CASE STUDY



Autism in the workforce: A case study

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Abstract

In a global society experiencing an increasing shortage of qualified workers and the recognition that individuals with autism spectrum disorder (ASD) can be effective employees, there is an uptick in private sector initiatives to address employment needs through the recruitment of workers with ASD. A case study methodology with consensual qualitative research analysis was used to gain a rich understanding of employment of people with ASD at a medium-sized clothier in collaboration with a service provider for people with ASD. Perceptions of implementation and effectiveness were collected. Results suggest the hiring of people with ASD was positively perceived by employees. Components of this success included changes to the physical work environment, diversity training specific to individuals with disabilities, and a company climate of engaging and supporting employees with ASD. This research suggests that the collaborative initiative may prove a meaningful model for other companies interested in employing people with ASD.

Key words: autism; recruiting and training; collaboration; managing diversity; organizational change

Given recent global workforce trends, including economic and demographic shifts, it is becoming increasingly difficult for employers to attract and retain a competent workforce (Allegis Group, 2018; Fry, 2018; Patel, 2014). The global recession and aging workers have the largest impact on attracting and retaining workforce talent (Allegis Group, 2018; Patel, 2014). As a result, employers have found success in the recruitment of 'non-traditional' applicant pools (Rynes & Barber, 1990). One undervalued and underutilized pool of workers can be found in people with autism spectrum disorder (ASD). Given the increasing shortage of qualified workers and the recognition that individuals with ASD can be effective employees, there has been an increase in private sector initiatives to address their employment needs through the active recruitment of workers with ASD. For instance, Walgreens, Freddie Mac, Microsoft, and SAP have each been publicly recognized for their activism in hiring people with ASD (Erbentraut, 2017; Miller-Merrell, 2016).

Autism Spectrum Disorder

ASD occurs in approximately 1 in 160 children worldwide with no significant differences by geographic regions, ethnic/cultural or socioeconomic factors (Elsabbagh et al., 2012). This estimate is a global average and results vary widely across studies. For example, the prevalence of ASD in the

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United States is 1 in 54 children (Maenner, Shaw, & Baio, 2020). ASD is a neurodevelopmental disorder characterized by differences in social communication and social interaction; and, restricted, repetitive patterns of behaviors, interests, or activities (American Psychiatric Association, 2013). Young adults with ASD were found to have challenges with participation in social relationships (Orsmond, Shattuck, Cooper, Sterzing, & Anderson, 2013) and employment in the community (Taylor & Seltzer, 2011).

Although willing and capable of work (Graetz, 2010; Hendricks, 2010; Roux, Shattuck, Cooper, Anderson, Wagner, & Narendorf, 2013; Seaman & Cannella-Malone, 2016; Smith & Philippen, 2005), employment rates of adults with ASD are estimated to be as low as 15% (Cameto, 2003; Chen, Leader, Sung, & Leahy, 2015; Hendricks, 2010) compared to 65% for people without disabilities (United States Bureau of Labor Statistics, 2018). The opportunity in hiring people with ASD has also been recognized in the literature, with employers noting multiple benefits. For instance, Howlin, Jordan, and Evans (1995) found that employers valued the reliability, trustworthiness, and high attendance of employees with ASD. Others have expressed an interest in employing people with ASD but voice real or imagined concerns with doing so (Hendricks, 2010; Kaletta, Binks, & Robinson, 2012; Scott et al., 2017). Employer apprehensions may arise from concerns about cognitive functioning, communication skills (Hendricks, 2010), and perceptions that individuals with ASD exhibit maladaptive behaviors at work, such as aggression, selfinjury, or destruction of property (Berkman & Meyer, 1988; Burt, Fuller, & Lewis, 1991; Kobayashi & Murata, 1998; Smith & Coleman, 1986). Indeed, some individuals with ASD report difficulty in maintaining employment due to organizational, sensory, or social deficits (Rashid, Hodgetts, & Nicholas, 2017), suggesting the need for a thoughtful consideration of the physical and social environment (Barnhill, 2007; Chen et al., 2015; Hendricks, 2010; Taylor, McPheeters, Sathe, Dove, Veenstra-VanderWeele, & Warren, 2012).

In this study, we describe a unique private initiative between a manufacturer of tailored menswear centralized in the Midwest region of the United States (Hart Schaffner Marx [HSM]) and a private disability services provider (Autism Workforce) in their efforts to employ people with ASD in multiple roles at a manufacturing plant of HSM. The current study aimed to understand (a) the perspectives of the employees and leadership at HSM about the autism initiative and (b) the characteristics of the business that led to the success of the initiative.

Initiative Partners

Founded in 1887, HSM is a men's apparel clothier headquartered in a major metropolitan city in the United States. The company employs nearly 600 people across its facilities that include two manufacturing plants. The chief executive officer (CEO) at HSM has been a national leader in the private industry for recognizing the potential for people with autism to contribute to a manufacturing setting.

Exercise Connection was created in 2009 to teach exercise to youth with ASD. Research suggests physical exercise interventions reduce stereotypical mannerisms and behaviors, aggression, off-task behavior, and workstation elopement among individuals with ASD (Lang, Koegel, Ashbaugh, Regester, Ence, & Smith, 2010). Recognizing the needs of youth transitioning to adulthood, Autism Workforce, a division of Exercise Connection, was created as an employment program for people with ASD. Autism Workforce assists businesses with workplace modifications and training to support employees with ASD and is the first known employment program for people with ASD that incorporates exercise as a core component. Partnering with HSM, Autism Workforce developed a pilot initiative aimed at employing individuals with ASD at one HSM manufacturing plant.

In a close collaboration between HSM and Autism Workforce, the initiatives partners began to modify the work environment including improving the accessibility of administrative and hiring processes, adding signage, color coding work stations, creating visual work task cues, painting the

interior, and creating a dedicated gym for the exercise program. Training was also provided to employees without ASD to improve knowledge and understanding of ASD and to teach effective communication skills for working with people with ASD. Autism Workforce worked in partnership with local service agencies to recruit candidates for jobs identified for applicants with ASD, and HSM conducted the interviews and hiring process. Finally, to further build the pipeline for hiring and to provide experience for people with ASD, HSM provided, and continues to provide, mock interview experiences to the local ASD community.

Employees with Autism

At the time of this study, HSM employed four young adults with ASD whose ages ranged from 20 to 32 years (see Table 1). Employment tenure for the employees with ASD was 1.5 to 3 years and they work an average of 3 days per week for 4-hour shifts. Each employee with ASD filled roles that were matched to their individual capabilities and interests. They hold the following positions: swatch specialist, expeditor in special orders, information technology (IT) specialist, and stock associate. Of note, the employees with ASD vary in their functional abilities, most of whom are affected by cognitive and communication challenges.

Employees with ASD interacted with HSM employees without ASD to varying degrees. In general, direct supervisors of employees with ASD had frequent daily interactions and worked the most closely with them. Frequency and capacity of interactions depended on the nature of the work and department. For example, the customer service department had more interaction than the pricing and community departments within the manufacturing plant. The human resource (HR) department had considerable interaction with employees with ASD during the hiring process, but less so after they began work. Many employees in the company had interactions with the employee with ASD filling the IT specialist position as it is the nature of this role to interact with employees across the plant when IT issues arise. Additionally, co-workers of employees with ASD reported making efforts to engage in social exchanges (e.g., general greetings) with the employees with ASD each shift. Although the upper level management team had minimal interaction with the employees with ASD, all managers knew the production value of the employees with ASD, likely from interactions with their direct supervisors. The management team played an instrumental role in implementation of the autism initiative.

Methods

A qualitative case study methodology was used to investigate the collaboration between HSM and Autism Workforce, with elements of consensual qualitative research (CQR) implemented in processes of conducting semi-structured interviews and for analyzing the data (Merriam & Tisdell, 2016). Similar case study designs have been successfully implemented to identify and assess best practices in company and agency services provided to people with disabilities (e.g., Anderson, Leahy, DelValle, Sherman, & Tansey, 2014; Phillips et al., 2016). The use of CQR for qualitative research has become popular in social science, psychology, and counseling as a tool for understanding human phenomena (e.g., Cardoso, Phillips, Thompson, Ruiz, Tansey, & Chan, 2016; Fleming, Phillips, Kaseroff, & Huck, 2014) and has been argued to add analytical rigor to an otherwise underspecified qualitative approach (Jackson, Chui, & Hill, 2012).

Researchers

The research team for this study was comprised of six rehabilitation counseling faculty and doctoral students across two universities in the Midwest region of the United States, with five team members involved in data collection. The sixth, a doctoral student experienced in the employment of people with disabilities, served as auditor. Team members engaged in a reflective process

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Characteristic	Employee 1	Employee 2	Employee 3	Employee 4
Position title	Swatch Specialist	Expeditor	IT Specialist	Stock Associate
Department	Customer Service	Special Orders	Information Technology	Distribution Center
Age in years	21	22	32	24
Years employed at HSM	3	3	1.5	2

Table 1. Characteristics of employees with ASD at HSM

(Creswell & Poth, 2018) to identify potential biases prior to data collection and again before completing the analysis in order to increase awareness and reduce the potential for biases to influence the results. Members of the research team had uniformly positive beliefs about company efforts to employ people with disabilities, and all assumed that the collaborative efforts between HSM and Autism Workforce could have a positive influence on the organization and employees. Few other biases existed prior to the interviews because of the limited exposure the researchers had to the initiative partners.

Participants and procedures

Participants included senior-level management, direct supervisors, and co-workers of employees with ASD working at HSM. The 28 HSM employees provided an in-depth perspective of the process and outcomes associated with this unique initiative for hiring people with ASD in manufacturing-related jobs. Some of the participants were from the pricing department, HR department, information technology, packaging, and specific teams that work with the employees with autism. Length of employment at HSM is provided in Table 2. Data were collected through a combination of individual interviews and focus groups. Individual interviews with senior-level management participants were necessary to accommodate schedules and to limit disruption of the day-to-day business operations. All interviews were conducted in person at the HSM headquarters.

Data collected for the current study were drawn from five group interviews with direct supervisors and co-workers of employees with ASD and six individual interviews comprised of seniorlevel management. Focus groups and interviews ranged from 20 to 90 min in length, and all were completed with two to three members of the research team present, to reduce the possibility of interviewer bias while also enriching the data collected. Digital audio recordings of all interviews and focus groups were created for transcription and analysis. Informed consent was obtained from all individual participants included in the study. Approval from the university's Institutional Review Board was obtained to conduct this study with human subjects.

Measures

Focus groups and interviews were conducted using semi-structured interviews. In accordance with CQR, the interview consisted of open-ended questions that were constructed to encourage responses without limiting them to a predetermined point of view (Burkard, Knox, & Hill, 2012). The research team developed the interview protocol prior to scheduled interviews, and all interview items were agreed upon by the team. Optional probing questions were included in the semi-structured interview to facilitate the elaboration of ideas while minimizing interviewer influence on the response. The semi-structured nature of the interview protocol provided consistency across interviews while allowing for the flexibility to pursue the unique knowledge and perspectives of each group or individual stemming from their different roles in the organization.

	Ν	Years at HSM <i>M</i>	Years at HSM SD	Years at HSM Range
Senior-level management	6	11.7	12.3	1–25
Supervisors	8	24.7	11.1	5–24
Co-workers	14	24.6	16.8	1–51

Table 2. Participant years at HSM

Note: Years at HSM were not reported by one senior-level manager, one supervisor, and three co-workers.

Each interview began with an introductory question about participants' roles in HSM and their connections with the autism initiative (i.e., 'Tell us about your background with HSM and the Autism Workforce program?'). Probing questions in connection with this question included: (a) What is your current role with HSM and what is your involvement in the Autism Workforce Program? (probe for detail on responsibilities) and (b) Do you have any previous education and/or experience providing services that support your work with the Autism Workforce program? From this set of introductory questions, the interview protocol included questions aimed at understanding the processes that were altered or added to include employees with ASD and to gain the participants' perspectives of how this initiative has shaped their jobs and the company (e.g., 'What are some of the main challenges you have experienced with this model for employing people with autism at HSM, and how have you sought to address these challenges?'). We closed the interview by asking whether there were any changes or improvements the participants would like to see made to the autism initiative.

Data preparation and coding

Audio recordings of completed interviews were placed on a secure internet-based server for transcription provided by a paid transcription service. The analysis team, which consisted of three coders and one auditor, then used both the transcribed interviews and the original audio to code the data. Coding of transcripts began with each coder individually creating domains among two primary groups: (a) HSM senior-level management and (b) direct supervisors and co-workers. After discussing biases and how they might be minimized in the coding process, the coding team independently engaged in an iterative process of identifying and extracting meaningful data units (i.e., phrases, sentences, and paragraphs) and assigning them to domains. Individual coding of domains were then combined through a consensus seeking process across the three coders to obtain a working version of the domains. After obtaining consensus, coders independently coded the remaining interviews prior to meeting again to achieve final consensus across all interviews.

Categories were created in the next phase of the analysis; this was accomplished by having the three coders take a subset of the interviews and individually developing categories within the domains. The coding team then achieved consensus for each category through an iterative process involving multiple meetings to complete coding of categories for the remaining interviews. After consensus was achieved, the analysis was sent to an auditor who was familiar with the project but had not assisted with any aspect of the coding. The auditor individually reviewed the domains and categories and provided suggested changes, additions, and deletions to the coding team. The coding team then arrived at a consensus in determining whether to accept or reject each of the suggested changes offered by the auditor.

Results

Four primary domains emerged from the data analysis across all 12 interviews. The shared domains were (a) evaluation of the autism initiative, (b) performance and integration of

employees with ASD, (c) influence of the autism initiative on the HSM company or employees, and (d) characteristics of HSM that influenced the success of the autism initiative. A fifth domain that was unique to the six senior-level management interviews included suggested modifications and future directions to the autism initiative. Definitions of each domain and resulting categories are described below along with direct quotations to illustrate our findings. Some quotations were modified to protect anonymity of participants. Since interviews included both group and individual interviews, the representativeness of results is not reported as is typically done with the CQR protocol.

Evaluation of the autism initiative

The evaluation of the autism initiative domain included responses that reflected support for or against the autism initiative at HSM. The two categories under this domain were (a) general evaluations and (b) evaluations of specific processes or of the training provided through the autism initiative. General comments across groups tended to convey an initial response of uncertainty or anxiousness to the initiative that gave way to almost unanimously positive evaluations after becoming comfortable in working with employees with ASD. A member of the management team captured the feelings of many by saying,

We were all nervous because we didn't understand the autism program. We never had any dealings with autistic individuals...I mean, you see movies about autistic individuals, like they have outbursts and you know they're sensitive to noises and other things, so we said how are we gonna deal with this?

As with this interviewee, there were many who referred to previous exposure to people with ASD in their initial response to the program.

After several months of the initiative, interviewees typically conveyed an appreciation and even excitement for the program. For instance, a direct supervisor stated,

The program that we started, and I don't know if there is any more around the United States, but I think it's a fantastic thing where they give these kids or adults a chance to go out and be part of society, to see what it's all about, to intermix with other people. I think it's a fantastic thing, I really do.

A member of the management team stated, 'I haven't heard any negative reactions.' And then later expressed, 'I think it was a positive addition to the department.'

Specific evaluations included a consideration of the process of implementing the autism initiative, including training that was provided by Autism Workforce. Analysis of these comments suggested a general satisfaction with specific aspects of the initiative. For example, one direct supervisor stated, 'I knew I had [Autism Workforce staff] and everybody here [HSM employees] to help and support. They were so reassuring about that. "Whatever comes up we'll be right there to help you out." That was really terrific.' A co-worker stated, 'it's amazing the way they [employees with ASD] work with us. We've been trained to work with them, let them feel comfortable and socialize with us, or any necessary thing to ask ... I feel really comfortable.'

Others spoke to the effectiveness of the formal training provided by Autism Workforce. For example, one stated, 'it was very, very helpful 'cause it gave us signs of...what to look for, what were the steps to take as to help him [employee with ASD] get back to where he needed to focus.' A management team member referenced the training and start of the initiative and stated, 'all of that went very smooth prior to the person starting, and then when the person started it was just monitoring, managing, and going towards progression. And it really took flight, it really did. So, it's working wonderful right now.'

Performance and integration of employees with ASD

The next domain was defined as the evaluation or perception of performance or integration of employees with ASD within HSM. Performance and integration were initially categorized into separate domains but were later consolidated due to the frequency in which comments related to these topics were expressed together. In general, comments conveyed positive evaluations and perceptions of performance across both groups, indicating that employees with autism were dedicated, hardworking, and productive members of the HSM workforce.

Performance of employees with ASD

Good work performance and growth in their respective roles was indicated by participants. For instance, a direct supervisor commented on giving more responsibility to an employee with ASD,

We've seen him grow since the time we did hire him 'til now. I mean, he's really grown into the position. We've given him more responsibilities, which is great, and we look forward to giving him more responsibilities as time goes on.'

A member of the management team described the performance of an employee with ASD in the packing department,

This individual, he nailed it. And after a couple of weeks he was flying through. And when we gave him orders to actually pack and look at a packing slip and use a hand-held scanner and scan things, he adapted pretty good and moved to the level that we needed, which was packing orders...It was amazing because the [employee with ASD] actually packs faster than our [workers without ASD].

Direct supervisors and co-workers shared this sentiment and conveyed pleasure in working with the employees with ASD. A supervisor described one of the employees with ASD by stating, 'he's very dedicated to what he does. I just enjoy working with him.' Similarly, a co-worker commented, 'we just adore him. The whole team does. I mean, the salesmen love him and they haven't even met him yet. They just know from his e-mails...that yeah, he's just great. I mean, I can't even remember life without him.'

Although most comments were positive regarding the performance of employees with ASD, participants also expressed some challenges related to communication and to the response to directives from authority. One direct supervisor described a time when she was filling in for another supervisor who was out of town. The supervisor stated, '[Employee with ASD] just didn't want to take anything from me. It was kind of like really defiant. Like, "I know more than you do, and why are you even attempting to talk me?" I'm like, "come on!" Another direct supervisor described a challenge of communication with an employee with ASD by saying, 'it's hard to be direct with [an employee with ASD] because you're not sure if [an employee with ASD] is getting defensive or offended. But I feel...As we start working with her more and more and she's more used to us.' Despite these challenges, which HSM employees suggested were things they were able to work through, direct supervisors and co-workers generally had positive perceptions of the performance of the employees with ASD.

Integration of employees with ASD

Comments about the integration of employees with ASD suggested they were highly integrated within the social environment at HSM. A member of the management team described the social inclusion of employees with ASD from the beginning of the initiative within a department by saying, 'It was amazing to see the difference in culture... the acceptance and the partnership where they treated this individual not as someone separate, but as part of a team. They had

lunch with him every day.' Co-workers also spoke to social inclusion, with one stating, 'we include them in our group, in our whole company.' Another shared their hope for an employee with ASD to feel socially included at work,

I hope [employee with ASD] does, that he feels good, that he's part of a workforce. A company that does stuff, and he's part of that workforce that gets something done, from step one all the way 'til the time we ship it. He's part of that group of us.'

Another co-worker referred to an employee with ASD as 'family,' stating,

I look at it this way, I've been here a long time, I've been here 38 years. We spend more time here with the employees and everything, and as a family. [The employee with ASD]'s just part of our family now. He's an addition to our family.

Influence of the autism initiative on the HSM company or on HSM employees

The third domain refers to the influence the autism initiative had on HSM as a company or on its employees. Two categories emerged including (a) the influence the initiative had on the company and (b) the influence the initiative had on its employees. The autism initiative influenced the company by improving the positive public image of HSM, increased visibility of the company to the public, and increased productivity within the manufacturing plant. Participants indicated the personal influence the autism initiative had on HSM employees such as feeling a sense of pride, contributing to rewarding work, and increasing the cohesiveness among co-workers. Comments regarding the influence the autism initiative has had on the company and employees were simply described by one member of the management team, 'so it really helped the company. It really helped me personally.'

Influence of the autism initiative on HSM

The autism initiative was viewed by many as having a positive influence on the company image and visibility to the public. A member of the management team discussed the public recognition HSM received because of the autism initiative,

I'll just talk about it, family wise and friends and stuff...because they've seen things in the newspaper. We've had a few things in the Trib [Chicago Tribune], around TV. We also get recognition saying, 'hey your company is trying to do some good things.'

Co-workers and direct supervisors commented on the company image as well. One supervisor stated,

It has opened up the doors – And it's a good thing 'cause it put HSM back on the map. It's not only for clothing, but now HSM is a company that incorporates these workers... we do more than just make clothing. We're a company that embraces the workforce – you know, different workforces.

The management team conveyed improved productivity and work efficiencies as a result of the autism initiative. A management team member stated, 'it helped not directly but indirectly. We started seeing the productivity got a lot faster now.' Another management team member provided an example:

We scheduled this [employee with ASD] on specific days that we knew are peak days of the week. And that's how we saw that productivity got a lot smoother. With the pack line, we saw that there was less overtime at the end of the day. And we saw that they were pushing

more volume out early in the day rather than later in the day after five or six o'clock, which was really nice.

Another management team member summarized the influence the autism initiative had on HSM by stating,

I think it has been successful because we proved that we can employ autistic individuals and they have been contributing to our needs, our company needs and also our department needs. And again, we could never have done it without [Autism Workforce] because they were very instrumental in helping us with this program.

Influence of the autism initiative on HSM employees

Both management and employees indicated the autism initiative resulted in multiple benefits to employees of HSM. For example, co-workers stated, 'it make you feel special, work in that kind of program' and 'we feel like a better person, also.' The sense of pride resulting from the initiative was explained by a co-worker who said, 'I feel proud that our employers bring this program and are helping these people....' A management team member noted that it was rewarding to know that 'I'm working for a company that cares.' Other participants indicated a personal change within themselves as a result of their involvement in the autism initiative. A co-worker indicated, 'it has made me more patient. It has made me more loving, in the sense of, doesn't matter who you are, what you are, you're still a person, and – more understanding.' The autism initiative was also perceived as having an influence on employee cohesiveness. A member of the management team indicated that the initiative, 'was really something that brought people together.' A co-worker noted the improved teamwork across departments, 'I think it's been positive for us, because we've come together a little bit more to help each other out in every department, especially when we see [employee with ASD].' A member of the management team articulated the influence the autism initiative had on employees by stating, 'it just makes it a better work experience overall. You just feel better about what you're doing.'

Characteristics of HSM that influenced the success of the autism initiative

This domain is defined as characteristics of the company that appeared to have a role in the success of the initiative and includes (a) the influence of HSM leadership, (b) diversity of the company, (c) a sense of close bonds among employees, and (d) a company culture of altruism. There was general agreement across the management, direct supervisors, and co-workers that the strong support from the CEO and unfailing commitment to its success played a crucial role in the implementation and success of the initiative. One management team member stated,

We knew the background came from [the CEO] whose son has autism and so didn't question the motivation for it or that this was serious and not just somebody's idea that maybe we were going to do or maybe we're not going to do it. So, I think from the start knowing this is a go.

A co-worker expressed the importance of the CEO's involvement by stating, '...he was so involved. Especially if there was any hesitation on anybody's part. Get going! He wants this. I think that was really important in the beginning.' A management team member described the importance of leadership support and stated, '...you need an individual who wants to make a program work and you need the support of higher management for it to work and to be put in place.'

The rich diversity in the company was noted by management as facilitating the widespread acceptance of the autism initiative. One manager expressed, 'you've got every ethnic background

and men, women, you name it, so it's kind of a diverse workforce anyway. I didn't have any concerns about that.' Another manager stated, 'I think with as much as diversity as there already is here I do feel like it has added another layer and it's expanded some viewpoints that people have. I feel like there's been a lot of support.' Diversity in the workplace was generally viewed as a characteristic that led to the successful inclusion of employees with ASD.

Additionally, close bonds among HSM employees was a contributing force to the success of the autism initiative. The co-workers and supervisors regularly referred to co-workers as family and explained the employees with ASD were welcomed into the 'family.' This unity in the company was already mentioned in relation to the integration of employees with ASD, but also seemed to support the success of the autism initiative as a whole. For instance, one co-worker explained,

Let me just tell you the history of here. Hart Schaffner Marx – we consider each other as family. We consider ourselves brother, sister, aunts, mother, grandma – whatever. And, when they came in, we brought them in like a family member.

Altruism of HSM was the final company characteristic contributing to the success of the autism initiative. A direct supervisor indicated, 'I think the company has always been supportive, I know I heard once, I think, in a meeting that the owner said that every sale of a suit or something, a certain percentage goes to autism. So, I know they're all on board.' A management team member explained the company has a history of being altruistic and philanthropic in nature and this contributed to wide acceptance of the autism initiative:

... we've tried as best we can to be very, very giving in terms of the amount of our income that we give away to various charitable organizations... We've been giving very, very substantial gifts every year. We do this and a lot of other things... We've been very, very aware of the need to give back into society so what [the CEO] proposed [referring to the autism initiative] made perfectly good sense.

Modifications and future directions for the autism initiative

The domain of modifications and future directions included statements about implementation of the autism initiative that might have been done differently or more effectively as well as next steps of the autism initiative at HSM. Modifications included changes to help improve employee's level of comfort in working with employees with ASD through earlier and continued training; and, earlier involvement of the HR department in recruiting and hiring. Future directions included discussion of expansion of the autism initiative and the fading of support services from Autism Workforce. This domain was unique to the management team.

Modifications

One modification that was commonly suggested within the interviews was to address the varying levels of comfort among employees. One manager suggested methods to address this:

Well... you have different levels of comfort in any situation with anyone. Some people handle change easily. Some people don't want anything to change, and then you bring in a – this is what the company's going to do. This is our initiative. This is going to help employ and will employ young adults with autism. Well, first of all, 99% of the people here didn't know what that meant. I think what could've helped would have been earlier on, not just for the people that were on the committee, everyone, because again, it impacts everyone. I think it would've been having more small group sessions with every department early on, teaching them about autism, having [CEO] come in and talk about his experiences, because I think when everyone saw from the CEO and the owner how passionate he is about it and how, that's his life's goal and how meaningful, it makes everyone understand, 'Okay. This is good.' A management team member indicated additional training was warranted:

I guess maybe a little more, maybe a little more training, I don't know how much training you can get but because we are not working with these individuals on a daily basis we don't have schooling, we don't have any classes in autism but I think the training that they did provide was an introduction to this new way of having employees. Another management team member provided a similar perspective:

I think it would've been a combination of just more basic education on autism, basic education on what are the educational opportunities for young people and then young adults with autism, and then probably having people come in who had worked with them at other companies.

A final modification that was implemented by the management team was the early involvement of HR in the recruitment and hiring of individuals with autism at HSM. The management team member stated, '... at the very beginning we did make a change because at the beginning HR wasn't really involved but now, we are involved so that was a change.'

Future directions

Management team members suggested a desire to expand the autism initiative by hiring more employees with ASD.

So now we're looking to expand it in the distribution center. And see if we can staff more individuals. The goal initially was to staff a [employee with ASD] and see how it develops. And look for progression to grow from initiation of one simple task to see how much this person can grow internally and take on more responsibilities to almost achieve something similar of a full-time worker, 40 h a week. And be very independent, and we've gotten to that point. So now we're looking at opportunity to staff more individuals.

Several management team members provided input on future directions by acknowledging the effective training provided by Autism Workforce to the employees with ASD and that, due to the success of the Autism Workforce team, the services should begin to reduce as the employees with ASD are becoming more independent and relying on natural workplace supports (i.e., HSM co-workers and supervisors).

I think there's a point where, if his program is run properly, there should be a point in time where [Autism Workforce] is coming in once a month for just hands on meetings to make sure there are no issues unless there's something that's really blowing up. I think that is what we would like.

Another manager stated, 'I think there's enough support here, that if it was a once a month check in or something that that would probably be fine. I think it's gone really well' and '[Autism Workforce] should be coming in intermittently to provide you support.' One member of the management team recognized the role of HSM in reducing the level of support by Autism Workforce and stated, '[HSM Supervisors] either have to become proficient at managing their entire staff, including those who are autistic, or the program's not working.'

Discussion

This research describes an innovative collaboration between HSM and Autism Workforce for tapping the underutilized workforce of people with ASD. Through a comprehensive consideration on how to better recruit, hire, and train employees with ASD, HSM created an environment to support success of employees with ASD. A modified CQR approach was implemented to gain a thorough understanding of the outcomes and collaboration between HSM and Autism Workforce. The interviews yielded three key points that can be taken away from the present research.

First, case study results indicate that, despite minor areas for improvement, there was a highly positive response regarding the autism initiative. As with other initiatives for hiring diverse populations, any initial reservations about hiring people with ASD appeared to evolve into a willingness to expand hiring of this population in the future (Morgan & Alexander, 2005; Scott et al., 2017). In considering the autism initiative, general comments across both management, supervisors, and co-workers indicated that prior to meeting the employees with ASD there were initially statements of uncertainty about the program. However, once the employees with ASD were established at HSM, both groups reported becoming almost unanimously positive about the autism initiative, supporting the role of exposure to and experience of working with individuals with disabilities in influencing positive attitudes. The highly personalized training and support provided through Autism Workforce were seemingly capable in their efforts to proactively address and prepare the company for any of the common challenges that employees with autism may experience (e.g., navigating the social environment, managing sensitivity to sensory stimuli, or having difficulty breaking from routine).

Management, supervisors, and co-workers all described employees with ASD as being integrated not only within job-related tasks but also in the more informal social relationships. A separate qualitative study found that psychosocial support, social acceptance, and assistance with completing work tasks were among the most influential keys to integration for people with disabilities (Kulkarni & Lengnick-Hall, 2011). Additionally, Phillips, Reyes, Kriofske Mainella, Kesselmayer, and Jacobson (2018) found that despite social deficits, employed individuals with disabilities can display high levels of workplace social effectiveness through meeting the socio-emotional needs of others for warmth and competence in the organization. The present case study highlighted each of these factors in the HSM work setting, which may help to explain the unity that was developed through the autism initiative described here. Positive responses toward the autism initiative were also attributed to the autism training provided to employees at HSM. This result is supported by other research that has highlighted the need for a disability specialist to assist in the training of other employees in order to facilitate an environment of adaptability, integration, and assimilation (Müller, Schuler, Burton, & Yates, 2003; Yamatani, Teixeira, & McDonough, 2015).

A theme captured by this research that has received scant attention in the broader literature is the personal influence of the program on HSM employees. There appeared to be wide agreement that the autism initiative improved employee perceptions of HSM and of their role and purpose in the company. Consistent with the HSM employee perceptions of the impact of the autism initiative, surveyors in Australia found the overall impact of employees with autism in the workplace to be overwhelmingly positive noting employees recognized changes to themselves and the team. Similar to this study, respondents in the Australia study acknowledged that having co-workers with ASD contributed to positive adaption in the workplace culture and improvements in workplace morale (Scott et al., 2017). These additional psychological and social advantages, termed 'third-party benefits,' suggest the inclusive and diverse environment created by hiring and accommodating individuals with disabilities betters the workplace for all employees (Hartnett, Stuart, Thurman, Loy, & Batiste, 2011; Travis, 2009). Historically, research has focused predominantly on the positive effect initiatives have on consumers' perceptions of the company. For example, researchers have shown that, in the United States, consumers typically regarded companies who hired people with disabilities more favorably by considering them socially responsible and preferring to give them business (Rosenbaum, Baniya, & Seger-Gutmann, 2017; Siperstein, Romano, Mohler, & Parker, 2006).

The final consideration from this study is that the autism initiative was created with the intention of being a model for other for-profit businesses. Building upon the strengths identified through this investigation future businesses can strive to create an inclusive and successful work environment for individuals with ASD and other disabilities. Consistent with previous research on employer and hiring people with disabilities (e.g., Fraser, Ajzen, Johnson, Hebert, & Chan, 2011; Gilbride, Stensrud, Vandergoot, & Golden, 2003; Younes, 2001), specific characteristics of HSM that were noted to contribute to the success of the autism initiative included commitment of HSM leadership, diversity of the company, close bonds among employees, and company altruism. The senior-level leadership at HSM made clear that this initiative is good business rather than charity. This initial exploration suggests that the collaboration between HSM and Autism Workforce may prove a meaningful prototype for other companies interested in employing people with ASD.

Limitations

The results of this study should be considered within the context of a few limitations. Although large for a qualitative study, the sample of 28 individuals still requires caution in generalizing results to other populations or settings. Our research team followed the recommended guidelines for self-identifying bias and other processes for analyzing the data objectively, including use of an auditor to minimize the likelihood of misinterpretation of comments. However, a different research team may have drawn alternative conclusions, and our backgrounds with vocational placement services may have biased our interpretations despite our best efforts. Additionally, participant responses may have been influenced by the positive attitude toward ASD held by the CEO and Autism Workforce team. Even with these limitations, we believe that our study has important implications for other employers interested in diversifying their talent pool to include people with autism.

Conclusion

The primary findings in this examination of the partnership between Autism Workforce and HSM suggest company characteristics contribute to successful initiatives and positive influence on employees and employees with ASD alike. Of paramount importance is understanding how critical elements in efficacious initiative implementation (e.g., partner with a disability service agency, strong leadership support, or provide disability training to employees) and the resultant effects will contribute to the knowledge base of best practice strategies to create a favorable work environment which increases productivity, engagement, and morale among all employees and employers. Equipping companies with the necessary skills and services to support employees with ASD extends beyond the benefits to employers and recognizes individuals with ASD as equally valued members of a workforce.

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