

Utilizing the Life Sherpa App with College Students with Intellectual and/or Developmental Delays for Morning Routine

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Introduction

Students with Intellectual and/or Developmental Delays (IDD) can have difficulty with learning new routines as well as maintaining them. This can hinder their ability to live independently on their own, or to even complete independent and/or employment activities on their own. At a postsecondary program this was the case. One goal of the residential component is for students to learn independent skills to live on their own in the community after program. This particular program found that while students were mostly compliant with following the steps, they required verbal prompts to complete them. This requires paid staff and a person to be with the student each morning for each step.

The LIFE Sherpa App allows schedules to be created for individuals. The App prompts the students to start their routine. Students then click when they have completed each step and the next step in the sequence presents itself. Should a student need assistance, there is a help option to contact a support staff remotely. This App allows the student to become more independent and less dependent on another human for successfully completing a skill. Staff can monitor the students' progress with the App from a distance or even another location.

Purpose

1. Will the LIFE Sherpa app increase students' ability to complete their morning routine independently?
2. What do participants think about using the LIFE Sherpa App?

Setting

This research was conducted at an inclusive postsecondary program for students with IDD at an urban east coast university over the course of one semester. The program includes 55 students ages 18-27. The program is a comprehensive transition program that focuses on functional academics, employment, residential/independent living skills, and auditing university classes.

The setting for this research was in the residential dorms. Students are to complete eight steps before leaving for class. They are 1) wake up on their own/by alarm 2) shower 3) get dressed appropriate for weather/activities for the day 3) eat breakfast 4) take meds if applicable 5) brush teeth 7) brush hair and 8) pack backpack, get student ID, and leave by 8:40 a.m.

Participants

Six students and RA's were chosen for this research project. Due to technological difficulties (parent controls on phones, Wi-Fi issues in dorms) three remained in the study.

Student A is a 21 year old, female Caucasian with Intellectual Disability (IQ = 70) and a mood disorder. Student A is in her 2nd year in the Program. Although willing to complete the

morning routine, Student A needs verbal reminders to stay on task for all steps. Staff has previously tried a check list (paper/pen) and reinforcers for completing the check list.

Student B is an 18 year old, male Caucasian with Down syndrome (IQ = 63). Although willing to complete the morning routine, this is his freshman year and first time living away from home. Student B needs verbal reminders to stay on tasks for all steps.

Student C is a 22 year old, female Caucasian with Intellectual Disability (IQ = 63). Student C is in her 4th year of Program. Student C is not always willing to complete the steps in the morning. Several behavior plans have been implemented unsuccessfully. Student C is capable and has the skills, but due to behaviors is not always willing.

Residential Assistants (RA) are undergraduates that are employed by the Program. They live in the apartment style units with the students and monitor the students in exchange for room.

Procedures

Students had a training where the App was installed on their phones and they were instructed in how to use the App. They were given time to become comfortable with the App. It was then turned off until time for their intervention. RA's also had a training where the App was installed on their phones and were instructed in how to use the App from the student and staff perspectives. They were given time to become comfortable with the App.

This research used a single subject design. Each participant is assigned a tier. Data is taken each morning. In baseline the data is collected via paper/pencil. RA's take data on how many steps the student completed independently compared to need a verbal reminder and/or refused to complete. The next phase is the intervention, the LIFE Sherpa App. Students use the App to complete and RA's evaluate how well the student did after the routine is completed. Data is collected via the App. All students begin in baseline. When the student in the first tier is stable in baseline the intervention is introduced to that student. The other two students remain in baseline. When student one has shown improvement begins the intervention, the student in the second tier begins the intervention. The last student remains in baseline. When student two has shown improvement with the intervention then the last student begins the intervention.

This staggering allows for systematic manipulation of the intervention. By using three participants/tiers, the researcher can demonstrate the effect of the intervention on the morning routine by predicting (first tier), replicating (second tier), and verifying (third tier) that the intervention resulted in the change of behavior of the morning routine.

Results

There is evidence that a positive functional relation between using the LIFE Sherpa App increased students ability to complete their morning routine independently.

Student A

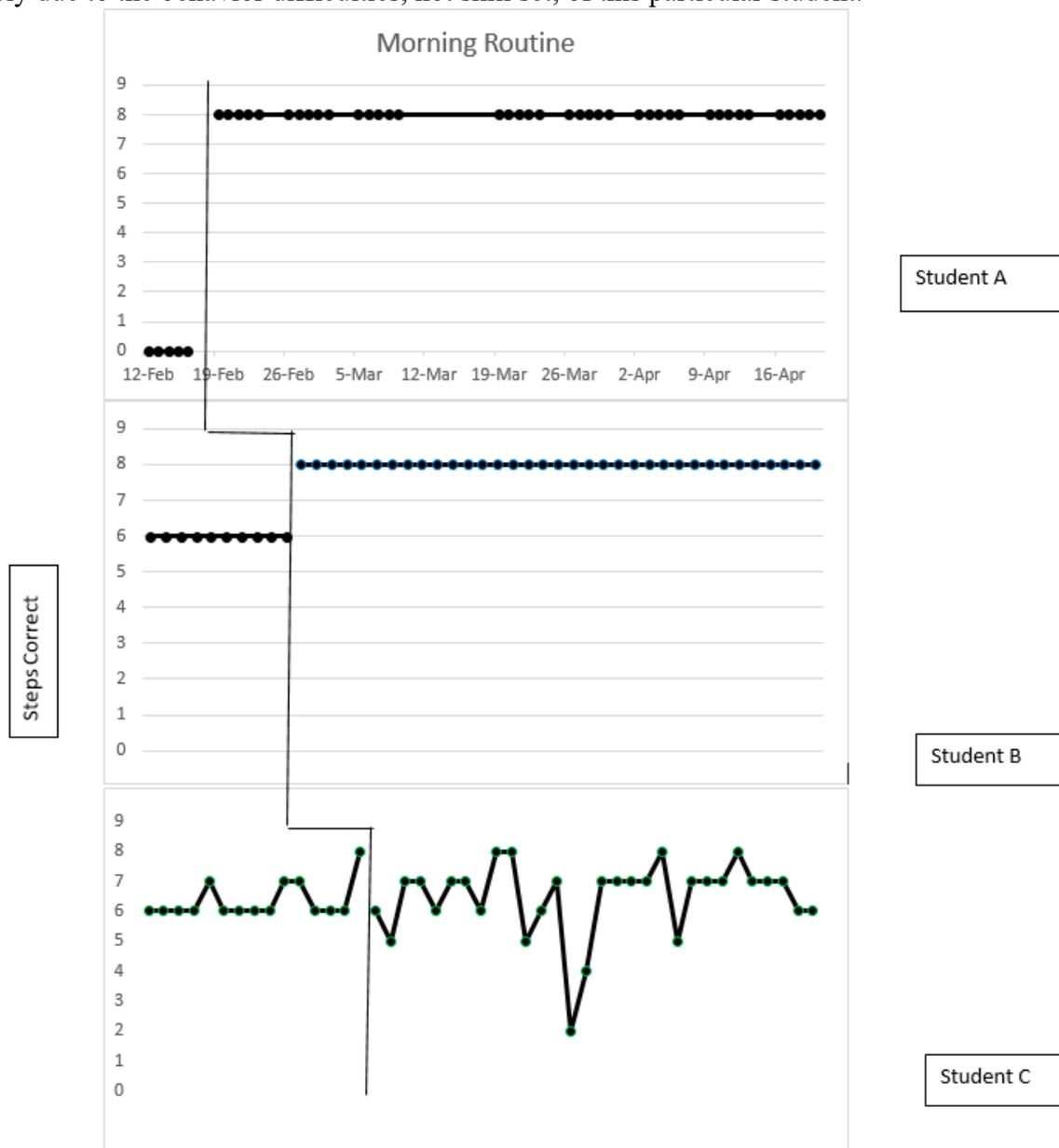
During baseline, Student A required assistance from the RA for every step consistently. After using the App, Student A was immediately able to complete each step in her routine independently.

Student B

During baseline Student B required assistance from the RA for an average of two steps of his morning routine. After using the App, Student B was immediately able to complete each step in his routine independently.

Student C

During baseline, Student C was variable in completing her morning routine, and very often needed a verbal prompt to complete two steps. Student C remained variable after the intervention, but there was an upward trend towards the end, after an extinction burst. This is likely due to the behavior difficulties, not skill set, of this particular student.



Discussion

Overall, there was great success with the students using the LIFE Sherpa App to complete their morning routines. Students enjoyed the sense of freedom and independence of the reminders of the App verses being told what to do next by their RA's. They felt a sense of accomplishment and independence. Additionally, by starting their day successfully, they were more prepared for the rest of their day. Student A and B were able to learn their routines and began completing the entire routine by memory and checked the items off before leaving their units as a reminder to make sure they had not forgotten anything (as opposed to step by step). Student C admitted to enjoy the App, but stated she still 'just didn't feel like getting ready' some days.

Although RA's needed reminders to use the App, they too noted the positive effects on their students. They also stated it made their mornings easier as they didn't need to follow the student around to give continuous reminders of what to do next.

Moving forward, this Program plans on conducting research with the LIFE Sherpa App in the employment setting this coming semester.