

Rating more apps for people who have IDD: A second round

In early 2019, Vanderbilt University and The Arc Tennessee released an evaluation on four application tools, commonly called “apps.” As per that report, “(t)he project’s goal was to download, use, evaluate, assess and rate a series of apps that will support individuals with IDD. The project’s goal was to develop an evaluation system that includes a rating scale system, protocol, and training that is user-friendly, easily implemented, grounded in research evidence, and yielded consistent results.”

That process was the foundation for a second round app of testing conducted during the first two weeks of June. Using the same four rating dimensions as before -- content, usability, individualization and overall impression -- Vanderbilt and The Arc Tennessee evaluated three more apps: First Then Visual Schedule, CanPlan and It’s Done. The evaluators also gave their impression of the Cognitopia suite of products, but Vanderbilt and The Arc Tennessee agreed that Cognitopia’s differences invalidated attempts to make an apples-to-apples comparison. Instead, the research team opted to evaluate Cognitopia qualitatively. More specific reasoning can be found in the Cognitopia section of this report.

This initial report is to summarize the findings from the evaluations of three apps. In keeping with the scoring system from the first round of apps, The Arc Tennessee used a rating scale of 0 to 4, and gave them an opportunity to practice rating an app (Wunderlist). Further analysis will be done by Vanderbilt’s researchers.

First Then Visual Schedule

Developer: Good Karma Applications, Inc.

Price: \$9.99

iOS Availability: Yes

Android Availability: No.

About the app: On the App Store, the preview states: “First-Then visual schedule application is designed for caregivers to provide positive behavior support. For individuals with communication needs, developmental delays, Autism or those who benefit from a structured environment; visual schedules serve to increase independence and lower anxiety during transitions through different activities.”

What the evaluators said: The evaluators gave this app fairly high marks in three of the four areas, but opinions on the individualization and usability varied widely, and these two areas represented the widest standard deviation in any of the 12 dimensions rated. This might suggest that some evaluators were able to find customization features quickly, while others never found them. Interestingly enough, the dimension that saw the smallest standard deviation was this app’s content.

CanPlan

Developer: University of Victoria

Price: Free

iOS Availability: Yes.

Android Availability: Yes.

About the app: On the App store, the preview states: “CanPlan promotes independence and builds confidence by helping people with cognitive challenges complete tasks successfully. Virtually any activity can be broken into a sequence of easy-to-follow steps, illustrated by photos and reinforced with optional text and audio. Scheduling and reminder features ensure each task gets done on time. Support workers and therapists are providing CanPlan to their clients with cognitive, memory and other challenges, while families and caregivers are using the tool with loved ones who desire more independence.”

What the evaluators said: Out of the seven apps evaluated thus far by this project, CanPlan had the highest overall score, earning 45.36. While two other apps (iModeling and Pictello) had high usability scores, CanPlan scored consistently well in every dimension. iModeling had a slightly better quality score, but CanPlan makes it easier to add content. Both CanPlan and iModeling have much the same target audience and overall goal: to help the user navigate his/her way through a task with some abstraction (e.g. washing hands).

It’s Done!

Developer: AJ Lester & Associates, Inc.

Price: \$2.99

iOS Availability: Yes.

Android Availability: Unclear. (There is a link to the Google Play store on the app’s website, but the link is broken.)

About the app: On the App store, the preview states: “Unlike calendar and task apps that nag you to do things, It’s Done iPhone app quickly confirms completion of routine tasks. After all, most people don’t need reminders for daily tasks. The problem is recalling later whether or not you actually did it. Everyone knows that feeling! It’s Done solves the problem and eliminates that feeling of uncertainty. ... (This) is the perfect app for anyone who’s ever forgotten anything. It’s also ideal for those suffer with short-term memory loss due to brain injury, dementia, or other related medical conditions.”

What the evaluators said: Out of the seven apps evaluated, this app had the lowest overall score, particularly in the dimensions of usability and quality. It should be noted that in both of those dimensions, both scores produced fairly wide standard deviations, meaning that some evaluators were positive. Two evaluators, however, gave the app extremely negative reviews.

Cognitopia

Developer: Cognitopia, LLC

Price: \$29/month for a single family

iOS Availability: N/A

INSIDE THE NUMBERS

First Then Visual Schedule

Content	10.25 out of 12
Individualization	9.88 out of 24
Usability	14.75 out of 20
Quality	5.38 out of 8
Overall	40.25 out of 64

CanPlan

Content	10.67 out of 12
Individualization	14.25 out of 24
Usability	14.89 out of 20
Quality	5.56 out of 8
Overall	45.36 out of 64

It's Done

Content	8.22 out of 12
Individualization	6.11 out of 24
Usability	9.67 out of 20
Quality	3.11 out of 8
Overall	27.11 out of 64

Notes

- This program had nine raters, and they evaluated 18 statements of fact pertaining to each app. These session took place the first two weeks of June.
- These statements were scored 0 to 4 on a Likert scale.
- One rater did not evaluate First Then Visual Schedule (the rater was absent that day, and rescheduling efforts were unsuccessful).
- One rater did not rate one section of an app (it's unclear why).

Android Availability: N/A.

About the app: As mentioned earlier, Cognitopia is not suitable for an apples-to-apples comparison. There are at least three major reasons why: a) Cognitopia is not strictly an application tool for a mobile device. It is web-based, although there are downloadable applications that can and should be used to maximize Cognitopia's features; b) Cognitopia offers a suite of products which work collectively; c) as opposed to other apps which require a one-time purchase, Cognitopia works best with a subscription.

The company's website states: "Cognitopia develops life management applications for people who see the world a little differently. We create cognitively accessible web applications for self-management and executive functioning that help people with cognitive disabilities be more independent while helping caregivers provide better support."

One of Cognitopia's main functions is where users can go to a page where routines are stored in a pictorial format, find a usable routine and then print out a QR code. That QR code can then be secured in a logical place (e.g., QR codes about doing laundry can be taped to the washing machine). Cognitopia also offers modules for goal-setting and relationships, and has easy-to-find settings and how to access

Overall ranking

The Vanderbilt/The Arc team of evaluators has rated seven application tools. Here they are, ranked in order of overall score:

CanPlan	45.36
Pictello	43.84
iModeling	41.16
First Then Visual Scheduler	40.25
ONEder	35.60
Picture Scheduler	29.73
It's Done	27.11

Dimension breakdown

Highest content score: CanPlan
Lowest content score: ONEder
Highest individualization score: Pictello
Lowest individualization score: Picture Scheduler
Highest usability score: iModeling
Lowest usability score: It's Done
Highest quality score: iModeling
Lowest quality score: It's Done

help.
The Arc/Vanderbilt team showed evalua-

tors Cognitopia and gathered mostly very positive feedback. Here are some of their comments.

"It's kind of like basic things, so if you're having trouble if running late or tying your shoes, this seems like it could help you with that."
- Rater 8

"Good way to brainstorm through the cognitopia app. seems like they have a lot of different stuff."
- Rater 9

"Helpful."
- Rater 4

"It's pretty useful. Lots of information. It will give you a QR code for if your mom and dad go on vacation, you can still find what you need to know."
- Rater 6

"I like the images, because it can help you see what you need to do at your apartment. I also like the reminder for when you need to take your medicine."
- Rater 7

More information on the Cognitopia suite can be found at cognitopia.com.