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Using Video Prompting for Daily Living Skill Acquisition in Adults with
Intellectual and Developmental Disabilities

Meghan Park Mitchell

A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

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for the degree of

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Dedication

This thesis is dedicated to my beloved family, partner, and friends. Those in my inner circle know which steps I've taken to get here and continue to be a constant support through every step in the process of education and life. For that, I am forever grateful.

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I am grateful to all who I've had the pleasure of working with throughout the completion of my thesis. My Committee Chair, Trevor Stokes, for his constant guidance through important decision making and changes, and my Committee Members, Bryan Saville, Tonya Lambert Delp, and Jeff Dyche for their continued mentorship through both my undergraduate and graduate career. Without their flexibility and consultation, the effects of this paper would be incomparable.

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Abstract

The current study examined the effects of video prompting on the acquisition of a daily living skill with adults who have intellectual or developmental disabilities (IDD). A multiple baseline across participants design was used to assess whether a video prompting procedure was able to teach adults with IDD a daily living skill with minimal socially mediated instruction. It was found that performance increased once the intervention was applied. Future directions for research and application in teaching daily living skills to adults with IDD are discussed.

Functional daily living skills play an integral part in helping to facilitate an individual's purposeful community inclusion, vocational ability, and independence (Carnahan et al., 2009).

“The term “daily living skills" refers to a wide range of personal self-care activities across home, school, work, and community settings. Most daily living skills, like food preparation and personal hygiene, need to be performed on a regular basis to maintain a reasonable level of health and safety” (Stabel, 2013, p. 839).

Material, emotional, and physical wellbeing as well as factors concerning rights and inclusion all play into maintaining a high quality of life (Schwartz & Kelly 2021).

Without adequate daily living skills, there is a potential for the individual and their relative parties' quality of life to decline due to factors such as the individual's lack of income and autonomy as well as the potential for the individual's dependence on others to have a negative impact on the unit as a whole.

As individuals with intellectual and developmental disabilities (IDD) mature, intensive services for treatment become less widely available. A study by Howlin et al. (2004) determined that 3 of 68 adults with developmental disabilities lived alone, and 4 of 68 lived in a hostel-type accommodation with minimal support. Most others were found to be considerably reliant on those in their environments for daily function, some defaulting to living in a hospital setting after all other options were exhausted.

Historically, education systems have put advanced academic skills higher on the priority order for learning than those which contribute to daily function, highlighting the neglect

for supplementing those who have IDD with more support in these areas (Ayres et al., 2011). In order to maintain the applied and socially valid nature of behavior analysis, it is pertinent to create interventions that maximize this population's exposure to skill acquisition procedures that address the widespread need of these adaptive skills. As a consequence, an obligation for the development of teaching procedures related to these skills has developed within the adult population of individuals with IDD.

Services for Adults with Developmental Disabilities

Individuals with autism spectrum disorder (ASD) often require services and/or support after the age of 18 and, in many cases, for the rest of their lives. In 2020, the projected number of American individuals with ASD who were to become legal adults within the following decade was 707,000 to 1,116,000 (Shattuck, et al., 2020). Unfortunately, only 2% of ASD research funding is targeted towards the adult population. Itzchak and Zachor (2010) determined that intervention success rates with younger consumers have quicker and more impactful outcomes than with older consumers. This is a probable cause for the majority of autism research funding going to children along with general increased supports for minors such as in schools. It is, nonetheless, important to consider the number of adults living with IDD who require additional support in maintaining their quality of life, as doing so will not only support the growth of their quality of life, but also in their continued societal contributions. The lack of resources for this population also reduces the intensiveness of treatment that can be delivered to the consumers. Due to a smaller staff to consumer ratio, consumers with individual needs often have to wait longer for effective treatment. With these barriers in

consideration, more research is called for to determine effective methods of treatment for adults with IDD.

Daily Living Skills

Various daily living skills have a direct relation with all dimensions of quality of life that were listed by Schwartz and Kelly (2021). Specifically, “chore” related tasks such as house cleaning, dish washing, laundry, setting a table, and taking out the trash are directly related to the maintenance of interpersonal relations. According to Cannella-Malone et al., (2006), completing chore related activities is associated with being socially valued, as a lack of contribution would increase the burden of care for the population of individuals with IDD. Accordingly, much of the focus on research and habilitation of adults with developmental disabilities lies in activities of daily living (Cannella-Malone et al., 2006).

Video Modeling and Video Prompting

Video modeling is a teaching procedure that requires the learner to watch a video-recorded performance of a competent performer completing a task before being given an opportunity to perform it themselves. These videos can either be recorded in first-person point-of-view (POV) or spectator POV. In a review conducted by Gardner et al. (2013), one study reported no difference when considering spectator POV vs. first-person POV while two others reported superiority when using first-person POV. This superiority may be caused by the benefits of eliminating irrelevant stimuli when watching the video from a first-person POV on performance as well as incorporating a more naturalistic perspective the learner will complete the task themselves. Another consideration when choosing video modeling modalities is whether to keep the whole task combined into one

video (typical video modeling), or to break up each task into smaller, shorter videos (video prompting). Although whole-task video modeling has proven to be effective to teach daily living skills to adults with developmental disabilities (Rehfeldt et al., 2003), it may be important to consider the implications of impaired attentional and retentional processes in individuals within this population (Domire & Wolfe, 2014). “Bandura’s (1986) research on observational learning suggests that (a) attention to the model, and (b) retention in memory of observed events are necessary for efficient learning” (Bandura, 1986, as cited in Cannella-Malone et al., 2006, p. 353). A study conducted by Sigafoos et al., (2007) indicated that video prompting may be a better instructional method serving adults with developmental disabilities. Because video prompting allows longer videos to be broken down into smaller segments assigned to each item within a task list, the shorter videos minimize the amount of attention and retention necessary to complete a single task in the chain of a more sophisticated response. Furthermore, Canella-Malone et al., (2006) compared video prompting to video modeling across participants and behaviors in adults with developmental disabilities and found that video prompting consistently resulted in faster skill acquisition than with video models.

Instructions given via video are valuable in an adult day program setting for a number of reasons. Adults in the context of the United States individualistic society “consider independence and self-sufficiency very important” (Fatehi et al., 2020, p. 11), and are expected to do work independently without constant direct supervision. Video modeling uses a form of instruction that does not require guidance through social interaction except for in cases where extra prompting or reinforcement is needed, which then can be faded out. Beyond the treatment setting, the video model can be taken into

the natural environment to promote the generalization of the skill without live socially mediated prompting. This benefits both the learners and the relevant parties as another person is not required to be present for the purpose of prompting the individual to complete tasks. Furthermore, adult day programs' "staff to client ratios tend to be fairly high" (Gerhardt, 2009, p. 23), meaning that staff's focus and attention are in high demand. Video prompting conserves staff's focus in the areas where it is used, allowing allocation of attention to areas of focus that may be more individualized/specialized, and thereby increasing the treatment efficacy for all clients who attend the institution. Treatment fidelity also plays a role in treatment efficacy, which is ensured by video modeling as the model remains consistent during each presentation. The current study was conducted to address questions related to video prompting's effectiveness in promoting daily living skill acquisition and increased independence in adults with IDD. Its level of effectiveness will contribute to research that solves issues such as low staff-to-client ratios and independent learning. It is expected that all participants will have an increase in accuracy of completing the chosen skill after video prompting is implemented. This study was an extension of previous research in video prompting for adults with IDD (Canella-Malone et al., 2006).

Methods

Participants

Three participants were recruited from an adult day-service program located in Virginia. All participants were determined through interview to have an adequate receptive language repertoire in order to comprehend the audio within the video prompts. They also were determined to have no significant visual deficits in order to be promising

candidates for video prompting. Each participant had to be able to follow 1, 2 or larger-step directions. Staff interviews concerning potential participants' current repertoire indicated their current level of accuracy with setting a table. Participants' ISPs (individual support plans) were also referenced to ensure that each individual's pre-determined goals were not being targeted by the current study. Assent/consent was obtained for each participant prior to beginning the study according to a protocol approved by the James Madison University Institutional Review Board.

Setting

This study was conducted in a mock-apartment space of an adult day services program in Charlottesville, Virginia. The apartment was equipped with a laundry area consisting of washer, drier, dresser, and countertop; a living room area consisting of chairs, a table, and a TV; a kitchen consisting of a refrigerator, microwave, coffee maker, air fryer, sink, countertop, countertop island, trash bin, cabinets and dishwasher; a dining area consisting of a table and six chairs; and a bedroom area consisting of a murphy bed, end tables, dresser, and full bathroom.

Independent Variable

Video Prompting

Video prompting was the chosen intervention for the current study. During baseline, no video prompts were played and the current skill level for setting the table was assessed for each participant. Following baseline, the intervention phase of the experiment was sequentially introduced to each participant following a steady state of responding for each. This phase included eight videos, each depicting and describing one step within the task analysis. This continued until all participants showed significant

increases in performance after the intervention was introduced following individual baselines.

Dependent Variable

The dependent variable of the current study was the rate of skill acquisition over intervention sessions. Each data point represents the percentage of steps within the task analysis that the participant performed correctly.

Data Collection

Data were collected both in vivo by a research assistant located in a nondescript location within the apartment space and by rewatching the recorded video off the research site. Research assistants underwent data collection training from the primary researcher on how to code data for the current study. Both the verbal behavior of the participants and the researcher was collected to determine the number of steps completed correctly from the task analysis by the participant as well as the degree of treatment fidelity. One data sheet was given to the data collectors during each session to record participant behavior, and another was also given to the data collectors to determine the degree of treatment fidelity across 50% of sessions, chosen randomly. One research assistant was designated as a primary data collector and the other as secondary in order to assess interobserver reliability. Graphic displays of the data are included, created by the software program Microsoft Excel.

Interobserver Reliability

While data were being collected, IOA was assessed across 30% of randomized sessions during each phase of the experiment. IOA was determined for the amount of items in the task list that were completed with accuracy by using the total count method.

The primary researcher calculated IOA by taking the smaller number recorded, dividing it by the larger number recorded, and then multiplying that number by 100 (Johnston et al., 2020). Each of the sessions for which IOA was recorded resulted in 100% IOA.

Experimental Design

A multiple baseline across participants experimental design was used to assess the effects of video prompting in adults with IDD within the current study. This design was chosen in order to demonstrate experimental control on a behavior that may maintain at intervention rates after the intervention is removed. In other words, this skill may not show a difference if the intervention is removed, because it is a learned behavior. A multiple baseline design, on the other hand, introduces each phase of the experiment at different points for each participant, demonstrating that the intervention has direct influence on the dependent variable. The intervention, therefore, does not need to be withdrawn. For example, the second participant did not enter the intervention phase until they maintained a steady state of responding and the first participant showed an obvious shift in responding as the independent variable was introduced to them. In order to minimize the potential for missing extraneous variables, new phases of the intervention were not introduced to any participant unless the data displayed that they were maintaining a steady state of responding during baseline, and, when applicable, the participant prior showed an obvious change from baseline to intervention.

Pre-Experimental Procedures

Prior to baseline, the primary researcher conducted an interview with the director of the adult day service program to inquire about the behavioral repertoire of each participant before the current study began (Appendix A). Reports of current daily living

skill repertoire were assessed. The questions also addressed whether the participants had learned to set the table in the past. Results from the interview indicated that none of the participants had been observed engaging in table-setting behavior in the past.

Task and Materials

Setting a table was the task chosen to be taught using video prompting in this study. This task was chosen because it fits in with the other daily living skills being taught during these times such as cooking and washing dishes. In order to teach these skills as naturalistically as possible, cooking/preparing snacks precedes setting the table, after which a meal can be eaten together. After that, there is an opportunity to teach dish washing. For the purposes of this study, only the behavior of setting the table was examined.

Each video prompting segment was edited from an individual video clip of a competent performer performing the whole task recorded by an AKASO EK7000 action camera from a first-person point of view. Each clip included a voice-over instruction describing the task being performed. For example, the video for the first step within the task analysis included a voice narration stating, "First, check that you have all the items you need." The second step within the task analysis stated, "Now, put one placemat on the table in front of each chair," and so on. A full description of the steps within the task analysis can be found in Appendix B. A laptop provided by the research site was utilized to play the videos for each participant.

Baseline

Baseline sessions were conducted in the same environment as the treatment setting. Before the participant arrived, an appropriate set of plates, napkins, cups, silverware, and place settings were placed on the counter. The participant was then invited into the space. The initial instruction was, "Okay, XX, please set the table." Minimal socially mediated reinforcement in the form of attention was delivered for correct steps during baseline measurements. That is, the researchers remained silent during the participants' completion of the task. Data were collected using a task analysis (Appendix B) with (+) as an indication of a step performed with accuracy and (-) as an indication of a step performed inaccurately or omitted. In order to be scored as correct, the item on the task list had to be initiated within 10 s of the initial instruction or the completion of the previous step and completed correctly in the order that the task analysis prescribed. If the participant failed to respond within 10 s of the initial instruction or completion of the previous step, the baseline probe was ended, and the participant was directed to another task. Each step must have been completed in the correct order in order to be considered correct.

Intervention

Each of the experimental sessions began similarly to the baseline sessions. The primary researcher conducted the procedures with the participants while other research assistants collected data on which steps within the task analysis were completed accurately. After the initial set up, the intervention phase introduced video prompts. Each step within the task was recorded prior to implementation. The participant had a laptop placed in front of them and was instructed, "Watch this." Once they had completed

watching the step, they were instructed "Okay, now do it." The individual was then given an opportunity to complete the step. If the participant failed to begin the step within 10 s of instruction or completed it without complete accuracy, the implementor completed the step as accurately and unobtrusively as possible so that the participant was able to move on to the next step. The same prompts and procedures were then repeated for all consecutive steps until the task reached full completion, at which point the participant was able to take a break. This phase continued until the multiple-baseline showed that the intervention had an impact on each participant's behavior.

Procedural Fidelity

Procedural Fidelity was tracked variably across 50% of sessions using a random generator. Out of the projected 8 sessions, fidelity was assessed on sessions 1, 4, 6, and 8 for each participant using the data sheet depicted in Appendix C. Consistency in implementation was tracked for appropriate use of the discriminative stimuli, utilizing the correct wait time (10 s) for participant latency to response initiation, and the implementer's initiation of task analysis step completion (if applicable). Sessions ranged from 90.6% to 100% fidelity with a mean score of 98.7% fidelity.

Results

Charlie

Charlie's data are represented in the top graph of the multiple-baseline graph depicted below. During baseline, Charlie did not complete any of the steps within the task analysis correct, making his average score 0%. When given the discriminative stimulus "Set the table," he sat at the table, looked at the implementer, and said, "Yes." Following the introduction of the independent variable, Charlie's performance rose by 25%. In other

words, his performance improved from 0 correct steps to 2 correct steps. During the second intervention session, Charlie's performance rose to 38%, meaning that his performance improved from 2 to 3 correct steps. His performance remained stable until the fourth intervention session where it rose to 50% accuracy (4 out of 4 steps correct) and remained constant until the study's conclusion, depicting a slow and steady upwards trend. Over the course of sessions, Charlie began to approximate correct responses. For example, he would put a piece of silverware on each plate instead of each napkin. He would also put a placemat on each side of the table, but not in front of the chairs or with the correct orientation. Steps that Charlie learned to perform accurately continued to be accurate throughout the study, meaning that performance on each step, individually, did not decline.

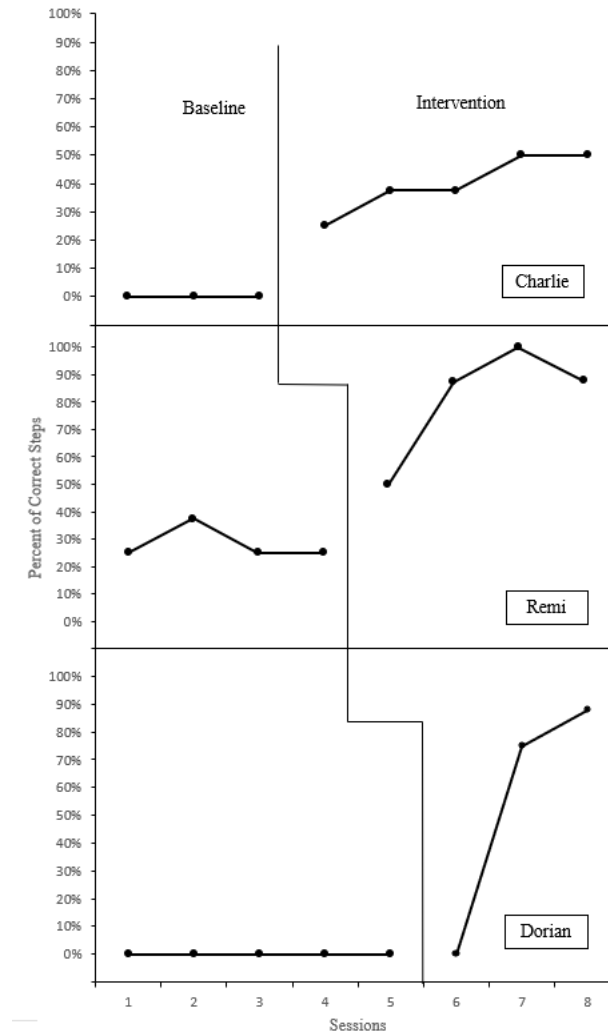
Remi

Remi's data are represented in the middle graph of the multiple baseline graph depicted below. During baseline, the majority of Remi's data points remained stable. There was slight variability during Session 2 where her score rose from 25% to 38%, meaning that she improved from 2 correct steps to 3 correct steps. In the third baseline data point, performance reduced back to 25%, meaning that she declined from 3 correct steps back down to two. This indicated that her performance remained at a significantly steady state, and was moved to intervention during the next session. This participant's performance immediately rose to 50%, meaning that it improved from two correct steps to 4 correct steps. It then continued increasing until reaching 100% accuracy (8 out of 8 correct steps) during session seven. Remi performed with 88% accuracy during the final session, meaning she decreased from 8 out of 8 steps correct to 7 out of 8 steps correct. The

incorrect step that occurred in this session was the 8th step – placing the cup on each placemat to the right and slightly above the dishes. Instead, she had put each cup on the left side of the placemat. The trend of the data path remained positive.

Dorian

Dorian's data are represented in the bottom graph of the multiple-baseline graph depicted below. During baseline, Dorian's performance remained at a consistent 0%, meaning no steps were completed correctly. When given the discriminative stimulus "Set the Table", the participant briefly looked at the implementer, then continued walking around the room. Because this level of responding remained consistent during baseline and the participant before Dorian had an immediate response to the intervention, Dorian was then moved to the intervention. Unlike the other two participants, Dorian's performance remained at 0% accuracy during the first intervention phase. Dorian did attend to the videos by looking at them while they were playing, and even put one fork down on a napkin. Though this part of the step was correct, it was unfinished, meaning that his data still remained at 0% accuracy. During the second session of the intervention, Dorian's performance rose from 0 to 75% accuracy, meaning that he rose from 0 correct steps to 6 correct steps. Finally, during the third intervention session, Dorian's performance rose again to 88% accuracy, meaning that he finished the study with 7 of 8 steps performed correctly.

Figure 1*Video Prompting*

Note. The above figure graphically displays the percent of correct responding for three participants setting a table during baseline and the percent of correct responding after the independent variable was introduced.

Discussion

The current study sought to determine whether video prompting worked with the sample of adults with IDD. The data show that the intervention had a significant effect on all three participants. Charlie had a clear increase from baseline to intervention with an increasing trend until the study's completion. Throughout the study, he began approximations to correct steps. For example, he began by putting all four placemats in a pile. During the subsequent instruction, he put one placemat on each side of the table, but not close enough to being in front of the chairs to be counted as correct. The performance of this particular participant prescribes future research regarding the addition of reinforcement and feedback at each step. If error correction is introduced, it may minimize the amount of repeated incorrect steps during each trial. Furthermore, it will allow the participant to reach reinforcement for correct responses more often.

During baseline, Charlie and Dorian did not attempt to set the table at all. They did not touch or move to the table any of the table-setting items. In contrast, Remi was able to take each item and set them down in a way that would be conducive to eating a meal with a group of people. Remi's baseline graph reflects that the items on the table were not placed in the correct space. For example, she put the knife, the spoon, and the forks all together in a pile on top of a folded napkin. In the current study, the prompt shows and states to put the napkin on the table (without folding it) and to put the knife, fork, and spoon on the napkin separately, and next to each other. Remi was kept as a participant for the social validity aspect of learning skills in different ways than before in order to prepare for a vocational setting. For example, if tables needed to be set at a restaurant, they may have a specific manner in which they would like them to look. This participant

did have a prerequisite skill set that the other two participants did not, but still demonstrated the effects of video prompting on this daily living skill task.

While the graph depicts that the intervention has a significant effect on each participants' behavior, no participants reached 100% accuracy and remained there. This is due to a time-based limitation of the current study. The study could not be completed to its full extent due to lack of time. Each participant continued getting video-based instruction following the completion of the study. Had the instruction completely stopped following the finish of the study, the participants would not be performing to a mastery criterion which would be generalizable to the real world. For example, if one of these individuals decided to seek a job which included this task, they would need to perform at 100% accuracy nearly all the time. Though both Remi and Dorian performed highly at the end of the study, performing at less than 100% accuracy may not be acceptable in a vocational setting.

Future studies should consider the implications of a participant completing either individual steps of the task analysis or the whole task correctly, but in a different order than the task analysis prescribes. If the resulting product of behavior is that of the correct response, future research might consider whether to change the task analysis to accommodate previously learned behavior. Not only would it allow faster skill acquisition of the whole task, but also allow more clarity in data collection. If skills completed correctly are not accounted for during data collection due to the order in which they were completed, the results may inaccurately depict skill acquisition with inconsistent validity. For example, because Remi entered the study with unpredicted prerequisite skills for setting a table, she consistently exhibited the correct behavior of

setting plates on the placemats. Unfortunately, due to the order in which she completed this step, it was sometimes counted as incorrect. Had the implementer changed the task analysis order dependent upon the participant's prerequisite skills, the behaviors may have been more accurately represented in the graph. The implementors should also consider whether the task analysis should be broken down to even smaller steps based on a participant's behavioral capacity. For example, perhaps Dorian would have done more steps independently had each task analysis item been broken down into four steps each – one step for each table setting.

One goal of the study was to seek a method of teaching daily living skills to adults with autism to minimize the amount of one-on-one support they require to learn a new skill. Several studies outline methods to which this teaching method can become even more independent. Brooks (2012) determined that adolescents with moderate to severe intellectual disabilities were able to use self-directed video prompts to teach themselves daily living skill tasks that were never explicitly taught. During this study, the researcher taught a skill to mastery criteria using video prompts and additional prompting by the implementer. Then, they taught the participants how to use the video prompting device. Following this, the participants were then able to teach themselves a different skill. This means that there was no longer a need for a supplemental individual for prompting purposes. During the current study, the implementer was required to remain within the treatment room to observe when the participants required a prompt to move on to the next video within the task analysis. Future research is also required to determine whether self-directed video prompting following learning how to navigate the video prompting device

works for the adult population of individuals with moderate to severe intellectual disabilities.

Several studies have examined the effects of using ‘video chunking’ as a fading procedure for when teaching skills using video prompting. Video chunking refers to when the implementer connects individual mastered video prompts together, making longer segments for the participant to watch before having an opportunity to perform the task. Sigafos et al. (2007) found that using chunking as a fading procedure resulted in 3 adults with IDD learning how to wash dishes at mastery criterion. At a 3-month follow up, performance decreased, video prompting was reinstated, and the skill stabilized at maintenance criterion levels. They suggested that this decrease in maintenance over time could be a result of the skill being taught using a step-by-step procedure, disrupting the chain of behavior and allowing time for the participants to get distracted. Wu et al., (2016) compared this typical form of video prompting with a fading procedure within the intervention in 2 students, ages 14 and 17. The behaviors of interest within this study were washing tables and washing windows. Instead of requiring the participants to watch videos of and repeat each step of the task analysis until criterion to begin chunking is met, videos were chunked based on the participants’ independent completion of steps within the task analysis. That is, if a participant completed steps 1-3 of the task analysis independently, these steps would then be chunked into one video for the next data collection session and the skills that were not independent would remain as single-step video prompts. The comparison between the two forms of teaching showed that skill acquisition occurred much faster during within-intervention across both participants. They also found that within-intervention fading promoted higher performance during

maintenance probes over time. One limitation of this study was identified as a potential for the different skills taught for each intervention type to have different levels of difficulty, resulting in faster skill acquisition during within-intervention video chunking. There is currently a lack of research addressing within-intervention fading procedures for the video prompting method of teaching daily living skills to adults with IDD. Future directions call for a replication of the current study using within-intervention video chunking with the adult population. Doing so would not only provide evidence of efficacy with this population, but also show the intervention's effectiveness while examining a singular behavior. The results from such research would guide practical application of video prompting in treatment facilities.

Further, this study calls for a comparison across teaching modalities. Many alternative teaching modalities are commonly used to teach individuals with IDD new skills such as most to least prompting, system of least prompts, graduated guidance, constant and progressive time delays, behavior skills training, and others. For some learners, this method of teaching may carry the necessary type and strength of reinforcement necessary to learn a new skill. The main difference between these modalities and others is the active role of the implementor for these other methods while, in video-based instruction, the learners may eventually become their own implementors. Factors such as differences in speed of skill acquisition and the amount of resources used within each teaching modality must be compared to determine if video-based instruction remains to be socially valid over other methods of instruction.

This study adequately demonstrates that video prompting shows promising results for the adult population with IDD. Future research calls for studies which teach individuals

how to independently monitor their own video prompting with novel tasks in order to glean the most independence from this method of instruction. Further, research is required to determine what type of reinforcement or feedback strategies may be necessary to make this type of instruction more efficient for a wider pool of individuals.

Appendix A

Pre-experimental Oral Interview

Interviewer: _____

Date: _____

Interviewee: _____

1. What daily living skills has this individual been reported to perform?
2. What daily living skills have you, personally, observed them complete with accuracy?
3. Has there been a reported deficit in this individual's skill of setting a table?
4. Have you seen behavior from this individual that indicates that they have the behavioral repertoire necessary to set a table independently?

Appendix B

Participant: _____

Observer: _____

Step in Task Analysis	Accuracy (+ or -)	Notes
1. Make sure all items are there		
2. Put placemats on table in front of chairs	.	
3. Put dish on each placemat		
4. Put napkins on each placemat, to the right of the dish		
5. Put knives on each napkin		
6. Put forks on each napkin, to the right of the knives		
7. Put spoons on each napkin, to the right of the forks		
8. Put cup on each placemat, to the right and slightly above the dishes		

Appendix C

Condition: _____

Date: _____

Participant: _____

Observer: _____

Chunk #	Say "Watch this"	Say "Now do it"	Allow 10 seconds for latency	Complete step for participant unobtrusively, if applicable
1st				
2nd				
3rd				
4th				
5th				
6th				
7th				
8th				

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