Evidence-Based Interventions to Teach Daily Life Skills to Adults Impacted by Disabilities in Transition-Based Programs

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This evidence project, submitted by

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has been approved and accepted

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Key words: intellectual and developmental disability, transition-aged students, video-based interventions

Abstract

In collaboration with an occupational therapist at a school-based outreach program, we conducted a systematic literature review exploring existing evidence-based interventions that support activities of daily living (ADL) and instrumental activities of daily living (IADL) skill acquisition for transition-aged students over the age of 18 highly impacted by cognitive or intellectual disabilities. Existing literature explored the use of video-based interventions such as video prompting (VP) and video modeling (VM); interactive technology such as augmented reality, iPad applications, or audio recordings; non-technology based interventions such as visual supports, self-regulated problem solving, and adapting the environment. The evidence favored the use of VP to support ADL and IADL skill acquisition, with added support such as graduated guidance and error correction. The end product of the knowledge translation was a publicly-available VP intervention for putting groceries away. Production of the VP intervention involved creating a task analysis, filming and script writing. In order to track the ease, efficiency, and feasibility of a video-promoting intervention in this population, we administered a pre-post test survey. Results indicate a higher feasibility in use of this intervention in a setting servicing transition aged clients impacted by disabilities. We recommend that future researchers continue to focus on interventions to support transition-aged students highly impacted by disabilities with ADL and IADL skill acquisition.

Critically Appraised Topic (CAT)

Focused Question

"What evidence-based interventions exist that support ADL and IADL skill acquisition, for transition-aged students highly impacted by cognitive or intellectual disabilities over the age of 18?"

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Professional Practice Scenario

The Outreach Program (TOP) is a public, federally-funded community-based transition program serving individuals 18-21 years old who have already completed traditional high school special education programs (TOP, 2019). TOP's objectives are to increase student skills and opportunities in independence, community, and employment; this is done by providing real-life experiences in the community to learn and gain valuable life skills (TOP, 2019). TOP networks with vocational programs that will take over once the students turn 21 years old to help ease this transition. This school-to-work program pays for a job coach who collaborates with OT through a vocational program. Students start working out in the community while enrolled at TOP and thereafter.

All students attending TOP have been diagnosed with a moderate to severe disability such as severe autism or Down syndrome. Students attending this program would most likely live in structured environments with assistance or supervision in the future. The current approach is to practice valuable life skills and involves the occupational therapist working with students to be as independent as possible. The OT and job coach facilitate student access to different job site opportunities and advocate for clients' physical, mental, and emotional

needs. The occupational therapist will go to the job site to observe the student in that environment, then they will return to TOP together to work on establishing the skills the student will need to successfully perform their job. Some job sites the students are employed at include grocery stores, movie theaters, gyms, and the library, to name a few (TOP, 2019). The identification of evidence based strategies for modifying activities and grading interventions is needed to effectively address the goals of clients at TOP. Some challenges include modifying interventions to fit the needs of non-verbal students and difficulties tailoring interventions to their cognitive abilities. Some students are able to gain employment, usually part-time, through the program, and live with modified independence with their caregiver(s).

The student's length of attendance is up to four years, when they reach 21 years old, but varies based on the student's need, success, and participation with the program. Currently, Amelia uses backward chaining as the primary intervention approach when teaching students new skills. Amelia is looking for evidence-based interventions to support transition aged students in acquisitions of ADL and IADL skills to increase independence. ADL skills include toileting, bathing, and grooming and other "activities oriented toward taking care of one's own body and completed on a routine basis" (AOTA, 2020, p. 30). IADL skills include shopping, paying bills, home management, and other "activities that support daily life within the home and community" (AOTA, 2020). Increased independence will be determined through a combination of caregiver reports, OT goals, and self reports. The practitioner is requesting information on specific interventions to better prepare her students for transition into the community after aging out of TOP at 21 years old.

Method

Categories	Key Search Terms
Patient/Client Population:Adults highly impacted by intellectual disabilities between the ages of 18-21; can include individuals over the age of 21	Adulthood, transition, transition age, young adults, adults, over 18, 18-21, young adults, transition age students, emerging adulthood, ASD, autism, individuals with ASD, developmental disability, developmentally disabled, cognitive-disability, developmentally delayed, highly impacted, severe, nonverbal, low IQ, low functioning, highly impacted by disability, severely-impacted, profoundly-impacted, mental retardation, significant impact intellectual disability, down syndrome, fragile X syndrome, fetal alcohol syndrome, genetic conditions, birth defects, moderately-impacted
Intervention (Assessment): Evidence-based interventions for supporting students in ADL or IADL skills	Daily self-care tasks, daily tasks, daily activities, ADL, IADL, interventions, transition programming, grooming, toileting, bathing, showering, dressing, eating, feeding, functional mobility, sexual activity, care of others, care of pets, child rearing, communication management, driving and community mobility, financial management, home management, meal prep and clean up, religious and spiritual expression, shopping, safety and emergency maintenance, adaptive behavior, adaptive skill, daily living skill(s)
Comparison: N/A	N/A
Outcomes: Increasing ADL or IADL skill acquisition and independence	Skill acquisition, skill development, obtained, increase, task-oriented

Databases, Sites, and Sources Searched
American Journal of Occupational Therapy
British Journal of Occupational Therapy
CINAHL
EBSCOhost: Education Research Complete
ERIC
Hand searching
Journal of Intellectual Disabilities
Journal of Special Education
Journal of Special Education Technology
ProQuest
PubMed
SageJournals: Journal of Intellectual Disabilities

Procedures for the selection and appraisal of articles

Inclusion Criteria

- Individuals at least 18 years and older
    - Can include articles whose participants are under 18, if and only if, at least one participant in the study is over 18 and the findings separate the results of participants and do not compare the results and findings of adults versus under 18's
- Articles published anywhere in the world
- Articles in English
- Includes individuals highly impacted by cognitive, intellectual, or developmental disabilities and/or low IQ
- Individuals who do not possess full independence in ADLs or IADLs
- Articles published from 2000-present

Exclusion Criteria

- Individuals under 18 years old
- Individuals 41 years or older
- Individuals in a rehab/hospital/ALF/SNF setting
- Acquired disabilities (TBI, SCI, etc.)
- Individuals not impacted by disabilities
- Articles that primarily address other areas of occupations: health management, rest, sleep, education, work, play, leisure, social participation
- Caregiver perspective/experiences
- Interventions given in a group

Search Outcomes/Quality Control/Review Process

The research team's initial strategy involved dividing up search databases over the summer. There were a promising number of hits, however as the team began to scan articles the numbers whittled down. Many of the articles that fit all inclusion criteria contained no original evidence and were reviews of previous studies. This led to the team conducting 84 hand searches of articles that had initially been yeses. In these searches the team encountered many repeated articles that had been obtained in previous database searches, increasing the team's confidence that they had met saturation.

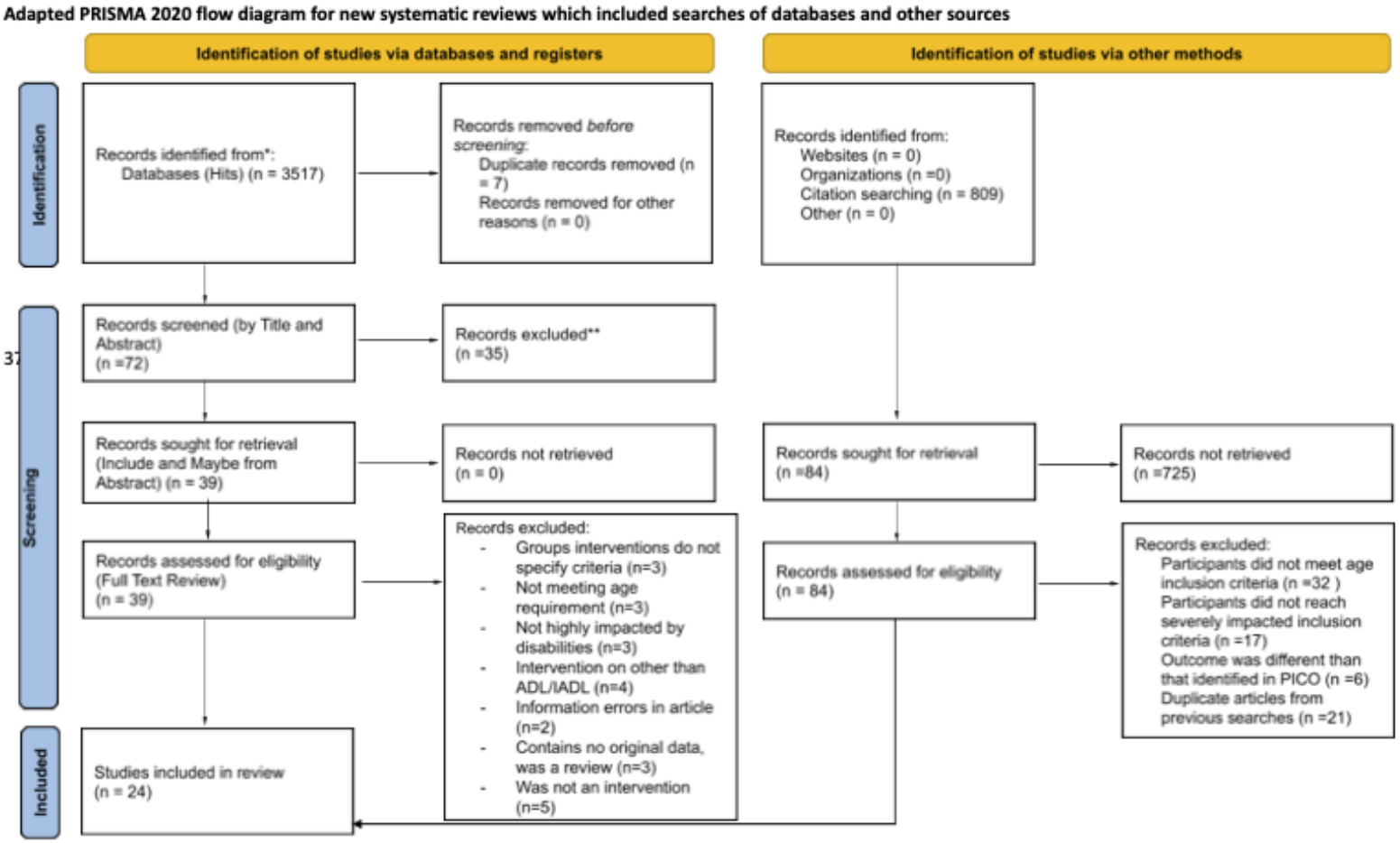
Over the course of searching 12 databases and hand searching, the team had to reexamine certain inclusion and exclusion criteria. At CAT proposal submission at the end of May, the research team chose to exclude any articles that had participants under the age of 18, even if some participants within the study did meet age inclusion criteria of over 18. After much discussion, the research team decided to include articles that had participants under 18 as long as at least one participant was 18 or over and satisfied other inclusion criteria, and the results of the article separated out the results of each participant and did not compare results of those 18 and older to those outside of our inclusion and exclusion criteria for age. The majority of articles included from this new rule were on a case-by-case basis.

The research team met with the project's chair in June to review the CAT proposal. After this meeting, appropriate changes were made to the proposal and the database searches began. At the beginning of the school year in August, the team's project chair changed. The

team met with the new chair and they were able to provide valuable information on things to consider and offer a new path for searches.

The research team consulted with the project's chair and the course mentor to receive guidance on better defining "severely impacted." A decision was made to not include IQ as criteria for severely impacted, but rather to leave it up to the teams discretion and discernment. The research team relied on Collins Memorial Library's interlibrary loan tool to obtain articles whose full text was not otherwise available online.

Graphic Representation of the Research Process



Results

Literature Searching and Article Inclusion

Overall we are satisfied with our saturation and results. Many of the articles we originally chose did not meet our inclusion criteria whether it was not meeting the age requirement, severity of disability, having the proper setting, or being within a year of publication range. Of the original 3,517 records identified from database searches (with 7 removed before screening due to duplicates), we resulted with 72 records screened by title and abstract (Appendix A). After a critical evaluation of the selected records, 37 records met our inclusion and exclusion criteria (n=35 excluded). Upon assessing records for eligibility and dividing records between members to do a full text review, some reasons records were excluded were due to group interventions not meeting specific criteria, participants not meeting age requirements, participants not meeting moderate to high impact of disabilities, study including interventions other than ADL/IADL, information errors in articles, or study was found to have no mention of specific interventions. We ended with a total of 16 studies to be included in the review.

Of the 362 identified studies via manual citation searching (Appendix C), 84 records were sought for retrieval (n=725 records excluded). Of those 84 records, 76 records were excluded due to participants not meeting the age inclusion criteria, participants not reaching moderate or severely impacted inclusion criteria, the outcome was different that identified in our PICO, or there were duplicate articles from previous searches. We extracted 8 total records from this method to be included in our total 24 studies for the review.

Summary of Key Findings

Summary of Video Modeling

Video modeling interventions entail a video of someone performing the entirety of a designated task from beginning to end. The entire video from start to end is then shown to a participant before each training session. Once the participant has watched the video model, then they are encouraged to perform the same task shown in the video. Video modeling was shown to be effective, however it may work better for some more than others. One way that video modeling became more effective was through the use of self-modeling videos, which entailed a participant to produce their own video and view it later (O'Handley et al., 2017). Video modeling was found to increase improvements in performance of ADL/IADL tasks in all articles (Kellums et al., 2012)

Summary of Video Prompting

Video prompting was proven across all articles to be an effective intervention to teach ADL/IADLs to individuals with intellectual or developmental disabilities. Video prompting entails a video tape showing an individual (usually other than the targeted participant) performing a desired task from a subjective point of view. The video is broken into individual steps of the entire activity and is shown to the participant one step at a time. Some video prompts include an overlay of audio or written words to assist with comprehension of what is being completed. Once one step of the video prompt has been shown and watched by the participant, the participant is encouraged to perform the same step of the task that was just shown to them. This process is repeated until the desired task has been completed (Sigafoos et al., 2005; Sigafoos et al., 2006; Mechling & Stephens, 2009; Canella-Malone et al., 2006).

Additionally, evidence from the articles suggests that video prompting with error corrections such as graded guidance or static pictures during the intervention increases successful skill acquisition for individuals for whom video prompting alone does not work. (Gardner & Wolfe, 2019; Goodson et al., 2007).

Summary of Interactive Technology

The use of interactive technology includes: augmented reality, iPad apps, or audio recordings in order to improve independence in ADL's and IADL's (Bridges et al., 2020; Mechling et al., 2004). Research supports the use of interactive technology to increase independence. iPad applications are easy to access and are easy to follow, making them user friendly (Cakmak et al., 2019). Augmented reality was shown to aid in increasing independent navigation on a college campus (McMahon et al., 2015; Smith et al., 2017). An audio recorder intervention, including self-recorded and other-than-self-recorded, was shown to increase independence in shopping literacy in the grocery stores (Buck et al., 2013).

Summary of Non-Technology Based Interventions

Non-technology based interventions include using visual supports, self regulated problem solving, and adapting the environment. One way to support independent living skills was by utilizing case-specific interventions and advocating for individualized care, which showed positive effects on ADL process ability (Srikanth, 2022). Additionally, a study focused on participants creating a self-regulated problem solving process which showed that participants improved their performance of target behaviors. (Argan, M. Et al., 2000) Furthermore, another non-technology based intervention was through the use of visual supports; these visual supports decreased prompting in order to achieve independence in ADL tasks (Deppisch et al., 2013; McMahon et al., 2015).

Bottom Line for Occupational Therapy Practice

Recommendations for Best Practice

There are multiple unique methods of interventions occupational therapists can implement to increase acquisition of ADLs/IADLs for individuals highly impacted by disabilities. In today's age, technology is found to be an effective strategy to teach these skills, and is also considered socially valid. Individuals highly impacted by disabilities may need interventions tailored to their needs and utilize different technology to achieve their goals. Incorporation of error correction can lead to more success of skill acquisition and generalization (Deppisch et al., 2013).

Implications for Practitioners

Research indicates that technology-based interventions show positive improvement in ADL and IADL skill acquisition for transition age students with moderate to severe intellectual disabilities. Occupational therapists working with transition aged students with moderate to severe disabilities should be aware there are various interventions such as video modeling

and video prompting to increase independence. The disabilities included in our research include ASD, intellectual or developmental disability, or cognitive disability. Due to varying levels of impairment, these interventions should be selected on a case-by-case basis and graded to the individual's ability. Due to rapid advancement in technology, some of the interventions addressed may not be the best solutions in the coming years. Occupational therapists should be cautious in generalizing this to all students within our inclusion criteria due to the low levels of evidence in some studies.

Implications for Consumers

Transition aged students with moderate to severe ASD, cognitive, developmental or intellectual disabilities may lack independence with ADL and IADLs. The research suggests that individuals may increase independence with ADLs/IADLs through interventions such as video modeling, video prompting, audio recorders, iPad applications, and augmented reality. However, due to the lack of research, and lower evidence levels within current research supporting these interventions, consumers should be cautious of these interventions. For clients whom these interventions are indicated, implications include increased independence of the individuals and decreased caregiver burden.

Implications for Researchers

The results from searching the literature indicates a lack of evidence-based interventions to be used with transition aged students who are moderately to severely impacted by intellectual, developmental, and/or cognitive disabilities. Study evidence levels are low, and therefore could benefit from larger studies, more RCTs, and more variety of interventions other than technology based. It is imperative to this population that more rigorous studies focusing specifically on transition aged students highly impacted by disabilities are done in order to better serve this population with evidence-based research.

Involvement Plan

Based on the findings from the evidence search, the research team considered multiple options for the knowledge translation/involvement plan. Ideas consisted of implementing video prompting, making a script for each video, creating a flowchart to help guide selection of interventions for clients, and creating a task analysis sheet more specific to the population she works with. However, it was determined that developing a task analysis of an identified ADL/IADL, creating a video prompting intervention, and a script to use for that intervention would best support Amelia and her clients.

Our evidence search found that video-based interventions such as video modeling and video prompting were effective at helping individuals with disabilities learn ADLs/IADLs. The research favored video prompting over video modeling for teaching skills. Research supported the incorporation of error correction in video prompting as leading to more successful skill acquisition and generalization for individuals with developmental and intellectual disabilities (Goodson, 2007; Deppisch, 2013; Gardner, 2019). Video prompting was proven to be an effective intervention to teach ADLs/IADL to individuals with intellectual or developmental disabilities by tailoring interventions to their needs to achieve goals. Video prompting entails a video tape showing an individual (usually other than the targeted participant) performing a desired task from a subjective, first person point of view. The video is broken into individual steps of the entire task and is shown to the participant one step at a time where they are then able to complete the task they just watched (Mechling & Stephens, 2009).

The research team collaborated and determined that the involvement plan and end goal of this project was to create a video prompting intervention for one target IADL, and in the process, create a framework for future videos to be made. The IADL was determined by the collaborator

by assessing what functional skills are most needed and utilized by her students. After she identified putting away groceries as the target activity, the activity was broken down into a task analysis (Appendix E) by the team. Once the task analysis was completed, we began the video prompting filming process in which one of the research team members held an iPhone with one hand, and completed the IADL task with the other according to the task analysis.

The IADL was performed in the environment that best matched where the actual task would take place and according to the steps on the task analysis. Videos were filmed at the University of Puget Sound's on-site clinic in the work hardening area in a similar environment to the setting of the project's collaborator. The video was then uploaded to Youtube on a private channel called "UPS Evidence Project", with a channel handle of, "@VideoPromptingInterventions", that was shared with Amelia as a collaborator so she would be given the opportunity to continue adding content as needed. The video was edited using iMovie software which allowed us to separate and identify the different steps that correlated to the task analysis while also replicating the conditions of video prompting. In addition to the task analysis and video prompting interventions, the research team proposed creating a task analysis template adapted from Thomas, H. (2015) for the practitioner to use while administering the video prompting intervention to her clients. The template outline was similar to those found in the evidence-based articles and designed to support the bridge between the video prompt intervention and performing the actual task in a real-life situation.

Knowledge Translation Effort

The final knowledge translation activity that was presented to our collaborator was providing a video prompting intervention focusing on the specific task of putting groceries away, which is a common goal at her setting that she identified. This video prompting intervention is

supported by the evidence; the process consisted of creating a task analysis of a targeted activity, creating a script, filming from a first person point of view, and editing and uploading the video to a publicly accessible website.

A long term goal was to increase independence of TOP participants in one target activity and provide a task analysis template to implement for future sessions. Additionally it was the research team's objective to provide Amelia with the scaffolding to incorporate video prompting into other areas of intervention using the four stages model the team used.

In the grocery activity, the research participants modeled their set up as closely as possible to Amelia's. At TOP, there is a simulated pantry where students learn to identify, sort, and put away items. The simulated pantry contains various items and packaging that are organized by type of good: canned, boxed, bagged, and bottled.

In stage one, the team completed a task analysis of putting groceries away in a pantry. One team member completed the task while the other three observed. The three observers each completed their own task analysis based on their observations and came together to merge their work and fill in the gaps. This was the group's process for creating a single task analysis for the grocery activity. Once the group reached a consensus on the task analysis it was then read to one research member, who completed the task exactly as it was read to them. This process took a few trial and errors to perfect. The final draft totaled 17 steps, with the 18th step of the task analysis being to repeat steps 1-17 if needed. Once the final draft of the task analysis was completed and multiple trials of performing the task exactly as it was read, the team submitted the task analysis to Amelia for approval. The process for creating a task analysis was not as challenging or as time consuming as the team had anticipated, however it should be noted that four individuals contributed to this process.

Stage two consisted of the team creating a task analysis template, and identifying where to incorporate graduated guidance in the form of verbal and written prompts. We did this by structuring an occupation-based activity analysis (OBAA) based on the simulated grocery activity. In order to develop a task analysis that involves all relevant components, the OBAA includes personal and environmental factors (OTPF-4, Tables 4&5) that would best support the population that Amelia serves that contribute to how it supports participation in the occupation of restocking groceries. The OBAA handout also includes room to provide a written description of what performance patterns (OTPF-4, Table 6) are involved as well as what client factors (OTPF-4, Table 9) impact the occupation. Additionally, there is space to provide a description indicating what activity demands (OTPF-4, Table 11) are required for the occupation including space demands, social demands, relevance and importance)

Stage three required filming equipment and a location to film. The team chose a simulated space with limited distractions and the highest potential for transferability of skills. The work hardening location in the outpatient clinic at the University of Puget Sound most closely replicated the pantry at TOP. The research team was not able to gain access to a hands free filming device and used resources that were readily available in the clinic space. One member used a gait belt to secure an iPhone to their body in order to film from a subjective point of view; this was extremely uncomfortable for the individual to wear throughout the length of filming. This individual used exaggerated body movements to mimic a subjective point of view. We trialed an alternative way of filming: using the 0.5 zoom feature on an iPhone and having the individual hold it with one hand and simultaneously use their other hand to complete the task. This method worked better as it eliminated the need for exaggerated body movements and was more comfortable. This team member completed the steps of the activity using verbal directions

from another member who was reading the final draft of the task analysis. The other two members observed in order to ensure the task was completed accurately and in accordance to the task analysis. The video was filmed a few times; when watching it back, some important aspects were cut from the frame and the team had to play around with different lenses. The member who was filming also had to use exaggerated body movements to mimic a subjective point of view, but we feel that access to more professional hands free devices would eliminate this.

In stage four the team edited the footage using Youtube. The entirety of the activity was uploaded and software allowed us to separate each step (guided by the task analysis) into individual task clips and incorporated graduated guidance. The final product was uploaded to Youtube under the channel name “UPS Evidence Project” with the handle “@videopromptinginterventions” and presented to the collaborator for implementation into her practice and for use as an example for additional activities.

Workflow:

Stage of KT	Completion Date	Items Completed
Stage 1: Task Analysis	02/15/2023	☑ Observe and collect data for the specific task of putting groceries away ☑ One person performs task; others create task analysis ☑ Merge work together to create a single task analysis ☑ Continue to perform the activity with task analysis guiding steps ☑ Ensure each step of task analysis includes the following: ☑ An action verb ☑ How the action takes place ☑ Objects used or interacted with (if needed) ☑ Amounts used (if needed) ☑ Have collaborator review and approve task analysis for her target audience

		☑ Develop a guided template of task analysis for future implementation
Stage 2: Occupation Based Activity Analysis	02/22/2023	☑ Incorporate task analysis of behaviors and skills used one step at a time ☑ Have chair review and approve
Stage 3: Filming	3/03/2023	☑ Gather/locate equipment for filming: ☑ Bagged items (rice, chips) ☑ Boxed items (mac and cheese, pasta shells) ☑ Canned items (sliced pineapple, black beans, corn) ☑ Shelving unit ☑ Signage ☑ Table ☑ iPhone ☑ Film video at the UPS occupational therapy on-site adult clinic using the task analysis to guide filming
Stage 4: Editing the video	3/27/2023	☑ Edit the video as needed to provide a suitable model of the target (voice-overs/closed captions) ☑ Upload to Youtube and publish on channel ☑ Put appropriate keywords in the description box
Stage 5: Post-survey results	4/17/2023	☑ Provide Amelia and practitioners at TOP same survey ☑ Exclude questions that need to be answered once ☑ Gather additional feedback as to what worked/didn't work

Outcomes Monitoring

The team completed a preliminary level of monitoring impact of the knowledge translation effort and progress by creating check-in points for each stage with Amelia in order to produce an applicable and practical product. The team created a survey, through Google Forms, to gain information regarding Amelia's use and knowledge of video-based interventions including video-prompting; the survey will also be utilized as a post-survey to monitor outcomes.

The purpose of our survey was to identify the ease and feasibility of a video-prompting intervention template design within our collaborators setting. The survey included questions about current use of video-based interventions in practice, how often it is implemented, and how likely they are to incorporate a video prompting design template into their practice. Amelia shared the survey with her OT colleagues at TOP; one response other than Amelia's was recorded. In addition, the task analysis that was created for the target ADLs/IADLs will be used to monitor client progress and be replicable. The team ensured the task analysis template was not only translatable and easy to follow, but can be adapted for a variety of client populations, and a variety of occupations. After our knowledge translation effort is completed and presented to Amelia, we will give her the same survey (excluding questions that needed to only be answered once), in order to see the impact our project has made on her ability and knowledge to use video-prompting as an intervention in her setting. If possible, we will also give her colleague the link to the youtube channel, and the task analysis template, and ask them to fill out the survey after watching the video as well in order to add more data to track the outcome of our project. This is a deviation from our original plan, but we believe that the more data we are able to gather, the better our outcome will be.

Evaluation of Outcomes:

The Google Form pre and post test survey created by the research team was completed by two OTs working at TOP. One question gauged the practitioner's knowledge of video-based interventions including video prompting interventions; pre and post-test results indicated half the participants had never heard of video-based interventions including video prompting. Another question utilized a likert scale to assess how likely the practitioner is to implement a video prompting intervention into practice; pre-test results displayed respondent A with a 3/5

likelihood and respondent B with 5/5 likelihood of incorporation. Post-test results demonstrated an improvement of respondent A to 4/5. Finally, the survey asked the practitioner to provide information about what worked and what didn't work in the past when using video prompting with a client. In the pre-test survey, respondent B indicated the following: "It worked to have clear, brief videos that I could pause and play to show different steps. It worked to have the videos on my iPad for ease of use in treatments. It did not work to have ads, intros, or lots of extra time in the video prompts because it would lose students' attention." The team took this feedback into consideration by incorporating static pictures and freeze frames that transition between each step when editing the videos before uploading to Youtube. For the same question in the post-test survey, respondent B indicated "being able to access on an iPad quickly. I will save them as links on my home page". Respondent A indicated that they would need additional practice to increase the likelihood of incorporating VP into practice.

The post-test survey included one additional question and one section for feedback or questions. The additional question was "Did this presentation help you to feel more prepared to use video prompting in interventions?" both respondents reported the KT project helped them feel more prepared for using VP interventions.. In the feedback and questions section, respondent B indicated the following: I really like the pauses in the video after each step to allow for extra processing time. The respondent A asked the following question, "Can it work with the audio off for students who do better with less verbal input?". The settings on YouTube do allow videos to be muted, and settings on the device also allow the user to turn the volume down.

Recommendations for feasible follow-on projects for the future

The research suggests that individuals with developmental disabilities may increase independence with performance in ADLs through video prompting-based interventions. There is

additional research supporting the effects of video prompting on the transition outcomes of individuals with developmental disabilities as well as decreased caregiver burden. However, due to the lack of research and lower evidence levels with current research supporting these interventions, it would be our research team's recommendation for future researchers to focus on interventions to support transition aged students highly impacted by disabilities with IADL and ADL skill acquisition. We found very limited research for ADL skill acquisition, while finding only slightly more for IADL skill acquisition. Of these articles, most included interventions that involve technology. This might not be feasible for some communities or settings due to cost, time, or access. In the articles we were able to find, there were very small sample sizes and often more than a decade old. Therefore, more research in this area is needed in order to support this population with evidence-based interventions. Future studies should focus on increasing sample size, and exploring additional interventions in order to expand the knowledge and tools for clinicians working with transition aged students highly impacted by disabilities. This is a specific population, therefore research should focus on this in order for the evidence to be truly applicable and evidence-based. Due to these factors, consumers and families may want to be cautious of these interventions as they should be selected on a case-by-case basis and graded to the individual’s ability and varying levels of impairment. Another consideration should be the qualitative outcomes of these interventions, future studies looking at the experience of the individual learning skills through video prompting and modeling would be in line with occupational therapy best practices (Cannella-Malone, 2006). Furthermore, with the speed in which technology is evolving and generally easier access to smartphones and tablets, it would be interesting to explore the newest developments in teaching ADLs and IADLs.

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Project Appendices

Appendix A

Evidence Tables

Qualitative Evidence

Author, Year, Journal, Country	Study Objectives	Study Design/ Level of Evidence	Participants: Sample Size, Description Inclusion and Exclusion Criteria	Methods for Enhancing Rigor	Themes and Conclusions	Study Limitations
Srikanth Koushik, V. 2022 Dissertations and Theses Global	To improve accessibility without radical changes in hardware aligning c ability-based design for adults c cognitive disabilities facing accessibility challenges and advocate for creating adaptable technologies for matching users' abilities	AOTA 3B; Pyramid Q3	N=15 (n=2 female staff, n = 7 male students, n = 3 female studs); 20 - 50 y.o.; individual dx was not collected Incl Criteria: 18 y.o+, have one or more of the following dx: alzheimer's, ASD, brain injury, memory disorder, dev disability, learning disability	- Participatory design method to elicit needs from end-users - Interviewing program direction -Attending class sessions and video recording group discussions - Analyzed data as a single data set	**Themes**: - Motivations to form code club - Curricular design strategies - Accessibility challenges - Peer mentoring and collaborative work to overcome - - Accessibility barriers - Outcomes beyond the classroom	- Current technology's lack of computing capabilities

Quantitative Evidence

Author, Year, Journal, Country	Study Objectives	Study Design/Level of Evidence	Participants: Sample Size, Description Inclusion and Exclusion Criteria	Intervention & Outcome Measures	Summary of Results	Study Limitations
O'Handley, R., et al. 2017 Research in Developmental Disabilities USA	To evaluate the production effects of video self-modeling on three activity of daily living tasks of an adult male c ASD and ID	AOTA 3B; Pyramid E4 Pre-test post-test	N=1 21 y.o. white male c ASD and ID incl/excl not specified	Tx: create self-modeling video in correct sequence using ppts in his home. Three tasks prioritized by mother: folding towels out of dryer, vacuuming, cleaning mirror and sink in bathroom. Production was done by using the task analysis c step-by step prompts from mom. Watch videos right before completing the task. Outcome measure: inspecting data trends, lvl, variability, magnitude of data change between conditions, and consistency of effects across different tasks	↑ in task efficiency when producing the videos, as well as when watching the VSM video found. Done by calculating task accuracy % baseline, production of video, and when viewing video before completing tasks	small sample, not tested on all populations, only done in one setting, only done c familiar tasks. Replication is needed to prove validity of this study

Kottorp, et al. 2003 Scandinavian Journal of Occupational Therapy Sweden	To implement a single-case design to evaluate the outcomes of a specified OT intervention program	AOTA 3B; Pyramid E4 single-case design	N=3 24-30 y.o. c moderate MR; incl: referred to disability services because of MR, lived in own apartment c limited support from caregivers, identified need and desire to develop ADL skills at home; no excl	Tx: identifying meaningful occupations of clients, and using adaptive interventions such as modifications of tasks or environments, providing adapted equipment, and teaching compensatory techniques. Also restorative interventions such as video feedback and verbal feedback from OT, and education and practice of more efficient ADL performance routines Outcomes: use of AMPS and AAD at baseline and after interventions	This OT intervention program including restorative occupation and adaptive occupation had positive effects on ADL process ability for three persons c MR, but only questionable effects on ADL motor ability and awareness of disability, despite changes found in mean abilities.	small sample, replication needed, only one population tested

McMahon, D. D., et al. 2015 Journal of Special Education Technology USA	To compare effects of three navigation aids (paper maps, Google Maps, and AR) c PSE studs c ID to safely navigate a college campus.	AOTA 3B; Pyramid E4 alternating treatment design	n=6, 18-24 y.o., 4 males and 2 females c mild to moderate ID, enrolled at a PSE program for studs c ID. One ppt fit incl criteria (moderate ID); 23 y.o.; pre-kindergarten lvl for reading decoding and comprehension (assessed c BTSI) Incl./Excl. Criteria: not explicitly mentioned by authors	DV: % of (I) direction checks Procedure: baseline, paper map, Google Maps, AR navigation app Used one of the 3 methods to navigate to novel location on campus 1/2 mile from starting location (locations could not be repeated for ppts). Req. to walk on sidewalks, use crosswalks, access greenways, walk inside building. Researcher(s) followed ppt and allowed 4 sec of hesitation from ppt before giving v/c and gestural assistance. Outcome measures: acquisition criteria defined as 100% (I) direction checks for three consecutive sessions. (I) navigation decisions divided by # of decisions possible = % of (I)	% of (I) direction checks across tx and the one ppt: Baseline: 0.0 Paper map: 2 Google Maps: 26.7 AR App: 75.6 Paper maps: most detailed, least amount of distractions; obtained from Google.com Google Maps: Used on iPhone/iPad; displayed pin c target location and best path AR Navigator Heads up Display: Real-time digital info (name of building, distance) on iPhone screen; displayed visual path to follow During baseline and paper maps, there was the least amount of (I). Google Maps showed more (I), but AR app was very successful. The one ppt's mean lvl of (I) rose to 75.6% during AR app and req no person supported in the last three sessions. Social validity: ppts reported they preferred AR app to other methods.	May not work as a stand-alone tool to find locations in large cities that req additional steps of locating a specific room in a multi-story building AR app displayed the target location in line of sight or compass bearing --> created obstacles (other buildings, parking lots, no crosswalks) that needed to be avoided

Sigafoos, J., et al. 2006 Journal of Behavioral Education USA	Evaluate VP and video fading procedure for teaching dishwashing skills to adults c DD	AOTA 3B; Pyramid E4 multiple baseline across subjects design	n = 3, c dev. disabilities. 2 of the 3 fit our incl criteria. 28-33 y.o.; dx of ASD and moderate MR. IQ ranges 45 & 46. Residing in community-based group home and attending vocational training program. Assessment scores show deficits in adaptive behavior functioning, deficits in domestic living skills (not (I) in washing dishes). Vision and acuity WNL. Incl Criteria/Excl Criteria not explicitly mentioned	VP and video fading used to teach skill of washing, drying, and storing dishes the ppts had just used for snack time. 10 step task analysis created and shown to ppts using prompts; ppts had to initiate the task within 30 sec. The intervention consisted of 2 times/week: baseline 1, VP 1, baseline 2, VP 2, video chunking, baseline 3, follow-up, follow-up c 1-chunk VP. Had to reach 90-100% (I) in VP 1 across 4-6 consecutive sessions. Video chunking phase used for three sessions before returning to baseline conditions DV = % of steps in dish washing task analysis that was completed correctly	During baseline 1, all ppts performed 30% or less of the tasks in the task analysis. When introduced to VP 1, the ppts showed an ↑ in performance to 100% correct. During baseline 2, the ppts' performance decreased. In VP 2, all ppts performed the task analysis c 100% accuracy. During video chunking, all ppts stayed at or above 90% accuracy. In baseline 3, performance dropped to around 90% for all ppts, but during the 1, 2, and 3 month follow-ups, all ppts' performance decreased to under 90%. When 1-chunk was introduced at the 3 month follow up, performance ↑ for all ppts at above 80%. Study suggests that VP was effective to teach skill of washing dishes.	Was not determined if acquisition would have occurred if the 1-chunk video was presented first

Wertalik, J. L., et al. 2018 Journal of Behavioral Education USA	To examine the development of (I) in daily living skills for individuals c ASD as they transition into adulthood from the highschool environment.	AOTA 3B; Pyramid E3 SCED (AATD)	N = 3, 17 y.o. male studs dx c ASD: made minimal progress acquiring ADL skills in the past Incl Criteria/Excl Criteria not explicitly mentioned	I: Compared two instructional methods, TAGteach and VM, c alternating tx to examine the short term effects to improve accuracy on ADL-based activities. IV: TAGteach and VM DV: frequency of steps performed correctly on a task analysis for each three target behaviors (brushes teeth, washes face, applies deodorant)	Results showed that there are immediate improvements in performance on targeted tasks for all studs c both TAGteach and VM	Adolescents c ASD is not in our incl however the paper includes the preparation for transitional stages into adulthood. The population is very small (N=3) and homogenous (17yo males)
Sigafoos, J., et al. 2005 Journal of Behavioral Education USA	Evaluate the use of a computer presented VP procedure for teaching three adults c DD to make popcorn in a microwave oven.	AOTA 3B; Pyramid E4 delayed multiple-probe across subjects design	n=3; 34-36 y.o.; IQ 43-50, dx of moderate MR (one dx c ASD too). Vision and hearing acuity WNL. Ability to self feed and motor skills necessary for task. According to VABS ppts had substantial deficits in domestic living skills. Ppts lacked meal preparation skills and had not received systematic training to develop meal preparation skills. All ppt living in community-based	10 step task analysis to make popcorn in microwave.Microwave redesigned to show only "start" and "popcorn" button. Experimental design is as follows: baseline 1, VP, video withdrawl (baseline 2), and follow-up. Video clips lasted 4-12 secs and included one-sentence voice-over instruction. The task analysis was used to determine if ppts (I) completed steps. Ppts must initiate next step within 30 sec of VP to be marked as (I). Agreement c trainer and reliability observer was	One ppts did not participate in the final two phases of the study because he failed to reach acquisition criteria within 15 sessions. During baseline 1, the ppts performance ranged from 0-30% (I). In VP phase, performance ↑ for all three ppts to 80-100%. After this phase, one ppt terminated the experiment. One of the two remaining ppt remained at 90-100% (I) in the final two phases: video withdrawl and 2, 6, 10 week follow-up. The other ppt performance remained at 100% in video withdrawl, but during	2 of 3 ppts reached criterion. The video clips included voice-over instructions and it isn't clear if that was responsible for acquisition alone

			group home and attended the same vocational training program. Incl/Excl Criteria not explicitly mentioned	calculated on a session by session basis using a formula. Ppt were given popcorn to make during their break and instructed using VP c audio cues added.	follow-up, performance ranged 80-100%.	
Smith, C. et al. 2017 Journal of Special Education Technology USA	Examine if AR is effective to improve navigation skills in PSE studs c ID	AOTA 3B; Pyramid E4 ABAB reversal design	n=3 (2 men, 1 woman), 22-25 y.o., IQ 48-65 (different IQ measures) Enrolled in 2-year PSE. Had basic cell phone operation skills; never been exposed to the app used in intervention. incl/excl criteria not mentioned	*Heads Up Navigator: 3D AR Navigation* app used on iPhone 4S to assist studs in traveling to a novel location on a large urban university campus. Baseline A, tx B, baseline A, tx B was experimental design. "model-lead-test" procedure to train ppts. First and sec tx B continues until each ppt reached criterion for (I) navigating to novel location for 3 sessions c 100% (I) and accuracy. 2nd baseline continued until 1st baseline results were neared or reached. DV: # of I waypoint decisions recorded when traveling to target novel location IV: mobile navigation app	At baseline, all studs reached 0-50% I, but following intervention, that ↑ to 71-100%. When baseline A was reinstated, performance decreased to 0-42% and when the (I) was reintroduced, I ↑ to 86-100%. Ppts also noted that they found the AR app to be useful for navigation. AR can be used to reduce lack of mobility, it is cost effective, does not require extensive planning nor preparation by researchers (as opposed to other methods like VM).	n=3; similar characteristics shared among ppts: disability dx, cultural and socioeconomic background, attended PSE program for highly motivated adults w/ disabilities, so can't be generalized. The app was only available to iPhone users at the time of the study and req. wireless internet and GPS.

Cakmak, S., et al. European Journal of Educational Research Turkey 2019	aims to provide the ID and autistic hs studs c (I) shopping skills by means of iPad.	AOTA 3B; Pyramid E4 Multiple probe design across subjects (single subject design)	N=3 17-19 y.o. "mentally retarded" and autistic all attending Umit Kaplan Vocational Education Center incl: prerequisite skills such as receptive and productive language skills, reading and writing double numbers, adding whole numbers c two digits and knowing money concept Excl not specified	2 iPad apps used in empty classroom. Tx between 10-11 a.m on Mondays, Tuesdays, and Fridays. The practitioner shows the stud how to work iPad and apps. When the shopping app is on, stud is able to see inside the market, products,a character that has his own face and money that he can use. Practitioner initially shows the stud the character in which his own face appears in iPad. The practitioner takes stud through all the steps of shopping on Ipad. Then has stud do it.. When necessary, he guides the stud. until the stud fulfills the shopping skill by himself on iPad. The presentation for teaching sessions took 45-60 minutes. stud needs to complete shopping three times successively to move on to (I) app stage in grocery store. Outcomes: an assessment scale for fulfilling the shopping skill" taken before, during, and after	intervention was effective on studs acquiring (I) shopping skill and the ppts could maintain the relevant skill even 5 or 10 days after the instruction	similar characteristics, small sample size

Bridges, S. A. et al. 2020 Journal of Special Education Technology USA	Evaluate whether the use of AR ↑ the % of steps completed (I) for individuals c IDD completing daily living tasks	AOTA 3B; Pyramid E4 multiple-baseline across ppts and behaviors design	n=3; only 2 have a dx of IDD: 19 y.o. Down syndrome; 20 y.o. Williams syndrome. ppts chosen from group of 15 individuals c moderate to severe IDD, attending a PSE Incl criteria: demonstration for needs of intense intervention to complete daily living tasks based on observational data, proficiency performing basic iPad functions, personal goals to ↑ (I) in area of daily living	Setting: dormitory on university campus. Intervention focused on setting alarm clock, ironing. Videos performing each task were recorded including verbal instructions, and closed captioning. HP Reveal = AR app, need to point camera at "marker" or "target" to activate VM. VM appeared as an overlay across the target. Ppts had to watch VM before completing task in the intervention; during fading, the "marker" was accessible if needed but they weren't req. to watch beforehand. Baseline 1 taken, then AR app introduced (ended when three data points were at or above 80% (I)), fading of AR app IV: use of AR app as VM tool for performing daily tasks DV: % of (I) steps completed based on a task analysis for performing the target skills	All ppts ↑ daily living skills and reached their personal goal. One ppt whose goal was setting an alarm did not use the "marker" during fading and remained 100% (I). The other ppt ↑ her (I) but she was not able to complete the fading procedure.	Small sample size, only one ppt of eligible criteria completed the entire experiment. Hard to generalize the info, failure to time-lag the introduction of intervention, and therefore unable to demonstrate a functional relationship between IV and DV.

Mechling, L. C. et al. 2004 Journal of Special Education Technology USA	Evaluate the use of a multimedia CBI program using video captions and still photographs was effective to each individuals c IDD how to read aisle signs and locate items in grocery stores	AOTA 3B; Pyramid E4 multiple probe design across ppts	n=3; 13-19 y.o., mild to moderate disabilities. Only one ppt fits our incl criteria; 19 y.o., moderate ID, epilepsy, IQ 47 (SBIS) Incl and excl criteria not stated	Design: CBI training, in-person generalization, intervention, baseline. CBI training: video caption of aisle, photo of same aisle, photo of item from same aisle, item placed in cart, photo of same aisle again, video caption to next aisle, then repeated. Ppts had 12 item shopping list, c 6 items matching aisle signs. CBI included VM and still photos. Criterion = 100% unprompted correct responses for 3 consecutive sessions. CBI followed by real life experience at grocery store	The one ppt who fits our criteria improved 44% from initial baseline to final baseline. The time for him to complete the shopping deceased from initial baseline. He needed 10 sessions using the intervention to reach criterion of 100% (I) 3 trials in a row.	Study limited generalization measures to 3 sessions (including only using one store) and failed to measure maintenance of skills. Intensive intervention (1-2 times/day for 4-5 days/week at ppts home)

Bouck, E. C., et al. 2013 Journal of Special Education Technology USA	Understand if the use of audio recorders (self-recorded or researcher recorded) impacted identification and selection of grocery items compared to a written list for individuals c disabilities lacking skills or (I)	AOTA 3B; Pyramid E4 alternating treatment design	n=3 but only 1 fits incl criteria. Attended hs and enrolled in a functional life skills program. stud had extensive experience in grocery shopping. Identified as using word list when shopping. Moderate ID. Incl/excl criteria not explicitly addressed	10 item grocery list created based on preference and relevance. Items grouped together at grocery store and by category. Experiment: baseline, intervention, maintenance; ppts shopped (I) c researcher following Baseline: 10 item handwritten list provided at store (not previously seen), asked to verbally identify item, locate in store, and select. Intervention: 1. grocery shopping c 10 item list on pre recorded audio recorder by researcher and 2. stud recording own list Maintenance: shopping c method deemed most effective for self Ppts alternated using self recorded list and researcher recorded list DV: correct number of items identified from grocery list, correct number of items from list, and time to complete list	Results show that the self recorded message was more successful than the researcher recorded recording. She was able to identify 6.8 items and 5.8 items respectively c the two choices for recordings. During maintenance phase, she had an average of 8.0 items correct. Since the ppt was an emergent reader, the audio recorder helped identify items. She didn't initially perform better during the intervention, it was during the maintenance phase she improved the most and ↑ (I).	Researchers used a lot of prompts to assist c the shopping. Length of experiment (4 instead of 5 phases occurred).

Agran et al. 2000 Education and Training in Mental Retardation and Developmental Disabilities USA	The purpose of the study was to evaluate the efficacy of the model means for educators to teach stud transition-related goals and to examine the degree to which stud who received instruction using the model benefited in terms of self-determination and goal orientation outcomes.	3B- non randomized pre-post test study; Pyramid E4	n = 19, but only 8 meet incl criteria of age and of those 8, 6 completed the trial. stud categorized as having a disability and served through special education, teachers identified stud they thought needed to become more self-determined, all studs were involved in transition programs in their respective schools	studs were trained to incorporate a self-regulated problem solving process.Three instructional phases to the model. Each phase presents a problem to be solved, there is a series of four questions that must be answered. To answer the questions in the sequence studs must regulate problem solving by setting goals to meet needs, constructing plans to meet goals, and adjusting actions to complete plans. DV: successful attainment of self-determined goal (skill proficiency or (I))	5 out of the 6 ppts who meet incl criteria improved their performance of target behaviors between baseline and post-training mean. The design provides experimental control by giving evidence that the mean performance across the group improved only when the intervention was introduced.	Time constraints ruled out incl of a maintenance condition. Delayed multiple baseline design across the group limited the experimental control of the study.
Deppisch, M. J. 2013 Dissertations and Theses Global USA	To investigate the effectiveness of combined visual supports for increasing (I) and decreasing prompt dependency. Follows a hs stud c a severe intel. and dev disability,	AOTA 4; Pyramid Q4 SCED	N=1 (male); 21 y.o.; dx as learning impaired c academic and adaptive behavior skills assessed at preschool to below-preschool lvl. Incl Criteria: available to participate, dx of severe intel disability, current participation in a transition program at a hs	Designed tasks for ↑ daily living skills (washing hands, brushing teeth, using urinal, brush hair, put together a puzzle, wash tables, grocery shopping, make peanut butter toast, prepare cleaning solution.) Withdrawal phase added after stable responding was achieved. Generalization phased added assessing lvl of (I). Inter-observer agreement	Results indicated dramatic ↑ in (I), and decreases in lvl of prompting req. which is promising for our study purposes in examining effective interventions for promoting (I).	- Single ppt - Low staffing availability - Devices such as personal computers and palmtop devices were not considered as they require a higher lvl of skill

	transitioning to adult dev services to complete vocational and daily living skills tasks.		Ext criteria: none provided	calculated, such as during task analysis and interventions incl verbal praise (token reinforcement schedule) and sequencing and performing tasks (I)ly		
Goodson et al. 2007 Research in Developmental Disabilities USA	To determine whether the addition of video-based error correction would improve daily skill acquisition for individuals who initially failed to learn a domestic living skill c antecedent VP procedure.	AOTA 3B-nonrandomized pre-post test study, Research Pyramid Q3	N=3, adult men c DD, living in community-based group homes and attending the same vocational training program during the day. All ppts had substantial deficits in adaptive behavior functioning, consistent c dx of "moderate MR" c extensive support needs.	- to control for hx, maturation and practice effects, VP was introduced across ppts in a multiple-baseline design. -Inter-observer agreement to increase reliability (always either 90% or 100%)	-Despite initial failure to learn task c just VP all ppts were successful when error correction procedure was added -none of the ppts completed many of the steps correctly in the initial baseline -most frequent type of error was incorrect placement of utensils	-study did not determine whether acquisition would have occurred if procedure had been implemented for more sessions -not known which component of the error correction procedure was necessary or sufficient (show video clip 2nd time or trainer demonstration of task). -study did not attempt to remove or fade VP [however data shows that ppts became more (I)]
Dalgarn, J. 2017 Dissertations and Theses Global. USA	To improve qol for high needs individuals c disabilities in transition programs on ADLs, vocational assessment, and workplace readiness training	AOTA 3B; Pyramid O4 nonrandomized pre-post test study	N=27 (n=22 ASD, n=15 mobility impairments, n=8 seizure disorders, n=6 require lvl of assistance for self-care); 13-21 y.o. Incl Criteria: live in state-run institutions in Kansas, middle and high individuals c severe disabilities	- Transcripts and field notes for each interview - Codes sorted into natural categories to identify emerging patterns - Negative and positive behaviors measured - vocational assessment and exploration - workplace readiness - (I) living skills - self-advocacy and self-care	The study yielded statistically significant results that a focused, lvl curriculum emphasizing those areas mentioned.	- Limited to scope to only middle and high individuals c severe disabilities (aged 13-21) - Small group size - Lack of control or comparison group

			Excl Criteria: None provided			
Burckley, E. et at. 2014 Developmental Neurorehabilitation USA	To provide VP and VC to teach shopping skills in the community to young adult c ASD and ID using tech-based instruction Maintenance and generalization also assessed.	AOTA 3B; Pyramid Q4 multiple-probe design	N = 1; 18 y.o. Caucasian female c ID. Incl Criteria: demonstrates limited I, reliant on instructor prompts, familiar c use of iPad Excl Criteria: None provided	During baseline, ppts assessed on skills in following a printed picture list to shop for 2 items using iPad for VP and VC. Maintenance and generalization probe provided Dependent measure: -walk in store -obtain shopping basket -tap picture of first item -navigate to location of second item -select second item -walk to checkout line	VC and VP increases IADL skills of shopping in ⅔ of community locations assessed, skills maintained after intervention, generalization achieved. iPad 2 c Book Creator software may be effective to teach I shopping skills but additional replications are needed	-medication changes could have affected performance -instructor assistance during intervention -ppt preferences of shopping items shift, decreasing motivation.
Mechling, L.C., et al. 2013 Remedial and Special Education USA	To compare the effects of using commercially available and custom-made VP on the completion of cooking recipes	Experimental-adapted alternating tx design AOTA: 3B Pyramid: O4	N=4 (2 our age range) 15-19 y.o males c ASD	Tx took place in home living room of hs and conducted by one of the authors. Custom VP was compared to commercially available VP software to complete cooking tasks. Each ppt did a baseline trial, a comparison trial, final tx and best tx both using customized VP.	Results indicate each of the four ppts performed more steps of the recipes independently correct when using the custom-made videos	varies by individual, small sample size, could be task specific, limited number of videos evaluated

Kellums, R. et al. 2012 Hammill Institute of Disabilities USA	To evaluate the effectiveness of using video modeling delivered through apple video ipod as a means of teaching job-related tasks	multiple probe design 3B, O4	N=4, 16-22 y.o Incl: ASD or PDD-NOS dx, cognitive functioning average or below, on Standard-Binet Intelligence Scale, currently employed in vocational setting Excl not specified	Three vocational tasks of each ppt were identified through collaborative process (are also IADL's within home context). Three videos were produced using job coach or peers. 3 videos for each ppt depending on task, and then broken up into clips for each step of task analysis that was done. Ppts attended learning session for Ipod use, then baseline was completed doing each task with observer watching. After baseline, ppts were instructed to watch videos on Ipod, and were given no further instructions and if they asked a question, the observer would tell them to refer to Ipod. Maintenance probes were completed on tasks 1 and 2.	VM intervention showed increase in the percentage of steps completed correctly. All ppts demonstrated maintenance of the acquired tasks	lack of female representation, hard to generalize because each ppt is unique,
Gardner, S.J. 2019 Journal of Special Education Technology	To investigate the effectiveness incorporating VP along with graduated guidance as an error correction procedure to teach	AOTA 3B; Pyramid E3 SCED (AATD)	N=4, 14-19 y.o. Incl: diagnosed w/ ASD by a licensed professional and had an IEP, had deficits in adaptive and/or daily living skills, and recommended by their educational teams	Instructional package including VP and prompting along with a graduated guidance error correction procedure. 3 of the 4 ppts acquired dishwashing skills upon introduction of the intervention. 2 ppts were able to generalize their	Findings support the use of a video-based instructional package consisting of VP and graduated guidance to teach daily living skills to studs with ASD and intellectual disabilities. This study indcates that video priming and VP along with graduated	Limitations:Study had to end when the summer school program ended, limited generalization and main- tenance data were reported for half of the ppts who did complete the intervention in accordance with the summer schedule, one ppt received a different

USA	dishwashing skills to four adolescents with ASD.			performance to two novel settings and maintain their skills for up to 3-week post intervention. DV: number of steps in the task analysis performed correctly, number of sessions required to reach the target accuracy criterion, and the level of assistance needed with graduated guidance for correct performance of a given step. All VP clips were filmed from the performers perspective. Four phases: baseline, intervention, video withdrawal, and generalization/maintenance.	guidance positively impacted skill acquisition, maximizing stud independence with performing a valuable and lifelong daily living skill.	video modification from the other ppts.
Cannella-Malone et al. 2006 Division on Autism and Developmental Disabilities USA	To compare the effectiveness of VP verse VM in teaching 6 adults c DD to set table and put away groceries.	AOTA 3B; Pyramid E3 Combined multiple probe across subject design with and alternating	N=6, 27-41 y.o. Inclusion: lived in community-based group homes, attended vocational program during the day, substantial deficits in ability to complete tasks in the domestic living domain, vision and hearing acuities were all within normal	VP involved 10 separate video clips, each showing one step, VM involved a single video showing all 10 steps from beginning to end. After watching, ppts were given the opportunity to complete the task. VP and VM were counterbalanced across tasks and ppts and compared in alternating tx design. Training was	VP was effective in promoting rapid acquisition except in 1 case. VM was generally shown to be ineffective. This study suggests that the duration, number and/or perspective from which the video clips are filmed may influence effectiveness for individuals with DD.	Limitation of the study include that only VP clips were filmed from the perspective of the ppts. 2 ppts may have been biased in favor of video prompting because of prior experiences with video prompting in a previous study teaching dishwashing.

		treatment design.	range Exclusion: deficits could not be due to physical impairment	conducted individually to avoid incidental modeling effects. Outcome of skill acquisition in IADLs of setting placemat and putting away 10 grocery items.		
Mechling et al. 2009 Division on Autism and Developmental Disabilities USA	To compare the use of static picture prompting and VP to self-prompt multi-step cooking tasks.	AOTA 3B, E4, SCED (AATD)	N=4, 19 to 22 y.o. Young adults with intellectual disabilities in need of meal preparation skills and had an IEP. Inclusion: prerequisite skills: operation of can opener, turning and setting dials on a stove, oven, and kitchen timer, opening jars, spreading with a knife, cutting with scissors, putting on and removing oven mitts, operation of an electric mixer, pouring, and stirring.	Six recipes were selected from a commercially available cookbook designed for persons unable to read text, ppt were assigned to each recipe within a set for VP and the alternating recipe within a set for static picture prompting prior to the start of study. Number of steps range from 10-19. Xerox copies were made of static picture prompts, VP clips were made to correspond to each step of the task. Adapted alternating tx design with baseline, alternating treatments, and final treatment.	VP was more effective than static pictures for self-prompting studs to complete complex tasks. DVs were: % of steps completed (I)ly correct for each cooking task, amount of time to complete each task, and number of prompts required by ppt to use or operate the system (static picture or VP.) Prompts were only provided for using the system. Each session consisted of one trial for static picture and one trial for VP. Order of presentation was counterbalanced across sessions and days. Final tx condition served to evaluate possible carryover effects by applying the VP alone for three sessions or until data stabilized. A second investigator (I) recorded ppts performance for interrater reliability, procedural reliability data was collected	It is possible that some steps were learned through observation when the instructor completed the critical step of a task analysis. Each task analysis was not individualized for each 4 ppt in order to standardize the procedure. The prompting systems did not allow for adaptation as ppts' needs for prompts changed.

					as well (97.6%).	
Mechling et al. 2005 Education and Training in Developmental Disabilities USA	To evaluate the effectiveness of CBVI used by studs with ID to make purchases in fast food restaurants to promote I. Generalization and maintenance of skills were measured.	AOTA 3B; Pyramid Q4 multiple-probe design	N=3 (females: n=1, males: n=2); 17-20 y.o. Incl: visual ability, physical ability, dx of moderate to severe ID, IEP objectives for increasing public transportation skills, transition plans identifying semi-independent Excl: not specified	Studs receive individual instruction of using CBVI and scored on following verbal steps. Generalization probe measures were taken to determine ability to verbally place orders. studs evaluated on ability to generalize verbal responding and completing steps, studs who reached criteria with CBVI and completed generalization condition evaluated for skill maintenance in more restaurants following.	Interobserver agreement (99.4% across all ppts and conditions))and procedural reliability data were collected simultaneously on 100% of generalization maintenance sessions. Procedural reliability data collected. Generalization sessions in community demonstrated the need for additional verbal skills. Each stud was able to correctly perform motor skills following CBVI.	Skills limited to ordering three generic food and drink items and answering the location for consuming items, motor skills may not be taught using observation alone through CBVI.
Mechling, C., et al. 2010 Education and Training in Developmental Disabilities USA	To evaluate the effectiveness of CBVI used by studs with ID to utilize a public bus to promote generalization of skill to natural environment and independence.	AOTA 3B; Pyramid Q4 multiple-probe design	N=3 (females: n=1, males: n=2); 17-20 y.o. Incl: visual ability, physical ability, ability to make verbal requests, dx of moderate to severe ID, attending high school, need for community skills, interest in using fast food restaurants. Excl: not specified	Generalization probe sessions conducted on same public city bus route. CBVI sessions conducted in classroom at learning site. CBVI conducted individually with each stud and taken along route, given 3 trials in one session. Data collected on ability to push “request stop” during CBVI and natural environment. Procedural reliability data collected on instructor and computer	⅔ studs able to generalize skill with 100% correct performance on all sessions. Results indicate that CBVI is effective and efficient for teaching studs to use landmarks on bus route and push request stop signal to exit the bus.	Not enough research evaluating effectiveness of teaching riding city bus, time consideration and constraint for school programs, cost of bus fare.

				behaviors (delivery, error correction etc).		

Appendix B

Term Abbreviation Key

Term	Abbreviation	Term	Abbreviation
Activities of Daily Living	ADL	Intelligence quotient	IQ
Application	app	Level	lvl
Augmented reality	AR	Mental retardation	MR
Autism Spectrum Disorder	ASD	Occupational therapy/therapist	OT
Brigance Transition Skills Inventory	BTSI	Participants	ppt
Computer based instruction	CBI	Percent(age)	%
Computer-based video instruction	CBVI	Pervasive Developmental Disorder-not otherwise specified	PDD-NOS
Dependent Variable	DV	Postsecondary education program	PSE
Developmental	Dev	Quality of life	qol
Developmental disability	DD	Required	req.
Diagnosis	dx	Second(s)	sec
High School	hs	Stanford Binet Intelligence Scale	SBIS
Inclusion / Exclusion	Incl / Excl	Student	stud
Increased	↑	Treatments	tx
Independence/Independent	(I)	Video modeling	VM
Individualized education plan	IEP	Video prompting	VP
Independent Variable	IV	Vineland Adaptive Behavior Scales	VABS
Information	info	With	c
Intellectual	Intel	Within normal limits	WNL
Intellectual Developmental Disability	IDD	Years old	y.o.
Intellectual Disability	ID		

Appendix C

Search Tracking Table

Initials	Search Terms or Strategies (note Limits, MeSH, etc.)	Date Searched	Resource Used (database, search engine)	# Hits	# Excluded	# Kept	Notes
CH	"adults" AND "ADL" AND "autism"	6/28/22	PubMed	3	3	0	
NB	(self care) AND (ADL) AND (adults with autism) AND (severely disabled) AND (independent living) AND transition	6/29/22	ProQuest	622	615	7	
CH	Search: ((intellectual disab*) or (developmental disab*) or (mental retardation)) and ((independent) or (daily living) or (life skills) or (self-help) or (hygiene) or (adaptive)) and ((computer) or (computer based) or (computer assisted)) and ((adult*) or (transition*) or (over 18) or (over eighteen)) Filters: from 2000 - 2022	7/9/22	PubMed	184	184	0	
CH	adults and ADL and autism	7/11/22	EBSCOhost: Education Research Complete	33	31	2	
CH	hand searching	7/11/22	Ford, K., Wang, M., Kern Kogel, L., Koegel, R. L., Fedders, A. (2020). Use of a videoconferencing intervention and systematic hierarchy to teach daily living skills to young adults	2	0	2	

			with autism spectrum disorder. *Journal of Positive Behavior Interventions,* 23(2), 81-92. https://doi.org/10.1177/1098300720921214				
ND	adults and ADL and autism and independence	7/12/22	ERIC	50	40	10	
CH	adult and disab* AND ADL or daily living skill AND video prompting	7/13/2022	EBSCOhost: Education Research Complete	6	4	2	
SD	autism AND adult AND ADL	7/14/2022	CINAHL	43	36	7	
SD	autis* AND severe AND intervention AND adult	7/14/2022	CINAHL	55	52	3	
NB	(adults with developmental disability) AND interventions AND ADL AND grooming AND bathing AND dressing AND (self care)	7/15/2022	ProQuest	985	981	3	more refined search than the last (adults with developmental disability), excluding caregiver experiences, any mention of studies before 2000... unsure whether or not to include dissertations/thesis papers as well as long term residential living services for older adults with autism or older adults with ID/DD who's interventions focus more on their frailness rather than the disability itself
ND	developmental disabilities AND adult AND interventions AND strategies AND independence	7/21/2022	ERIC	16	15	1	

SD	developmental disabilities AND adult AND self care AND interventions OR best practices OR strategies	7/21/2022	CINAHL	25	23	2	
SD	nonverbal AND adult AND interventions OR best practices OR strategies	7/21/2022	CINAHL	350	349	1	
SD	low iq OR intellectual disability AND adults AND activities of daily living AND interventions OR strategies OR best practices	7/22/2022	CINAHL	41	40	1	
SD	autis* AND adult AND self care OR self-care OR self management OR self-management	7/22/2022	CINAHL	55	50	5	
CH	neurodivergent or intellectual disability and daily living skill and adult	7/26/22	EBSCOhost: Education Research Complete	36	33	3	
CH	[All adult and severe disab*] AND [All transition age and intervention] AND [All daily living skill]	7/29/2022	The Journal of Special Education Technology	27	25	2	
CH	[All adult and severe disab*] AND [All transition age and intervention] AND [All daily living skill]	7/29/2022	Journal of Intellectual Disabilities	47	47	0	
ND	independence AND adult AND interventions OR best practices OR strategies	8/1/2022	ERIC	150	140	2	3 repeat articles from others searches so i am not counting them as articles kept.
CH	adult* AND technology AND indepen* AND daily life skills OR activities of daily living	8/3/2022	SageJournals: Journal of Intellectual Disabilities, Journal of Special Education	200	192	8	

			Technology, and The Journal of Special Education				
CH	adult AND Independ* AND ADL AND disab* AND intervention	8/7/2022	American Journal of Occupational Therapy	457	454	3	one repeat article was not counted as a "kept" article
ND	Students with disabilities AND transition services AND life skills	9/8/2022	EBSCOhost: Education Research Complete	64	59	5	3 repeats
NB	All autism] AND [All severe] AND [All transition students] AND [All adults] AND [All self care]	9/8/2022	British Journal of Occupational Therapy	27	27	0	
NB	Students with disabilities AND transition services AND occupational therapy	9/8/2022	EBSCOhost: Education Research Complete	38	38	0	
ND	Hand searching	9/29/2022	Test, D. W., Fowler, C. H., Richter, S. M., White, J., Mazzotti, V., Walker, A. R., Kohler, P., & Kortering, L. (2009). Evidence-Based Practices in Secondary Transition. Career Development for Exceptional Individuals, 32(2), 115–128. https://doi.org/10.1177/0885728809336859	84	84	0	4 repeats and many out of our publishing date inclusion criteria, many out of our age criteria.

ND	Hand Searching	9/29/2022	Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of Interventions to Promote Self-Determination for Individuals With Disabilities. Review of Educational Research, 71(2), 219–277. https://doi.org/10.3102/00346543071002219	119	119	0	Majority of articles were out of date range criteria, 2 repeats.
ND	Hand Searching	10/2/2022	Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in autism spectrum disorders: A review of three focused interventions. Journal of Autism and Developmental Disorders, 39(9), 1329–1338. https://doi.org/10.1007/s10803-009-0751-2	67	64	3	One meta-analysis that can be hand searched,

ND	Hand Searching	10/2/2022	Lee, C. E., Shogren, K. A., Segal, J., Pezzimenti, F., Aleman-Tovar, J., & Taylor, J. L. (2021). Goal attainment scaling—community-based: A method to incorporate personalized outcomes into intervention research with youth and adults on the autism spectrum. Autism, 26(1), 178–187. https://doi.org/10.1177/1362361320924492	36	35	1	1 repeat
ND	Hand Searching	10/2/2022	Bellini, S., & Akullian, J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders. Exceptional Children,73, 264–287.	53	52	1	2 repeats
NB ND SD CH	Hand Searching	10/31/2022	Auld, C., Foley, K., Cashin, A. (2022). Daily living skills of autistic adolescents and young adults: A scoping review.	46	43	3	

			DOI: 10.1111/1440-1630.12806				
ND	Hand Searching	11/1/2022	Hong, E. R., Ganz, J. B., Ninci, J., Neely, L., Gilliland, W., & Boles, M. (2015). An evaluation of the quality of research on evidence-based practices for daily living skills for individuals with autism spectrum disorder. https://doi.org/10.1007/s10803-015-2444-3	67	62	5	

Appendix D

Master Citation Table

MASTER CITATION TABLE					
Citation	Include (from abstract)	Maybe (Explain) (from abstract)	Final decision Y/N	If No, reason to exclude	Reviewer
A. Kottorp, M. Hällgren, B. Bernspång & A.G. Fisher (2003) Client-Centered Occupational Therapy for Persons with Mental Retardation: Implementation of an Intervention Programme in Activities of Daily Living Tasks, Scandinavian Journal of Occupational Therapy, 10(2), 51-60, https://doi.org/10.1080/11038120310009416	Include- ADL interventions for moderate "mental retardation" in adults- meets inclusion criteria with no exclusion criteria present.		Y		SD
Agran, M., Blanchard, C., & Wehmeyer, M. L. (2000). Promoting Transition Goals and Self-Determination Through Student Self-Directed Learning: The Self-Determined Learning Model of Instruction. Education and Training in Mental Retardation and Developmental Disabilities, 35(4), 351–364. http://www.jstor.org/stable/23879857	Include. Findings from a multisite randomized clinical trial measuring the impact of employment on independence in 18 to 22 year old youth with significant impact from ASD. The treatment condition was Project SEARCH plus ASD Supports (PS+ASD) where 73.4% of ppt gained competitive integrated employment (CIE) within 1 year of graduation compared to control ppt who acquired CIE at 17%. ppt demonstrated overall improvement whereas control group ppt demonstrated improvement in one domain only. Between groups analysis indicated that ppt demonstrated better rates of improvement at graduation		Y		ND

	and 1-year follow-up. Evidence that employment provides therapeutic benefits to individuals with ASD.				
Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of Interventions to Promote Self-Determination for Individuals With Disabilities. Review of Educational Research, 71(2), 219–277. https://doi.org/10.3102/00346543071002219		comprehensive review of literature and used quantitative methods of meta-analysis to investigate what self-determination interventions have been studied, what groups of individuals with disabilities have been taught self-determination, and what levels of outcomes have been achieved using self-determination interventions	N	Will hand search for articles with data	ND
Blaskowitz, M. G., Johnson, K. R., Bergfelt, T., Mahoney, W. (2021). Evidence to inform occupational therapy intervention with adults with intellectual disability: A scoping review. The American Journal of Occupational Therapy, 75(3). https://doi.org/10.5014/ajot.2021.043562		Based on the title and abstract, this article is a scoping review of evidence-based occupational therapy interventions for adults with intellectual disability. Articles that focused on employment, self-care, leisure and social interaction, and community participation were reviewed. It is unclear how these are broken down in the article itself.	N	While this article is great because it explored OT interventions to improve independence in occupations, it doesn't actually add anything of substance to our study. It just gives general information of how interventions help increase independence, but it doesn't explicitly	CH

				state how or the method that was used to be most effective.	
Bouck, E. C., Satsangi, R., Bartlett, A. M. W. (2013). Using audio recorders to promote independence in grocery shopping for students with intellectual disability. Journal of Special Edcuation Technology, 28(4), 15-26. https://doi.org/10.1177/016264341302800402		The abstract does not mention the age of the students in the study.	Y		CH
Bridges, S. A., Robinson, O. P., Stewart, E. W., Kwon, D., Mutua, K. (2019). Augmented reality: Teaching daily living skills to adults with intellectual disabilities. Journal of Special Education Technology. https://doi.org/10.1177/0162643419836411			Y		CH
Burckley, E., Tincani, B., Fisher, A.G. (2014) An iPad-based picture and video activity schedule increases community shopping skills of a young adult with autism spectrum disorder and intellectual disability. Developmental Neurorehabilitation, 18(2): 131–136. DOI: 10.3109/17518423.2014.945045	demonstrated the efficacy of tech-based instruction to establish response chains for those with ASD and/or intellectual disability, the purpose of which was to evaluate the use of visual cues and video prompting delivered by an iPad 2 to teach shopping skills in the community.		Y		NB

Cakmak, S., & Cakmak, S. (2015). Teaching to Intellectual Disability Individuals The Shopping Skill Through Ipad. European Journal of Educational Research, 4(4), 177-183. doi: 10.12973/eu-jer.4.4.177	Include- meets all inclusion criteria. This article is about adults with mental retardation increasing independence in ADLs		Y		SD
Cannella-Malone, H., O'Reilly, M., De la Cruz, B., Edrisinha, C., Sigafood, J., Lancioni, G. E. (2006). Comparing video prompting to video modeling for teaching daily living skills to six adults with developmental disabilities. Education and Training in Developmental Disabilities, 41(4), 344-356. https://www.jstor.org/stable/23879661	Y; the abstract mentions that the article compares two types of video-based instructions, video modeling and video prompting, to determine the most effective intervention for teaching daily living skills to individuals with developmental disabilities.		Y		CH/ND
Cheak-Zamora, N., Petroski, G., La Manna, A., Beversdorf, D., & Farmer, J. (2020). Validation of the health-related independence for young adults with autism spectrum disorder measure-caregiver version. Journal of Autism and Developmental Disorders, 51(6), 2036–2046. https://doi.org/10.1007/s10803-020-04690-2		Exclude, is looking at the effectiveness of a measurement tool, not intervention approaches	N		ND

Cohen, S., Koegel, R., Koegel, L. K., Engstrom, E., Young, K., & Quach, A. (2022). Using Self-Management and Visual Cues to Improve Responses to Nonverbal Social Cues in Adults With Autism Spectrum Disorder. Behavior Modification, 46(3), 529–552. https://doi.org/10.1177/0145445520982558		Unsure- abstract does not say if independence was increased or if ADL's and IADL's are addressed Final answer NO! Only about social participation	N		SD
Condy, J., Myburgh, L., & Barnard, E. (2020). Pedagogical approaches to develop social skills of learners with autism spectrum disorder: Perceptions of three foundation phase teachers. Perspectives in Education, 38(2). https://doi.org/10.18820/2519593x/pie.v38.i2.16		Exclude. "high-functioning" looking more at social skills Support strategies used in this research project include group work, structured play, social stories and visual aids. Qualitative Study. Sub-Saharan Africa. This article looks at how three foundation phase teachers provided explicitly structured classroom experiences to develop social skills training (independence, behavioral etiquette and self-esteem.) This study was underpinned by Vygotsky's (1978) socio-cultural theory (highlights the importance of social learning in the education of children with disabilities.) Also mentions high functioning.	N	N, strategies don't target ADLs or IADLs	ND

Cullen, J. M., Alber-Morgan, S. R. (2015). Technology mediated self-prompting of daily living skills for adolescents and adults with disabilities: A review of the literature. Education and Training in Autism and Developmental Disabilities, 50(1), 43-55. https://www.jstor.org/stable/24827500		The article is a review of the literature that looked at 36 experimental research studies. The term "adolescent" in the title indicates that individuals are under 18, however it is unclear how the rest of the article is organized and if there are sections that contain studies with adults over 18 years old.	N	The inclusion criteria for this literature review are individuals 12 and older. All the information is clumped together and there is no differentiation between articles, so this automatically does not fit our inclusion criteria	CH
Cullen, J. M., Simmons-Reed, E. A., Weaver, L. (2017). Using 21st century video prompting technology to facilitate the independence of individuals with intellectual and developmental disabilities. Psychology in the Schools, 54(9), 965-978. https://doi.org/10.1002/pits.22056		While the abstract mentions that the ppt in the study are in a postsecondary program, it does not mention their ages.	N	While the ppt in the study lacked basic cleaning skills noted by program staff, their IQ scores are relatively high. While IQ score is not part of the inclusion criteria, the descriptions of the ppt do not	CH

				demonstrate they are significantly impaired	
Dalgarn, J. (2017). The quiet discrimination of lowered expectations: A study on the independent living needs of severely disabled individuals in kansas (Publication No. 10272156) [Doctoral dissertation, University of Arkansas]. ProQuest Dissertations and Theses Global.	The purpose of this study was to examine the independence of individuals with severe disabilities in transition programs and the relationships between ADLs, vocational assessment, and workplace readiness training. The study yielded statistically significant results that a focused, leveled curriculum emphasizing those areas mentioned.		Y		NB
Delgado-Lobete, L., Montes-Montes, R., Freire, C., & María del Mar Ferradás. (2021). Performance of (instrumental) activities of daily living and physical capacity in Spanish adults with intellectual disabilities: A cross-sectional pilot study. Healthcare, 9(4), 435. https://doi.org/10.3390/healthcare9040435		This pilot study aimed to describe the profile of ADL and IADL performance in Spanish adults with ID cross-examined with functional physical skills. The Waisman Activities of Daily Living Scale for adolescents and adults with developmental disabilities (W-ADL) was administered to the caregivers of twenty adults with ID (mean age = 41.0, SD = 10.1; women = 75.0%). The study individually assessed patients' dynamic balance and maximum walking speed, LB strength, aerobic capacity and manual dexterity.	N	Most ppt were functional in completing ADLs	NB

Deppisch, M. J. (2013). Increasing independence in individuals with severe intellectual disabilities: Investigating visual supports for decreasing prompt dependency (Publication No. 1546517) [Doctoral dissertation, University of Arkansas]. ProQuest Dissertations and Theses Global.	This paper reviews the dependence levels of individuals with severe intellectual and developmental disabilities when participating in daily activities and living skills. This study investigates the effectiveness of combined visual supports for increasing independence and decreasing prompt dependency. It follows a high school student with a severe intellectual and developmental disability, transitioning to adult developmental services to complete vocational and daily living skills tasks. The results indicated dramatic increases in independence, and decreases in levels of prompting required which is promising for our study purposes in examining effective interventions for promoting independence.		Y		NB

DeZonia, K. R. (2008). Formulating their future: Transition to adulthood for students with profound disabilities (Publication No. 3307118) [Doctoral dissertation, University of California, San Diego]. ProQuest Dissertations and Theses Global.		This study examines students with profound developmental disabilities entering adulthood and parent, teacher, and institutional formulations. It includes an overview of post-school outcomes, transition practices, social constructions of adulthood and disability, and parent/teacher perspectives on adulthood for students with profound disabilities. This research provides insightful information about the factors that influence the formulations of the adult lives of students with profound disabilities including the role of context in thinking, decision making, cultural expectations, and community perceptions. While this study supports the critical need for establishing model transition programs, there is heavy emphasis on parent, teacher, and institution implications and their perspectives rather than the student's levels of ADL/IADL integration. The study uses data collected from interviews with parent and teacher pairs and community resources rather than directly from the patients. There may be good information on how transition-based programs for adults with profound disabilities are run but the abstract lacks mention of interventions for activities of daily living skills.	N		NB

Feathers, Karen H.; Schadler, Deborah E. (2020). Transition Programs for Individuals with Disabilities: A Post-Secondary College Experience Leading to Greater Independence in Life and Work. Journal of the American Academy of Special Education Professionals, Win 2020, p7-37	Exclude, looks at assessments and high functioning individuals.		N	Did not meet inclusion criteria of highly impacted by disability and looked at assessment options not interventions .	ND
Ford, K., Wang, M., Kern Kogel, L., Koegel, R. L., Fedders, A. (2020). Use of a videoconferencing intervention and systematic hierarchy to teach daily living skills to young adults with autism spectrum disorder. Journal of Positive Behavior Interventions, 23(2), 81-92. https://doi.org/10.1177/1098300720921214		The title and abstract make the article appear that it will teach daily living skills to young adults with Autism Spectrum Disorder, but it doesn't explicitly state which daily life skills the intervention will focus on. The abstract also does not mention the ages of the ppt.	N	The ppt in the study were described as having average intelligence	CH
Ganz, J. B., Pustejovsky, J. E., Reichle, J., Vannest, K. J., Foster, M., Haas, A. N., Pierson, L. M., Wattanawongwan, S., Bernal, A., Chen, M., Skov, R., & Smith, S. D. (2022). Considering instructional contexts in AAC interventions for people with ASD and/or IDD experiencing complex communicative needs: A single-case design meta-analysis. Review Journal of Autism and Developmental Disorders. https://doi.org/10.1007/s40489-022-00314-w		Exclude- focus is primarily on children	N		ND

Gardner, S., & Wolfe, P. (2019). Results of a video prompting intervention package impacting dishwashing skill acquisition for adolescents with Autism. Journal of Special Education Technology, 34(3), 147–161. https://doi.org/10.1177/0162643418802666	Include, this article looks at VP coupled with a form or error correction to increase effectiveness.		Y		ND
Geller, L., Greenberg, M. (2009). Managing the Transition Process From High School to College and Beyond: Challenges for Individuals, Families, and Society, Social Work in Mental Health, 8(1), 92-116, https://doi.org/10.1080/15332980902932466		Unsure- need to read more to see age and if there is mention of ADL or IADL Final answer NO! Seems like more of a resource on the topic, no interventions. BUT, has helpful tips that we might use for paper	N		SD
Golisz, K., Waldman-Levi, A., Swierat, R. P., Toglia, J. (2018). Adults with intellectual disabilities: Case studies using everyday technology to support daily living skills. British Journal of Occupational Therapy, 81(9), 514-524. https://doi.org/10.1177/0308022618764781		Per the title and article, inclusion criteria for age is satisfied, however it is unclear from the abstract alone, what "mild to moderate intellectual disabilities" entails.	N	None of the ppt fit inclusion criteria	CH

Goodson, J., Sigafoos, J., O' Reilly, M., Cannella, H., & Lancioni, G. (2007). Evaluation of a video-based error correction procedure for teaching a domestic skill to individuals with developmental disabilities. Research in Developmental Disabilities, 28, 458–467.			Y		ND
Gustin, L., Funk, H.E., & Reiboldt, W., Parker, E., Smith, N., Blaine, R. (2020). Gaining independence: Cooking classes tailored for college students with autism (Practice Brief). Journal of Postsecondary Education and Disability, 33.4, 395-403. https://eric.ed.gov/?id=EJ1293012		Exclude: Sample was made up of college students, could mean not highly impacted. Registered dietitian nutritionist, not OT. Mentions the Learning Independence for Empowerment (LIFE) project which may be a useful resource.	N	N, High functioning.	ND
Hall, M. L. (2018). Addressing activities of daily living (ADLs) by design: Identifying self-care adl challenges & designing clothing to promote independence for children with disabilities (Publication No. 10979841) [Doctoral dissertation, University of Delaware]. ProQuest Dissertations and Theses Global.		This paper examines the self-care tasks, such as dressing, involved with children who have a motor or sensory impairment. There is limited research on apparel tested to promote independence and interventions involving ADL challenges with design in clothing. The research team researched plausible "design for disability" to identify dressing related needs for individuals with disabilities, alternative adaptive clothing solutions, and dressing behaviors and usability of a universal design. This paper heavily addressed children's dressing behaviors, though did have insights on	N	While there is interest in exploring clothing design as a solution for ease and efficiency in dressing for individuals with disabilities, the research is based on a pediatric population.	NB

		general adaptive dressing solutions for all ages into adulthood. The research team determined that a universally designed solution may not be as effective at promoting dressing task independence compared to a customized solution.			
Hedley, D., Cai, R., Uljarevic, M., Wilmot, M., Spoor, J. R., Richdale, A., & Dissanayake, C. (2017). Transition to work: Perspectives from the autism spectrum. Autism, 22(5), 528–541. https://doi.org/10.1177/1362361316687697	Include, study represents the transition to work of a small group of individuals within a specialized employment program. includes a caregiver perspective.		N	N, emphasis is on transition to work, not approaches for increased independence in ADLs or IADLs.	ND
Henton, P., Deitrick, L., Godfroy, R., Horodeczny, C., Madaris, T., Mericle, S., & Stout, K. (2020). Basic Activities and Anxiety Reduction in the Care of Canines (BAARCC) Protocol for adults With autism spectrum disorder. SIS Quarterly Practice Connections, 5(2), 2–4.	Include- the abstract includes strategies to increase skill acquisition in many areas of occupation including IADL/ADL. The population is young adults and the abstract includes none of our exclusion criteria.		N	Changed answer no- participant number not stated- they are developing a protocol	SD
Hume, K., & Odom, S. (2007). Effects of an individual work system on the independent functioning of students with autism. Journal of Autism and Developmental Disorders, 37, 1166–1180.			N	Outcomes include work and play skill independence.	ND

Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in autism spectrum disorders: A review of three focused interventions. Journal of Autism and Developmental Disorders, 39(9), 1329–1338. https://doi.org/10.1007/s10803-009-0751-2	Include: This article looks at the features of autism that inhibit the independent demonstration of skills and three effective interventions for increasing independence. Self-monitoring, video modeling, and individual work systems have proven successful in addressing executive function deficits and increasing independence.		N	No, article is a synthesis of interventions but provides no data, will hand search	ND
Johnson, K. R. (2016). Daily life participation in a residential facility for adults with intellectual disabilities: An institutional ethnography (Publication No. 10193221) [Doctoral dissertation, The University of North Carolina at Chapel Hill]. ProQuest Dissertations and Theses Global.		The authors explore the ADLs of adults with DD living in a residential facility and how training in self-care affects their quality of life and participation in meaningful activities. The specific aims were more aimed at describing the daily operations and practices of the facility and identifying how the opportunities for residents to participate in meaningful activities were affected by the institutional operations which may not fully align with our thesis question. There may be insight in the section of the paper that identifies and describes the activities of the residents and staff.	N		NB
Kellems, R. O. (2010). Using video modeling delivered through iPods to teach vocational tasks to young adults with autism spectrum disorders (ASD). Social Science Premium Collection. https://login.ezproxy.ups.edu:2443/login?url=https://www.proquest.com/dissertations-theses/using-video-modeling-delivered-through-ipods/docview/906394244/se-2	Include, fits all criteria and skills acquisition of tasks that are also consider IADL		Y		ND

Kirby, A. (2015). Factors Influencing Participation Outcomes of Young Adults with Autism Spectrum Disorder. Chapel Hill, NC: University of North Carolina at Chapel Hill Graduate School. https://doi.org/10.17615/mder-ke30		Unsure whether to include or not. The abstract does not specifically address interventions or strategies, increasing independence, or IADL's and ADL's. It mostly addresses key factors of why people with ASD might not participate rather than ways to solve this. Final answer: NO! Addresses participation influence, and parent experience- could also be useful for paper	N		SD
Lee, C. E., Shogren, K. A., Segal, J., Pezzimenti, F., Aleman-Tovar, J., & Taylor, J. L. (2021). Goal attainment scaling—community-based: A method to incorporate personalized outcomes into intervention research with youth and adults on the autism spectrum. Autism, 26(1), 178–187. https://doi.org/10.1177/1362361321102444 92	Include, looks at goal attainment scaling as an approach to achieve meaningful goals for individuals within a wide range of diagnoses		N	DIscusses application of method, not evidence of effectiveness, will hand search	ND
Mariya T. Davis & Ingrid K. Cumming (2019) Practical strategies for improving postsecondary outcomes for students with EBD, Preventing School Failure: Alternative Education for Children and Youth, 63:4, 325-333, DOI: 10.1080/1045988X.2019.1608898		Mentions transition age but doesn't specify ages in abstract.	N	Details how to build an effective program for transition age youth	ND

McGill, C., Breen, C., (2020).Can sensory integration have a role in multi-element behavioral intervention? An evaluation of factors associated with the management of challenging behavior in community adult learning disability services. British Journal of Learning Disabilities, 48(2). https://doi-org.ezproxy.ups.edu:2443/10.1111/bld.12308		Unsure-The strategies listed in the abstract may be useful for daily living skills but was not specifically mentioned in the abstract- also community setting which we might be able to look past based on our own discretion. Final answer: NO! Focuses mostly on sensory interventions that address behavior issues	N		SD
McMahon, D. D., Smith, C., Cihak, D., Wright, R., Gibbons, M. M. (2015). Effects of digital navigation aids of adults with intellectual disabilities: Comparison of paper map, Google Maps, and augmented reality. Journal of Special Education Technology, 30(3), 157-165. https://doi.org/10.1177/0162643415618927	Y; while this article does not explicitly mention ADLs/IADLs, it does focus on community navigation. From the abstract alone, it is difficult to tell if the ppt, college-aged students with intellectual disabilities who attend a postsecondary education program, are navigating their college campus or the community.		Y		CH
McQueen, C., Gerwe, R., Wilson, A., Caudill, J., Bird, C., Russell, L., & O'Brien, S. (2018). Driver exploration: Meeting the needs of young adults with ID and ASD. OT Practice, 23(13), 12-17. https://login.ezproxy.ups.edu:2443/login	Include- abstract touches on adults, IADL, and independence and does not include any of our exclusion criteria		N	Changed answer is no; this is a group intervention which is part of our exclusion criteria	SD
Mechling, L. C. (2004). Effects of multimedia, computer-based instruction on grocery shopping fluency. Journal of Special Education Technology, 19(1), 23-34. https://doi.org/10.1177/016264340401900102		The title nor the abstract mention the age of the ppt.	Y		CH

Mechling, L. C., Pridgen, L. S., & Cronin, B. A. (2005). Computer-Based Video Instruction to Teach Students with Intellectual Disabilities to Verbally Respond to Questions and Make Purchases in Fast Food Restaurants. Education and Training in Developmental Disabilities, 40(1), 47–59. http://www.jstor.org/stable/23879771	Include, skills looked at in this article correspond to skills used in the home and IADLs		Y		NB
Mechling, L. C., & Stephens, E. (2009). Comparison of Self-Prompting of Cooking Skills via Picture-based Cookbooks and Video Recipes. Education and Training in Developmental Disabilities, 44(2), 218–236. http://www.jstor.org/stable/24233496	Include: meets inclusion criteria and skills necessary to decrease caregiver burden.		Y		ND
Mechling, L. C., & O'Brien, E. (2010). Computer-Based Video Instruction to Teach Students with Intellectual Disabilities to Use Public Bus Transportation. Education and Training in Autism and Developmental Disabilities, 45(2), 230–241. http://www.jstor.org/stable/23879809	Include: article fits inclusion criteria and adds to building evidence that video instruction is effective approach to intervention of target population		Y		ND
Mechling, L. C., Gast, D. L., Langone, J. (2002). Computer-based video instruction to teach persons with moderate intellectual disabilities to read grocery aisle signs and locate items. Journal of Special Education, 35(4), 224-240. https://doi.org/10.1177/002246690203500404		The title nor the abstract mention the age of the ppt.	N	All ppt are under 18 y.o.	CH

Mechling, L. C., Ayres, K. M., Foster, A. L., & Bryant, K. J. (2013). Comparing the Effects of Commercially Available and Custom-Made Video Prompting for Teaching Cooking Skills to High School Students With Autism. Remedial and Special Education, 34(6), 371–383. https://doi.org/10.1177/0741932513494856	Include- abstract includes IADL skills- need to look further into ages and function level		Y	Meets all inclusion criteria	SD
Milley, A., & Machalicek, W. (2012). Decreasing students' reliance on adults. Intervention in School and Clinic, 48(2), 67–75. https://doi.org/10.1177/1053451212449739		Include. references an article that looked at preschoolers The abstract states that the article focuses on and highlights the importance of fostering student independence for students with ASD and presents three evidence-based strategies to improve student task engagement and decrease reliance on adult prompts: activity schedules, tactile prompting, and peer support interventions. Does not mention age. never mentions IADLs or ADLs, just increased independence (less prompting)	N	N, requirements not met.	ND
Newman, B., Reinecke, D. R., & Meinberg, D. L. (2000). Self-management of varied responding in three students with autism. Behavioral Interventions, 15, 145–151.			N	Out of age inclusion criteria and outcome is to increase variability in play and social language	ND

Nittrouer, C. L., Shogren, K. A., & Pickens, J. L. (n.d.). Using a Collaborative Process to Develop Goals and Self-Management Interventions to Support Young Adults With Disabilities at Work. Rehabilitation Research, Policy, and Education, 2, 110–128. https://doi.org/10.1891/2168-6653.30.2.110		Unsure- will need to discuss with the research team whether or not we want to include vocational work.	N		SD
O'Handley, R. D., & Allen, K. D. (2017). An evaluation of the production effects of video self-modeling. Research in developmental disabilities, 71, 35–41. https://doi.org/10.1016/j.ridd.2017.09.012	Include- this article is about an adult with ID and ASD working on daily living skills. This meets our inclusion criteria and includes none of our exclusion criteria		Y		SD
Ogletree, B. T., Bruce, S. M., Finch, A., Fahey, R., McLean, L. (2011). Recommended communication-based interventions for individuals with severe intellectual disabilities. Communication Disorders Quarterly, 32(3), 164-175. https://doi.org/10.1177/1525740109348791		This article reviews literature related to communication interventions for individuals with severe intellectual disabilities. It is not clear what area of occupation this would fall under just from the title and abstract alone. Additionally it doesn't mention the age of the ppt.	N	Participant under 18 year old	CH
Park, J., Bouck, E., Duenas, A. (2018). The effect of video modeling and video prompting interventions on individuals with intellectual disability: A systematic literature review. Journal of Special Education Technology, 34(1), 3-16. https://doi.org/10.1177/0162643418780464		This article is a systematic literature review of existing literature (the article was published in 2018). The abstract does not mention the date range the review is being conducted, nor the target population age.	N	While this is a thorough systematic literature review, it includes individuals who are outside of our age range for	CH

				inclusion/exclusion criteria, and the information is combined together.	
Reyes, E. N., Wood, C. L., Walker, V. L., Voggt, A. P., & Vestal, A. R. (2022). Effects of video self-modeling and system of least prompts on completion of transitional routines for a student with extensive support needs in Inclusive settings. Journal of Positive Behavior Interventions, 24(2), 145–155. https://doi.org/10.1177/1098300721990291		Maybe, the focus mentioned in abstract is on transition from one task to another, not necessarily skill acquisition. But if that is a skill a client at TOP needs this may work. Also does not include ages in abstract.	Maybe; Need further elaboration and examination from research team		ND
Ribu, K., & Patel, T. (2016). Developing a User-Centred Planning Tool for Young Adults with Development Disorders: A Research-Based Teaching Project. Studies in health technology and informatics, 229, 283–286.		Unsure- adults with developmental disabilities using a tool that could probably help complete ADL's and IADL's but there is not mention in the abstract of that specifically Final answer: NO, mostly about the process of developing tool	N		SD
Riffel, L. A., Wehmeyer, M. L., Turnbull, A. P., Lattimore, J., Davies, D., Stock, S., Fisher, S. (2005). Promoting independent performance of transition-related tasks using a palmtop PC-based self-directed visual and auditory prompting system,. Journal of Special Education, 20(2), 5-14. https://doi.org/10.1177/016264340502000201		The abstract mentions the ppt are transition-aged students with cognitive disabilities, and the intervention is focused on increased independence on vocational and independent living tasks. Further analysis of the article must be done to see if vocational and independent living tasks are separately studied or if they are combined.	N	The ppt in the study are working on vocational AND IADLs, the ages are 16+ AND the results are compared amongst ppt instead of	CH

				keeping the information separated by individual.	
Shipley-Benamou, R., Lutzker, J. R., & Taubman, M. (2002). Teaching Daily Living Skills to Children with Autism Through Instructional Video Modeling. Journal of Positive Behavior Interventions, 4(3), 166–177. https://doi.org/10.1177/109830070200400 30501			N	ppt did not meet age criteria	ND
Sigafoos, J., O'Reilly, M., Cannella, H., Edrisinha, C., de la Cruz, B., Upadhyaya, M., Lancioni, G., Hundley, A., Andrews, A., Garver, C., Young, D. (2006). Evaluation of a video prompting and fading procedure for teaching dishwashing skills to adults with developmental disabilities. Journal of Behavioral Education, 16(2), 93-109. https://doi.org/10.1007/s10864-006-9004-z	Y; the title and abstract fit the inclusion and exclusion criteria. Only thing to note when reviewing the entire article is if the intervention was successful.		N	Only a couple of the ppt fit our inclusion criteria. The article splits the ppt up into three groups of two and doesn't specify which ppt were in each group.	CH

Sigafoos, J., O'Reilly, M., Cannella, H., Upadhyaya, M., Edrisinha, C., Lancioni, G., Hundley, A., Andrews, A., Garver, C., Young, D. (2005). Computer-presented video prompting for teaching microwave oven use to three adults with developmental disabilities. Journal of Behavioral Education, 14(3), 189-201. https:doi.org/10.1007/s10864-005-6297-2	Y; the title and abstract fit the inclusion and exclusion criteria.		Y		CH
Siu A. M., Lin Z., Chung J. (2019). An evaluation of the TEACCH approach for teaching functional skills to adults with autism spectrum disorders and intellectual disabilities. Research in developmental disabilities, 90, 14–21. https://doi.org/10.1016/j.ridd.2019.04.006			N	ppt were individuals with ASD who have high functioning or without intellectual disabilities	ND
Smith MD, Belcher R. Teaching life skills to adults disabled by autism. J Autism Dev Disord. 1985 Jun;15(2):163-75. https://doi.org/10.1007/BF01531602.		Exclude, hits all criteria but is from 1985 Adults disabled by autism who are living in community-based residential programs. Five adults who were severely disabled by autism and who lived in group homes in the community served as ppt. progress in targeted life skills, and four of the five achieved independence on their targeted skills.	N		ND

		training model in community-based residential programs			
Smith, C. C., Cihak, D. F., Byungkeon, K., McMahon, D. D., Wright, R.(2016). Examining augmented reality to improve navigation skills in postsecondary students with intellectual disability. Journal of Special Education Technology, 32(1), 3-11. https://doi.org/10.1177/0162643416681159	Y; the abstract mentions the use of mobile technology to improve navigation skills in three students with an intellectual disability on a university campus.		Y		CH
Spriggs, A. D., Mims, P. J., van Dijk, W., Knight, V. F. (2017). Examination of the evidence base for using visual activity schedules with students with intellectual disability. Journal of Special Education, 51(1), 14-26. https://doi.org/10.1177/0022466916658483		The article is conducting a comprehensive review of literature published after 2005. It is unclear if these 14 studies align with our inclusion and exclusion criteria (age, disability, setting, etc.)	N	The study included ppt who were outside of our inclusion criteria for age and did not make a clear determination in the results .	CH
Srikanth Koushik, V. (2022). Designing customizable smart interfaces to support people with cognitive disabilities in daily activities (Publication No. 29067467) [Doctoral dissertation, University of Colorado at Boulder]. ProQuest Dissertations and Theses Global.	This paper examines adults with cognitive disabilities facing accessibility challenges, and interventions to support a range of abilities using assistive devices. The research team looked at an AR-based smart display that uses a combination of motivating features, like avatars, animations, and gamification mechanisms, to support people with cognitive disabilities in everyday activities. They also analyze interventions that include completing daily activities and modifying prompts to support a diverse range of needs and abilities.		Y		NB

Stahr Wynkoop, K., Robertson, R. E., Schwartz, R. (2017). The effects of two video modeling interventions on the independent living skills of students with autism spectrum disorder and intellectual disability. Journal of Special Education Technology, 33(3), 145-158. https://doi.org/10.1177/0162643417746149		The ppt in this study include four "students" (does not mention age) with autism spectrum disorder and intellectual disability. It does not make it clear if the individuals with autism also have an intellectual disability, or if these two diagnoses are being studied separately.	N	All ppt are under 18 y.o.	CH
Stancliffe, R., Anderson, L. (2017) Factors associated with meeting physical activity guidelines by adults with intellectual and developmental disabilities. Research in Developmental Disabilities,62, 1-14, https://doi.org/10.1016/j.ridd.2017.01.009		Exclude- about exercise only	N		SD
Tarver, J., Pearson, E., Edwards, G., Shirazi, A., Potter, L., Malhi, P., & Waite, J. (2021). Anxiety in autistic individuals who speak few or no words: A qualitative study of parental experience and anxiety management. Autism : the international journal of research and practice, 25(2), 429–439. https://doi.org/10.1177/1362361320962366		Disregard because it is mostly about parental experience and not as much about the individual with ASD. We have decided as a group to not focus on the parental experiences but on the individual themselves. Also not about ADLs/IADLs or interventions.	N		SD

Taylor, J. L., Smith, L. E., & Mailick, M. R. (2013). Engagement in vocational activities promotes behavioral development for adults with autism spectrum disorders. Journal of Autism and Developmental Disorders, 44(6), 1447–1460. https://doi.org/10.1007/s10803-013-2010-9		Maybe. Results from this study provide evidence that adults with ASD who are in vocational placements show acquisition of greater independence in functional activities of daily living. Bidirectional relations over time between behavioral functioning (autism symptoms, maladaptive behaviors, activities of daily living) and vocational/educational activities of adults with (ASD). M age = 30.2 years. Data were collected at two time points separated by 5.5 years. Results suggested that greater vocational independence and engagement was related to improvements in activities of daily living. Relations between earlier behavioral variables (symptoms, behaviors, and activities of daily living) and later vocational independence were not statistically significant.	Maybe; Need further elaboration and examination from research team	Maybe	ND
Test, D. W., Bartholomew, A., & Bethune, L. (2015). What High School Administrators Need to Know About Secondary Transition Evidence-Based Practices and Predictors for Students With Disabilities. NASSP Bulletin, 99(3), 254–273. https://doi-org.ezproxy.ups.edu:2443/10.1177/0192636515602329	Include: This article provides an overview of practices and predictors, as well as providing examples of how school administrators can use the practices and predictors to help guide staff development and school policy.		N	list interventions but has no actual data, will hand search for articles	ND

Van Laarhoven, T., Van Laarhoven-Myers, T. (2006). Comparison of three video-based instructional procedures for teaching daily living skills to persons with developmental disabilities. Education and Training in Developmental Disabilities, 41(4), 365-381. https://www.jstor.org/stable/23879663		The abstract mentions that this article looks at three different types of video-based instructional procedures to teach young adults daily living skills. The abstract does not mention the ages of the young adults nor does it mention the specific daily living skills the intervention will target.	N	The information in this article seems off. In the ppt section of the article it mentions the age range of the ppt (17-19 y.o.) and their IQ ranges, but in the part where they actually give descriptions about the ppt, they don't use ages so it's not possible to tell which participant(s) is over 18 y.o., additionally, when describing the ppt, the IQs are different from the ranges it initially gives.	CH

Voltz, K. (2020). The B.E.E. program (build, engage, employ): A community- and occupation-based program for adults with intellectual and developmental disabilities (I/DD). The American Journal of Occupational Therapy, 2020, 74(4). https://doi.org/10.5014/ajot.2020.74S1-PO8209		The abstract explains that the B.E.E. program was implemented to two adults with I/DD and was focused on targeting occupational exposure through a community volunteer experience and education session. It was aimed at increasing independence with ADLs and IADLs.	N	This article is about implementing a community and occupation based program, not an intervention, and this is not something Amelia expressed	CH
Wæhrens, E. E., Kottorp, A., & Nielsen, K. T. (2021). Measuring self-reported ability to perform activities of daily living: A rasch analysis. Health and Quality of Life Outcomes, 19, 1-17. https://doi.org/10.1186/s12955-021-01880-z		There could be some insights as to how the ADL-Instrument (ADL-I) could benefit our interested population using valid and reliable ADL ability measures for adults with autism. There is interest in reviewing the data analyzed based on Rasch measurement methods to examine if the ADL-I provides precise and reliable measures of ADL ability for adults with highly-impacted autism. The abstract mentions using existing research on persons with chronic conditions across diagnostic groups including medical, rheumatological, oncological, neurological, geriatric and psychiatric diagnoses.	N		NB

Walton, K.M., Ingersoll, B.R. (2013). Improving Social Skills in Adolescents and Adults with Autism and Severe to Profound Intellectual Disability: A Review of the Literature. Journal of Autism and Developmental Disorders, 43, 594–615. https://doi-org.ezproxy.ups.edu:2443/10.1007/s10803-012-1601-1	.		N	Exclude- good article but mostly focuses on social interaction which is not what we are focusing on for this project	SD
Ward, D. M., & Esposito, M. C. (2018). Virtual reality in transition program for adults with autism: Self-efficacy, confidence, and interview skills. Contemporary School Psychology, 23(4), 423–431. https://doi.org/10.1007/s40688-018-0195-9		Exclude. high-functioning autism spectrum disorder (HFASD) One factor related to low employment rates are limited interview skills demonstrated by individuals with HFASD. Benefits of employment for those with HFASD: sense of purpose, independence, and social interaction -> wellness. Virtual Reality Job Interview Training Program (VR-JIT) was implemented in an adult transition program to improve job interview skills. Study examined pre-post changes in ppt' SE and self-confidence specific to their perceived interview skills. Viable method to improve confidence and skill with interviewing.	N	N, high functioning.	ND
Watanabe, M., & Sturmey, P. (2003). The effect of choice-making opportunities during activity schedules on task engagement of adults with autism. Journal of autism and developmental disorders, 33(5), 535–538. https://doi.org/10.1023/a:1025835729718		Exclude- no mention of ADL/IADL in abstract, also in community setting which we have decided as a group we will exclude unless other info in the article seems very prominent or related to our topic.	N		SD

Weaver, L. (2015). Effectiveness of Work, Activities of Daily Living, Education, and Sleep Interventions for People With Autism Spectrum Disorder: A Systematic Review. American Journal of Occupational Therapy, 69(5), https://doi-org.ezproxy.ups.edu:2443/10.5014/ajot.2015.017962		Unsure- need to read more to see if this is adults or not. Otherwise it looks promising Final answer: NO- articles pertaining to self-care and IADLs are all about children	N		SD
Wertalik, J. L., & Kubina, R. M. (2017). Interventions to improve personal care skills for individuals with autism: A review of the literature. Review Journal of Autism and Developmental Disorders, 4(1), 50-60. https://doi.org/10.1007/s40489-016-0097-6	The abstract highlights individuals with ASD and the learning challenges they experience in the vocational world. There is mention of independent functioning and teaching personal care skills (i.e., grooming/hygiene, dressing, eating) to achieve independence and improve quality of life. The present literature review examines and summarizes interventions to teach personal care skills to individuals with ASD. The interventions fall into four categories based on intervention components: (a) video-based instruction, (b) behavioral in vivo procedures, (c) audio cueing, and (d) social stories. The results of the reviewed studies indicated improved performance for all ppt across intervention categories for a variety of personal care skills.		Y		NB

Wertalik, J. L., & Kubina, R. M. (2018). Comparison of TAGteach and video modeling to teach daily living skills to adolescents with autism. Journal of Behavioral Education, 27(2), 279-300. https://doi.org/10.1007/s10864-017-9285-4		This study examines the development of independence in daily living skills for individuals with ASD as they transition into adulthood from the highschool environment. Researchers compared two instructional methods, TAGteach and video modeling, with alternating treatments to examine the short term effects to improve accuracy on ADL-based activities. The ppt were three 17-year old male students severely impacted with ASD. Results showed that there are immediate improvements in performance on targeted tasks for all students with both TAGteach and video modeling Adolescents with autism are not in our inclusion however the paper includes the preparation for transitional stages into adulthood. The population is very small (N=3) and homogenous (17yo males)	N		NB
Wright, R. E., McMahon, D. D., Cihak, D. F., Hirschfelder, K. (2020). Smartwatch executive function supports for students with ID and ASD. Journal of Special Education Technology, 37(1), 63-73.		University students with intellectual disability and autism spectrum disorder were given a wearable smartwatch-based intervention to suppose executive functioning needs of their studies, and the focus was to determine if there was a relationship between the intervention and the percentage of tasks these individuals completed	N	ppt do not fit inclusion criteria: average intelligence	CH

		independently. It is unclear what exactly "executive functioning needs" entails, but all other aspects fit the inclusion/exclusion criteria. It's also unclear if this article would fall into the occupation of education rather than ADL/IADL.			
Zionch, A. (2011). Digital Simulations: Facilitating Transition for Students With Disabilities. Intervention in School and Clinic, 46(4), 246–250. https://doi-org.ezproxy.ups.edu:2443/10.1177/1053451210369514		Does not mention ages just, "students"	N	Article states that students should have access to the internet and technology but offers no data or evidence based interventions.	ND

Appendix E

Task Analysis

1. Face the table with grocery items
2. Locate a (bagged/boxed/canned) item
3. Securely grab the (bagged/boxed/canned) item with your hand(s)
4. Pick up (bagged/boxed/canned) item from table
5. Turn around to face the pantry
6. Walk to the pantry
7. Visually scan the pantry to identify the correct location for the (bagged/boxed/canned) item
8. Position yourself in front of the correct location on the pantry
9. Safely place the item at the front of the shelf in it's correct location
10. Ensure the label is facing forward ***correct if not positioned
11. Ensure the item is the right way up **correct if not positioned properly
12. Step away from the pantry
13. Visually scan the pantry to ensure the item is in the proper location
14. If not in the correct position, repeat steps 7-13***
15. Turn around and face the table
16. Walk back to the table with grocery items
17. Select another food (bagged/boxed/canned) item
18. Repeat process*****

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April 19th, 2023

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