



The Effectiveness of Custom Activities of Daily Living (ADL) Toolkits to Increase the Generalization of Skill and Carryover in Caregivers of Children with Autism Spectrum Disorder (ASD)

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Introduction

- Few studies discuss the effectiveness of ADL toolkits for children with ASD; even fewer examine the impact OT has on their development.
- Difficulty with ADL skills can lead to reduced independence and increased caregiver dependence (Walczak, 2019).
- Caregivers often receive educational resources to support intervention implementation and skill continuation.
 - Examples include flyers, demonstrations from the OT, videos, etc.
- Research in India highlighted significant struggles among parents of children with ASD in executing ADLs, with the use of at-home interventions improving family routines (Naik & Vajaratkar, 2019).
- Custom ADL toolkits can enhance skill carryover, generalization, and caregiver knowledge, addressing key concerns for children with ASD.
- The purpose of this study is to explore caregiver perceptions and ease of use of tailored ADL toolkits for children with ASD.

Methods

DESIGN TYPE: Program Development

PARTICIPANTS:

- Caregivers whose child receives OT services at Mitchell's Place
- A total of 8 participants

PROJECT DESIGN:

- 5 custom ADL toolkits were created based on the following criteria:
 - Each child's level of ASD
 - Specific ADL skills identified by OTPs
- ADLs targeted:
 - Socks and Shoes (x2)
 - Toilet Hygiene
 - Toileting
 - Getting Dressed
 - Hand Washing
- Each toolkit consisted of the following (if applicable):
 - Backward and Forward Chaining Infographic
 - QR Codes to ADL Video Resources on YouTube
 - Social Stories
 - First, Then Boards
 - Crafts and/or Activities
- Implementation:
 - 4-week implementation period
 - 7 days a week, no designated time each day
- Post-Participation Survey:
 - 6-17 questions based on how participants responded to each question
 - Open and closed-ended questions included

Results

Post Custom ADL Toolkit Participation Survey

- Of the 8 participants, 6 started the survey and 5 completed it to the final question
 - One participant did not complete the toolkit for the entirety of the implementation period and, therefore, was prompted to end the survey
 - One participant exited out of the survey after question 3
- Caregivers' perspective of the toolkit effectiveness

Post Custom ADL Toolkit Survey Results					
Question Number	Number of Responses Per Answer Choice				
	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Extremely Dissatisfied
4	4	0	0	0	0
7	3	1	0	0	0
12	4	0	0	0	0

Post Custom ADL Toolkit Survey Results					
Question Number	Response Percentage Per Answer Choice				
	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Extremely Dissatisfied
4	100%	0%	0%	0%	0%
7	75%	25%	0%	0%	0%
12	100%	0%	0%	0%	0%

Question Key to Results Charts:

- Question Number 4:
 - How satisfied were you with the educational resources provided in your custom ADL toolkit?
- Question Number 7:
 - How satisfied were you with the implementation process of your custom ADL toolkit?
- Question Number 12:
 - Finally, please rate your overall experience with the custom ADL toolkit process.

Discussion Cont.

SURVEY RESPONSES:

- Caregivers were extremely satisfied with the educational resources in their ADL toolkit
- All caregivers state the amount of resources included in the toolkit was just right
- Caregivers were extremely or somewhat satisfied with the implementation process of their toolkit
- All caregivers were extremely satisfied with their overall experience of the custom ADL toolkit process

LIMITATIONS:

- Small sample size
- Short implementation period
- Short interactions with caregivers
- Limited budget for purchasing resources for toolkits

Conclusion

IMPLICATIONS:

- OT practitioners to enhance and further educate caregivers on ADL interventions in the home setting
- Data supports the use of customized ADL toolkits to increase carryover and generalization of the skill for caregivers and recipients of care

FUTURE RESEARCH:

- Revise current toolkits and recollect data
- Continue to measure the impact OTs have in the creation process of each toolkit
- Create more toolkits targeting a wider range of ADLs
- Create a longer timeline for more in-depth carryover over and generalization of skill
- Measure the impact of multiple caregivers carrying out per recipient of care

References

Naik, S., & Vajaratkar, P. (2019). Understanding parents' difficulties in executing activities of daily living of children with autism spectrum disorder: A qualitative descriptive study. *The Indian Journal of Occupational Therapy*, 51(3), 107. https://doi.org/10.4103/ijoth.ijoth_22_19

Walczak, M., Severson, M., Muesbeck, J., Kant, S., & Ausdreau, K. (2019). Interventions improving activities of daily living (ADLs) for children and adolescents with autism spectrum disorder: A systematic review. *The American Journal of Occupational Therapy*, 73(4_Supplement_1). <https://doi.org/10.5014/ajot.2019.73s1-po5009Citation>

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