ADHD Challenges: Get by with a Little Help from Your Apps

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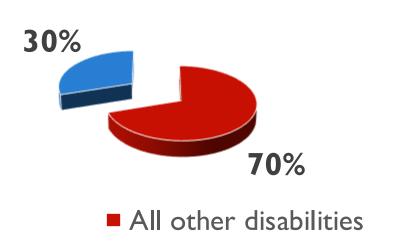
Overview

- 3 studies
 - Compilation of list of Apps
 - 131 Apps for post-secondary students with ADHD
 - Questionnaire: Use of technology for schoolwork
 - Apps most liked and used
 - Interviews: Students with ADHD as App users
 - Use, satisfaction, and wish list



Relevance of ADHD

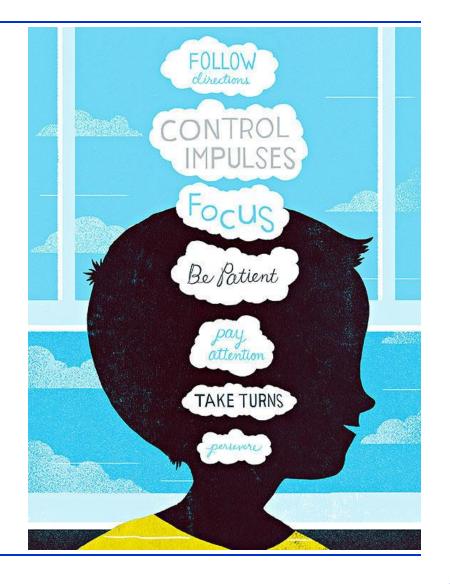
- 10-20% of Students With Disability in your classes¹
- 2/3 of SWD not registered for access services²
- Between 28% 38% of SWD have ADHD³
- Poor academic performance⁴
 - Lower grades
 - Less likely to graduate





Main Characteristics of ADHD

- Deficits in executive functioning
 - Focus/impulsivity/distractibility
 - Time management
 - Organization
- Academic difficulties due to challenges with sustained attention
 - Reading comprehension
 - Lengthy writing assignments





Focus of Study #1⁵

- Goal: Compile comprehensive list of apps for postsecondary students with ADHD
 - Impact on academic success
 - Directly support schoolwork
 - Also support daily life demands





Methodology of Study #1

- Examined 23 sources (2017-2020)
 - Google Scholar, Web sites, Facebook groups
 - App Store and Google Play Store (Canada)
- Adaptech focus group study (2018-2019)⁶
 - Composition (7 SWD and 9 professionals)
 - Conclusion: Mobile devices and apps are of extreme importance for SWD both inside and outside the classroom.



Results Study #1

- Annotated list of apps⁷
 - Total of 131 apps
 - All available (on August 1st, 2020)
 - Most free or <\$10
 - Frequency each mentioned
 - Range of 1-9
 - Comprehensive descriptions



Schoolwork Apps – results of study #1

- Most common categories
 - Task management (e.g., Evernote, Microsoft To Do)
 - Focusing + distraction management (e.g., Freedom)
 - Time management (e.g., RescueTime/ Time Timer)
 - Organization (e.g., Dropbox)
 - Literacy (e.g., Read & Write)
 - Text-to-speech (e.g., Voice Dream Reader)



Daily Living Apps – results of Study #1

- Most common categories
 - Wake-up (e.g., Alarmy, FreakyAlarm)
 - Budget and financial tracking (e.g., Mint, YNAB)
 - Email management (e.g., Boomerang Mail, Unroll.Me)



What happened next? Study # 2

- Study: Use of technologies for schoolwork⁸
 - Online questionnaire Fall 2020
 - Content informed by focus groups (from Study #1)
 - 237 Canadian university and college students
 - With and without disabilities
 - Students with ADHD (our primary focus)



Apps Tried by Students

Participants with ADHD but no LD n = 35		All participants with ADHD n = 57		All nondisabled participants n=74	
%	name of app	%	name of app	%	name of app
63%	Dropbox	65%	Dropbox	59%	Dropbox
57%	Google Calendar	61%	Google Calendar	57%	Google Calendar
31%	Evernote	30%	Evernote	39%	Quizlet
26%	Quizlet	30%	Quizlet	18%	Evernote
17%	To Do / Wunderlist	25%	Read & Write	8%	To Do / Wunderlist



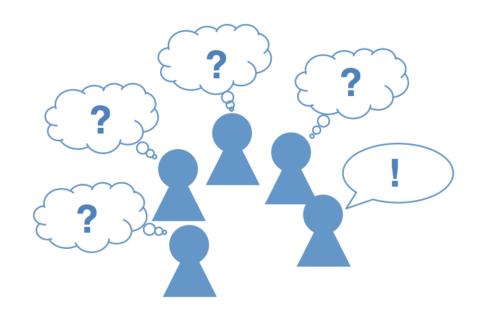
Apps Liked by Students

Participants with ADHD but no LD n = 35		All participants with ADHD n = 57		All nondisabled participants n=74	
%	name of app	%	name of app	%	name of app
43%	Google Calendar	47%	Google Calendar	45%	Google Calendar
34%	Dropbox	35%	Dropbox	36%	Dropbox
20%	Quizlet	25%	Quizlet	32%	Quizlet
11%	Read & Write	18%	Read & Write	8%	Evernote
9%	Evernote	7%	Evernote	4%	Pomodoro Timer & To Do List



What's Happening Now? Study # 3

- ADHD Interviews
 - Questions
 - Use of Apps for academic work
 - In-class
 - Out-of-class
 - Level of satisfaction
 - Wish list





Preliminary Findings – Study # 3

- So far, 6 students with ADHD interviewed
- Interesting quotes:
 - Reminder app in Google Calendar: "(...)to schedule daily tasks. Uses both the electronic calendar and a paper agenda. Finds schedule and reminders very helpful."
 - "(...)phone goes with me everywhere whereas a paper agenda can be forgotten at home."



Preliminary Findings – Study # 3 (positive quotes)

- Microsoft OneNote: "Perfect, as it is the one place where I can gather all my notes. It's like having a binder. Very helpful, due to my ADD allows me to focus. All info is in one place, has helped to organize my studies. It's my # 1."
- **Pomodoro**: "(...)because it prevents me from going off task like checking FaceBook. Study time is scheduled and so are breaks. I need this kind of structure."



Preliminary Findings – Study # 3 (negative quote)

 Todoist: "(...)an organizing program that sends reminders on tasks that need to be completed, however didn't like it, and stopped using it as it created stress by always indicating that tasks were not completed, even when they were being attended to over the course of several days or weeks."



todoist

Take-Aways

- Most apps work across various mobile devices
- Importance of daily life apps
- Technology rapidly changing
- Same apps tried and liked across groups
- Students need opportunities to explore apps



References

- ¹Eagan, M. K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Whang Sayson, H. et Rios-Aguilar, C. (2017). The American freshman: National norms fall 2016. Higher Education Research Institute. https://www.heri.ucla.edu/monographs/TheAmericanFreshman2016.pdf
- ² Fichten, C., Jorgensen, M., Havel, A., Legault, A, & Budd, J. (2021). Academic performance and mobile technology use during the COVID-19 pandemic: A comparative study. Journal of Post-Secondary Education and Disability (forthcoming).
- ³Fichten, C., Jorgensen, M., King, L., Havel, A., Heiman, T., Olenik-Shemesh, D., & Kaspi-Tsahor, D. (2019). Mobile technologies that help post-secondary students succeed: A pilot study of Canadian and Israeli professionals and students with disabilities. International Research in Higher Education, 4(3), 35-50. https://doi.org/10.5430/irhe.v4n3p35
- ⁴Budd, J., Fichten, C., Jorgensen, M., Havel, A., & Flanagan, T. (2016). Postsecondary students with specific learning disabilities and with attention deficit hyperactivity disorder should not be considered as a unified group for research or practice. Journal of Education and Training Studies (JETS), 4(4), 206-216. https://doi.org/10.11114/jets.v4i4.1255
- Fichten, C. S., Havel, A., Jorgensen, M., Arcuri, R., & Vo, C. (2020). Is there an app for that? Apps for post-secondary students with attention hyperactivity disorder (ADHD). Journal of Education and Training Studies, 8(10), 22-28. https://doi.org/10.11114/jets.v8i10.4995
- 6https://adaptech.org/research/personal-technology-in-the-classroom/
- ⁷Jorgensen, M., Arcuri, R., Vo, C., & Fichten, C. (2020, August). Comprehensive list of apps related to the academic performance of post-secondary students with ADHD. Adaptech Research Network.
- 8Fichten, C., & Budd, J. (2021). [What apps do students with ADHD and nondisabled students use and like?]. Unpublished raw data.



Thank you! Questions?





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