

Community-based assessment of pedagogical and instructional needs in adult learners with Autism Spectrum Disorder (ASD)

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Introduction

A 2018 report by the AAMC identified three critical areas of concern regarding obstacles facing individuals with disabilities in the realm of undergraduate medical education (UME):

1. Inconsistent policies and procedures
2. Inconsistent support across campuses
3. Lack of understanding of the Americans with Disabilities Act (ADA)¹

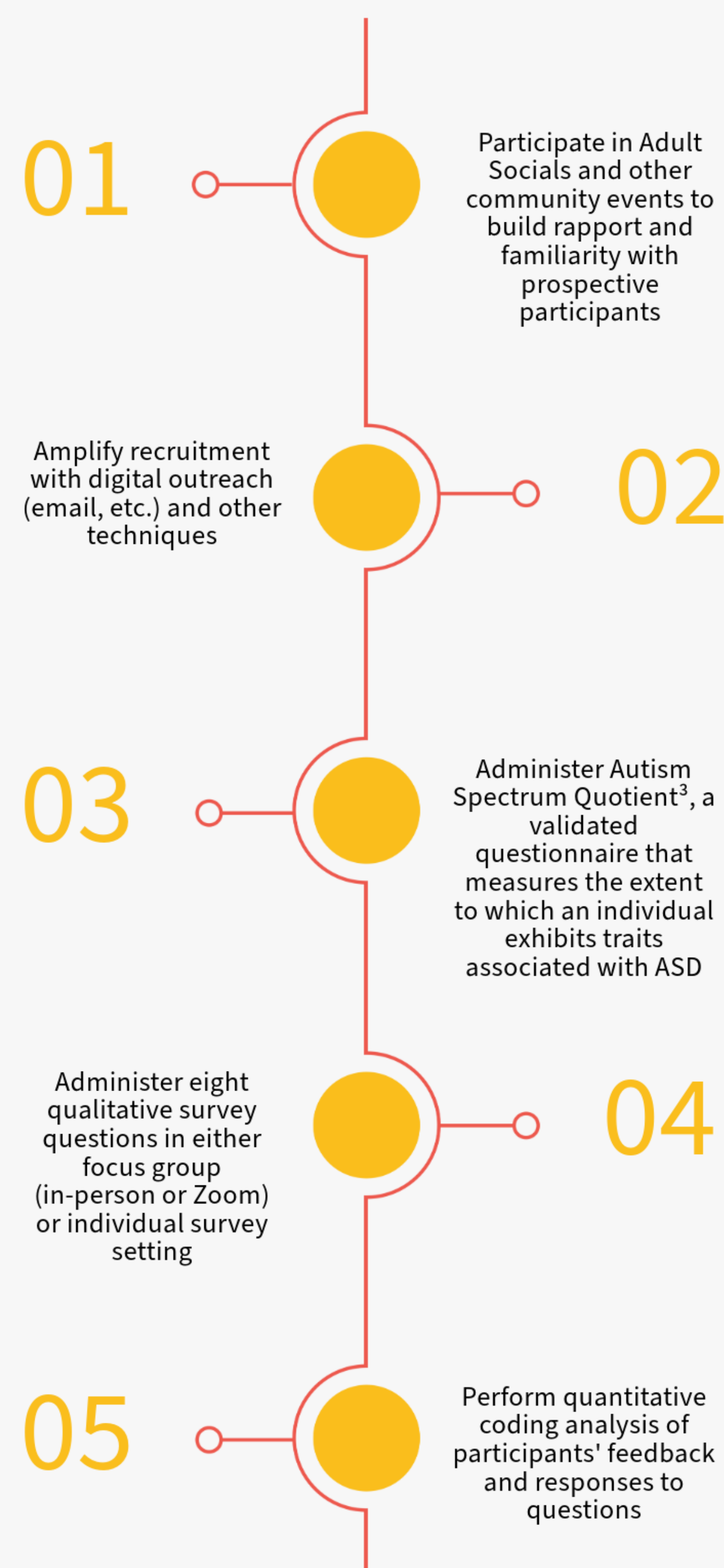
Autism spectrum disorder (ASD) is a diverse and prevalent diagnosis, and those with ASD are affected by the three aforementioned obstacles. Prior research in this realm has chiefly focused on the concerns and perspectives of teachers, administrators, and other educators, rather than directly eliciting perspectives from the community of adult learners with ASD. Among the most valuable areas for investigating these perspectives are extracurricular learning experiences (EX. STEM science camps), which are more widely available for neurotypical learners – but constitute an additional opportunity for amplifying inclusivity of learners with ASD.

Aims and Objectives

1. Directly solicit feedback from adult learners with ASD who have participated in extracurricular learning experiences, preferably those oriented towards STEM fields and medicine
 - a) Conduct 5-6 focus groups of 3-5 participants each in an in-person or virtual setting, in which qualitative questions are asked about those experiences
 - b) Allow for participants to fill out an individual survey with the same questions in lieu of a focus group, if comfort or logistics dictate this to be preferable and/or necessary
2. Analyze participant feedback to draw relevant conclusions about useful pedagogical and other strategies to optimize the learning environment for adult learners with ASD
 - a) Conduct qualitative coding analysis of participant responses to survey questions in line with prior studies performed related to self-directed learning²

Methods

Soliciting Feedback



Results

- Over the course of approximately 1.5 years, researchers attended adult socials, bowling outings, holiday parties, and other community events oriented around adults with ASD, in addition to conducting email outreach to other organizations, to support recruitment efforts
- Following difficulties in building interest and participation, a decision was made to switch exclusively to individual digital surveys for research participants
- Despite attending three consecutive events with OUCARES with iPads containing easy-access links to the survey and continuing email outreach throughout this period, no focus groups were ever brought to fruition. Additionally, no individuals ultimately ended up completing either the ASQ questionnaire or the Qualtrics survey version containing the research questions



Conclusions

Ultimately, this project did not yield any results by way of actual feedback solicited from adult learners with ASD. However, its conclusions are relevant insofar as they highlight the unique challenges presented for those who wish to work directly with individuals with ASD in this manner. Such efforts remain critically important to amplify inclusivity and representation of individuals with ASD in STEM fields. In reviewing our methods and analyzing what might have been done better, we offer the following suggestions to future efforts in this realm:

- Diversifying recruitment efforts so that one local group or organization is not overrepresented in the pool of potential participants
- Involving individuals with ASD at every phase of the research process, including study design and developing methods of gathering feedback⁴
- Soliciting input from adults with ASD employed in information settings, such as libraries and academia writ large⁵
- Optimizing communication efforts to highlight to adults with ASD their unique role as stakeholders and maximize the conveyance of exactly *how* the research being conducted will be *directly* beneficial to themselves and their communities^{4,6}
- Creating an inclusive environment within the study geared towards the unique needs of adults with ASD, such as a quiet space for stimulation breaks or provision of extensive visual representations of the research being conducted⁴

References

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