

Technology use by high school students with autism: It's not just for playing video games and watching animated movies

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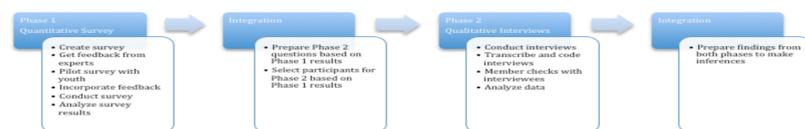
Introduction

The majority of students with Autism Spectrum Disorder (ASD) are leaving high school ill prepared to integrate successfully into adult life, which comes at a huge cost, not only to themselves and to their families, but to society at large. Technology supports have the potential to improve their outcomes and enhance their quality of life. Knowing that most individuals with ASD have an affinity for technology and that technology is becoming more portable, less expensive, and more widely available, makes it an attractive potential support. Previous studies of the technology use by adolescents with ASD focused primarily on discretionary use (Kuo et al., 2013; MacMullin, Lunsky, & Weiss, 2015; Mazurek et al., 2012; Shane & Albert, 2008). This mixed methods study investigated the use of everyday technologies as a support tool by high school students with ASD.

Objectives

1. To gain a first-person account of technology use
2. To find out what forms of tech teens w/ASD are using
3. And for what purpose
4. To gain insights into perceptions of the benefits and barriers of tech use

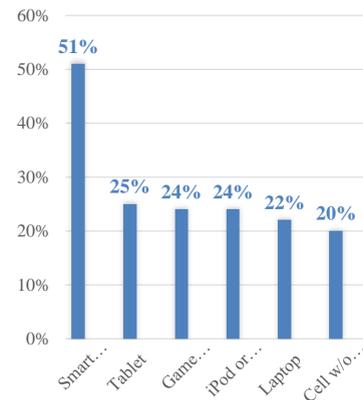
Methods



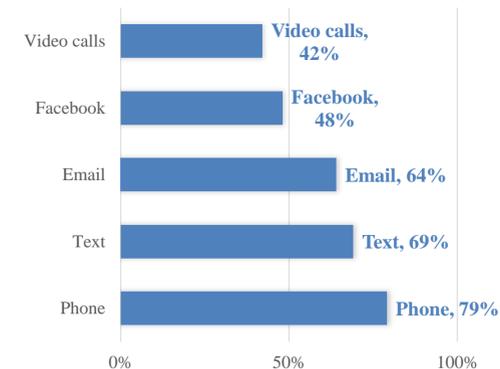
Characteristics	Survey N=243	Interviews N=10
Gender Male	84%	80%
Age	mean=17 range 14-22	mean=16 range 15-18
Race White	74% (Hispanic 17%)	70% (Hispanic 10%)
Income >\$99k	52%	20%
IQ >70	78%	90%
Standard Diploma Track	61%	90%

Survey Results

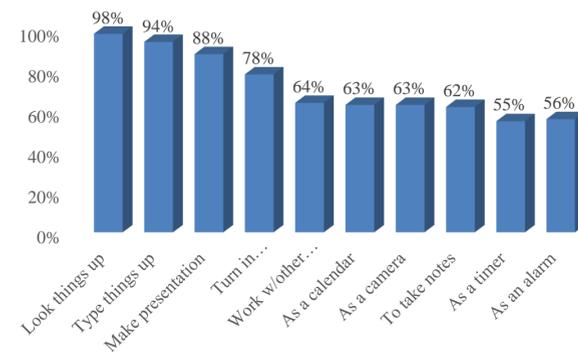
84% bring technology to school



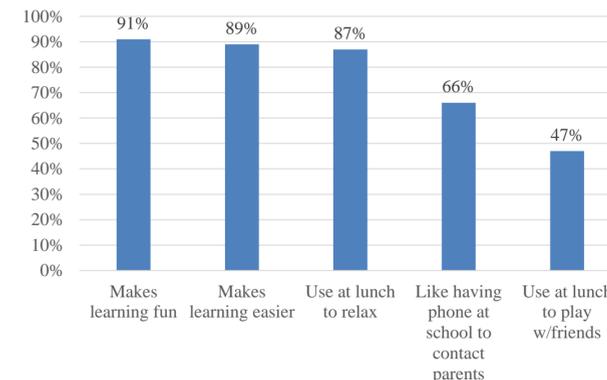
94% use technology to communicate/socialize



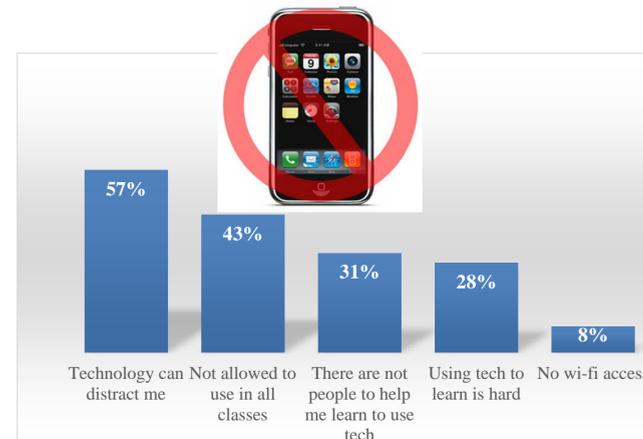
97% use technology at school



96% indicated they are good at using technology



57% say technology can be distracting



"I think technology is the best industrial thing in our world because it gives us joy and curiosity into great things." Survey respondent

Interview Results

Increase Independence

- Bypass poor handwriting
- Improve organization
- Aid comprehension
- Pursue own interests
- Use for leisure time

Distraction

- Limits to access
- Interferes with schoolwork/chores/sleep
- Impedes social interaction

Reduce Anxiety/Stress

- Music and games to reduce stress
- Contact friends/family as lifelines

Improve Social Opportunities

- Bridge distance
- Variety of options

Conclusion

Practitioners/parents should leverage the use of everyday technologies to:

- improve organizational skills,
- promote independence,
- reduce anxiety and stress
- enhance social/communication opportunities

Researchers:

- Need for efficacy studies for the above uses

Limitations:

- Self-report only
- Lack of diversity in sample

References

- Kuo, M., Orsmond, G., Coster, W. & Cohn, E. (2013). Media use among adolescents with autism spectrum disorder. *Autism, 18*(8), 914-923. doi: 10.1177/1362361313497832
- MacMullin, J.A., Lunsky, W., & Weiss, J.A. (2015). Plugged in: Electronics use in youth and young adults with autism spectrum disorder. *Autism*. doi: 0:1177/1362362361314566047
- Mazurek, M.O., Shattuck, P. T., Wagner, M., & Cooper, B. P. (2012). Prevalence and correlates of screen-based media use among youths with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders, 42*, 1757-1767. doi: 10.1007/s10803-011-1413-8
- Shane, H. C., & Albert, P. D. (2008). Electronic screen media for persons with autism spectrum disorders: Results of a survey. *Journal of Autism and Developmental Disorders, 38*, 1499-1508. doi: 10.1007/s10803-007-0527-5

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