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Vincent Myers,¹ Julie Manoharan,¹ Amy M. Daniels,¹ LeeAnne Green Snyder,¹ Pamela Feliciano,¹ Wendy K. Chung^{1,2}
Simons Foundation Autism Research Initiative¹ Columbia University Medical Center²

Background

- Accessibility of mobile apps/Web-based tools for tracking health information has increased in recent years [1].
- Though accessibility has increased, few people use these tools [2].
- More research is needed to ensure that products align with users' needs and goals.

Objective

- To survey interest in and use of mobile apps/Web-based tools to track ASD-related behavior within an online community of parents/guardians of children with ASD.

Methods

- Anonymous survey distributed to 16,031 participants of the Interactive Autism Network (IAN) [3] over five weeks.
- Surveys primary aims were:
 - To assess the autism community's interest in participating in SPARK.
 - To assess the autism community's interest in mobile apps/Web-based tools to track ASD behaviors and related information.

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- Respondents were asked to report on their past and present use of mobile apps/Web-based tools in the following areas:
 - Recreation
 - Social/communication skills
 - Education
 - Organizing and tracking
 - Tracking of ASD-related behaviors
- Data abstracted from SurveyMonkey and analyzed using Stata 12.0.

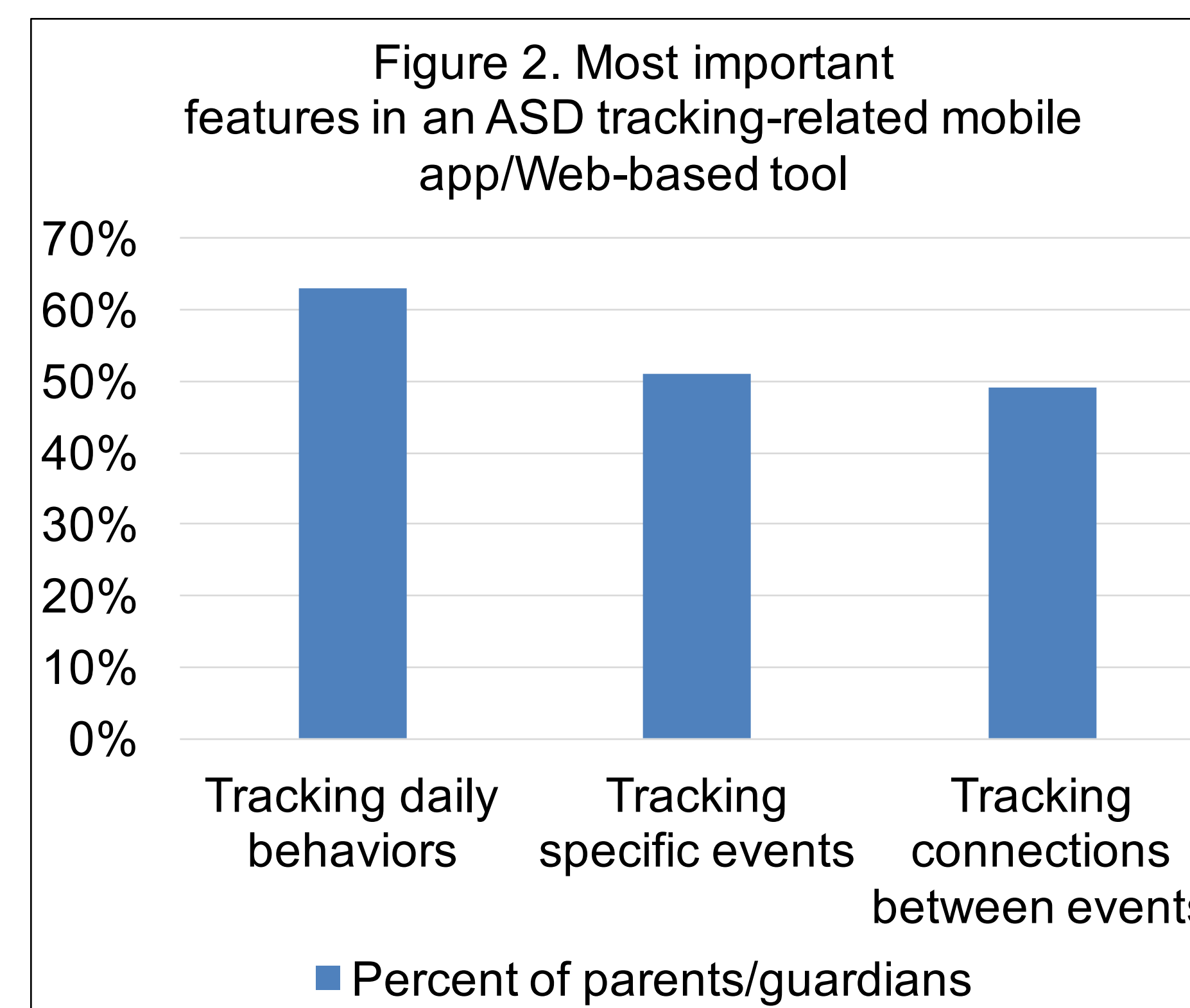
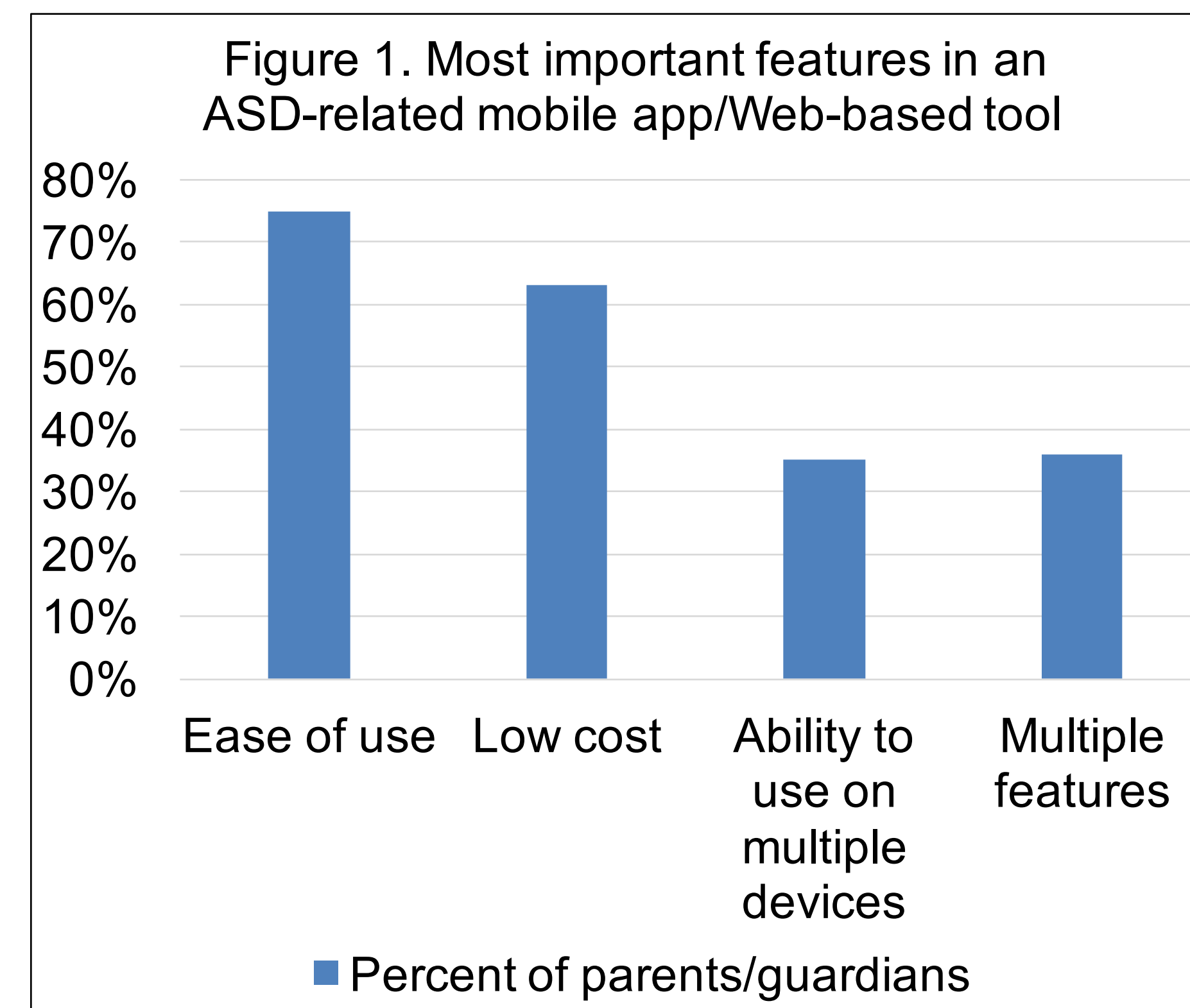
Results

- Survey completion (Table 1.):
 - 943 parents/guardians of children with ASD
- Past use of mobile apps/Web-based tools:
 - 18% of parents/guardians of children with ASD
- Most important features in an ASD-related mobile app/Web-based tool (Figure 1.):
 - Ease of use: 75%
 - Low cost: 63%
 - Ability to use on multiple devices: 36%
 - Multiple features: 36%

- Most important features in an ASD tracking-related mobile app/Web-based tool (Figure 2.):
 - Tracking daily behaviors: 63%
 - Tracking specific events (e.g., tantrums): 51%
 - Tracking connections between two things (e.g., behavior and diet): 49%
- Percent of parents/guardians who would be willing to spend several minutes a day (>5 minutes) entering data into a mobile app/Web-based tool if they could see changes over time:
 - 74%

Table 1. Participant characteristics (n=943)

Age of child in years, mean (SD); (n=828)	6.0 (2.4)
	N (%)
Child gender	
	822
Male	687 (84)
Female	135 (16)
Annual household income	
	725
<\$35,000	118 (16)
\$35,000 - \$49,999	86 (12)
\$50,000 - \$74,999	146 (20)
\$75,000 - \$99,999	119 (16)
>\$100,000	256 (36)
Child race	
	782
White	694 (89)
Black / African American	36 (5)
Asian / Pacific Islander	22 (3)
Other	30 (4)



Conclusion

- Despite participating in online research, many parents/guardians in IAN do not use mobile apps/Web-based tools to track ASD-related information.
- Though app/Web-based tool use is low among parents/guardians, a majority (74%) would be interested in using a tool to track and visualize their child's behavior over time.
- Needs and desires of parents who previously used mobile apps/Web-based tools closely matched those who had not previously used these tools.
- Further study and user testing is important in the development of mobile apps/Web-based tools to track ASD-related information.

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