

Teaching Daily Living Skills to Adolescents and Adults with Autism Spectrum Disorder: An Updated Systematic Review

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INTRO:

- Daily living skills (DLS) are essential for autonomy and independent living (Wertalik & Kubina, 2017)
- ABA is an evidence-based practice for teaching DLS in this population (Bahry et al., 2023)
- Previous literature reviews focused on specific interventions or limited age group (Cullen & Alber-Morgan, 2015; Gardner & Wolfe, 2013)

PURPOSE:

- Update and extend the systematic literature review conducted by Bennett and Dukes (2014) on teaching DLS for this population

Search Terms & Databases

- *daily living skills, self-care skills, self-help skills, life skills and functional skills* paired with *autis*, Asperger syndrome or pervasive developmental disorder and adolescent, secondary student, or adult.*
- Academic Search Complete, ERIC, and PsycINFO

Descriptive Coding

- Participant information
- Setting and implementer
- Intervention, target skill, maintenance, generalization, and social validity

Reliability

- Search = 99%
- Title & abstract screening = 97%
- Full text review = 100%
- Descriptive coding = 80%

Technology-based interventions were most utilized to teach DLS

More research needed for additional skill areas, settings, and diverse population



<https://www.abautsa.com/publications-and-presentations.html>

Results = 25 articles

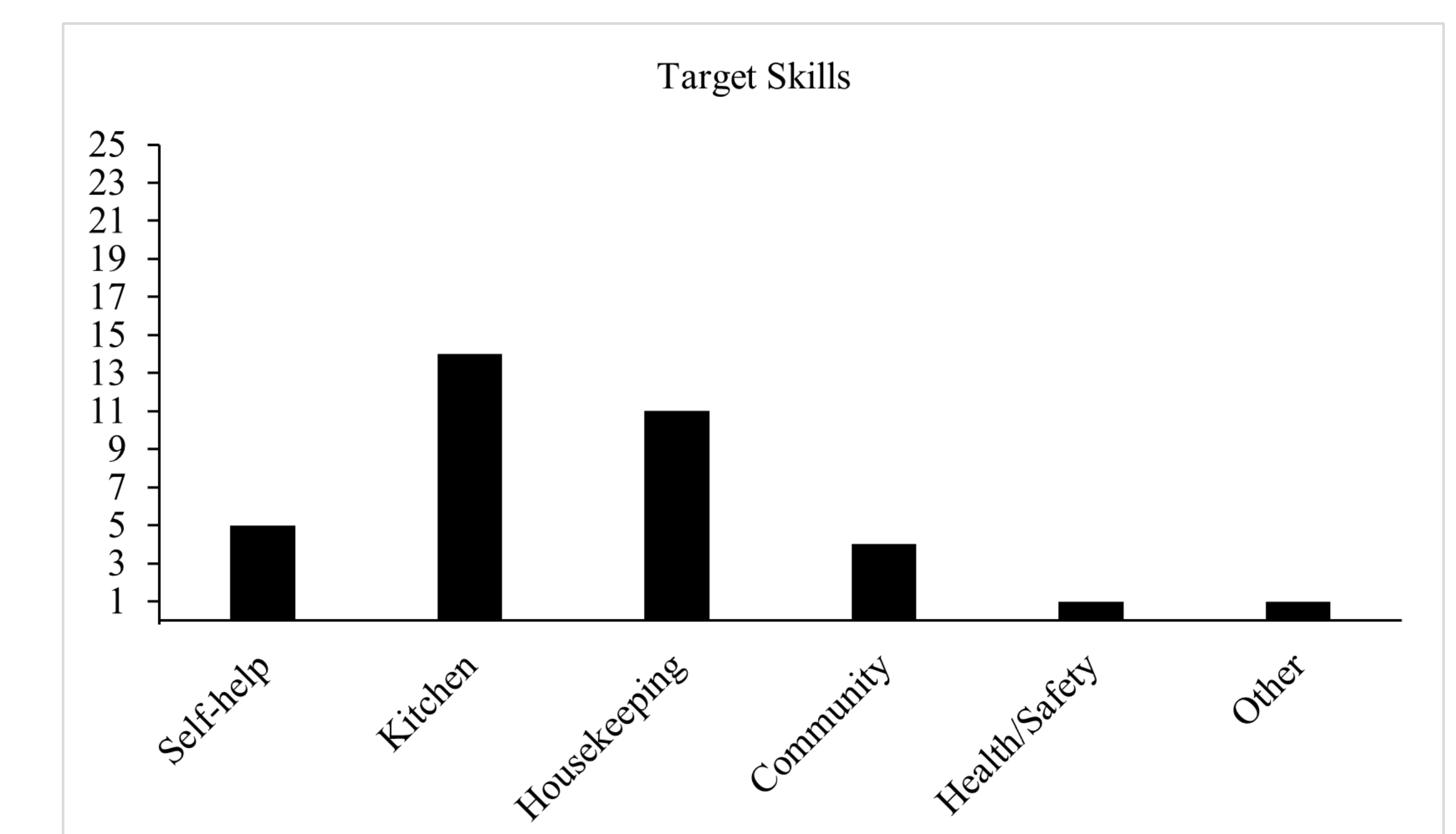
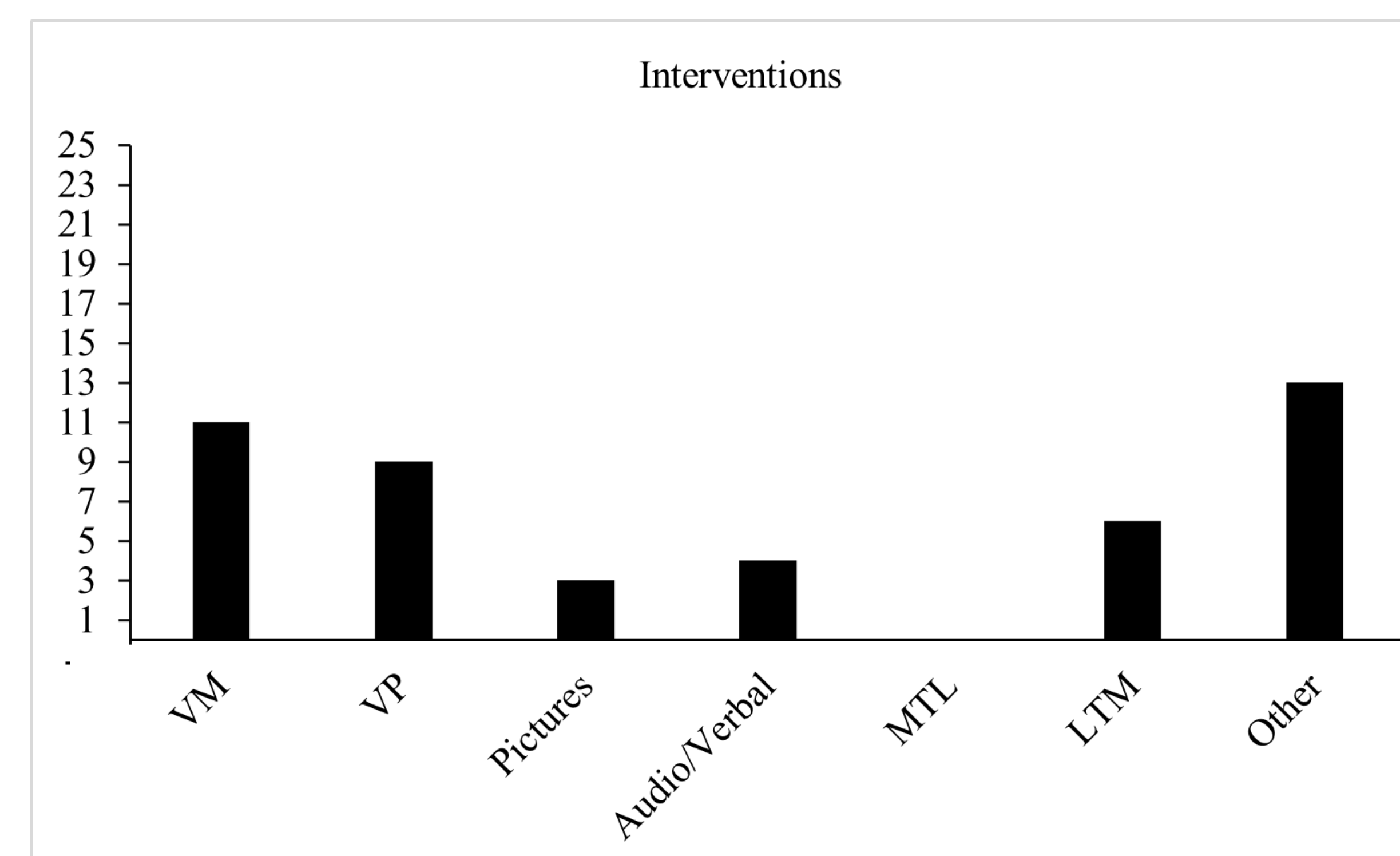
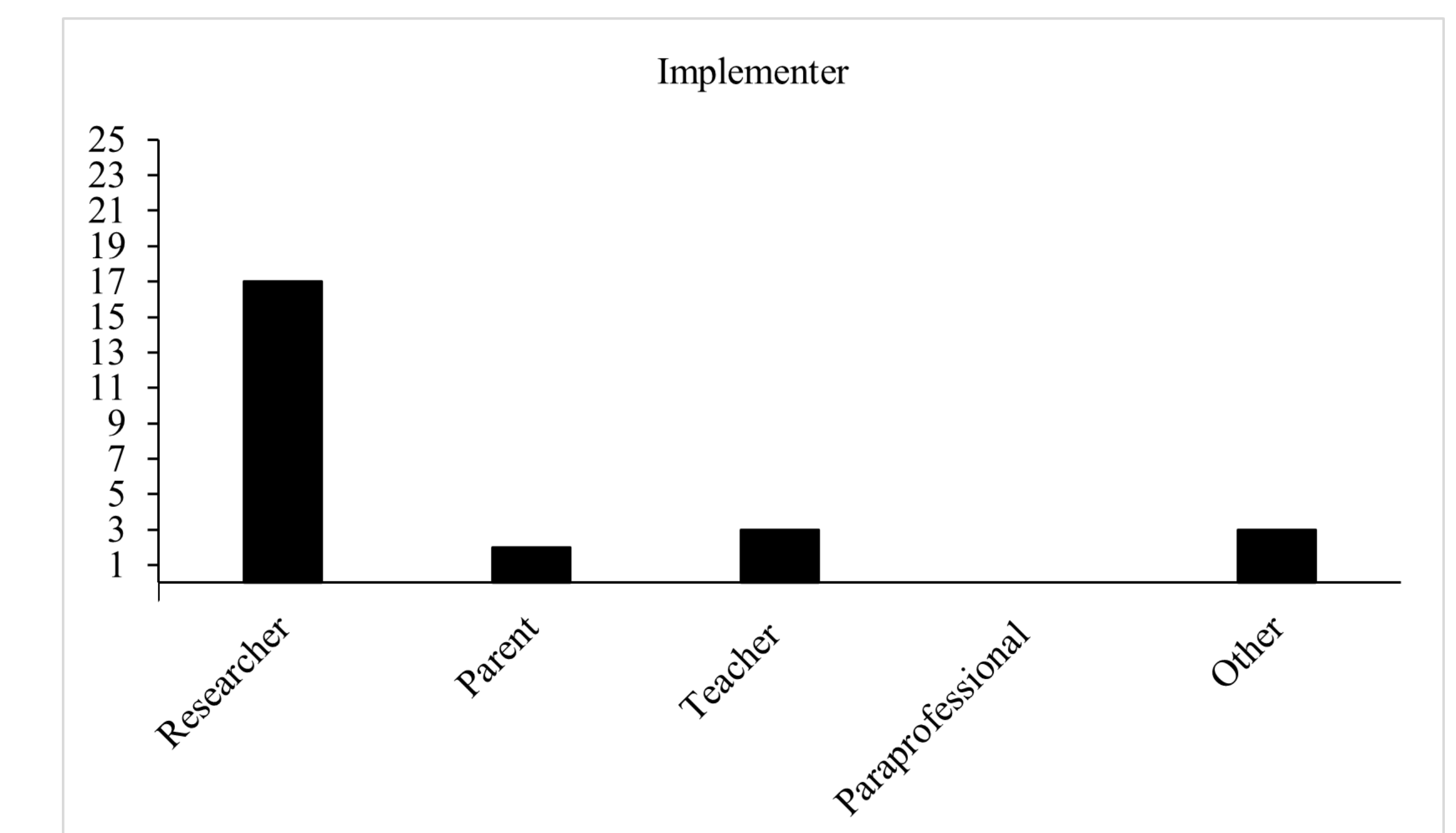
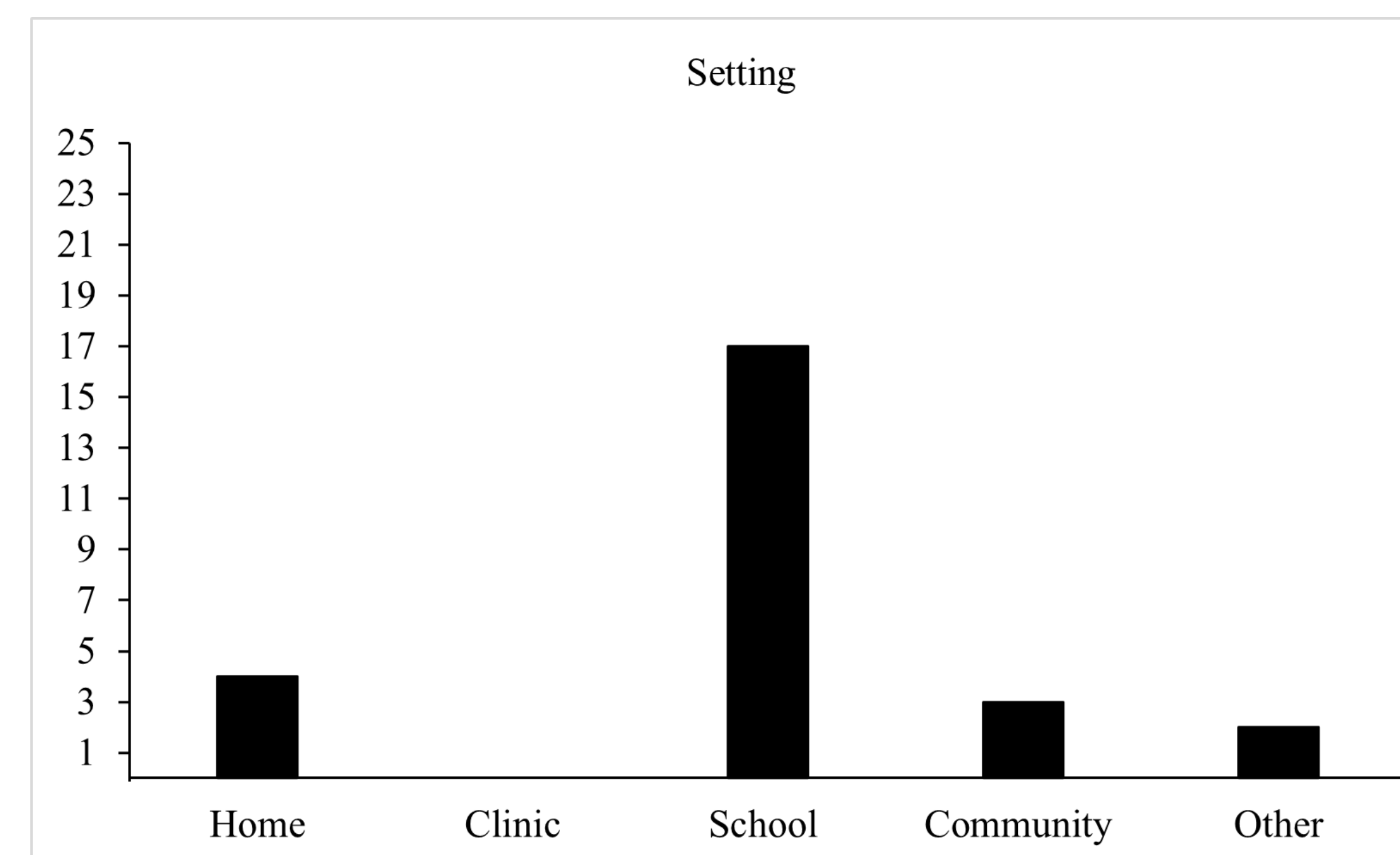


Table 1*Participant Characteristics*

Study	<i>n</i>	Age range	Sex/Gender	Race/Ethnicity	Co-occurring disability
Aldi et al. (2016)	2	18	Male	NR	NA
Beahm et al. (2023)	5	24-32	Male	NR	NA
Bennett et al. (2017)	3	11-15	Male	NR	NA
Bouck et al. (2014)	3	13-15	Male (1), Female (2)	White	Speech/language impairment
Brady et al. (2016)	4	14-17	Male (3), Female (1)	NR	Speech/language impairment
Burke et al. (2024)	1	19	Male	White	Bipolar disorder, schizophrenia
Cruz-Torres et al. (2020)	3	12-17	Male (1), Female (2)	White	NA
Dogan (2023)	1	16	Male	NR	NA
Gardner and Wolfe (2019)	4	14-19	Male (2), Female (2)	NR	ID (1)
Horn et al. (2021)	3	18-20	Male	Black (2), Asian (1)	ID
Johnson et al. (2013)	1	17	Male	NR	ID
Kaya and Yucesoy-Ozkan (2022)	4	10-14	Male	NR	NA
Kellems et al. (2017)	2	19-20	Male (1), Female (1)	NR	NA
Mechling et al. (2013)	4	15-19	Male	NR	NA
Ohtake (2015)	1	10	Male	NR	NA
Ohtake et al. (2015)	1	12	Male	NR	NA
Smith et al. (2016)	4	15-19	Male	NR	Speech/language impairment (3)
Taber-Doughty et al. (2013)	2	16-17	Male	White	ID, speech/language impairment (1), orthopedic impairment (1)
Wahlbrink et al. (2022)	3	14-16	Male (2), Female (1)	White	TBI (1), speech/language impairment (2)
Wertalik and Kubina (2018)	3	17	Male	NR	NA

Wertalik and Kubina (2022)	3	12-16	Male (1), Female (2)	NR	ID (2), ADHD (1), speech/language impairment (2)
Wynkoop et al. (2017)	2	15-16	Male	White	ID, seizure disorder (1)
Yakubova and Chen (2021)	1	14	Male	Multiracial	ADHD, speech/language impairment, specific learning disability
Yakubova and Taber-Doughty (2013)	3	12-15	Male	NR	ID, intermittent explosive disorder (1)
Yeong et al. (2022)	3	12-13	Male (1), Female (2)	Asian (2), Other (1)	ID

Note. NR Not reported, NA Not applicable, ID Intellectual disability, TBI Traumatic brain injury, ADHD Attention-deficit/hyperactivity disorder

Table 2*Intervention Related Characteristics*

Study	Setting	Implementer	Intervention	Target Skill
Aldi et al. (2016)	Home	Researcher	VM	Kitchen skills, housekeeping
Beahm et al. (2023)	Day program	RBT	Token economy, Class Dojo	Housekeeping
Bennett et al. (2017)	School	Researcher	VP	Housekeeping
Bouck et al. (2014)	School	Researcher	Static pictures, LTM, self-monitoring, task analysis	Kitchen skills
Brady et al. (2016)	School	Peer	Static pictures, verbal prompts, task analysis, peer	Kitchen skills
Burke et al. (2024)	School	Researcher	Static pictures, LTM, task analysis	Kitchen skills
Cruz-Torres et al. (2020)	Home	Parent	VP	Self-help, kitchen skills, housekeeping
Dogan (2023)	Home	Researcher	VM	Kitchen skills, housekeeping
Gardner and Wolfe (2019)	School	Researcher	VP, graduated guidance	Housekeeping
Horn et al. (2021)	University	Job coach	VM, verbal/gestural prompts	Safety skill
Johnson et al. (2013)	School	Teacher	VP, LTM	Kitchen skills
Kaya and Yucesoy-Ozkan (2022)	School	Researcher	VP, LTM	Kitchen skills
Kellems et al. (2017)	School	Researcher	VP	Kitchen skills, housekeeping, other
Mechling et al. (2013)	School	Researcher	VP	Kitchen skills
Ohtake (2015)	School	Teacher	VM/praise with character	Self-help, housekeeping
Ohtake et al. (2015)	School	Teacher	VM/praise with character	Self-help
Smith et al. (2016)	School	Researcher	VM, progressive time delay	Kitchen skills
Taber-Doughty et al. (2013)	Grocery store	Researcher	VM, LTM	Community
Wahlbrink et al. (2022)	Coffee shops	Researcher	Static pictures, audio prompts, app on device	Community
Wertalik and Kubina (2018)	School	Researcher	VM, TAGteach	Self-help

Wertalik and Kubina (2022)	School	Researcher	VP, frequency building	Housekeeping
Wynkoop et al. (2017)	School	Researcher	VM (continuous loop)	Housekeeping
Yakubova and Chen (2021)	Home	Parent	VP, LTM	Self-help, kitchen skills, other
Yakubova and Taber-Doughty (2013)	School, Grocery store	Researcher	VM, verbal prompts	Community
Yeong et al. (2022)	School	Researcher	VM, app on device	Kitchen skills, housekeeping

Note. VM Video modeling, VP Video prompting, LTM least to most

Table 3*Generalization, Maintenance, and Social Validity*

Study	Generalization	Maintenance	Social Validity
Aldi et al. (2016)	No	Yes	NR
Beahm et al. (2023)	No	Yes	RBTs
Bennett et al. (2017)	No	No	NR
Bouck et al. (2014)	No	Yes	Teacher, participants
Brady et al. (2016)	No	Yes	NR
Burke et al. (2024)	Across context	Yes	School staff, participant
Cruz-Torres et al. (2020)	No	Yes	Participants, parents
Dogan (2023)	Across settings and context	Yes	Participants, parents, sibling
Gardner and Wolfe (2019)	Across settings	Yes	Teacher, participants
Horn et al. (2021)	Across settings and context	Yes	Participants
Johnson et al. (2013)	No	Yes	Teacher
Kaya and Yucesoy-Ozkan (2022)	Across settings, people, and context	Yes	Teacher, participants
Kellems et al. (2017)	No	Yes	Teacher, participants
Mechling et al. (2013)	No	No	Teacher
Ohtake (2015)	No	Yes	Teacher
Ohtake et al. (2015)	No	Yes	Teacher
Smith et al. (2016)	Across settings and people	Yes	NR
Taber-Doughty et al. (2013)	No	No	Teacher, participants
Wahlbrink et al. (2022)	Across settings	Yes	Parents
Wertalik and Kubina (2018)	No	No	Teacher, school staff
Wertalik and Kubina (2022)	No	Yes	Teacher, school staff
Wynkoop et al. (2017)	No	No	Teacher, participants, parents
Yakubova and Chen (2021)	No	Yes	Participants, parents
Yakubova and Taber-Doughty (2013)	Across settings	No	Teacher, participants, cashier
Yeong et al. (2022)	No	No	NR

Note. NR Not reported

References

References marked with an asterisk indicate that the study was included in the review

- *Aldi, C., Crigler, A., Kates-McElrath, K., Long, B., Smith, H., Rehak, K., & Wilkinson, L. (2016). Examining the effects of video modeling and prompts to teach activities of daily living skills. *Behavior Analysis in Practice*, 9(4), 384-388.
<https://doi.org/10.1007/s40617-016-0127-y>
- Alfulayyih, M., Troop, C., & Harley, D. A. (2023). Addressing vocational rehabilitation, independent living, and social integration issues of adults with autism spectrum disorders. *Education and Training in Autism and Developmental Disabilities*, 58(4), 456–469.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychiatric Association, issuing body. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR* (5th edition, text revision.). American Psychiatric Association Publishing.
- Bahry, S., Gerhardt, P. F., Weiss, M. J., Leaf, J. B., Putnam, R. F., & Bondy, A. (2023). The ethics of actually helping people: Targeting skill acquisition goals that promote meaningful outcomes for individuals with autism spectrum disorder. *Behavior Analysis in Practice*, 16(3), 672–695. <https://doi.org/10.1007/s40617-022-00757-x>
- *Beahm, L. A., Ingvarsson, E. T., Funk, N., Haskins, L., & Frazier J. (2023). Using an app-based token economy to increase engagement in daily living and vocational tasks with adults

with developmental disabilities. *Behavior Analysis in Practice*, 16(4), 1-14.

<https://doi.org/10.1007/s40617-023-00774-4>

*Bennett, K. D., Crocco, C., Loughrey, T. O., & McDowell, L. S. (2017). Effects of video prompting without voice-over narration among students with autism spectrum disorder. *Behavioral Development Bulletin*, 22(1), 147-158.

<https://doi.org/10.1037/bdb0000058>

Bennett, K. D., & Dukes, C. (2014). A systematic review of teaching daily living skills to adolescents and adults with autism spectrum disorder. *Review Journal of Autism and Developmental Disorders*, 1(1), 2–10. <https://doi.org/10.1007/s40489-013-0004-3>

*Bouck, E. C., Savage, M., Meyer, N. K., Taber-Doughty, T., & Hunley, M. (2014). High-Tech or low-tech? Comparing self-monitoring systems to increase task independence for students with autism. *Focus on Autism and Other Developmental Disabilities*, 29(3), 156-167. <https://doi.org/10.1177/1088357614528797>

*Brady, M. P., Honsberger, C., Cadette, J., & Honsberger, T. (2016). Effects of a peer-mediated literacy based behavioral intervention on the acquisition and maintenance of daily living skills in adolescents with autism. *Education and Training in Autism and Developmental Disabilities*, 51(2), 122–131. <https://www.jstor.org/stable/24827542>

*Burke, R., Taylor, S., Adler, M., Belisle, J., Durbin, K., Roger, C., & Paliliunas, D. (2024). Individualizing the LIFE curriculum to establish flexible cooking skills in a neurodivergent young adult. *Behavior Analysis in Practice*, 17(1), 323–331. <https://doi: 10.1007/s40617-023-00857-2>

Center for Disease Control and Prevention (2024, May 16). *Key findings: Estimated number of adults living with autism spectrum disorder in the United States, 2017.*

<https://www.cdc.gov/autism/publications/adults-living-with-autism-spectrum-disorder.html>

*Cruz-Torres, E., Duffy, M. L., Brady, M. P., Bennett, K. D., & Goldstein, P. (2020). Promoting daily living skills for adolescents with autism spectrum disorder via parent delivery of video prompting. *Journal of Autism and Developmental Disorders, 50*(1), 212–223.

<https://doi.org/10.1007/s10803-019-04215-6>

*Dogan, S. (2023). Teaching daily living skills to an adolescent with autism in a real-life setting. *British Journal of Special Education, 50*(4), 472–482.

<https://doi.org/10.1111/1467-8578.12480>

*Gardner, S. J., & Wolfe, P. S. (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>

Gerhardt, P. F., & Bahry, S. (2024). *Make it meaningful: Creating programs that matter into adulthood for learners with autism spectrum and related disorders.* Make it Meaningful, LLC.

Gerhardt, P. F., & Lainer, I. (2011). Addressing the needs of adolescents and adults with autism: A crisis on the horizon. *Journal of Contemporary Psychotherapy, 41*(1), 37–45.

<https://doi.org/10.1007/s10879-010-9160-2>

*Horn, A. L., Layden, S. J., & Bobzien, J. (2021). Where are you? Young adults with autism calling and texting location following video modeling instruction. *Career Development*

and Transition for Exceptional Individuals, 44(1), 17-27.

<https://doi.org/10.1177/2165143420953908>

*Johnson, J. W., Blood, E., Freeman, A., & Simmons, K. (2013). Evaluating the effectiveness of teacher-implemented video prompting on an iPod Touch to teach food-preparation skills to high school students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 28(3), 147-158. <https://doi.org/10.1177/1088357613476344>

*Kaya, F., & Yucesoy-Ozkan, S. (2022). Self-directed video prompting with and without voice-over narration in teaching daily living skills to students with autism spectrum disorder. *Education & Treatment of Children*, 45(1), 1-15.

<https://doi.org/10.1007/s43494-021-00060-4>

*Kellems, R. O., Rickard, T. H., Okray, D. A., Sauer-Sagiv, L., & Washburn, B. (2018). iPad® video prompting to teach young adults with disabilities independent living skills: A maintenance study. *Career Development and Transition for Exceptional Individuals*, 41(3), 175–184. <https://doi.org/10.1177/2165143417719078>

Marsack-Topolewski, C. N., Samuel, P. S., Tarraf, W., & Pisula, E. (2021). Empirical evaluation of the association between daily living skills of adults with autism and parental caregiver burden. *PloS One*, 16(1), e0244844. <https://doi.org/10.1371/journal.pone.0244844>

*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>

- *Ohtake, Y. (2015). Using a hero as a model in video instruction to improve the daily living skills of an elementary-aged student with autism spectrum disorder: A pilot study. *International Journal of Disability, Development and Education*, 62(4), 363-378. <https://doi.org/10.1080/1034912X.2015.1027179>
- *Ohtake, Y., Takahashi, A., & Watanabe, K. (2015). Using an animated cartoon hero in video instruction to improve bathroom-related skills of a student with autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities*, 50(3), 343–355. <https://www.jstor.org/stable/24827515>
- Roux, A. M., Rast, J. E., Anderson, K. A., & Shattuck, P. T. (2017) *National Autism Indicators Report: Developmental Disability Services and Outcomes in Adulthood*. A.J. Drexel Autism Institute, Drexel University.
https://drexel.edu/~media/Files/autismoutcomes/publications/Nat1%20Autism%20Indicators%20Report%202017_Final.ashx
- Sevlever, M., Roth, M. E., & Gillis, J. M. (2013). Sexual abuse and offending in autism spectrum disorders. *Sexuality and Disability*, 31(2), 189–200. <https://doi.org/10.1007/s11195-013-9286-8>
- *Smith, K. A., Ayres, K. A., Alexander, J., Ledford, J. R., Shepley, C., & Shepley, S. B. (2016). Initiation and generalization of self-instructional skills in adolescents with autism and intellectual disability. *Journal of Autism and Developmental Disorders*, 46(4), 1196–1209. <https://doi.org/10.1007/s10803-015-2654-8>
- *Taber-Doughty, T., Miller, B., Shurr, J., & Wiles, B. (2013). Portable and accessible video modeling: Teaching a series of novel skills within school and community settings.

Education and Training in Autism and Developmental Disabilities, 48(2), 147–163.

<http://www.jstor.org/stable/23880636>

- *Wahlbrink, L. L., Dukes, C., Brady, M. P., Bennett, K. D., & Wilson, C. L. (2022). Use of an iPhone to enhance interpersonal daily living skills in the community for adolescents with autism spectrum disorder. *Inclusion*, 10(2), 91–103. <https://doi.org/10.1352/2326-6988-10.2.91>
- *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>
- *Wertalik, J. L., & Kubina, R. M. (2023). Comparison of two video prompting interventions to teach daily living skills to adolescents with autism. *Behavioral Interventions*, 38(1), 39–61. <https://doi.org/10.1002/bin.1914>
- *Wynkoop, K. S., Robertson, R. E., & Schwartz, R. (2018). 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>
- *Yakubova, G., & Chen, B. B. (2021). Examining the effects of parent-created and parent-implemented video prompting to teach daily living skills to an adolescent with autism. *Journal of Autism and Developmental Disorders*, 51, 4679–4691. <https://doi.org/10.1007/s10803-021-04913-0>
- *Yakubova, G., & Taber-Doughty, T. (2013). Effects of video modeling and verbal prompting on social skills embedded within a purchasing activity for students with special education.

Journal of Special Education Technology, 28(1), 35–47. <https://doi.org/10.1177/016264341302800104>

*Yeong, A. M. Y., Dutt, A. S., Yong, Y. H. L., & Nair, R. (2023). The use of iPad and eBooks to perform daily living skills among adolescents with autism spectrum disorder and intellectual disability. *Journal of Special Education Technology*, 38(2), 161–173. <https://doi.org/10.1177/01626434221102538>