RAISE C-Accel Phase I Grant
National Science Foundation (NSF)
Track B-1 (AI and Future Jobs)

Empowering Neurodiverse Populations for Employment through Inclusion AI and Innovation Science (B-6970) Funded to Vanderbilt University

Preliminary Report Summarizing the Results of Interviews and Focus Groups with Employers, Autistic Individuals, Service Providers, and Higher Education Career Counselors on Perceptions of Barriers and Facilitators for Neurodiverse Individuals in the Job Interview and Customer Interface Processes

Phase 1 Final Report

From
Cornell University
PTE Federal Award No.: 1936970
Subaward No.: UNIV61108
August 31, 2020

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Executive Summary

The unemployment and underemployment of people with Autism Spectrum Disorder (ASD) have been well documented, and traditional approaches to the interview process identified as one area that poses multiple barriers that disadvantage qualified candidates with autism. This report summarizes research conducted by researchers from the Yang-Tan Institute on Employment and Disability at Cornell University, in partnership with the Owen Graduate School of Management at Vanderbilt University, examined employment experiences from the perspective of Autistic people, employers, service providers, and educational institution representatives who work with people with autism. The goal of the research is to explore and depict insights into factors that influence the interview process and job success. This study is part of a series of studies that is part of an NSF C-Accel study to Vanderbilt University entitled Empowering Neurodiverse Populations for Employment.

The current study included semi-structured individual and focus group interviews with employers with autism affirmative hiring programs, community employment service providers, and educational representatives (career counselors) who have experience of hiring and working with individuals with ASD people on employment, as well as ASD people. A total of 23 individuals participated in the study through group or individual interviews. Content analysis, triangulation, inter-rater tests were performed to captures the themes and agreement of the findings.

The findings suggest that employers, Autistic individuals, and service providers are consistent in experiencing challenges and opportunities that influence the interview and employment experience of Autistic individuals, although from different perspectives. Particularly, ASD people have interview preparation and support, and that employers demonstrate knowledge of neurodiversity and willingness to alter the traditional interview process aids the interview and job success. Employers that we interviewed were all involved in autism hiring programs. Therefore, their responses often highlight the utilization of strategies that minimize challenges that are often reported by Autistic individuals during interviews. While these organizations are more cognizant of the needs of Autistic applicants/employees, the employers' comments suggest that many managers continue to need support even after autism awareness training. Their comments also underline a potential issue; that is, human resource (HR) professionals or managers who know the needs of Autistic applicants may not always be present to support these applicants or to influence the hiring decision.

The comments of Autistic informants highlight the importance of having employment support, such as pre-interview training, and having the ability to self-advocate. Many of them reportedly could be handling different interview situations now, yet, their awareness was based on many trial-and-error experiences and learning on their own over time. This suggests that it is crucial for service providers to be engaged early on in the career development process. Service providers and educational representatives often play the role of bridging information and communication gaps between employers and ASD job seekers. Many of them noted that having a mentor-mentee program is an effective strategy to support both employer and Autistic individuals. One of the main challenges is for employers to both make the effort to promote neurodiversity inclusion within their company and to alter existing HR processes, such as those in the interview process. Perceived and procedural barriers remain that need to be addressed, such as continuing misperceptions about the capability of neurodiverse individuals, as well as legal and human resources policies that need modification to be more neurodiversity inclusive.

Introduction

Rationale for this Research

Approximately 58% of young adults with autism have ever worked between high school and their early 20s (Roux, Shattuck, Rast, Rava, & Anderson, 2015). In addition, they seem to be disproportionately under-employed compared to their peers without such a diagnosis and with those with other kinds of diagnoses, including individuals with other neurodiversity characteristics. Results from the National Longitudinal Transition Study-2 shows that in their early 20s, young adults with autism had far lower rates of employment than their peers. For example, approximately 95% of young adults with learning disabilities reported having ever worked after high school (Roux et al., 2015). Additionally, postsecondary employment outcomes for individuals with ASD are lower compared to their peers with other disabilities (37% vs. 66%), and they reported less paid work experience over the past year compared to their peers with other disabilities (23% vs. 40%) (Lipscomb, Haimson, Liu, Burghardt, Johnson, & Thurlow, 2017). These dramatic disparities in employment participation illustrate the urgency of addressing these issues. One of the biggest impediments to employment has been getting through the interview screening processes of employers (Booth, 2016). Traditional job interviews are nuanced social interactions that carry with them a vision of the "good employee" that often disadvantages individuals with ASD due to the social demands of the interview itself and the desired image of an employee (Austin & Pisano, 2017).

The traditional hiring process often places people with autism spectrum disorder (ASD) at a serious disadvantage in fully presenting themselves. While current technologies exist to prepare and support people with ASD on employment skills, such as interviewing skills, these technologies, such as online training modules and software, have been developed with limited understanding of the experience and needs of people with ASD in vocational development. The purpose of this research project is twofold: (1) to understand the perception of employers, service providers, and educational institution representatives in interviewing or interacting with individuals living with ASD socially and at the workplace, and (2) to explore the lived experience of individuals with ASD in interviews and workplace interactions. During the interviews, we will ask participants about their experience with interview preparation, the interview process, and social interaction with customers and peers in the workplace.

Technology-aided instruction has been used to teach various employment skills, including job acquisition (e.g., interviewing skills), to individuals with ASD. Although highly promising, there are two key limitations in prior research. First, the technologies deployed are limited and don't fully capitalize on the capabilities of VR and AI. This leaves interventions insufficiently dynamic and realistic to fully translate to the interview and employment setting. Second, the interventions in existing research lack a sufficient grounding in the lived experience of individuals with ASD and the perceptions of employers. Both perspectives are essential to ensure training is sufficiently targeted and relevant to the modern workplace. This research addresses these gaps by proposing a tighter integration between the lived experience of individuals with ASD and employers and the design of VR-based job interviewing tools and simulated customer interactions with social robots. Our qualitative exploration enlisted employers, Autistic individuals, and community service providers, and university career counselors to better understand what the barriers are in the interview process and processes to remediate them. This information was design to be then used to inform the design of the VR-based tool for individualized job interview training as well as the development of the social robots used for customer interaction training.

Methods

Data Collection

Procedure

The current study included semi-structured individual and focus group interviews with employers with autism affirmative hiring programs, community employment service providers, and educational representatives (career counselors) who have experience in hiring and working with individuals with ASD people in the employment process, as well as ASD people. The interview questions aimed to explore the challenges and opportunities that influence an individual's: (1) interview experience or outcome, and (2) workplace experience, from the perspective of employers, service providers, educational institution representatives, and ASD individuals. Table 1 illustrates the types of questions asked of participants regarding the interview and workplace experience.

Table 1. Example interview questions.

Question Type	Example Questions
Interview Process	• What were some challenges that you have experienced during an employment interview? (ASD individual) • What is your hiring process? (Employer) • What types of intervention approaches/strategies in the interview process, or interview questions, have you seen or used that you have found effective? (Service provider and educational representatives)
Workplace Interaction	• When you've been employed, what helped you succeed and stay employed? (ASD Individual) • For employees who were successful, what skills did they possess that made them successful? (Employer) • For individuals who were successful at school and/or work, what skills did they possess that made them successful? (Service provider and educational representatives)

Participants

The participants were recruited through professional networks and word-of-mouth from October to December 2019. Depending on the individual's availability, each person was invited to either one-on-one or group interviews. A total of 23 participants participated in either focus group (n=2) or individual interviews (n=13). The interviews involved four target groups, including ASD individuals, employers, educational representatives, and service providers. The term *employer* refers to an individual who holds managerial responsibilities and is often involved in the hiring process and/or making decisions. Several employers are based at companies with more than 500 employees and have more than five years of experience hiring and working with ASD employees through the autism hiring program in their companies. They work to support HR professionals and managers in different units of their companies on hiring and supporting ASD employees. Table 2 provides a demographic overview of the study participants.

Table 2. Demographic overview of the study participants.

Participant Type	Industry	Year of Work	Position	Interview Type
ASD	Education	12	Educator	Individual
ASD	Education	10	Executive Director	Group
ASD	Education	6	Web Developer	Group
ASD	Education	1	Front Desk Worker	Group
ASD	Education	1	Peer Support	Group
ASD	Education	1	Peer Support	Group
ASD	Education	1	Residential Assistant	Group
ASD	Education	*	Coordinator	Individual
ASD	Information	20	Consultant	Individual
ASD	Professional Service	7	Owner	Individual
Employer	Finance	8	Global Head	Individual
Employer	Technology	14	Program Coordinator	Individual
Employer	Technology	7	Manager	Individual
Educational Representative	Education	18	Career Counselor	Individual
Educational Representative	Education	15	Director	Individual
Educational Representative	Education	8	Career Counselor	Individual
Educational Representative	Education	5	Career Counselor	Individual
Service Provider	Professional Service	*	Manager	Group
Service Provider	Professional Service	24	Director	Individual
Service Provider	Professional Service	20	Director	Individual
Service Provider	Professional Service	2	Job Coach	Group
Service Provider	Professional Service	1	Job Coach	Group
Service Provider	Professional Service	1	Job Coach	Group

*Data not available.

Data Analysis

Analysis of the data used an inductive category application approach of qualitative content analysis to identify commonalities and variables within the texts and between interviews (Marying, 2000). Three researchers were involved in the process of data analysis using Dedoose. The researchers began by splitting and reading through the transcripts. The process of coding first involved the researchers' understanding of text content and the application of codes to meaning units (De Vries, Elliott, Kanouse, & Teleki, 2008). Coding by units of meaning refers to coding words, sentences, paragraphs, or pages that contain meaning or perspective rather than coding by a given perimeter of the text (Campbell, Quincy, Osserman, & Pedersen, 2013). The second step was to reduce the codes and determine categories that reference codes of similar concepts. The researchers reviewed and refined the categories that were generated. Inter-coder agreements were calculated for main categories using Cohen's Kappa coefficient. The resulting Kappa Score generated ranged from 0.54 to 1.00 yield, which is a fair to excellent agreement (Miles & Huberman, 1994).

Results

Employers' Experiences of Hiring

Background Knowledge

In contrast to many employers who report limited experience in hiring and working with employees with disabilities (Dixon, Kruse, & Van Horn, 2003), the employers who participated in the study interview process have considerably more experience in hiring and working with ASD people. Their responses demonstrated the value of workplace disability inclusion and how their organization has translated this knowledge into hiring practice. One employer discussed the practice, and the importance of job matching and workplace integration in noting that, "*Just like any employee, you want to match their skills to the business needs, [and] our model is that the people with autism go to work on teams, with [non-Autistic] peers*." This awareness might be influenced by their select workplaces that specifically seek ASD talent for their companies. Employers noted that they did not specifically hire people on the autism spectrum prior to initiating the autism hiring programs. Most of their responses regarding challenges and opportunities to identify and hire Autistic talent were based on their experience after they became involved in their company's autism hiring program.

Identifying Talent

Because of the purpose of the autism hiring program, these employers actively seek out Autistic talent, as compared to more traditional ways of recruitment, which await potential candidates to apply for a position. Employers typically identify and hire Autistic talent through their professional and personal networks, such as families, schools, and other community organizations. The network now extends to collaborating with different autism hiring programs. When the applications are referred through community service providers, universities, or an autism program, the applications are usually pre-screened by qualifications, personality, and work preference. Some applicants may have already received training from an autism hiring program of another company prior to the referral. The employers noted that the pre-screening process facilitates the decision on the invitation to interview or to hire because of the job matching focus. When an application came in through the regular hiring process, but the applicant disclosed autism, the person then offered support through the targeted program. The employer commented, "*A lot of people tell us that there's troubles to finding talent. We don't have that.*" Having an established targeted employment program, thus an extended network, appear to be lessening some of the challenges that are often mentioned in the literature regarding identifying top ASD talent.

Interview Process

An interview is a critical component of the hiring process that requires candidates to demonstrate their abilities effectively so that the hiring managers can make accurate hiring decisions. The employers noted an interview process often begins in the process of identifying ASD candidates as employment vendors would pre-screen candidates before making referrals. Two strategies in common that many companies use to ensure the success of the interview are to (1) provide autism awareness training, and (2) establish an alternative interview protocol.

First, the companies provide training to HR professionals and hiring managers prior to conducting the interviews, so they gain an understanding of neurodiversity and offer support that is necessary to ASD candidates throughout the hiring process. The employers noted that ASD individuals' knowledge of

application and interview process, the experience of disclosure, mock interviews, or prior work experience helps them to succeed at work. On the other hand, an employer's experience and understanding of the needs of Autistic employees also facilitated success. Important to note, having pre-training for recruiters and hiring managers does not always lead to the decision to hire an ASD applicant.

However, although there is autism awareness training, one employer noted that some managers may still reject a qualified applicant because of lack of eye contact during the interview. Employers believe that, like ASD applicants, that hiring managers also need multiple forms of support for them to select and interview ASD individuals during the hiring process. In addition to providing training for hiring managers, they also bring in job coaches and create a mentor circle to support both the employees and the managers. One employer commented, "*If the [ASD] employee's feeling frustration, the manager probably is too. [...] The job coach is there to support our new colleague [with ASD], the job coach cannot support the colleague unless they are supporting the manager too and the rest of the team as needed*."

The second strategy involves modifying the interview structure and developing an alternative recruiting process so that the candidate can showcase their qualifications in an unconventional way. Here are some of the examples mentioned:

- Demonstrate technical skills by solving a problem; this strategy is typically used to hire software engineers
- Do not use "panels of interviewers" for this pre-screened targeted cohort of interviewees
- Do one-on-one interviews and keep it short, such as 20 minutes per session
- Have stripped out the job requisition process
- No more than two interviewers in one session
- Avoid using "rapid-fire" questions in the interview process
- Eliminate open-ended interview questions
- Provide interview questions in advance
- Introduce the work environment before the interview

As noted in the bullet points above, the employers select different alternative interview strategies because of their organization's needs. An employer explained, "*In contrast to another financial firm, our company does not use a cohort and project-based interview, which typically runs 10 to 12 weeks. Because we have such a talent gap, we need people to have a specific skill set. It's just a firm decision*." The employer continues to note that the interview strategies evolve over time and sometimes borrowed and adapted from other companies in a similar industry, commenting "*we have the employer's roundtable, and we exchange ideas and best practices every month about differing techniques.*" The comment underlines, again, the importance of autism hiring networks to promote awareness and strengthen the hiring process. The employers' responses show that various strategies are used to facilitate employment success and that the development of strategies is an iterative process as challenges on promoting disability awareness persist.

Experience at Work

All the employers agree that a combination of factors contribute to and therefore merit attention to facilitate job success, such as having the candidate having the required skill set, attitude, and the employment setting affording an encouraging and understanding work environment, and these factors also heighten the likelihood of success for individuals with and without autism. In the case of ASD

employees, a key component to employment success means "*having autism awareness in the team*." One employer shared when the workplace understands neurodiversity, people become more aware of the need of ASD employees, and in turn, they can extend and offer support to peers on the autism spectrum.

ASD Individuals' Experience in Interviews and Workplace Interactions

Interview Process

The ASD individuals' comments on interview processes revealed two key challenges that they experienced during traditional interviews; these are (1) type of questions asked, and (2) the interview structure and environment. The ASD individuals also discussed their concerns and decisions on disclosure.

Interview questions

Many comments indicated that most of the ASD individuals had experienced an interview process that involves open-ended questions, such as questions on conflict resolution, or questions based on hypothetical situations. These types of interview questions typically were used during a traditional interview. The use of a *traditional interview* refers to the two interview elements, which are:

> (1) Using a broad and open-ended approach on interview questions, and the questions are often generic, such as "tell me about yourself" or "what was the major challenge that you experienced in your last position?" and

> (2) Asking questions that can be hypothetically based, such as "tell me about a time that you experienced conflict at work and how you handled it."

Autistic individuals have difficulties responding to these types of questions, such as hypothetical questions that may have never happened. From an Autistic individual's perspective, she explained,

> *When somebody says, "Okay, when did you have a time that you didn't get along, that you had a problem with a coworker?" Often, I didn't recognize I had a problem with a coworker. So, there's already a challenge now that I don't necessarily know I had a problem with a coworker. Then secondly, they ask, "How did you solve the problem with a coworker?" What I think the correct answer is how somehow you worked it out or you needed to go to somebody that was a little higher up in the chain to help you work through the details because you couldn't work it out yourself. That is not what is going to come into my mind. What's going to come into my mind is something like I don't know. I just sort of have to fake those. Those are tough ones."*

Similar to the response above, some participants also mentioned moments that they felt that they have to mimic the behaviors of their peers without autism. While the strategies provide solutions for people to adapt, some people might feel anxiety and feeling inauthentic that they cannot be who they are as an ASD person.

Many ASD individuals noted that they are better at responding to questions on skillsets that they have a definite answer to. They noted the importance of understanding what those open-ended questions are actually asking and learning how to structure their responses. One ASD individual noted, "*I have [learned] to start answering a question and then kind of fill space with things that seem related to where I was going to let my brain catch up and eventually after about 30 seconds I can circle back and usually*

incorporate what I just said into my answer. I've kind of figured out how to stay vague and then [hammer in] at the end of the question." ASD participants highlighted that they were able to learn to adapt to traditional interview questions and emphasized that when they could get those theoretical questions in advance, or if they understand what the questions are really asking, they can provide an adequate response.

Interview structure and environment

Other comments focus on the types of interview structure and environment that make the interview process more challenging or successful. For example, ASD people often share that they become overwhelmed when having large group interviews, hearing multiple people talking, or having to look at multiple people in the eyes. One ASD person commented, "S*maller groups are easier for me. When I met one-on-one with [an interviewer], that wasn't as bad because it (was) more of personal interaction*." Being able to understand the interviewer's facial cues is also important. One person noted, "*When I can't tell if they don't like me, or they are just not engaged, I end up spending a lot of time trying to make eye contact with them to get some sort of reading to know how I'm doing. And then I realize I've been staring at this person, I haven't blinked, and I haven't looked at anybody else at the table. It kind of throws me off my game*." Both unpredictability and overstimulation impact ASD people's experience with the interview. Having clear instructions on job application and application materials, as well as concise interview questions in advance is helpful. The interviewees also shared suggestions to improve the interview structure and environment, including a strength-based interview approach, and break the interview into two parts "*to give people a chance to think and return; possibly interview/conversation and demonstration of skills.*" Finally, the employers' understanding of autism plays a critical role in making the hiring process more effective for Autistic people.

Disclosure

A part of the research also focuses on the decision to disclose. We asked (1) if participants disclose when applying for a job and (2) if their experience of the job application process was influenced by the decision to disclose. Most of the interviewees shared that they don't disclose immediately, and decide to disclose when necessary, such as needing accommodations or applying through an Autism at Work Program. Many interviewees have to learn when and how to disclose, as the decision to "*disclose is a learning process*." Interviewees noted several benefits of disclosure, such as to promote disability awareness and help to develop self-advocacy skills.

Experience at Work

Comments fall within five domains of work and workplace-related traits that aided job success at work. Specifically, the workplace that (1) is accommodating, (2) provides structure and predictability, and (3) culture of neurodiverse understanding, and individuals who have (4) communication and social skills and (5) demonstrates good work ethics facilitate success at work. Some interviewees noted that they are sensitive to work environment conditions, such as heat and noise, which impact their ability to work. Having a predictable and structured workflow is also important to many ASD interviewees, such as clear expectations and instructions to tasks. Many interviewees noted concerns about navigating social interaction at work because there are many "hidden curriculums" to learn, which adds unpredictability and stress at work. Another central theme addresses the importance of changing workplace culture. Similar to factors that contribute to interview success, having an organization, a manager, or a team that understands neurodiversity supports job success. Examples of a supportive work environment include

the presence of awareness at work and having regular checking in from supervisors, as well as flexible work environment options. Having a supportive work environment is critical for employee retention.

Other comments focus on personal traits and abilities, such as self-awareness and the ability to communicate needs or mimic the behaviors of a non-Autistic person. Ability to take initiatives and advocate for themselves or ask for clarifications on work expectations when needed is essential as ASD people gain an understanding of workplace expectations. Some ASD informants also reported that it was difficult to engage in team settings as well as small talk, especially of uninteresting topics (to them). The interviewees noted the benefits of having mentors or allies at work helped them to stay employed.

Service Providers' and Educational Representatives' Experience on Hiring

Background Knowledge

Service providers and educational representatives often play the role of bridging information and communication gaps between employers and ASD job seekers. They provide neurodiversity training to employers and managers and support job seekers and students on employment strategies and skills, as well as help with job matching and placement. All service providers and most of the university representatives reported that they have worked with people on the autism spectrum, although the extent of experience working with people on the spectrum varies by the work responsibilities. For example, some people work directly in programs that support neurodiverse students, or in an autism-centered service setting, whereas other people worked as a career counselor in an educational institution, who did not work with a specific targeted population. Educational representatives we interviewed appear to have less experience supporting students on the spectrum than service providers. This might be due to the nature of work in their setting and that students are identified only by self-disclosure and may be reluctant to do so in the education setting unless an accommodation is needed. A couple of educational representatives noted that they sometimes speculate that a student is on the spectrum but cannot be sure. The educational backgrounds of Autistic people that they support ranged from senior-level students in high school to students in college. The comments from service providers and educational representatives are consistent with employers, and ASD individuals with regard to challenges and success observed during the interview process. Most of the educational representatives noted that they do not usually follow up with students after they are hired. Therefore, they have limited information reported regarding their students' experience at work.

Interview Process

Traditional approaches in job interviews are not designed to support the employment of Autistic people; therefore, service providers/university representatives help students to prepare for interviews, through training programs or one-on-one support. Much of the training consists of role-playing in different situations, using web-based software on interview and job skills, performing different tasks (e.g., create a video resume, fill out a job application, and pre-site visits), as well as to prepare students to work in a team-based setting. Another useful process includes coaching on how to establish relationships with the employers and gain a detailed understanding of job requirements and the employer's needs, so that the job coaches can perform quality job matches.

Service providers/university representatives' comments highlight the importance of preparation work before the interview day and how critical it is to enhance the interview experience. For example, partnering with employers to learn about their needs, and preparing the employers on how to communicate with Autistic employees in advance of the interview effectively can make the interview

process smoother. Having the opportunity to a pre-interview day visit, so the candidate can show their ability to work or complete tasks before an onsite behavioral assessment on the interview day. A pre-interview visit also helps to decrease anxiety and stress and affords the opportunity to show/observe the strengths of Autistic candidates. Obtaining the interview questions ahead of time is also commonly mentioned as an effective strategy; this enables service providers to work in advance with ASD individuals and prepare for the interviews. Additionally, short and skills-focused job descriptions were reported to attract Autistic candidates as they tend to select themselves out when reading long job descriptions. It is important to note that most of the effective strategies noted require establishing a relationship with employers, which is a challenge that is noted in the comments.

Most comments on an effective interview process for an ASD individual included elements, such as (1) environment, (2) mode, and (3) questions. Autistic candidates respond better when they are in a quiet environment, and when they do not feel rushed. One of the interview methods mentioned is to use a portfolio, in which individuals can demonstrate their skills, such as through a pre-recorded video so that they can avoid a more traditional interview. Asking interview questions that are specific and close-ended helps to draw better responses as generic open-ended interview questions are not effective and tend to overwhelm a person on the autism spectrum, preventing them from providing responses that accurately reflect their qualifications. Service providers work to support employers by providing awareness training and recommendations to alternate traditional interview structures and processes.

Experience at Work/School

The service providers noted that individuals who have access to a supportive job coaching system, ability to self-advocate, and/or a mentor are more likely to be successful at school and/or work. Additionally, it is better when they have a good manager and a supportive work environment that engages in understanding the needs of employees with autism. They also noted that when Autistic individuals have access to clear expectations of the jobs and structured guidance from employers/supervisors, it markedly contributes to their enhanced chance of success.

They reported that ASD individuals lack social skills training or experiences interacting with others in team settings compared to their peers without autism. Therefore, they work to provide the individuals on the spectrum with a set of skills and strategies that they can apply when interacting with customers, which in turn makes the work environment more predictable and has ultimately helped the individuals to become more successful at work. It is challenging to address the stereotypes and preconceived biases about the capability of Autistic people, so they offer training to HR and managers. When both sides are prepared with communication strategies, and Autistic people have a clear understanding and specific directions to complete tasks, that collaboration becomes more successful. Additionally, they can "*move from an assessment model to a calibration/incremental approximation mode*l" and create a safe work environment that leads to a successful outcome for the candidate and the company.

Summary and Next Steps

The purpose of this part of the NSF C-Accel Track B project has been to inform overall project efforts by gathering qualitative data on the barriers and facilitators of job acquisition and retention for Autistic individuals. There has been throughout a specific focus on improving Autistic individuals' performance in the interview process and within the work environment (as well as gaining insights for how employers may alter their interview practices). This information contributed to the inter-disciplinary nature of the overarching team led by Vanderbilt University. We did so by designing a semi-structured interview protocol and collecting data from employers, individuals on the autism spectrum, and service providers (e.g., job coaches, career counselors in educational settings) to specifically inform the design and implementation of the VR interview technology and social robot interactions. Specifically, with regard to interviewing as an assessment of individual skills, the interviews with employers and service providers consistently identified that interviewees often struggled with the interview process in specific ways – incompletely answering questions (giving "yes/no" answers to open-ended questions), struggling to understand the context of unstructured questions (e.g., "tell me about yourself"), managing and regulating emotion to unexpected events or questions during the course of an interview. Employers, service providers, and Autistic individuals all described the need for more coaching and practice with both the social interaction and emotion management components of the interview as well as the substantive aspects of the interview (demonstrating requisite skills and knowledge).

Overall, these insights and how employers and service providers make adaptations to create better outcomes (modifying questions and coaching candidates regarding the specific timeframes or experiences a question is attempting to elicit or reducing the experienced stress during the interview). These insights, among others, were conveyed to the other NSF C-Accel B-6970 team members through written summary reports of the focus group and interview findings as well as through bi-weekly meetings with the research teams. These exchanges led to specific modifications in, for example, the VR interviewing system by focusing on two specific ways in which Autistic individuals tended to struggle – interruptions and vague questions. The system added functionality where the interviewer is interrupted by a phone call or other employee during an answer from the candidate. Initial data shows the interruptions, even in a virtual setting, increase stress (based on skin conductant data) and affect performance. Similarly, a number of types of questions were added to better resemble the types of interviews that are especially difficult for Autistic candidates. The researchers on this project also had a presentation from these data accepted to the Society for Industrial and Organizational Psychology and are currently preparing a manuscript for inclusion in an edited volume published by the same society, as well as an empirical paper. Future additional papers will possibly be developed with other projects and teams to create a mixed-methods analysis of technology development and implementation.

In our proposed NSF C-Accel Phase II project, we will engage in stakeholder interviews with employers and vocational rehabilitation professionals to surface their mental models and criteria for determining appropriate job skills. Each interview will be divided into four segments (cognitive skills, interview skills, interruption and behavioral adaptability, social and teamwork skills) to understand stakeholder criteria for determining that an individual successfully demonstrates these skills in order to: inform implementation evaluations, provide targets for clinical support within systems and workplaces.

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