Do coworker interactions impact workplace participation of people with disabilities?

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ABSTRACT

Workplace accommodations (assistive technologies, designs, and strategies) are typically prescribed to employees with disabilities with an assumption that improving their ability to perform job tasks will result in increased work productivity leading to improved work participation. However, work is inherently social in nature and participation is strongly correlated with social inclusion. In this paper, part of a larger study on universal design practices and work outcomes, we looked at the social environment, and specifically, how the formal and informal interactions between coworkers and an employee with a disability impact the latter’s sense of inclusion in the workplace. Workplace participation was higher when a larger proportion of coworkers understood the employee’s need for accommodation and when the employee with disability perceived fewer difficulties in communicating with coworkers. Social environment factors, especially, practice of disability etiquette and using a method of communication preferred by the employee with disability, significantly impacted the employee’s perception of being valued at the workplace and having opportunities for self-advancement.

INTRODUCTION

Traditionally, and as mandated by the Americans with Disabilities Act [1-2], the practice of workplace accommodation has focused on the use of assistive technologies, designs, and strategies to remove barriers to essential job tasks. The assumption is that improving an employee’s ability to perform his or her job tasks (activity performance) will result in increased work productivity and job satisfaction, and that these will in turn reflect full participation in the workplace. This activity-focused model is flawed, however, because work is not just a series of individual tasks that occur in isolation. Rather, work is inherently social in nature, where a sense of belonging is fostered by employee engagement and working towards a common goal [3-4] and where participation is strongly correlated with social inclusion [5].

Participation has been described as the “ultimate aim” of rehabilitation efforts [6] and we have defined workplace participation to be an overall sense of inclusion in the workplace that includes the following constructs: 1) control and autonomy over one’s work, 2) opportunity for professional development, 3) recognition and value of one’s work, 4) a sense of fulfillment in work roles, and 5) being part of a team. Workplace participation supports job functions through the improved execution of work-related tasks, coordination of group activities, transmission of office culture, and team building [7-8]. It is also important for the role it plays in enhancing work outcomes, such as higher individual and office productivity, increased satisfaction with colleagues and their work, and lower rates of employee turnover [9-11].

Coworker relationships are essential to workplace participation. However, traditional accommodation practices may create resentment among coworkers who believe that an accommodated employee with disability is receiving preferential treatment [12-13]. Coworkers also may believe that an accommodation provides an unfair advantage or a valuable “perk” to the employee by making their work tasks easier [14]. Such concerns can have negative consequences for an employee with a disability: first a worker may avoid requesting a needed accommodation [15], and second, a supervisor may be reluctant to approve or impose a spending limit [12] on a request for an accommodation [16].

Formal and informal interactions with coworkers are a necessity in a typical work environment where employees are expected to work as a team. If the employee with disability has perceptual or mobility limitations and uses assistive devices (e.g. assistive listening devices or wheelchairs) to accommodate for them, the way coworkers would communicate or arrange group meetings/activities will influence the employees participation in the team work. Limited participation in activities can have effects on career advancement and prospects.

This paper, part of a larger study on universal design practices and work outcomes, looks at the social environment, and specifically, how the formal and informal interactions between coworkers and an employee with a disability impact the latter’s sense of inclusion in the workplace.

METHODS

Two surveys were administered to currently-employed people with disabilities. Participants were recruited through snowball sampling, originating from multiple disability-related organizations (e.g., RESNA, Centers for Independent Living, AT Act Projects). Most of the participants completed the survey at their own pace through an online survey.
but they also had the option to have the questions administered over a phone interview. An employee’s sense of inclusion in workplace was evaluated using the Workplace Participation Survey (WPS). This 10-item survey gathered the employee’s self-reported sense of inclusion during professional development activities, social events, and also their sense of being recognized as a valued member of a team by other employees and supervisor(s) using a used a 5-item Likert scale metric (1=Strongly agree, 2=Somewhat agree, 3=Somewhat disagree, 4=Strongly disagree, 0=Not Applicable). This survey was previously validated with people with mobility impairments [17]. The second survey was the Coworker Interaction Survey (CIS), a 9-item questionnaire that was newly introduced to augment the WPS. This self-report, 5-point scale survey (1=Yes, without anyone asking, 2=Yes, after being asked by my employer, 3=Yes, after being asked by me, 4=No, even when asked, 0=N/A (help is not needed)) evaluated the spontaneity of inclusive co-worker interactions with employees with disabilities during work activities and social events. For example, one question asked if coworkers made room at the table for the employee (to help them sitting at the table), and whether that behavior was automatic or only after being instructed to do so. Finally, participants were asked questions on demographics, difficulties experienced getting to and using different work areas, difficulties with face-to-face and remote communication, and workplace accommodations.

Data Analysis

Statistical significance was set at 0.05 for all analyses and Bonferroni corrections performed wherever required. An aggregate participation score was computed by adding together responses from all WPS items. Spearman Rho correlations were performed between the aggregate WPS participation score and the individual items from the CIS to determine significant coworker interaction factors that are most related to participation. To further evaluate differences between employees who reported positive vs. negative inclusion, their responses on individual WPS items were dichotomized into positive (1=Strongly agree, 2=Somewhat agree) and negative (3=Somewhat disagree, 4=Strongly disagree) inclusion scores. This was done to help make meaningful pairwise comparisons and to facilitate interpretation. Non-parametric Mann Whitney U statistics were used to evaluate differences in coworkers’ interactions between the those who positively or negatively report inclusion on WPS items. Spearman’s Rho analysis was also performed to understand the relationship between the aggregate participation score and the participant’s self-report on effectiveness of their accommodation and support from coworkers for using accommodation.

RESULTS

A total of 80 employees with disabilities completed the surveys. The group of participants who completed the survey were on average 47.25±11.89 years old, were predominantly female (64.6%), and were comprised of 72.37% white, 21.05% black, and 9.2% of other races. Of all participants, 31.25% reported having limitations in motor abilities, 60% in visual abilities, 32.5% in speech or hearing abilities, and 12.5% in cognitive abilities. Participants reported functional limitations in all categories applicable to them: 31.25% reported motor limitations, 60% reported visual limitations, 10% reported speech limitations, 22.5% reported hearing limitations, and 12.5% reported having cognitive limitations. Eighty percent participants were employed for 40 hours or more per week and the remaining 20% for 20-40 hours per week. About 77.5% participants used some kind of workplace accommodation to assist with their job duties and the other 22.5% did not use any accommodations. About 47.5% participants reported that their accommodation was very effective, 27.5% reported their accommodation was somewhat effective and 2.5% reported their accommodation was ineffective. About 42.5% participants reported that all of their coworkers understood their need for accommodation, 33.8% reported most of them understood, 18.8% reported some of them understood, and 3.8% reported none of them understood their need for accommodation.

The overall WPS participation score showed moderate correlation with the number of coworkers who understood the need for the employee with disability to use workplace accommodations (Spearman’s ρ= 0.56, p<0.001), weak correlation with the employee’s self-report on the level of effectiveness of their workplace accommodation (ρ= 0.37, p=0.001), and moderate correlation with number of perceived communication difficulties with coworkers (ρ= -0.43, p<0.001). The most significant results from the pairwise comparisons between employees that report positive and negative inclusion (measured by WPS) are as shown in Table 1 and summarized below along with some other significant results.

Employees who did not feel a part of the team as other employees, also reported more difficulties in communicating with coworkers in-person and remotely, higher number of areas in the workplace they were unable to use (MW=205, p=0.001), fewer coworkers understood their need for using workplace accommodations, coworkers were less likely to use a communication method they preferred, coworkers were less likely to enable them to use different equipment or technology that helps them to perform job duties, coworkers were less likely to consider their needs when arranging activities outside of the company (e.g. choose an accessible location), and coworkers were less likely to practice disability etiquette.
Table 1. Mann Whitney U (MWU) analyses comparing employees reporting positive vs. negative inclusion at workplace and social environment factors.

<table>
<thead>
<tr>
<th>Workplace Participation Item</th>
<th>Social environment factors</th>
</tr>
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<tbody>
<tr>
<td>Overall, I [do]/[do not] feel that I am as much a part of the work team as other employees</td>
<td>MWU=181.5, p&lt;0.001</td>
</tr>
<tr>
<td>I feel that I am [not] equally included in formal work events (e.g., meetings)</td>
<td>MWU=319, p&lt;0.001</td>
</tr>
<tr>
<td>I feel that I am [not] equally included in informal social gatherings in the workplace</td>
<td>MWU=357.5, p&lt;0.001</td>
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<tr>
<td>I feel that I [do]/[do not] have equal opportunities for promotion and/or self-advancement</td>
<td>MWU=366, p=0.001</td>
</tr>
<tr>
<td>I feel that my work is [not] equally recognized and valued, as compared to other employees</td>
<td>MWU=178.5, p&lt;0.001</td>
</tr>
<tr>
<td>Overall, I feel my supervisor(s) [do]/[do not] value me as much as other employees.</td>
<td>MWU=251, p=0.005</td>
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</table>

Employees who felt they were not equally included in formal events (e.g. meetings, holiday party), as compared to other employees, reported more difficulties in communicating with coworkers in-person or remotely, coworkers were less likely to use a communication method they preferred, and coworkers were less likely to practice disability etiquette.

Employees who felt that they were not equally included in informal social gatherings in the workplace (e.g. chatting in the hallway, having lunch with coworkers), as compared to other employees, reported more difficulties in communicating with coworkers in-person and remotely, coworkers were less likely to remove (or arrange to remove) physical barriers to help them move around (e.g. move an item that blocks a hallway, prop open doors, or adjust lighting) (MWU=144.5, p=0.004), coworkers were less likely to modify their activities to match their altered work schedules or locations (MWU=76.5, p=0.002), and coworkers were less likely to consider their needs when arranging activities outside of the company (e.g. choose an accessible location).

Employees who felt they did not have equal opportunities for promotion and/or self-advancement (e.g. opportunities to show leadership skills) as compared to other employees, also reported fewer coworkers understood their need for using workplace accommodations, and coworkers were less likely to practice disability etiquettes.

Employees who felt their work was not equally valued as their coworkers, also reported more difficulties in communicating with coworkers, coworkers were less likely to understand their need for using workplace accommodations, and fewer coworkers used a communication method they preferred.

Employees who felt their supervisor did not value them as much as the other employees, also reported more difficulties in communicating with coworkers, fewer coworkers understood their need for using workplace accommodations, coworkers were less likely to use a communication method they preferred, coworkers were less likely to enable them to use different equipment or technology that helps them to perform job duties, coworkers were less likely to practice disability etiquettes.
DISCUSSION

A majority of the employees with disabilities that we surveyed had at least one workplace accommodations and a significant majority of them reported that their accommodations were effective. However, these accommodations by themselves were not sufficient to achieve a consistent level of workplace participation. Participation was higher when a larger proportion of coworkers understood the employee’s need for accommodation and when the employee perceived fewer difficulties in communicating with coworkers. Conversely, we found that lack of understanding of employees needs contributed to lower levels of overall workplace inclusion as well as in work events and social gatherings. Specifically, employees with disabilities pointed to coworkers’ lack of disability etiquette and lack of appropriate communication methods as factors that contributed to lower levels of inclusion. The possible correlation between a lack of inclusion for social gathering and difficulty in workplace communication, regardless of whether in-person or remotely, suggests that technology or other accommodations may not be sufficient to address largely cultural issues in the workplace.

In addition, a lack of understanding about the need to remove barriers in the physical space and for selecting accessible meeting places contributed to the lack of inclusion in specific events. It is also significant to point that a coworker’s understanding of the employee’s need for accommodations, use of their preferred method of communication, and the practice of disability etiquette were associated with the employee’s perception of being a team member, perception of being valued at the workplace, and having opportunities for self-advancement. These findings points to the salience of social capital within the workplace for individuals with disabilities.

There are a few limitations for this study. Our sample has a fairly high number of individuals who were blind or had low vision, possibly because of the channel selected for recruitment. Results from this preliminary analysis may vary across groups with different limitations. We are currently in the process of recruiting additional participants which will enable us to repeat these analyses to understand the influence of functional limitations and the type of work environment on workplace participation.

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REFERENCES