Working Toward Neurodiversity: How Organizations and Leaders Can Accommodate for Autism Spectrum Disorder

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In an increasingly relationship-oriented working world, social skills can be essential for job success. However, there is a growing number of working age adults who do not possess these heightened skills. Autism spectrum disorder (ASD) is characterized by specific difficulties with social interaction, and employers have legal obligations to reasonably accommodate for the particular needs associated with this disorder. To date, research has generally focused on identification, treatment, and prevention in children. Much less research has been devoted to the issues of ASD in adulthood, in particular in employment situations. An exploratory investigation was conducted to discover strategies that managers and organizations can use to accommodate for employees with ASD. From the research emerged five distinct themes: understanding, flexibility, motivation, direct communication, and ongoing support. Using this framework, several theoretical propositions are made and theoretical implications and avenues for future research are discussed.

The working world is focused on relationships. Much research has shown that social capital and social ability are essential to career success (Ferris, Witt, & Hochwarter, 2001; Seibert, Kraimer, & Liden, 2001). However, many individuals entering the workforce do not have the benefit of heightened social ability because of distinct disorders. Individuals with ASD typically exhibit impaired comprehension of others' thoughts, intentions, and emotions as well as difficulty understanding and regulating their own (Bruggink et al., 2016; Samson, Huber, & Gross, 2012).

Lewis (2014) identified brain differences as the next frontier in organizational

diversity. More recent theoretical perspectives emphasize progressing beyond outdated medical models that conceptualize the individual with a disability as "flawed" and needing alteration or improvement to fit better within existing societal frameworks. Newer models view disability as a social construct, like gender or ethnicity; these theoretical perspectives place the onus on society to eliminate the barriers that create "ability" gaps (social model of disability), and/or conceptualize disability as a distinct cultural group (cultural model of diversity), equally worthy of representation and inclusion (Barnes & Mercer, 2001). Cultural models draw parallels with other "minority groups", positing that individuals with disabilities face discrimination, prejudice, and segregation for involuntary membership in a socially constructed group that is viewed by the majority as having negative traits and are consequently unable to enjoy "ableist" privileges, comparable to white or male privilege (McDonald, Keys, & Balcazar, 2007).

Much of the research on ASD in the workplace focuses on helping individuals adapt to the working environment (e.g., Hendricks, 2010). This paper asserts that this is valuable for basic social interaction and task performance, but there is still a missing piece. More research is needed on how organizations and leaders may adapt to accommodate and gain competitive advantage from neurological diversity. Research on this topic is also important for organizations because there is a legal responsibility under the Americans with Disabilities Act (ADA) against discrimination on the basis of physical or mental impairment. Discrimination can come in the form of employment decisions based on the disability or a failure to provide reasonable accommodations (Americans with Disabilities Act, 1990).

Background

ASD is a neurodevelopmental condition present from childhood that is characterized by difficulties with reciprocal social function and communication along with repetitive behaviors and restricted interests (APA, 2013). The Center for Disease Control reported that the diagnostic prevalence of ASD has increased over the past 20 years to 1 in 68 children at present (2014). Approximately 40%-60% of individuals diagnosed with ASD also exhibit cognitive impairment, separate from the impairments associated with ASD. However, roughly half do not and are of average intellectual ability (Buescher et al., 2014; Fombonne, 2003). The current study will focus on individuals with a diagnosis of ASD without intellectual disability and characteristics described will be traits associated with ASD specifically.

ASD has been associated with significant functional impairments that impact lifelong health, social, and financial outcomes for the individual, their family and society in general. For the individual, research indicates that adolescents with ASD experience lower satisfaction with overall quality of life and interpersonal relationships than neurotypical peers (Cottenceau et al., 2012) and there are higher prevalence rates for behavioral and emotional problems among adults with ASD than the general population (Gray et al., 2012). Estimates place the societal cost of supporting a single individual with ASD (without cognitive impairment) in the United States at $1.4 million (Buescher et al., 2014). Calculated into this figure are costs specifically associated with childhood (special educational services and parental productivity loss). However, adulthood costs

are even greater, with the highest costs being residential care, supportive living, and loss of individual productivity ($10,718 annually). Loss of parental productivity is also found to extend into adulthood ($1,896 annually) (Buescher et al., 2014).

These direct and indirect impacts of ASD, in conjunction with an increasing number of individuals receiving the diagnosis, emphasize the urgent need for discussion regarding possible societal changes to optimize economic resources and improve long-term quality of life for individuals with ASD. Addressing workplace barriers and creating work environments accessible for adults with ASD can begin to ameliorate both individual and some parental productivity loss, as well as potentially contribute to greater satisfaction and quality of life for the individual. Postsecondary education providers have been steadily devoting more resources to programming and accessibility services that will meet the needs of the increasing population of students with ASD enrolling in higher education (Cullen, 2015). When these qualified young adults graduate, employers will have access to this labor pool, which will have protections under the ADA.

Despite the enormous societal cost due to loss of personal productivity of individuals with ASD, the legal requirements and the sizable population of children with ASD who will ultimately reach adulthood and, ideally, join the workforce, there has been relatively little research examining how employers can best meet the needs of employees with ASD and create work environments that optimize employee success. The employment prospects for individuals with ASD are quite grim. Young adults with autism are significantly less likely to secure employment than those with other kinds of disabilities (Singh, 2015). Adults with autism also experience high levels of underemployment and high rates of job switching, along with difficulty adjusting to new work environments (Hendricks, 2010).

To date, research has generally focused on training and fit with the organization and position. Hendricks (2010) published a review of research on employees with ASD and found that current studies focused on job placement, behavior of supervisors and coworkers, on-the-job training, workplace modifications, and support systems. The studies cited in the review mark the beginnings of research on ASD and employment distinctly from the perspective of developmental disorder research. Researchers have yet to utilize leadership and management research to scaffold theory on employees with ASD.

Prior to embarking on this research, individuals in the ASD community provided anecdotal support asserting that there may be best practices waiting to be identified through evidence-based research. Given what was found to be a dearth of research on this topic from an organizational science perspective, an exploratory study was designed to find how leaders, managers, and organizations can better accommodate employees with ASD and diminish workplace barriers.

Methods

Research Approach

The study was designed to explore the leader and organizational characteristics that influence levels of success or failure for employees with ASD. For the data collection, a small organization was selected that offered both in-house vocational training as

well as off-site community job placement with job coaching. The organization was unique and highly individualized in its offerings to clients, and the organizational members often worked more closely with individual clients than in comparable job placement organizations. In-depth, semi-structured interviews were conducted with five key employees in the organization who worked directly in vocational training and employment placement for clients with ASD. Each employee was asked a series of questions relating to their observations and experience working with clients with ASD. An inductive approach was chosen for exploring the research questions and drew from established methodologies and assumptions used in similar research (Bryman, Stephens, & Campo, 1996; McAlearney, 2006).

Sample

In order to gather the most robust information, employees who worked directly and consistently with clients with ASD were interviewed. Each of these employees had a minimum of 1 year of experience in the organization, and had worked with a minimum of 24 clients. Employees in a range of positions were spoken with, including a program director, job coach, job developer, and in-house manager. The total number of clients that all respondents had worked with was estimated at about 650. The average organizational tenure of respondents was 3 years and 8 months. Thus, although the organization was small, each employee who participated brought a wealth of experience to the interview, and each interview was considered "information rich" (Patton, 1990). As Sandelowski (1995) noted, "experiences, not people per se, are the objects of purposeful sampling" (p. 180).

Semi-Structured Interview Design

Prior to designing the study, the Director of the organization was spoken with in order to shape the open-ended questions that would be asked during the interviews. The semi-structured interview guide was designed to frame the interview while allowing for additional probing of topics that seemed of particular interest to interviewees (Miles & Huberman, 1994). The specific purpose of the interviews was to explore, in as much detail as possible, the interviewees' experiences with leadership and management for employees with ASD. Interviews were recorded then transcribed verbatim so that software could be used to methodically analyze the raw data collected.

After gathering demographic data (organizational tenure, experience, number of clients), the interview guide was used to ask a series of questions in roughly the same order. Each general question had a series of possible follow-up questions that could be used depending on the direction the interviewee took the answer. These follow-up questions were designed to elicit richer details and/or more specific descriptions.

Analyses

During data collection and analysis, the grounded theory approach developed by Glaser and Strauss (1967), which requires a constant comparison of data and theory, was followed. The contents of the interviews were also discussed as they were ongoing, to ensure responses matched the theory and evolved it to fit the data being collected. It was an iterative process that allowed for a better exploration of emerging themes in

the data. The transcripts were read closely, using an inductive approach to develop a coding schema (Miles & Huberman, 1994). The coding process involved categorizing the data based on recurring themes, which referred to the patterns observed in the transcript data. Once all the data was collected, a final list was compiled of categories and compared for agreement. These categories were used to code the data. An independent reader who was not involved in the project was chosen to read selected excerpts and identify the corresponding codes in order to test the accuracy of coding. This resulted in a 90% agreement. To confirm the findings, the qualitative analysis software ATLAS.ti (version 7.5) was used (ATLAS.ti, 2014).

Results

Through the analysis, 5 unique themes were identified that emerged from the data regarding the leadership and organizational environment that worked best for employees with ASD. All of these themes related directly to leader or managerial characteristics and behaviors. The coding process revealed that each of these themes occurred in multiple statements, and in the majority of interviews. Only 2 of the themes were not discussed by every interviewee (these were each discussed in 4 out of 5 interviews). Tables 1 and 2 provide verbal and numerical summaries of these themes, respectively. Table 1 includes definitions and selected representative comments for each of the themes. Table 2 includes the total counts of representative comments for each of the themes across interviews. Below, each of the themes are discussed in greater detail and these themes are connected to current leadership literature. There is also a focus on the aspects of the themes that are not currently addressed with extant leadership and organizational theory. Theoretical propositions relating to each theme will be presented as well.

Theme 1: Understanding/Education. The most common theme that emerged across respondents was the idea that, in order for an employee with ASD to succeed in an organization, the leader or manager within that organization must have a certain degree of compassion or understanding for this specific diagnosis. Respondents all noted that the level of understanding could essentially make or break an employment situation. One respondent described it as follows:

> I also think that managers and leaders should also be able to be extremely understanding. A lot of individuals with autism deal with certain things, they need routine, they need to be made aware of changes that are possibly coming up, and I think an understanding leader or supervisor that is working with them should know that and be understanding to that to make sure they are better preparing the individual.

Respondents noted that this understanding can often come from personal experience with autism. Managers who had family members or other close relationships with individuals with ASD were, according to respondents, more likely to act with understanding toward their clients. As one interviewee explained, "We have had a lot of success with [managers] that have experience or have a sibling or a relative, or whoever it may be, that they know that has autism. And they are personally invested."

Table 1: *Definitions and Selected Representative Comments*

	Definition	Selected Comments
Theme 1	*Understanding/Education*: Managers must have compassion along with specific knowledge about the disorder or individual	"Someone who is...educated on characteristics of individuals with an ASD diagnosis." "I also think that managers and leaders should also be able to be extremely understanding."
Theme 2	*Flexibility/Individualization*: Flexibility in rules and policies and adaptability in leadership style	"For our clients I think that the most successful ones are the managers that are able to adapt." "I think that if every rule has to be followed exactly to a T, we're gonna have a few issues here and there."
Theme 3	*Willingness/Motivation*: Possessing the motivation to include employees with ASD in the workforce and accommodate for their needs	"If those leaders and those people in those positions are willing to work with individuals with autism, then we are set up for success." "So, those ones that are not willing to really not work with them and give them leeway and understand that this is their disability. Those would be the harder ones."
Theme 4	*Direct communication/ Instruction*: Providing direct communication, clear instruction, and limiting extraneous conversation and micromanagement	"I think being direct, in terms of, this is what needs done, we need this done at this time...I think is a good thing." "The constant verbal instructions doesn't always work. And, but then, just standing there and watching them and not giving any direction doesn't work either."
Theme 5	*Ongoing support*: Allowing for job coaching and providing supervisor and coworker support	"That job coaching may need to be an ongoing situation for this person's entire career." "But, I guess it's mostly I would say the fellow employees those natural supports around them that, they have more interaction with the people than the managers."

Another interviewee further rationalized why this personal experience helps managers understand their employee with ASD:

> So, people that know someone, have someone in their family, maybe has a kid of their own, where they kind of understand that they are absolutely capable of work, and that they have abilities, and they have strengths. Especially like in certain fields, they may have this one very high level specialty that they're very good at, and they may struggle in some of the other basic areas.

Another common aspect of this theme was the usefulness of education intended to promote understanding. Respondents emphasized both the importance of learning about the particular employee's needs as well as learning about the condition of ASD more generally. Another respondent stressed the following regarding ASD education generally:

> I think employer education is a neglected piece, and that needs to come not only from the university level on up with new managers, especially human resource or training individuals or who would be in training positions. Public policy to understand, you know, some of the differences and similarities of individuals on the autism spectrum, or any neuro-developmental disorder.

Traditional leadership research has explored aspects of this theme, such as a leader's ability to empathize with employees. Empathy is considered a critical component of emotional intelligence (Goleman, 2006; Salovey & Mayer, 1990), and is defined as a person's "ability to comprehend another's feelings and to re-experience them" for themselves (Salovey & Mayer, 1990, p. 194). Wolff, Pescosolido, and Druskat (2002) found that higher levels of empathy predicted better performance for leaders in the form of enhanced perspective taking, which, they argued, should lead to better problem solving. For those managing employees with ASD, empathy is a form of understanding that would allow them to see problems from the perspective of a person with this particular disability.

What the idea of empathy or compassion misses is the element of understanding that relates to specific knowledge or learning. The concept of understanding that emerged from the data seems to have 2 necessary prongs: empathy and knowledge. Because ASD may be foreign for many managers, empathy will only make up one piece of the understanding puzzle. In other words, empathy will not be useful unless combined with specific knowledge. This may be why so many interviewees linked the idea of understanding specifically with education or learning. As one respondent put it:

> To say the truth, in our state, employment for autistic people is…kind of [a] new thing, you know. And most managers may be not really aware what people with autism can perform on the job site. And sometimes I think it takes a little time for coworkers and managers at the job site to figure out how special the person is, what to expect, and you know, how to deal with this person. So, I would say sometimes some information would be helpful for those managers because each person with autism [is] very unique. You have to know how to view them.

As such, the following propositions are offered:

Proposition 1a: Managerial understanding includes the elements of empathy and knowledge.

Proposition 1b: Managerial understanding will increase success for employees with ASD.

Table 2: *Total Counts of Representative Comments*

	R1*	R2	R3	R4	R5	TOTALS:
Understanding/Education	8	7	5	4	2	26
Flexibility/Individualization	4	2	7	2	5	20
Ongoing support	1	2	2	1	4	10
Willingness/Motivation	2	2	3	0	1	10
Direct communication/Instruction	0	2	1	1	3	7

*R = Respondent

Theme 2: Flexibility/Individualization. All of the interviewees also commented on the importance of flexibility on the part of those who are managing employees with ASD. They noted that, while structure is often beneficial to employees with ASD, an adherence to strict, one-size-fits-all rules will often lead to failure in the employment environment. One individual recounted an example as follows:

> I think that if every rule has to be followed exactly to a T, we're gonna have a few issues here and there. We've had a situation where the client that was hired and employed was taking a transportation company, and regardless of how many times she called to set her appointment, the transportation company messed up a few times, and so she was getting points taken off of her attendance because she was late due to her transportation. So, I think going in and kind of talking to them, most managers are willing to work with that, and say, "Ok, we understand that it's not her fault. Maybe we should do this, this, and this." I think the ones that are so rule-oriented and extremely rigid in their thinking are going to be the ones that are, like, "No, sorry, she was late, she's gone anyway."

Respondents also brought up the significance of managerial adaptability. They explained that managers who are able to adjust their leadership styles to fit the needs of the employee helped make for more successful employment situations. There is an inherent interconnectedness between understanding and flexibility, but for interviewees, these concepts were brought up with distinction. For them, understanding refers to the experience, knowledge, and learning, while flexibility is the ability to apply that understanding to a particular person with unique needs. One interviewee described ideal leaders for employees with ASD in the following way:

> Leaders that are willing to direct and adjust. Because not everyone on the autism spectrum learns the same, or works the same, so you need to adjust how you're

giving instruction, you need to adjust how you're teaching. You can't just have one way of doing things and say, this is it, go to work now. You have to be willing to make changes.

The quality of flexibility that was described by the interviewees is related to what Dansereau et al. (1995) defined as Individualized Leadership. The theory promotes the idea that leaders and followers make relationships with each other independent of their relationships with others. Leaders can thus adjust based on a specific follower's characteristics or needs, rather than a relativist assessment compared to other followers (Dansereau et al., 2013). The distinction here is that Individualized Leadership (along with many contemporary leadership theories) focuses on the relationship between leader and follower, and this is what allows the leader to identify the particular needs and strengths of the follower. The flexibility described by interviewees often refers more to the individualized structure a manager can provide for an employee with ASD; it is a more direct dealing with follower needs, which does not rely on the strength of the relationship. Although these concepts may share significant overlap, it is worth distinguishing, especially in light of the theory that relationship-oriented leadership styles may not have the same effectiveness for employees with ASD as for those in a traditional workforce. Given the evidence presented above, the following propositions are offered:

Proposition 2: Managerial flexibility will increase success for employees with ASD.

Theme 3: Willingness/Motivation. Another managerial characteristic that many of the interviewees described of successful employment situations for their clients included the willingness to work with an employee with this kind of disability. The sum of the data indicates that it may not be enough for a manager to understand the particularities of ASD, but also to be motivated to include them in the workforce. When asked about managers who make for successful work situations, one interviewee said simply, "willingness to accommodate." Another interviewee stated, "If those leaders and those people in those positions are willing to work with individuals with autism, then we are set up for success." On the other hand, interviewees also described managers who may have been able to accommodate their clients, but who were just not willing to put forth any effort. These were the situations they expressed were unsuccessful. One such example is as follows:

I have a client who would have been great at the bagging. He would have loved to stand there and like organize and put different things in, and he would be great with customers. But, he hated cleaning the bathroom, so he couldn't get that job. So instead of finding maybe, you know, where he could kind of bag, and he could also maybe stock a little bit of shelves here and there on the downtime, you know, kind of carve out the job that he could do, they, you know, he wasn't able to get the position, which is unfortunate because he's able to do so many things, just not everything in that specific job. So, those ones that are not willing to really work with them and give them leeway and understand that this is their disability; those would be the harder ones.

Interviewees described managers who were unwilling to accommodate to, arguably, a baseline of accommodation required by the ADA. In situations like those, their clients were either not able to get a position or did not succeed in the position. An example of this was recounted by an interviewee:

> We can go in the interview and help them in the interview process. And I've had employers tell me I can't come into the interview with them. And I'm like, well, that's illegal, but I'm not going to tell you that because we're already starting off on the wrong foot. So the ones that don't allow job coaching and try to move around that, that makes it very, very difficult for them, because they don't have the extra support that they need and are searching for.

The interplay between ability to accommodate and willingness or motivation to do so in this context may be compared to the distinction that Mintzberg (1985) drew between political skill and political will in organizations. In order to engage in political behavior, one must have sufficient willingness to expend such energy to achieve personal or organizational goals. It is both the skill and the will that make the behavior effective (Mintzberg, 1985; Treadway et al., 2005). In the case of political behavior, there may be some external reward that drives the political will. However, in the context of a willingness to accommodate for an employee with ASD, the rewards of that behavior may not be readily apparent for managers, and they may thus lack the motivation that would be essential to the success of that employee.

Motivation has been defined as "a process governing choice made by persons, among alternative forms of voluntary activity" (Vroom, 1964, p. 6). Traditional value/reward notions of organizational motivation may not apply to managers who are asked to accommodate employees with ASD because, unless organizations are specifically and explicitly aiming for higher levels of neurodiversity, there may be little benefit for the hiring manager. Most traditional theories of motivation rely on the value of an outcome, a reward, or goal achievement (Kanfer, 1990; Steers, Mowday, & Shapiro, 2004). For managers accommodating employees with ASD, these immediate drivers may not be present.

Some studies have argued that leaders can be motivated by altruism, while still maintaining some self-interest (Avolio & Locke, 2002). This argument rests on the idea that altruism may involve some immediate self-sacrifice, but it can be done with a view of the benefits to the greater good. "Taking a utilitarian viewpoint, by giving up something in the short term, a leader may be given more respect and trust from followers for their self-sacrifices. Self-sacrifice is a way of showing others the importance of what you are working towards, or your commitment to 'the cause.'" (Avolio & Locke, 2002, p. 176). From the data and theory presented, this paper can begin to provide a picture of the kind of motivation necessary for managers to accommodate employees with ASD: altruistic motivation. Managers may need to sacrifice time and effort to accommodate for an employee with ASD, where the motivation is the greater good related to disability accommodations in the workplace, recognition of social/cultural perspectives on disability, or the specific cause of neurodiversity. Motivation that flows from egoism may also be useful in the particular scenario where a manager may be expecting a

distinct valuable outcome from the accommodation, such as personal reward from the organization for promoting diversity, or the actual knowledge that the employee in question would perform well. This is not to say that, absent an organizational reward or perception of competence, accommodations essentially serve as charity. Rather, the issue of willingness to accommodate is viewed from the perspective of the manager who may not recognize the immediate benefit of such accommodation. As one respondent noted, to some managers the benefits of accommodation are quite obvious:

[The manager] said, 'you know, we know that there's going to be bumps along the road. we know that it's going to take some adjustment some times, and we know that, you know, they need maybe a little bit of extra accommodating, but we are willing to do whatever we can for them. So, because we know that they can do the work, and when they do get a position and do get in, they love a routine. So they're going to show up on time, the same time every day. You know, they're going to do their job to the best of their ability, and they're specifically going to pay a lot of attention to detail as well.' They can become some of the best workers, and they know that.

The following proposition regarding managerial willingness to accommodate is presented:

Proposition 3: Managerial willingness to accommodate, either in the form of altruistic motivation or egoistic motivation, will increase success for employees with ASD.

Theme 4: Direct communication/instruction. One very specific behavior that interviewees identified that helps employees with ASD is direct communication. On multiple occasions, interviewees also emphasized the importance of limiting extraneous instruction or conversation. In short, they advised giving brief, direct instruction, and then letting the employee get to work. One individual put it as follows:

I think talking and over-directing is another thing that doesn't make for a great leader. Once you tell them how to do something, most of the time, if they are shown or given some simple directions, they can complete the task and learn the work duty that they need to do. If you continue to talk and talk and talk and talk about what they're doing, how they can possibly do it better, they get confused and overwhelmed with that as well.

Respondents also stressed the importance of individualized instruction. One gave the example of providing one of their on-site supported employees with step-by-step instructions for a task, where each step appeared on a new page. The employee was able to easily complete the task, and it was done well. Another offered the following advice:

I think being direct, in terms of, this is what needs done, we need this done at this time, again if our client works better with lists, taking a few extra minutes to

create that list with them, I think is a good thing. A lot of individuals like it quiet, regardless of the situation that they're in. I think a lot of additional talking and conversation that isn't related to what they're doing, even if it's not with them, can sometimes confuse and throw the employee off. So I think trying to limit excess conversation is a good thing as well.

This particular behavior style is not well-researched in the leadership literature, primarily because it is so specific to the population of employees with disabilities like ASD. It may, in some cases, be a behavioral element of managers who use goal-oriented styles of leadership such as Initiating Structure or Path-Goal Theory. Initiating Structure refers to leadership that focuses on organizing work roles, providing clear channels of communication, and goal orientation (Fleishman, 1973). One could infer from a behavioral perspective that direct communication and clear instruction may fit within this paradigm. However, the theoretical basis for this leadership style lies in the assumption that leaders lead groups (Stogdill, 1950), so the definition of initiating structure misses the individualization of the instruction concept that emerged from the data.

Path-Goal Theory was developed by House (1971) to describe leadership that motivates followers through removal of barriers and rewarding goal achievement. The idea is that leaders should simplify and clear the path toward goal completion. Direct communication and clear instruction could be examples of behaviors that accomplish the directives of path-goal theory. However, there are any number of behavioral methods that managers might use when engaging this leadership style. Thus, because it is so specific, direct communication does not hold its own space in traditional leadership literature as a distinct style. For employees with ASD, this style of managerial communication may be essential. Therefore, the following proposition is offered:

Proposition 4: Direct communication and clear instruction from managers will increase success for employees with ASD.

Theme 5: Ongoing support. The theme of ongoing support was also recurring in interviews. Respondents commented that the time frame that they were allowed to job coach under the current state standards was often insufficient. Most remarked that continuing job coaching would make employees with ASD even more successful. As one respondent explained:

Where especially some of our higher functioning individuals would be able to fit into an organization if the organization understood, you know, what some of the repetitive behaviors were or if they understood why job coaching is more than just, you know, 90 days during training. That job coaching may need to be an ongoing situation for this person's entire career.

Respondents also brought up the idea that others in the work environment can provide much needed support for employees with ASD when the job coach is not

present or when job coaching has ended for that individual. Coworkers especially can act as what respondents termed "natural supports" in the workplace. The following example was offered in an interview:

> So, for example, we have a client that was hired on at a thrift store, and she took very quickly to an older lady that was doing the same thing that she was doing. So she could learn very much from this older employee that had been there for years and years. And so not only when we faded out job coaching, did she still have a natural support in place, but it made her feel more comfortable. So I think in addition to having good leaders and good managers, finding a first kind of point of contact, the natural support, whether it be a coworker, another employee that is working around them, we've seen success in that as well.

There is a great deal of research identifying social support as a resource that employees may use to cope with stress (Seers et al., 1983; Soltis et al., 2013; Terry, Nielsen, & Perchard, 1993; Viswesvaran, Sanchez, & Fisher, 1999). Social support may include both instrumental support (providing tools, information, and feedback) and emotional support (providing sympathy and encouragement). Meta-analytical results found that both types of support are related to various employee outcomes, but that the relationships with those outcomes were generally stronger when the social support came from a supervisor rather than a coworker (Ng & Sorensen, 2008). For a traditional (non-neurologically diverse) workforce, supervisor support may indeed be viewed as a greater and more prestigious resource. However, for employees with ASD, it may be equally valuable to have the support of a coworker, who likely will have more contact and may even have similar responsibilities to the employee with ASD. As one respondent observed:

> But, I guess it's mostly I would say the fellow employees, those natural supports around them that, they have more interaction with the people than the managers. The managers and the leaders are doing so much that they're, you know, they're checking in, but they're not with them as much as the coworkers are.

Another respondent pointed out that often managers and coworkers are so concerned with providing instrumental support to the employee with ASD, that they neglect to provide the emotional support to go with it. The respondent said, "And you have to give praise and appreciation. We all want that, and just because they're on the autism spectrum doesn't mean they don't want to be recognized for their work." Thus, the following propositions are offered:

> *Proposition 5a: Instrumental and emotional social support from managers will increase success for employees with ASD.*

> *Proposition 5b: Instrumental and emotional social support from coworkers will increase success for employees with ASD.*

Discussion

This exploratory investigation found evidence for 5 distinct methods that leaders and managers could use to accommodate employees with ASD and minimize workplace barriers. These include being understanding of the particular characteristics of ASD, being flexible and adjusting according to the varying needs of employees with ASD, having the willingness to put forth the effort to accommodate employees with ASD, providing direct communication and clear instructions, and allowing for ongoing instrumental and emotional support in the workplace for employees with ASD. Each of these may be addressed, in part, in research on leadership and management for a traditional workforce. However, each also has some elements unique to the population of employees with ASD that are not addressed in current literature. Although this study was exploratory in nature, it does provide a number of theoretical implications and fruitful avenues for future research.

Theoretical Implications and Future Research Directions

Using the grounded theory approach, this paper discussed the research process of how the presented data matched the theory. Certain questions were chosen because it was expected that those being interviewed would offer substantive answers to them. It was found that when respondents were asked about organizational policies that make for successful working situations for employees with ASD, they often had trouble coming up with clear answers. The study elected to continue asking this question because it was found to be an interesting "non-finding." Although it was not included as a distinct theme, many respondents noted that the characteristics of the organization were largely irrelevant. A couple respondents simply responded with "I don't know." But one respondent explained specifically why it was a difficult question to answer:

> I get asked this a lot, you know, what are your most successful businesses that, you know, are most understanding, and it has absolutely nothing to do with the business name. It has everything to do with the managers. You know, I mean, someone may get hired at [supermarket chain] in one city and they do absolutely amazing, and it's successful, and the client is doing great, everyone loves them. Someone might get hired at [supermarket chain] at another place, and it just, it doesn't work because there's just not a whole lot of, I keep saying understanding, but that's really what it is.

In continuing this stream of research, a future avenue may include exploring how the organization may formalize the managerial practices suggested by the data so that organizational policies encourage the understanding, flexibility, and motivation required to make these employment situations successful. There may indeed be organizational policies that would be effective for those employees with ASD, but which are not currently formalized because of the lack of official initiatives promoting this particular brand of diversity (neurodiversity). Organizations that do hire employees with ASD seem to do so with piecemeal approaches to the unique needs of this population.

Respondents also recounted incidents where organizations were, at best, toeing the

legal line of reasonable accommodations for their clients. The ADA requires reasonable accommodations that do not impose an undue hardship to the organization (Americans with Disabilities Act, 1990). The ADA covers both mental and physical impairment, so employees with ASD may avail themselves of this protection. The small body of current research on employees with ASD may not be covering the spectrum of organizational compliance with ADA. Even those organizations with which the interviewees have experience placing clients were often not aware of their responsibilities under the law. Future research may be able to follow the growth of organizational compliance as the issues of neurodiversity generally, or employees with ASD more specifically, get disseminated more widely. Publicly and privately funded advocacy groups, such as Autism Speaks, are actively increasing visibility and representation, bringing this issue to the forefront.

Finally, this exploratory research indicates that there are limitations to the extent to which traditional leadership and organizational research may apply to special populations of employees. If neurodiversity is the new frontier in organizational research diversity, lessons can be taken from the past. More than two decades ago, the American business landscape was on the precipice of a new era of globalization with the advent of the internet. Organizational researchers began questioning the sufficiency of current research, arguing that American researchers had developed the majority of organizational research without consideration of non-US contexts, models, research, and values (Boyacigiller & Adler, 1991). In the same vein, even contemporary leadership theory often ignores non-normative contexts, such as that of neurodiversity. Future research may begin to test the validity of organizational theories on neurologically atypical populations of employees.

Limitations

Although this exploratory research uncovered distinct areas relating to accommodation for employees with ASD that remain unaddressed by current organizational research, it should be viewed in light of its limitations. The study consisted of five in-depth interviews. A greater number of participants to increase internal validity would have been ideal. However, an organization was chosen based on its unique interaction with clients with ASD, and because of its niche mission, is a very small organization. Purposive selection was used to ensure the richest data possible and key members of that organization with the closest interaction with multiple clients were selected. Purposive selection refers to the idea that, in qualitative research, the unit of study is not the number of participants, but rather experience and language (Polkinghorne, 2005). Participants should be carefully selected to ensure the researcher learns as much as possible from each one.

Because the goal of qualitative research is enriching the understanding of an experience, it needs to select fertile exemplars of the experience for study. Such selections are purposeful and sought out; the selection should not be random or left to chance. The concern is not how much data were gathered or from how many sources but whether the data that were collected are sufficiently rich to bring refinement and clarity to understanding an experience (Polkinghorne, 2005, p. 140).

The participants from the small organization that was chosen for the research had in-depth experience with more than 650 clients. Thus, the data was rich with experience, in spite of the small number of interviews conducted. Future research may further validate the findings and continue to explore how to accommodate and effectively lead a neurologically diverse workforce.

Conclusion

Increasing neurodiversity in organizations presents unique challenges for organizational accommodation and individualized leadership, much of which is not addressed by current organizational research. This exploratory study shed light on specific ways that managers and leaders can accommodate for the unique needs of employees with ASD in order to eliminate workplace barriers and help them succeed. Organizations should encourage those in hiring and leadership positions to employ these characteristics and behaviors in order to realize the benefits of neurological diversity.

References

Americans with Disabilities Act (1990). Retrieved from Americans with Disabilities Act website, http://www.ada.gov/ada_intro.htm

APA. (2013). *Diagnostic and statistical manual of mental disorders* (DSM-5®). (0890425574). American Psychiatric Association.

ATLAS.ti. (2014). *ATLAS.ti7*. Berlin: Germany.

Avolio, B. J., & Locke, E. E. (2002). Contrasting different philosophies of leader motivation: Altruism versus egoism. *The Leadership Quarterly, 13*(2), 169-191.

Barnes, C., & Mercer, G. (2001). Disability culture. *Handbook of Disability Studies*, 515-534.

Boyacigiller, N. A., & Adler, N. J. (1991). The parochial dinosaur: Organizational science in a global context. *Academy of Management Review, 16*(2), 262-290.

Bruggink, A., Huisman, S., Vuijk, R., Kraaij, V., & Garnefski, N. (2016). Cognitive emotion regulation, anxiety and depression in adults with autism spectrum disorder. *Research in Autism Spectrum Disorders, 22,* 34-44.

Bryman, A., Stephens, M., & Campo, C. (1996). The importance of context: Qualitative research and the study of leadership. *The Leadership Quarterly, 7*(3), 353-370.

Buescher, A. V. S., Cidav, Z., Knapp, M., & Mandell, D. S. (2014). Costs of autism spectrum disorders in the United Kingdom and the United States. *JAMA Pediatrics, 168*(8), 721-728.

Cottenceau, H., Roux, S., Blanc, R., Lenoir, P., Bonnet-Brilhault, F., & Barthélémy, C. (2012). Quality of life of adolescents with autism spectrum disorders: Comparison to adolescents with diabetes. *European Child & Adolescent Psychiatry, 21*(5), 289-296.

Cullen, J. A. (2015). The needs of college students with autism spectrum disorders and Asperger's syndrome. *Journal of Postsecondary Education and Disability, 28*(1), 89-101.

Dansereau, F., Seitz, S. R., Chiu, C. Y., Shaughnessy, B., & Yammarino, F. J. (2013). What makes leadership, leadership? Using self-expansion theory to integrate traditional

and contemporary approaches. *The Leadership Quarterly, 24*(6), 798-821.

Dansereau, F., Yammarino, F. J., Markham, S. E., Alutto, J. A., Newman, J., Dumas, M. D., & Al-Kelabi, S. A. (1995). Individualized leadership: A new multiple-level approach. *The Leadership Quarterly, 6*(3), 413-450.

Ferris, G. R., Witt, L. A., & Hochwarter, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology, 86*(6), 1075.

Fleishman, E. A. (1973). Twenty years of consideration and structure. In E. A. Fleishman & J. G. Hunt (Eds.), *Current developments in the study of leadership* (pp. 1-40). Carbondale, IL: Southern Illinois University Press.

Fombonne, E. (2003). Epidemiological surveys of autism and other pervasive developmental disorders: An update. *Journal of Autism and Developmental Disorders, 33*(4), 365-382.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. London: Weidenfeld and Nicholson.

Goleman, D. (2006). *Emotional intelligence*. New York: Bantam.

Gray, K., Keating, C., Taffe, J., Brereton, A., Einfeld, S., & Tonge, B. (2012). Trajectory of behavior and emotional problems in autism. *American Journal on Intellectual and Developmental Disabilities, 117*(2), 121-133.

Hendricks, D. (2010). Employment and adults with autism spectrum disorders: Challenges and strategies for success. *Journal of Vocational Rehabilitation, 32*(2), 125-134.

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, *16*(3), 321-339.

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. *Handbook of industrial and organizational psychology, 1*(2), 75-130.

Lewis, K. R. (2014). The next frontier in workplace diversity: Brain differences. *Fortune*. Retrieved from http://fortune.com/2014/12/16/brain-differences-autism-workplace-diversity

McAlearney, A. S. (2006). Leadership development in healthcare: A qualitative study. *Journal of Organizational Behavior, 27*(7), 967-982.

McDonald, K. E., Keys, C. B., & Balcazar, F. E. (2007). Disability, race/ethnicity and gender: Themes of cultural oppression, acts of individual resistance. *American Journal of Community Psychology, 39*(1-2), 145-161.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Mintzberg, H. (1985). The organization as political arena. *Journal of Management Studies, 22*(2), 133-154.

Ng, T. W. H., & Sorensen, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group & Organization Management, 3*(3), 243-268.

Patton, M. (1990). Purposeful sampling. *Qualitative evaluation and research methods, 2*, 169-186.

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology, 52*(2), 137.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211.

Samson, A. C., Huber, O., & Gross, J. J. (2012). Emotion regulation in Asperger's syndrome and high-functioning autism. *Emotion, 12*(4), 659.

Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health, 18*(2), 179-183.

Seers, A., McGee, G. W., Serey, T. T., & Graen, G. B. (1983). The interaction of job stress and social support: A strong inference investigation. *Academy of Management Journal, 26*(2), 273-284.

Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal, 44*(2), 219-237.

Singh, M. (2015). Young adults with autism more likely to be unemployed, isolated. *NPR*. Retrieved from http://www.npr.org/sections/health-shots/2015/04/21/401243060/young-adults-with-autism-more-likely-to-be-unemployed-isolated

Soltis, S. M., Agneessens, F., Sasovova, Z., & Labianca, G. J. (2013). A social network perspective on turnover intentions: The role of distributive justice and social support. *Human Resource Management, 52*(4), 561-584.

Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2004). Introduction to special topic forum: The future of work motivation theory. *The Academy of Management Review, 29*(3), 379-387.

Stogdill, R. M. (1950). Leadership, membership and organization. *Psychological Bulletin, 47*(1), 1.

Terry, D. J., Nielsen, M., & Perchard, L. (1993). Effects of work stress on psychological well-being and job satisfaction: The stress-buffering role of social support. *Australian Journal of Psychology, 45*(3), 168-175.

Treadway, D. C., Hochwarter, W. A., Kacmar, C. J., & Ferris, G. R. (2005). Political will, political skill, and political behavior. *Journal of Organizational Behavior, 26*(3), 229-245.

Viswesvaran, C., Sanchez, J., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54*(2), 314-334.

Vroom, V. H. (1964). *Work and motivation*. Oxford: Wiley.

Wolff, S. B., Pescosolido, A. T., & Druskat, V. U. (2002). Emotional intelligence as the basis of leadership emergence in self-managing teams. *The Leadership Quarterly, 13*(5), 505-522.