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CLICK-ENTER-SEND:
THE RELATIONSHIP EXPERIENCES OF PEOPLE WHO ARE BLIND OR VISUALLY IMPAIRED IN TEXT-BASED WORKSPACES

A Dissertation

Presented to the Faculty of

Graduate School of Leadership & Change

Antioch University

In partial fulfillment for the degree of

DOCTOR OF PHILOSOPHY

by

Kelly Bleach

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November 2022

CLICK-ENTER-SEND:
THE RELATIONSHIP EXPERIENCES OF PEOPLE WHO ARE BLIND OR VISUALLY IMPAIRED IN TEXT-BASED WORKSPACES

This dissertation, by Kelly Bleach, has
been approved by the committee members signed below
who recommend that it be accepted by the faculty of
Graduate School in Leadership & Change
Antioch University
in partial fulfillment of requirements for the degree of

DOCTOR OF PHILOSOPHY

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ABSTRACT

CLICK-ENTER-SEND:
THE RELATIONSHIP EXPERIENCES OF PEOPLE WHO ARE BLIND OR VISUALLY IMPAIRED IN TEXT-BASED WORKSPACES

Kelly Bleach

Graduate School of Leadership & Change

Yellow Springs, OH

Companies have increasingly turned to text-based communications to recruit, hire, and manage a distributed remote workforce. For people who are blind or visually impaired, this movement presents both challenges and opportunities for attaining and retaining employment. Does the potential isolation of telework have a negative effect on workplace relationships for people who are blind or visually impaired? Does participation in text-based workspaces mitigate stereotypes and stigmatization experienced by people with visible disabilities? Using a constructivist grounded theory framework, this study explored how people who are blind or visually impaired experience relationships in text-based workspaces. Building and maintaining social connections and networks is critical for employment success, so understanding the factors at play in text-based workplace communications is key. Interviews with 18 blind or visually impaired professionals revealed a number of ways individuals connected with colleagues, cultivated professional identity, and built extended networks. This happened despite challenges from technologies and organizational processes that failed to account for employees who are visually impaired. This investigation resulted in the development of an emergent theory and a model that can advance policies and practices for employers and for employment training and support programs. This dissertation is available in open access at AURA (https://aura.antioch.edu/) and OhioLINK ETD Center (https://etd.ohiolink.edu/).

Keywords: leadership, grounded theory, blindness, low vision, disability, computer-mediated communication, employment, workplace inclusion

Dedication

To my husband, Kevin, who has cheered me on through all my years as a perpetual student. The night I met you, I told you someday I would earn my PhD. Many, many years later, here we are!

Acknowledgements

First and foremost, I would like to thank the individuals who participated in this research project. Your willingness to take the time to share your experiences made this study possible and enjoyable. Thank you also to the people who participated in practice interviews and pre- and post-conversations; to my awesome coding team—Jane Feinberg and Sharon Wamble-King—for your engagement and valuable insights; and to others who provided essential support, including fellow data nerd Phil So, and my brother Kraig whose design skills helped turn my chicken scratch into illustrations.

Special thanks to my dissertation committee: Dr. Mitchell Kusy, advisor and chair extraordinaire—your positivity and responsiveness were so appreciated; Dr. Harriet Schwartz—your enthusiasm for grounded theory methodology convinced me it was right for my own investigation; and Dr. Bonnie O'Day—in appreciation for your time and expertise and support. Thanks are also due to the rest of the Antioch community, the faculty and the classmates in Cohort 18 and beyond who supported and challenged me in all the best ways.

I am so fortunate to have people in my life who keep me curious—my colleagues, friends, and family. Three wonderful daughters continuously introduce me to new ideas and experiences and encouraged me throughout this doctoral journey. Finally, words cannot convey the depth of my appreciation for the support of my husband who listened to me talk endlessly about my data and sustained me through long stretches of analysis and writing.

This study focused on connecting and relating, and fittingly, my doctoral odyssey itself became a testament to the importance of the people in my life for achieving success.

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Glossary of Acronyms and Terms

Table 0.1

Glossary of Acronyms and Terms

Acronym	Expansion or Term	Short Definition	Citations
	Accessibility (digital)	Ensuring that computer applications, web content, and mobile devices and apps are usable by everyone, including people with disabilities	TechTarget, 2016
AFB	American Foundation for the Blind	Nonprofit whose mission is to create a world of no limits for people who are blind or visually impaired	American Foundation for the Blind (AFB), n.d.-a
	Alt-text OR alt-tag	Alternative text, a short, written description of an image	Supercool, 2020
ACS	American Communities Survey	Survey conducted annually by the U.S. Census Bureau	U.S. Census Bureau, n.d.-b
ADA	Americans with Disabilities Act	1990 law that prohibits discrimination against people with disabilities	Americans With Disabilities Act (ADA), 1990
	Assistive technology	Products, equipment, and systems that enhance learning, working, and daily living for people with disabilities	Assistive Technology Industry Association, n.d.
	Avatar	An electronic image that represents and may be manipulated by a computer user	Merriam-Webster, n.d.
BRFSS	Behavioral Risk Factor Surveillance System	Continuous health survey conducted by the Centers for Disease Control and Prevention	Centers for Disease Control and Prevention (CDC), n.d.-a
B/VI	Blind or visually impaired OR blindness or visual impairment	Blind or has serious difficulty seeing, even when wearing glasses	U.S. Census Bureau, n.d.-c
CDC	Centers for Disease Control and Prevention	An operating component of the U.S. Department of Health and Human Services with a mission to protect people from health threats	CDC, n.d.-b
	Channel	Method through which to direct a message to an intended audience using electronic collaboration software, e.g., #sales-team	Slack, 2021

CMC	Computer mediated communication	Forms of human communication through networked computers, generally applied to text-based platforms	Lee & Oh, 2017
	Curb-cut effect	When laws or programs designed to benefit vulnerable groups, such as people with disabilities, end up benefiting all of society	Blackwell, 2016
	Disability identity	Sense of self in connection to the disability community	Dunn & Burcaw, 2013
	Disability:IN	Nonprofit resource for business disability inclusion	Disability:IN, n.d.-a
DEI	Disability Equality Index	A scoring tool that helps companies measure toward goals of disability inclusion and equality, managed by Disability:IN and the American Association of People with Disabilities (AAPD)	Disability:IN, n.d.-b
	Distributed organization	A collection of heterogeneous work groups where team boundaries may fluctuate, connected by communications rather than geographic location	Alexander & Swatman, 2008
DEI	Diversity, equity, and inclusion	Diversity is the presence of difference, equity is promoting fairness, and inclusion is the outcome of people feeling welcomed	eXtension Foundation, 2021
	Dramaturgy	The concept that people are “actors” that attempt to control their “scenes,” situations, interactions, and self-presentations	Goffman, 1959
	eCollaboration	Collaboration and communication between people, by electronic means such as computer software	Myhr, 2008
	Emoji	Digital icons, or tiny emotive characters, that represent language, designed to add emotional nuance	Pardes, 2018
	Emoticon	Keyboard-generated emotion signs, e.g., smiling face depicted by :-)	Darics, 2010
ERG	Employee resource group	Formalized group of employees with similar backgrounds or interests that network and provide a collective voice within an organization	Matos, 2014
EN	Employment network	Agencies that provide services to help people with disabilities find work	Social Security Administration (SSA), 2020

	Employment rate	The percentage of the population that is either working or actively seeking work	U.S. Bureau of Labor Statistics (BLS), n.d.
FtF	Face-to-face	Interaction that takes place in person, not online	Dictionary.com, 2021
	Generalized other	Social group that influences the behavior of individuals in social processes	Mead & Strauss, 1956
	Gig work	Income-earning activities outside standard, long-term employment relationships, that tend to be temporary or project based	Gig Economy Data Hub, n.d.
HQC	High-quality connection	Interpersonal connections that are mutually felt and sensed with vitality and positive regard, with lasting implications for the individuals	Dutton and Heaphy, 2003
	Human-centered design	Designing products and experiences through feedback from human users	Donovan, 2020
	Inclusion	Organizational effort and practice in which different groups or individuals are culturally and socially accepted and welcomed and treated equally	Global Diversity Practice, n.d.
NCD	National Council on Disability	Independent federal agency charged with advising governmental entities on policies and practices that affect people with disabilities	National Council on Disability, 2015
NHIS	National Health Interview Survey	Survey that continuously interviews personal households on a broad range of health topics, managed by the CDC National Center on Health Statistics	National Center for Health Statistics, n.d.
ODEP	Office of Disability Employment Policy	Non-regulatory federal agency that promotes policies and practices that increase the number and quality of employment opportunities for people with disabilities	U.S. Department of Labor (DOL), n.d.
	Optimal distinctiveness	Theory that in group membership, people strive to balance the desire for differentiation and uniqueness, and yet, inclusiveness and commonality	Brewer, 1993
PWD	Person (or people) with disabilities	A person (or people) with a physical or mental impairment that substantially limits one or more major life activity, or with a record of disability or regarded as having a disability	ADA, 1990

	Reasonable accommodation	Any change in the work environment or in the way things are customarily done that enables an individual with a disability to enjoy equal employment opportunities	ADA, 1990
	Relational energy	Energy derived from a relational experience that may enhance job performance and engagement	Owens et al., 2016
	Screen reader	Software programs that allow blind or visually impaired users to read text displayed on a computer screen with a speech synthesizer or braille display	AFB, n.d.-c
	Section 188 of the Workforce Innovation and Opportunity Act	Rule/regulation that incorporates the prohibitions against discrimination in programs and activities that receive federal financial assistance under certain civil rights laws, including laws applicable to discrimination on the basis of disability	National Disability Institute, 2016
	Section 503 of the Rehabilitation Act of 1973	Law that prohibits federal contractors and subcontractors from discriminating in employment against individuals with disabilities and requires employees to take affirmative action to recruit, hire, promote, and retain these individuals	Office of Federal Contract Compliance Programs, n.d.
	Section 508 of the Rehabilitation Act	Law that requires federal agencies to make their electronic and information technology accessible to people with disabilities	U.S. General Services Administration, n.d.
	Self-disclosure	Voluntarily communicating a disability to another person or to an organization	Bailey, 2017
	Sensory disability	Disability that can involve any of the five senses, but generally refers to a disability related to vision and/or hearing	Virginia Department of Education, 2021
	Social capital	The collective value of social networks (who people know) that encourages people to do things for one another	Putnam, 2000; Putnam, 2020
	Social identity	How people segment, classify, and order the social environment and their place in it	Tajfel & Turner, 1979

SIP	Social information processing	Theory that users of computer-mediated communications overcome the lack of nonverbal cues online by adapting their messages to convey expression through content and style	Walther, 1992
	Social media	Online interactions among people in which they create, share, and/or exchange information and ideas in virtual communities	Tufts University, 2021
SSA	Social Security Administration	Federal agency that oversees retirement, disability, and survivor benefits	SSA, 2020
SSDI	Social Security Disability Insurance	SSA program that pays benefits to individuals and family members if “insured” through working for enough years to qualify	SSA, 2020
SSI	Social Security Income	SSA program that pays benefits to adults and children with disabilities who have limited income and resources	SSA, 2020
SIPP	Survey of Income and Program Participation	Household-based survey conducted by the U.S. Census Bureau, designed as a series of national panels to capture data on how the nation's economic well-being changes over time	U.S. Census Bureau, n.d.-a
	Swift trust	The rapid emergence of trust in temporary groups	Meyerson et al., 1996
	Symbolic interactionism	Theory that meaning is negotiated and understood through social interactions that have structures and implied or explicit codes of conduct	Glaser & Strauss, 1967
	Telework OR telecommute OR remote work	A work flexibility arrangement that allows an employee to perform work from an approved alternate worksite (e.g., home)	U.S. Office of Personnel Management, n.d.
	Title V of the Rehabilitation Act of 1973	Law that prohibits discrimination on the basis of a disability by the federal government, federal contractors, by recipients of federal financial assistance, and in federally conducted programs and activities	U.S. Equal Employment Opportunity Commission, n.d.
	Visible disability	Disability that can be noticed by looking at a person	Brown et al., 2009

VR	Vocational rehabilitation	Services designed to facilitate entering or returning to work for people with disabilities, including training and career counseling	National Rehabilitation Information Center, 2013
WCAG	Web Content Accessibility Guidelines	Accessibility guidelines developed in cooperation with individuals and organizations around the world, with the goal of providing a single shared standard for web accessibility	W3C, 2021
RERC	Work Rehabilitation Engineering Research Center	Federal program to improve the effectiveness of services authorized under the Rehabilitation Act by conducting engineering research and development of innovative technologies	Administration for Community Living, n.d.
	Workspace	The office, desk, or area on a computer where someone works	Cambridge Dictionary, n.d.

CHAPTER I: INTRODUCTION

The workplace is rapidly changing, and with it an explosion in reliance on text-based communications. Even before the COVID-19 pandemic-driven mass migration to work from home, organizations were recruiting and interviewing the smartphone generation via text messages and distributed organizations utilized e-collaboration applications like Microsoft Teams and Slack. As remote work becomes commonplace, full- or part-time telework arrangements may be a more conventional option for people with disabilities (PWD). Telework poses challenges for anyone trying to manage their career and be fully included in the workplace (Dill & Ishmael, 2021). People who are blind or visually impaired (B/VI) report experiencing isolation from coworkers even in the physical office setting (Naraine & Lindsay, 2011), so this could easily be amplified in remote work arrangements. On the other hand, remote work may allow someone with a visible disability to curate their workplace identity in a way that mitigates stereotypes. For people who are B/VI, there appear to be both opportunities and challenges to participating in text-based workspaces. It is crucial that employers and employment support systems consider both the technical and the social aspects of text-based communications in hiring, training, and workplace inclusion programs. This study will investigate the social aspects, or how people who are B/VI experience relationships in text-based workspaces, with a focus on the implications for developing a sense of inclusion and the access to social capital that helps people succeed at work.

This chapter will describe the current employment climate for people with B/VI, including the state of telework and the use of text-based e-collaboration applications. Relational dynamics associated with workplace participation and inclusion are discussed, and the importance of supporting and connecting people with B/VI in the virtual workspace. I will describe the significance of this study and situate my positionality, then discuss the assumptions and

limitations of the study in the context of a fast-changing workplace paradigm. Finally, I will lay out the organization of this dissertation, by chapter.

Employment of People Who Are Blind or Visually Impaired

Statistics indicate that individuals who are B/VI tend to have lower employment rates, less education, and lower wages than others (Okeke et al., 2018). More than half of working-age people with B/VI are not in the labor market (they are not working and not seeking work). Only 44% are employed, compared with 73% of those without disabilities. The high percentage of people with B/VI not participating in the labor force may represent people who feel they cannot work because of their disability, people who choose not to work for fear of losing Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) benefits, or discouraged workers who have given up on finding a job (American Foundation for the Blind [AFB], 2018).

Workers with B/VI are more likely to be employed part-time or only part of the year than those with no disability (AFB, n.d.-b). In 2019, among workers with B/VI, 30% worked part-time or only part of the year, compared with 23% of people without a disability (Erickson et al., 2022). Some workers with B/VI may choose to work part-time or only part of the year to limit earnings and retain SSI or SSDI benefits. Others may wish to work full-time but find it difficult to get a job. Fewer hours worked contributes to lower earnings; however, even full-time workers with B/VI, with similar levels of education, earn significantly less than their non-disabled peers (Erickson et al., 2022; Yin et al., 2014).

As a result of the COVID-19 pandemic, in March to May of 2020, workers with disabilities lost nearly one million jobs, a 20% decline compared with a 14% decline for workers without disabilities (Livermore & Hyde, 2020). An April 2020 survey of people who are B/VI about the effects of COVID-19 on their lives revealed that of the 1,801 people reporting their employment status, 705 (39%) were employed and 159 (9%) were now unemployed as a result

of workplace closures or layoffs due to the pandemic (Rosenblum et al., 2020). It is still to be seen what the longer-term economic fallout will be for people with B/VI. Many of these layoffs may result in applications for SSDI and other public benefits and permanent separation from the workforce. Most of the survey participants who reported they were employed said that the move to working from home had affected their work in some way. Challenges described were accommodations needed for remote work, accessibility problems, and loss of productivity.

Over the years, a number of laws and programs have attempted to promote employment of PWD. Yet, despite these employment initiatives, limited progress has been made. Title V of the Rehabilitation Act, passed in 1973, prohibits discrimination against PWD by the federal government, programs receiving federal financial assistance and federal contractors, The Americans with Disabilities Act (ADA), passed in 1990, expands non-discrimination requirements to public and private employers with 15 or more employees. It requires public programs to meet accessibility requirements and requires private entities to make “readily achievable” accommodations to individuals with disabilities. To be protected under the employment provisions of the ADA, the applicant must be qualified for the job, meet experience and skill requirements, and be able to perform the essential job functions. Employers may not discriminate in hiring, firing, promotion, wages, or any other privilege or benefit. The employer must also provide “reasonable accommodation” or adaptations to the individual’s disability at all levels of the employment process, from pre-employment testing to hiring and promotion (Americans with Disabilities Act, 1990). In 2015, the ADA celebrated its 25th anniversary, resulting in a progress report from the National Council on Disability (NCD). It recognized that while significant progress has been made in protecting the civil rights of people with disabilities, much remains to be done so that people with disabilities enjoy the benefit of full access and inclusion throughout society (National Council on Disability, 2015).

Many companies have neglected to include people with disabilities as part of their global talent strategies. McCary (2005) noted how businesses overlook PWD in their diversity initiatives, despite being the largest minority population (citing the 2000 Census numbers showing 49.7 million Americans with disabilities, 21.3 million of working age). While 90% of global corporations report being committed to diversity and inclusion efforts, only 4% state having a disability inclusion focus (Mercer, 2021). Convincing employers to hire PWD generally relies on a combination of “sticks” and “carrots” (Luecking, 2008). Legislation like the ADA often needs to be enforced to get companies serious about ensuring their business practices are nondiscriminatory. However, companies are finding benefits to being a diverse, equitable, and inclusive organization. More and more, employees and customers are evaluating companies based on their performance as a responsible contributor to society. Anecdotally, company administrators shared numerous benefits to hiring PWD in Hernandez et al. (2008). A hospitality participant indicated, “I get wonderful feedback from our associates who will say, ‘It’s so nice that we work for a company that looks at everybody” (p. 163). A retail representative added, “The customers really appreciate [our associates with disabilities]” (Hernandez et al., 2008, p. 163).

According to the Office of Disability Employment Policy (ODEP) survey in 2018, 18% of companies reported actively recruiting PWD in comparison to 14% 10 years earlier, in 2008. Still, at only 18%, a small number of companies are recruiting PWD. Table 1.1 (Gasper et al., 2020) depicts the percentage of companies with recruitment policies and practices for PWD, reported in 2018. The results are mixed, illustrating more effort to comply with legal requirements than to establish a comprehensive program. For instance, while a high number of companies (92%) said they have interview locations that are accessible to all PWD, far fewer (30%) reported an accessible application process.

Table 1.1

Percentage of Companies with Recruitment Policies for PWD

Policy/practice	Percentage of companies
Accessible interview locations	92
Interview accommodations	80
Job announcements with equal opportunity policy	74
Accessible application process	30
Actively recruit PWD	18
Partnerships with organizations to recruit PWD	17
Measurable goals for hiring PWD	10
Dedicated recruiter for hiring PWD	4

Note: From *Survey of employer policies on the employment of people with disabilities: Final report*, by J. Gasper, M. Palan, & B. Muz, 2020, p. xv (https://www.dol.gov/sites/dolgov/files/OASP/evaluation/pdf/EmployerSurveyFinalReport.pdf?utm_campaign=&utm_medium=email&utm_source=govdelivery). Westat.

A report by Accenture (2018) attempted to quantify the benefits of proactive hiring practices by analyzing correlations between business success and employment of PWD. Metrics suggested that companies that embrace best practices for employing and supporting more persons with disabilities in their workforce have outperformed their peers. Leading companies had on average, over the four-year period, 28% higher revenue, double the net income, and 30% higher economic profit margins than their peers. Companies that improved their inclusion of persons with disabilities over time were also four times more likely than others to have total shareholder returns that outperformed their peer group. The question has been asked, however, whether hiring PWD contributes to the improved business performance or whether companies with higher business income can afford to focus on programs for PWD.

Employment for PWD, including those with B/VI, involves navigating a complex system of laws, social services, economic factors, and rehabilitation programs, even before reaching

the application process. While these can provide important supports for a person with a disability who wants to work, plotting a course to successful employment can be daunting. Once employment is achieved, the person with a disability will face a new set of challenges. These include addressing assumptions and questions about their ability to do the job, receiving adequate support for workplace accommodations, and being fully included in their team and organization, and will be explored in the sections Stereotypes and Stigmatization and Succeeding at Work.

Stereotypes and Stigmatization

Stereotypes have come to mean generalizations, or sometimes overgeneralizations, about the members of a group. These generalizations can be positive, but more often they are negative. This negative prejudgment results in prejudice about a group or its members (Plous, 2003). Allport (1954), in his foundational theory on prejudice, explained that prejudice is in part a result of normal human functioning, based on our tendency to think in terms of categories. Pious (2003) further posited that distortion occurs as people commonly minimize differences within categories (“assimilation”) and exaggerate differences between categories (“contrast”; Plous, 2003). This mental programming can be highly resistant to change.

Stone and Colella (1996) presented a model of factors affecting the treatment of individuals with disabilities in organizations. They theorized that “observers” automatically categorize individuals according to disability subtypes, e.g., physically disabled, mentally disabled. These stereotypes are then associated with inferences about the disabled person’s traits, abilities, and personality characteristics that influence affective responses to working with PWD. Expectancies are extremely important because they are likely to bias observers’ employment-related decisions based on the assumed ability levels, social competence, or emotional adjustment of PWD. Table 1.2 lists factors affecting treatment of individuals with disabilities in organizations from the model presented by Stone and Colella (1996). These

factors are only a part of the full model, illustrating the dynamic between the person with a disability and the observer.

Table 1.2

Factors Affecting Treatment of PWD in Organizations

Attributes of Person with Disability ⇨	**Psychological Consequences for Observers**
• Nature of disability • Performance level • Gender • Interpersonal style • Race • Status/social power	• Categorization • Stereotyping • Expectancies • Affective states

Note: Adapted and used with permission of Academy of Management (NY), from A model of factors affecting the treatment of disabled individuals in organizations, by D. L. Stone and A. Colella, 1996, *Academy of Management Review*, 21(2), p. 355; permission conveyed through Copyright Clearance Center, Inc.

It is common for employers to have a conscious or unconscious prejudice against an applicant or an employee with a disability. Hernandez et al. (2008) found that while employers tended to espouse positive attitudes overall toward workers with disabilities, when specific attitudes associated with the hiring of this group were assessed, views were more negative. Stereotypes, described by Stone and Colella (1996) included views that PWD are saints (courageous, even tempered, easy to get along with), needy and helpless (less capable than others), or embittered (quiet, withdrawn, depressed). Similar to the saint stereotype is the expectation that a person with a disability will be a superworker. This stereotype is often based on the belief that a person with a disability is so grateful to have a job that they will overperform. This belief is another manifestation of stigmatization. Workplace administrators in the Hernandez et al. (2008) study identified the benefits of hiring PWD as low absenteeism rates and long tenures, as well as traits such as loyalty, reliability, and hardworking. Luecking (2008) described the problem in terms of the vocational rehabilitation (VR) system, when job

developers present to employers the image of super-achieving workers who would go above and beyond what was required of employers to prove their worth. Unfortunately, this skews perceptions and creates unrealistic expectations. It is particularly problematic if discrimination results when an employer is subsequently disappointed with the performance of an employee who does not meet these lofty expectations. These stereotypes often mean employees with disabilities are not considered for promotion, as they are perceived to be “grateful” for the job they have and loyal to the employer, irrespective of the promotion.

Degree varied, but stereotypes and stigmatization were common themes in the literature exploring the employment experiences of PWD. Robert and Harlan (2006), in their study of disability discrimination, described experiences of workers with disabilities who felt marginalized as outsiders. This included being ignored by coworkers and supervisors, excluded from the daily routines of work life, and being stared at. In Naraine and Lindsay (2011), six participants in the study of people with B/VI said they relied on assistance from colleagues who were often willing to help, but as one observed about attending social events in the workplace, “[People just want to get blind people seated] as soon as you get there . . . but that’s when I feel excluded” (p. 397). Quotes from the Robert and Harlan (2006) article were more disturbing. For instance, one participant with a back problem stated:

> When I first came into this agency . . . I was more or less treated like an imbecile. People are very strange about disabilities. They immediately assume that you have a severe brain problem along with whatever else is wrong with you. (p. 610)

A woman who was blind that became pregnant encountered the general response at work as, “Oh, my God, that’s awful!” The implication was that her choice was somehow immoral, that parenthood really should not be a choice for people with disabilities like hers.

According to Sherbin and Kennedy (2017), 28% of the study respondents (PWD who were employed) regularly felt isolated at work and 35% regularly felt nervous or anxious at work.

The stress seemed to flow both ways, and perhaps feed off one another. As shared by a male accountant at a multinational accounting firm in the U.K.,

> One of the things that really struck me is that people are frightened to ask questions. They don't know the right language or terminology. So, they tend to avoid the conversation altogether, all because they don't want to cause offense. (Sherbin & Kennedy, 2017, p. 20)

This supposition was confirmed by remarks in Hernandez et al. (2008), such as these two quotes by employers from the hospitality and healthcare sectors, respectively, "It's nerve-racking in some cases [when interviewing applicants with disabilities] because you're kind of afraid of saying the wrong thing, doing the wrong thing" (p. 161) and "I think it is scary . . . you are afraid that you are going to be charged with discrimination" (p. 161). Further, Kaye et al. (2011) reported that employers frequently expressed discomfort in the presence of PWD. Employers "see so few people with disabilities that they don't know how to act when they meet one" (p. 531). Another thought that employers "may be afraid of people with disabilities, afraid of the unknown, and also afraid of certain disabilities more than others" (Kay et al., 2011, p. 531). Even if employers are themselves comfortable around workers with disabilities, they noted fear that their customers or clients were not.

Talmor et al. (2019) postulated that when presented with the request to interact with someone with a physical or sensory disability, a person may experience a tendency to withdraw rather than engage as a means of self-protection. When encountering people with physical or sensory disabilities, a tension exists between wanting to be fair and helpful to others while unconsciously retreating from the reminder of one's biological fragility. In *Public Attitudes About Eye and Vision Health*, respondents ranked losing vision as equal to or worse than losing hearing, memory, speech, or a limb, and nearly half (47.4%) rated losing vision as the worst possible health outcome (Scott et al., 2016). Still, findings suggest that self-protective

motivations may be overridden when one's sense of social responsibility is activated and refusing help is hard to justify (Talmor et al., 2019).

Crudden et al. (2005) suggested that, to increase contact of employers with people who are B/VI and assist them in feeling more comfortable, VR service providers utilize nonthreatening methods such as videotapes, portfolios, and meetings of employers with groups of people who are visually impaired. Adams (2019) observed that several interviewees with B/VI in the study said that individuals felt increased levels of comfort who interacted with them. One participant said,

> I think that from working with me they know that blindness is not a scary thing. It's just something that's different, and that it's okay to ask what to do and it's okay to acknowledge that there are real barriers. (p. 161)

Another noted the increased capacity for sighted coworkers to see blind people as people. "Most importantly, that I'm a whole person, that being blind is one aspect, being a parent's another aspect, being married is an aspect. Being biracial is an aspect" (Adams, 2019, p. 161).

Osmun (2019) pointed out that organizations can ensure diversity and inclusion, but they cannot, on their own, determine if belonging has been achieved. Further, the key to belonging is relationship building. Schur et al. (2005) recommended that organizations can help dispel stereotypes, build stronger working relationships, and support social integration by ensuring that co-workers have significant contact with employees with disabilities in informal and recreational settings, as well as formal work activities. Osmun (2019) recounted a human resources professional discussing with a manager why an employee had been isolated,

> And it was crazy because when the director started to engage with the individual, not only did his perception of the individual change, but it changed so much that instead of wanting to exit the person from the organization, they wanted to promote them. (p. 134)

The manager's direct contact with the individual helped him see the employee as a contributor, rather than a stereotype.

Succeeding at Work

For PWD, overcoming stereotypes and stigma is a big step toward becoming truly included in the work team and the organization. In a 2021 survey of employees regarding workplace engagement, the largest deficit in affirmative responses between PWD and those without disabilities was reflected in questions related to the category Workplace Achievement. For instance, respectively, there was a 13-point disparity in the results for the question “I have the freedom to use my judgement in getting my job done” and a 10-point difference for the question “I have the opportunity for advancement.” Further, the results showed that, as the length of employment increased for both groups, the engagement of employees with disabilities dropped considerably more than for those without disabilities (Global Disability Inclusion & Mercer, 2021).

The consortium Disability:IN is comprised of more than 270 corporations, serving as a collective voice to “effect change for people with disabilities,” with a “shared commitment to collaborate with purpose to promote the full inclusion of people with disabilities, to inspire accessible innovation for all, and to foster cultures of inclusion” (Disability:IN, n.d.-a, About). Industry leaders like Microsoft and Walmart rate highly on the Disability Equality Index, a scoring tool that measures toward the goal of disability equity and inclusion, and they are not just practicing diversity and inclusion of PWD, but also proclaiming its importance. According to the 2018 ODEP Survey of Employer Perspectives on the Employment of People with Disabilities (Gasper et al., 2020), practices that could help to retain or advance PWD were more often implemented by companies than practices to recruit and hire PWD. Table 1.3 (Gasper et al., 2020) shows the percentage of companies implementing retention and advancement practices and policies for PWD, from a 2018 survey.

Table 1.3

Percentage of Companies Implementing Retention and Advancement Practices for PWD

Policy/practice	Percentage of companies
Voluntary & confidential self-disclosure	83
Stay-at-work/return-to-work program	73
Flextime or telecommuting	69
Task shifting	65
Job reassignments	60
Disability awareness or sensitivity training	52
Measurable goals for retaining & advancing PWD	29
Disability employee resource or affinity group	5

Note: From *Survey of employer policies on the employment of people with disabilities: Final report*, by J. Gasper, M. Palan, & B. Muz, 2020, p. xv (https://www.dol.gov/sites/dolgov/files/OASP/evaluation/pdf/EmployerSurveyFinalReport.pdf?utm_campaign=&utm_medium=email&utm_source=govdelivery). Westat.

Although 83% of these companies have implemented programs to encourage self-disclosure of a disability, many PWD decline to do so. Employees are reluctant to disclose a disability, fearing lost promotional opportunities and reduced earnings (Blanck & Schartz, 2005) as well as risk of rejection and isolation by others (Gewurtza & Kirsha, 2009). According to Sherbin and Kennedy (2017), 30% of employees have disabilities, but only 3% self-identify to their employers that they have a disability. Percentages were similar across gender and generation. However, it is less an option for those with a visible disability, often the case for someone with a physical or sensory disability, such as blindness.

In Sherbin and Kennedy (2017), data related to inclusion/exclusion showed that 29% of study participants (PWD who are employed) said they downplay or avoid drawing attention to aspects of their identities by avoiding mentioning their lives outside work; 36% say they have not told others about their disability because it's "none of my colleagues' business;" and 60% report expending energy repressing parts of their persona in the workplace. This may relate to the theory that characterizes stigmatization as "the spoilage of normal identity" by social

reactions which discredit the individual because of an attribute which others find unacceptable (Goffman, 1963). About half of the 63 people interviewed in Robert and Harlan (2006) reported that based on their interactions with coworkers and supervisors, they routinely encountered one or more false characterizations, or “fictional identities,” in contrast with their “identity standard” (i.e., view of themselves). The two fictional identities that emerged were the Incompetent and the Helpless. As one person with B/VI described his experience upon joining a new team, “In the beginning, all was a curiosity. ‘Oh my gosh! How is this guy even gonna do anything we do? How are we gonna dumb things down for him’” (Adams, 2019, p. 161)?

Despite considerable challenges articulated in the literature, there were certainly some success stories shared by PWD in the workplace. Interview data provided insight into positive experiences. A participant in Silverman et al. (2019) said, “Respect, great coworkers, perfect schedule with flexibility, trust, responsibility, reward of helping others and seeing quantifiable results . . . opportunities every day for personal and professional growth, getting paid to do something I love” (p. 47). This describes the characteristics of a work experience that most anyone would find highly satisfying. Among the key factors associated with job satisfaction for PWD was feeling respected as a contributing member of the team and organization and receiving support from supervisors and coworkers.

Silverman et al. (2019) reported that when employed respondents with B/VI (n = 559) were asked to rate their overall job satisfaction, the average rating was just under six on a 7-point scale, indicating generally high job satisfaction. Among the participants with high job satisfaction, themes in open-ended comments included participants doing the job they loved, employers providing needed tools and support, and participants being treated with respect. For example,

> As a blind person, I am respected and held to the same standards as my normally sighted counterparts. I have an excellent supervisor. My work and opinions are respected and appreciated. I earn a decent wage and have good benefits comparative to most private-sector workers. (Silverman et al., 2019, p. 47)

In a meta-synthesis of seven qualitative studies, Gewurtza and Kirsha (2009) noted that the psychosocial characteristics of the workplace were discussed in all the studies as being important to the experiences of PWD at work. Almost all the articles referred to the importance of relationships at work, and particularly prominent were the supportive aspects of relationships with supervisors and coworkers. From Adams (2019), one participant described feeling integrated into the work team, and the development of a relationship with an informal mentor:

> What John did was to pull me into the group and make me part of the group. And that was so huge, so then people got to know me as a person and not just a blind guy. . . They just kind of accepted me and that is so huge to get included as part of the team. (p. 154)

Feeling connected and included has important implications for succeeding at work. According to Casciaro and Lobo (2008), people in the workplace seek out resources from someone they feel positively toward. People appear to need active liking to seek out task-related resources from potential work partners. Interpersonal affect includes emotional reactions that can develop rapidly and without extensive interaction. As described by Kenny and La Voie (1982), we expect people who seem to be warm and friendly to like us and we like them in return, even when we have not had direct contact with that person. As Naraine and Lindsay (2010) explained, social interaction in the workplace, such as interacting with colleagues in the lunchroom or socializing around the water cooler, is important to integrating into the workplace. These opportunities allow for networking and keeping current with workplace culture and enhance job satisfaction and enthusiasm for the work.

In an interview with four professionals who are B/VI about *Inclusion, Intersectionality, and the Future of Work*, each strongly endorsed networking as critical to success in their career (AFB, 2021). As one described,

> Building relations and networking really made a huge difference in who I am and where I am right now . . . I have seen how it has helped me get from where I was to where I am right now . . . Really embrace the value of building relations. You just don’t know when that one relationship is going to help you in the next step in your career. Really expand

> on getting to know people. But don't do it just because you're trying to get something out of it. Be genuine when you're doing this networking. (para. 52)

For many, networking seemed challenging during the COVID-19 pandemic, with in-person meetings and conferences canceled and workplaces pivoting to telework. Managers feared that work relationships would suffer from prolonged remote work arrangements (Cutter, 2020). In response, companies attempted to replicate day-to-day office camaraderie by hosting virtual games and regular "water-cooler" check-ins where people came to chat. Platforms such as Slack became the way many workers socialized, sharing personal stories and photos, and organizations encouraged "channels" where casual conversation could take place to replicate the water-cooler experience. According to *The Atlantic* (Cushing, 2021), Slack is used in more than 169,000 organizations in America—including 65 of the Fortune 100. Companies like Lyft and AirBnB use it but so do Target, Liberty Mutual, and NASA's Jet Propulsion Lab. As the author described,

> Especially in an officeless office, Slack is the cubicle, the boardroom, the hallway, the watercooler, and the bar. It's where you talk about your performance with your manager, and where you then talk about your manager with your friends. It's where you flirt; where you joke around; where you complain; where you, in some sense, live (Cushing, 2021, sect. 3, para. 2).

Further, digital services like Donut were developed, using an algorithm to introduce employees to people on other teams or in other departments every few weeks, opening a direct message in Slack between people who had been paired (Bindley, 2020). People who are B/VI can participate in this virtual networking when it is designed properly, and some have found it easier to network online than to wrestle with transportation and other challenges associated with in-person events (Thomas, 2021).

The Rise of Telework

The COVID pandemic accelerated a steady trend over the past decade that had transformed telework from occasional work-from-home arrangements to some companies

organizing as entirely virtual. Telework has sometimes been offered as a work accommodation for PWD. Linden and Milchus (2012) described a 2007 U.S. Department of Labor Office of Disability Employment Policy examination of telework practices of public and private sector employers. Of the 1,168 employers who responded, 80% had employees with disabilities and 23% had employees who telework, but only 8% had employees with disabilities who participated in telework. In a related project, a survey of 1,200 “telework-friendly employers” found that only 10% were willing to hire new employees with disabilities as teleworkers, preferring employees to have established a work history with the company prior to teleworking (Anderson & Douma, 2009). These practices were not deemed discriminatory, however, in that they were not different for those without disabilities. According to Moon et al. (2014), a study by Work Rehabilitation Engineering Research Center (Work RERC) suggested that individuals who considered telework an accommodation were three times more likely to utilize flexible scheduling. Telework altered where work was accomplished, and flexible scheduling changed when work was done. These developments corresponded with the evolution toward the knowledge workplace and away from production-based forms of work.

Types of jobs, e.g., blue-collar vs. white-collar knowledge-based jobs, see somewhat different paths, as reflected in the Linden and Milchus (2012) survey of employees with disabilities about workplace accommodations. Of 373 usable responses, 19% (n = 72) reported teleworking, with just 2% (n = 9) teleworking full-time and 17% (n = 63) part-time; 100 reported vision as a functional limitation, and of these, 17 (17% of those with vision limitation and 4% of the total) said they participated in telework. Those in jobs categorized as Managers and Professionals were twice as likely to telework as those in other job categories. Only 44% (n = 32) of all teleworkers reported telework as a job accommodation; the authors speculated that this was underreported in situations where co-workers who are not disabled also telework. Of those considering telework an accommodation, 57% were satisfied with telework and more than

three-fourths reported it as important to doing the job. The authors noted that relatively low satisfaction with telework suggested that telework may have presented other employment-related barriers (e.g., limited support for assistive technology). As telework becomes increasingly prevalent in workplace culture, remote work is becoming conventional practice rather than an accommodation.

Time will tell how many of the pandemic-inspired workplace practices, like telework and supporting technologies, will become permanent and normalized. According to The Conference Board (2020), just 4% of respondents to their online survey reported that 40% or more of their employees were teleworking before the pandemic. Now, 34% of these companies expect that 40% or more of their employees will telework post-pandemic. As illustrated in Figure 1.1, pre-pandemic, only 12% of surveyed U.S. companies said they would hire full-time teleworkers. As of September 2020, 36% of companies responded that they would hire employees who were 100% virtual, and another 51% stated they would hire employees who could work remotely if they came to the office occasionally. An even higher number of organizations with mostly professional and office workers would hire full-time teleworkers (44%) or partial-time teleworkers (48%; The Conference Board, 2020). A number of companies (e.g., Meta, Twitter) have announced that they will extend remote work indefinitely for many employees. Competitive business reasons to embrace the trend include employee satisfaction, attracting talent wherever potential employees reside, cost savings from eliminating real estate expenses, and working near the customer base. Figure 1.1 depicts the change in organizations' willingness to consider hiring virtual employees, before the pandemic versus September 2020.

Figure 1.1

Percentage of Organizations Reporting the Future of Remote Workers Pre- and Mid-pandemic

Note: From *Adapting to the reimagined workplace: Human capital responses to the COVID-19 pandemic*, by The Conference Board, 2020, p. 7. (https://www.conference-board.org/topics/natural-disasters-pandemics/adapting-to-the-reimagined-workplace). Content reproduced with permission.

Yet, numerous challenges must be addressed when moving from face-to-face (FtF), on-premises work to telework. As in-person interactions are reduced or disappear, organizations turn to technology to facilitate collaboration and to reduce the isolation of telework. According to a 2021 McKinsey Global Survey of executives, as a result of the COVID-19 pandemic, their companies have accelerated the digitization of internal operations, implementing new or advanced business technologies, by three to four years. The biggest acceleration was cited in the “increase in remote working and/or collaboration,” where the expected time to respond to or implement that change was 454 days, but the actual response took place in just 10.5 days! Further, respondents expected most changes to be long-lasting. Of the 93% of organizations experiencing the change in remote operations, 54% believed the change will stick (McKinsey, 2020).

The Wall Street Journal reported that global weekly downloads of business apps like Microsoft Teams on smartphones surged from around 33.7 million in early October 2019 to 80 million in mid-April 2020. Further, Slack “threatened to become the place where people spent

the bulk of their time" (Tilley, 2020, para. 28). Microsoft reported that instant message chats increased within internal groups by 65% to 72% after beginning remote work in comparison to pre-COVID rates (Teevan et al., 2021). In an April 2020 survey of people with B/VI, a participant noted that, "Because of working remotely, I'm using [Microsoft] Teams extensively, and have begun to use Slack" (Rosenblum et al., 2020, p. 68). The outcomes reported by The Adecco Group (2020) were mixed in a global survey with 8,000 respondents who had altered the way they worked, mainly by teleworking as a result of the COVID pandemic. It was encouraging that 19% said their relationship with their manager improved, though for 12% it got worse during the pandemic. Further, 26% responded that their relationship with their colleagues got worse, while 13% said it got better.

In addition to leveraging technology for virtual work, employers have leveraged tech for hiring. According to a survey by Robert Half (2020), 75% of responding companies now conduct remote interview and onboarding sessions, versus only 12% pre-pandemic. Most of these remote interviews are conducted by video call, but increasingly, companies are trying more radical approaches. In an interview with *The New York Times* (Gelles, 2020), the CEO of Automattic, a global technology company, declared that their hiring process is done entirely over chat. They may hire someone without ever seeing or talking to the person. He noted that,

> We're always looking at what we can do to make it as much about the work, and not extraneous stuff, like how you're dressed, how you showed up, how you sound, how you look, where you live. All those things don't ultimately matter (How do you hire? section).

Jobs at Automattic tend to be technical professionals, but according to *USA Today*, companies like Amazon and UPS use text-based recruiting for hourly and blue-collar type jobs (Baig, 2019). According to Emissary (Russell, 2019), only 24 out of 121 emails are opened per day by an American employee. In comparison, someone sends and receives an average of 94 text messages every day, with a response rate of 80%. This seems a good fit for tech professionals and for hourly workers who may be drawn from those that have engaged in gig work (such as

rideshare drivers at Uber or food delivery for DoorDash) that is managed through smartphone apps. However, a challenge in the text-based hiring process is monitoring the scope and progression of professional versus casual interactions as the online conversation develops. Especially during the hiring process, impressions count and may depend on the nuances of text-based cues, such as when it is appropriate to use the exclamation mark as punctuation.

For better or worse, employees and employers have begun to rely more on text-based communication and are talking less, despite the proliferation of Zoom meetings. For someone who is B/VI using text-based communication in the workplace, numerous factors may be at play. For instance, the experience may be affected by whether they have previously met face to face with the person with whom they are communicating, the availability of an application with an interface that is accessible/usable by someone using assistive technology (e.g., screen reader or magnification software), or the expectations of the team and/or organization using text-based collaboration (e.g., synchronicity, frequency). Investigating the experiences of people who are B/VI in these circumstances may help inform policies and practices within organizations, so that people with B/VI are not left behind but are fully included in the workplace.

Purpose of the Study

The recent leap to more telework and reliance on text-based communications is likely to be long-standing. Many employees have expressed the desire to continue telework, including those who are B/VI. Many employers are seeing the benefits, as well. So, it is critical that people who are B/VI, their coworkers, and their current or prospective employers have a sense of what's happening in text-based workspaces. What are the challenges and opportunities for people who are B/VI?

Research is limited on these practices, and only a modest number of studies focus on the employment experiences of people who are B/VI. Specifically, very few investigate telework, and to my knowledge in an extensive review of the literature, none speak to the experiences of

employees who are B/VI using text-based collaboration tools in the workplace. A number of general-population studies have discussed remote work, recently in light of the pandemic. Studies have also explored text-based communications, including quasi-experiments that assessed its potential influence on stereotypes and bias (Alvídrez et al., 2015; Stiff, 2017; Walther et al., 2015). The intersection of employment for people with B/VI, working remotely in distributed organizations, and relating through text-based e-collaboration is a topic that is especially relevant now and ripe for investigation.

My underlying inquiry for this study was “what is going on?,” a concept associated with grounded theory methodology. More specifically, my research question was: How do people who are visually impaired experience relationships in text-based workspaces? An objective of this study was to uncover relational undercurrents taking place in text-based workspaces, with the goal of generating understanding for the employers and support systems like VR agencies and employment networks that work with people who are B/VI.

This study used constructivist grounded theory methodology. The grounded theory framework is a good fit when exploring social processes between and among people (Glaser & Strauss, 1967). Further, qualitative methods like constructivist grounded theory are a good fit for disability studies, because they address the implications of human interaction and acknowledge the complexities of the disability experience (O’Day & Killeen, 2002).

Positionality

Although I have many friends and colleagues who are B/VI with whom I have had conversations about diversity, equity, and inclusion (DEI), and accessibility and technology in the workplace, I am not a person who is B/VI myself. Views differ about whether it is appropriate for a non-disabled researcher to study disability issues (Barnes & Mercer, 1997). I acknowledge that there may be concerns about me being an “outsider” since I am not a member of the community from which study participants will be drawn (Dwyer & Buckle, 2009). I am cognizant

of this fact and intend to include people who are B/VI as a sounding board during my data analysis and ask them to review key sections of the study findings.

I am well acquainted with the field of B/VI, having worked at the American Foundation for the Blind (AFB) for more than 25 years. I have been a leader in both operational and programmatic areas, including human resources, information technology, program development, and research. I interact daily with colleagues and connections who are B/VI, in person and through e-collaboration platforms. These experiences have sensitized me to many of the concepts and realities associated with B/VI. My background influenced my decision to learn research methods to investigate issues in the field of B/VI and inspired development of my research question.

In preparation for this study, I supplemented my first-hand experience working with people who are B/VI by reviewing existing literature on the experiences of people with physical and sensory disabilities, especially B/VI, in the workplace. While I encountered noteworthy themes, I recognize that individuals have unique experiences and perspectives. These distinctions were apparent in pre-conversations that took place while thinking through my study design.

In this dissertation, I present full disclosure that I have been a long-time proponent of telework. I introduced the concept to my organization over a decade ago and today everyone can work remotely from anywhere. We collaborate using text-based workspaces, but also using audioconferencing and occasionally videoconferencing, so one could say it is a hybrid approach. I am entirely comfortable in text-based workspaces, and often choose to communicate on those platforms, but I know that others prefer interacting via phone call or in person.

Building Relationships in Text-Based Workspaces

My first and most immersive experience building relationships in a text-only environment occurred when I was pursuing my graduate degree in Computer Information Systems. The program, which I completed over a period of 2 ½ years, was conducted entirely through asynchronous text messages, including conversations with faculty and project teams. I never spoke to or saw my classmates. When a team project required a more in-depth discussion, we sometimes scheduled a synchronous text session.

After finishing a few courses and class projects, some of us had figured out who we could count on for quality on-time work and stimulating discussions, and we started scheduling our future courses together and requesting that we be teamed up, when possible. Before long, we were inserting jokes and personal stories into our online discussions. We certainly developed relationships with one another during that time. After graduation, I maintained professional relationships with some of those classmates—and no, we have still never met face to face.

Takeaways from this experience are that it is possible to develop social rapport in workspaces that are entirely text-based, and these social connections contribute to work success. However, I believe that the trust and the relationships formed over a longer period of time than if we had first met in person. The process also required more effort, as I tended to reread and revise my messages before sending them. This was perhaps good in that I could be more careful and intentional in my communications, but it was also time-intensive and not quite as authentic.

Working with People Who are B/VI

My interest in this research topic is based on personal observations in the workplace. I have worked for many years at AFB, a nonprofit organization that advocates for people with visual impairment. My responsibilities included human resources and information technology,

and ensuring that the work environment is fully accessible and inclusive for all employees, many of whom are B/VI. Over a decade ago, I began transitioning the organization to remote work and over the years it became a predominantly virtual organization. This enabled the hiring of experts in the field, regardless of where they lived, and eliminated dependence on transportation, which was of benefit to visually impaired employees who do not drive but also popular with employees in metropolitan areas with long commuting times. E-collaboration technologies such as email, then instant messaging, then tools like Slack and Teams were key to facilitating internal and external business communications. The organization was well-positioned for operating remotely as the number of employees working from home surged across the world due to shelter-in-place orders during the COVID-19 pandemic.

In my organization, e-collaboration tools were originally used for task-oriented communications. In the past few years, though, employees have been encouraged to participate in non-task online conversations to foster a sense of community. Specific “channels” were created in our Slack environment, such as “breakroom,” and more recently, “covid-parenting.” I have had conversations with people in other organizations that said they also encourage computer-facilitated social engagement, whether they are a dispersed workforce or located in the same office. I began to observe that some of our employees with B/VI were using these e-collaboration tools quite a lot, especially those who had not had the opportunity to meet their colleagues FtF. At times, B/VI employees who had joined the organization most recently were the most active in the non-task Slack channels.

People who are B/VI often mention that they want to be seen as persons, not only as people who are B/VI. They have interesting jobs and hobbies, spouses and children, aging parents, pets, and so on. Friends and colleagues have related that oftentimes, when they begin working on a new team or in a new organization with people who are not B/VI, there can be some hesitance or discomfort in interactions with their new colleagues. In particular, when they

are seen with a white cane, their disability is clearly visible, and bias may result in barriers to inclusion within the group. Even when a sighted colleague wants to welcome the person with a disability, they may not know how to approach them. The ability to relate over social circumstances such as family and hobbies can provide the bridge.

I am exploring the use of text-based workspaces by employees who are B/VI and how they experience relationships in the online office that is embodied in email, smartphone messaging, and e-collaboration tools like Teams and Slack. Among the questions I considered: Might use of e-collaboration technologies provide opportunity to develop relationships that contribute to feeling included in the workplace? Are employees who feel more included in the workplace more likely to participate in casual conversations on electronic platforms? Are there situations in which text-based collaboration leads to the exclusion of employees who are B/VI?

Study Assumptions and Limitations

This research study used grounded theory methodology, with data collected from a purposeful sample of people who are B/VI. I expected a number of factors might impact participants' experiences, including their own technical savvy and preferences, the accessibility and usability of the e-collaboration tools they are working with, and the type of job and organization they are situated in. To the extent possible, these factors were captured and analyzed through dimensional analysis.

The effects of the COVID-19 pandemic needed to be considered. By the time interviews took place, participants may have been working from home for more than a year. However, pandemic-related telework has significant differences from telework in "normal" times, since people normally have more freedom to socialize outside the home, while this was considerably restricted in 2020–2021.

Telework during this time was rapidly changing. This required a balance of keeping up with the latest developments but finding a moment in time to represent the "current" state, to pin

the publicly available data that reports metrics such as the number of people with B/VI that are working, who and how many employees are teleworking full-time or some of the time, and the degree of accessibility for PWD built into workplace technologies. The swiftness and suddenness of the new workplace paradigm meant that limited scholarly research was available to reference, since studies resulting in peer-reviewed articles take time to move to publication. Hence, I frequently relied on reports and news articles to get a sense of what was happening.

This state of affairs is exactly why this research study is timely and relevant, endeavoring to capture the challenges and opportunities for people with B/VI in a new environment. Although I was interested in this topic of inquiry long before COVID-19 appeared, the result has been that the pool of potential participants expanded with more people who are B/VI experiencing telework and navigating relationships through e-collaboration tools like text-based workspaces. I hope this qualitative investigation, capturing the phenomenon in the words of those experiencing it, will contribute to the knowledge in the field of B/VI and I anticipate that the resulting theoretical model will provide a foundation for further research.

Organization of Dissertation

Chapter I: Introduction. This chapter laid out the landscape of employment for PWD, and specifically B/VI. I introduced the importance of this study and my positionality in relation to the research and discussed the complexity of investigating telework in light of the pandemic-fueled change happening in the workplace.

Chapter II: Literature Review. In the next chapter, I will define and discuss key concepts in the context of this study. I will then introduce conceptual frameworks that I considered significant to my line of inquiry and will serve as sensitizing concepts, or a reference point at the start of the study. These include Disability theory, Inclusion and social identity, Social capital, Symbolic interactionism, Dramaturgy, and Managing difference in text-based workspaces.

Chapter III: Methodology. In Chapter III, I will describe constructivist grounded theory methodology and dimensional analysis and discuss the fit of this method for investigating research questions related to disability. I will outline the research process, including identification and recruitment of a purposeful sample, data collection and analysis techniques, and data management. Finally, I will describe the ethical considerations for this study and the Institutional Review Board (IRB) process.

Chapter IV: Results of the Study. Chapter IV will describe the data collection and analysis and lay out the findings of my interviews with study participants. Characteristics of the sample will provide some context. Then, key themes or categories will be presented in a dimensional matrix.

Chapter V. Discussion. The final chapter will provide an interpretation of the study findings and offer a model to depict the theory that was generated from the data. Further, I will describe the study's practical application, and how the findings relate to leadership and change. Finally, I will present recommendations for action and consideration for future research.

CHAPTER II: LITERATURE REVIEW

Vast changes are happening in today's labor market, including the exponential growth in telework, rapidly changing technologies that support a distributed workforce, and communications practices that are transforming as younger generations that grew up with texting and social media enter the workplace. It is critical that employers and vocational rehabilitation support systems for people who are B/VI understand what is taking place in the modern workplace and the effects on people who are B/VI. While few agree about how to calculate the prevalence of B/VI, the number of people with a visual disability is expected to nearly double by 2050 from the current estimate of 3% of the U.S. population, especially as the population ages (Chan et al., 2018; Varma et al., 2016). This is particularly noteworthy for those that fall into the upper end of working age, or age 45 and older.

This chapter will start by defining some key concepts in the context of this study, examining foundational questions such as: Who qualifies as Blind or Visually Impaired? What is Accessibility? Where are Text-Based Workspaces? Next, several conceptual frameworks will be explored, with literature synthesized to provide a backdrop from which to consider the design and analysis of the research. Although these frameworks may show up in varying degrees, or not at all, during this study, I believe they are important considerations from which to start. These include Disability theory, Inclusion and social identity, Social capital, Symbolic interactionism, Dramaturgy, and Managing difference in text-based workspaces.

Core Concepts

For those who are not familiar with topics associated with B/VI or have not analyzed the nuances of e-collaboration, the following section will serve as a brief introduction. For all, it will explain how key terms are defined for this specific research study. I chose broad parameters for the inception of my study, with the understanding that, as data collection and analysis progressed, these delineations might narrow or stretch. For instance, I selected my own

understanding of text-based workspaces but expected I might encounter alternative meanings presented by participants interviewed for this study.

Blind or Visually Impaired

Researchers often have difficulty pinning down the definitions of “disability” and “visual impairment.” For the purposes of federal disability nondiscrimination laws, such as the Americans with Disabilities Act (ADA), Section 503 of the Rehabilitation Act of 1973 and Section 188 of the Workforce Innovation and Opportunity Act, the definition of a person with a disability is typically defined as someone who (1) has a physical or mental impairment that substantially limits one or more “major life activities,” (2) has a record of such an impairment, or (3) is regarded as having such an impairment (Americans with Disabilities Act, 1990). For purposes of Social Security disability benefits or eligibility for State vocational rehabilitation services, there are other definitions (U.S. Department of Labor Office of Disability Employment Policy, n.d.).

Estimates for the number of people with a disability in the U.S. differ by the millions, as illustrated in Table 2.1.

Table 2.1

Estimates of the number of people with disabilities in the U.S.

Estimated PWD by number and percentages	Source
67.2 million (27%)	Centers for Disease Control (CDC; n.d.-a) using data from the 2019 Behavioral Risk Factor Surveillance System (BRFSS)
54 million (17%)	Survey of Income and Program Participation (SIPP; U.S. Census Bureau, n.d.-a)
41 million (13%)	American Communities Survey (ACS) conducted by the U.S. Census Bureau (n.d.-b)

Similarly, approaches vastly differ in defining and calculating the presence of visual disability in the U.S., with estimates ranging from less than 1% to more than 26% of the

population (Rein et al., 2021). For the purpose of determining eligibility for benefits, the Social Security Administration (SSA) defines statutory blindness as “central visual acuity of 20/200 or less in the better eye with the use of a correcting lens” or “an eye that has a visual field limitation such that the widest diameter of the visual field subtends an angle no greater than 20 degrees” (SSA, n.d., How do we define statutory blindness? section). Most estimates are made from data collected through surveys that ask respondents to self-report their level of vision and other demographics. The National Health Interview Survey (NHIS) uses the broadest definition of B/VI and estimates that 19 million working age adults (10% of the population) “have any trouble seeing, even when wearing glasses or contact lenses” (National Center for Health Statistics, n.d.). Several other surveys, including the American Community Survey (ACS; U.S. Census Bureau, n.d.-b) and BRFSS (CDC, n.d.-a), estimate that between four and eight million working-age people (2–4%) are “blind or have serious difficulty seeing, even when wearing glasses” (U.S. Census Bureau, n.d.-c, Current section).

For this study, I chose to use the ACS definition of B/VI, “blind or have serious difficulty seeing, even when wearing glasses” (U.S. Census Bureau, n.d.-c, Current section). The ACS is a nationally representative survey of households conducted annually by the U.S. Census Bureau that defines visual, hearing, and ambulatory disabilities and reports the estimated prevalence for each. In 2018, the ACS reported that the prevalence of people estimated to have a visual disability in the U.S. was 2.3% or about 7.5 million people (Cornell University, 2022). Further, for the purposes of this study, a participant’s “serious difficulty seeing” would be significant enough to require use of assistive technology (screen reader or magnification) to read text. For these people, to fully participate in their community and workplace, spaces including those that are digital must be accessible.

Accessibility

Structural accessibility may be environmental and/or technical. Environmental access includes physical spaces that are easy to navigate by someone who is blind and traveling with a white cane and technical accessibility includes software that is programmed to be usable by someone with vision loss when using a screen magnifier or screen reader. In the context of this study, the term “accessibility” will refer to technical or digital accessibility. Digital accessibility is ensuring that computer applications, web content, and mobile devices and apps are usable by everyone. Technology can provide opportunities for PWD to participate more fully in work and society. However, if the technology is not accessible, the digital divide widens, leaving PWD behind (Accenture, 2017).

People who are B/VI may use a computer or a mobile device together with assistive technologies, such as a software screen reader or magnifier. Examples of screen reader software include Narrator (built into Windows operating systems), VoiceOver (built into the Apple operating systems), NVDA (a free, open-source application), or JAWS/Fusion (a fee-based application). These software programs are powerful tools for accessing digital information, but the experience is only as good as the content code it is reading. For instance, the user may navigate to a digital button on a web page that shows the text “Next page.” If this is only a picture of the button, the screen reader is relying on the developer to have properly labeled the button in the computer code using a feature called alternative-text (alt-text). If no alt-text has been added, the person who is B/VI will only hear “button” or “blank,” so will not know what function will be activated when selecting that button.

Many websites are required to comply with government regulations that mandate covered online content conform to the Web Content Accessibility Guidelines (WCAG; W3C, 2021). Computer software procured by the federal government must meet accessibility standards per Section 508 of the Rehabilitation Act (U.S. General Services Administration, n.d.).

No such requirement to procure accessible software is in place for other organizations, so it is the responsibility of companies to require their vendors to provide accessible software products. Process is as important to accessibility, and all employees should be trained to format their email, documents, and presentations so that people who are B/VI can read them, e.g., by utilizing the alt-text description for an embedded image.

Organizations that design for a diverse population, including PWD, create better solutions and experience for all users, internally and externally. The “curb-cut effect” resulted from ramps being cut into sidewalks, so they meet the grade of the street, and were designed for people using wheelchairs, but are appreciated also by people pushing strollers or pulling luggage (Blackwell, 2016). Alternative text, or alt-text (Supercool, 2020), is an example of a digital curb cut. For someone who is sighted, if the function associated with an image or icon on a website is not understood, hovering the mouse over that image may show the alt-text to clarify its purpose. Human-centered design is grounded in understanding and designing to an individual’s needs, so is fully inclusive (Accenture, 2017).

Respondents to the State of Digital Accessibility Survey (Level Access, 2021) listed the top three reasons their organization was addressing accessibility:

- 77.6% to include people with disabilities;
- 61.7% to provide the best user experience for all users; and
- 61.3% to comply with laws.

The results illustrate how companies are influenced by a combination of factors—doing the right thing, responding to customer and employee needs, and protecting themselves from lawsuits. Unfortunately, too many companies develop products and practices that are not fully accessible by people who are B/VI, and this extends to some text-based e-collaboration tools. On the whole, the trend is positive, but companies that did not build accessibility in from the start may find it time-consuming and expensive to retrofit. So, for someone who is B/VI, it may be difficult

to use the Slack desktop software, but possible to navigate the Slack iPhone app. This makes the tool essentially usable, but if an organization discourages the use of personal iPhones for work-related tasks, it introduces a significant productivity barrier.

Text-Based Workspaces

Today, most employees use text-based electronic-collaboration tools to communicate in the workplace. These belong to a category of technology sometimes referred to as computer-mediated communications (CMC). Computer-mediated communication is a term that encompasses forms of human communication through networked computers. The interaction may be synchronous (in real time) or asynchronous (not time bound) and include one-to-one, one-to-many, or many-to-many exchanges of text, audio, and/or video messages (Lee & Oh, 2017). Examples of CMC include email, smartphone messaging, Slack or MS Teams, Zoom, or Google Meet.

This study focuses on the text components of CMC technologies as “text-based workspaces.” So, the definition would include the text messaging components of Slack or Teams but not the video and phone-calling features. Zoom and Google Meet are primarily videoconferencing technologies, however, participants are increasingly opting to attend with cameras off, and their Chat feature could be considered a text-based workspace. Social media platforms like LinkedIn or Twitter that rely heavily on text exchange would also qualify if used for work-related purposes. In summary, the primary e-collaboration tools that will be considered text-based workspaces for the purposes of this research study include:

- email
- smartphone text messaging
- Slack or Teams (or similar) instant messaging
- Zoom or Meet (or similar) chat
- LinkedIn or Twitter (or similar) text posts and comments

All these tools have at least one option that is usable by those who are B/VI, even if they may not meet the standards of fully accessible. However, from professional experience supporting workplace technology for people who are B/VI, I expect the user experience to be influenced by the tools' degree of usability, their interplay with assistive technology, organizational policies on if/how these are used in the workplace, and individuals' comfort with technology. This, in turn, will influence their ability to leverage the text-based workspace for developing and cultivating relationships. Other realities may also affect how study participants experience this phenomenon, so next I will explore some conceptual frameworks that may prove salient to the meaning-making in this study.

Sensitizing Concepts

This qualitative research study will be conducted using grounded theory methodology. One of the philosophical assumptions represented in the selection of a research method is its ontology, or beliefs about the nature of reality (Creswell & Poth, 2018). In qualitative research, the ontology acknowledges the concept of multiple realities. Different realities are accepted by different researchers, by individual study participants, and by each reader of the study. Qualitative researchers endeavor to capture and report these multiple realities. Thus, it is important for researchers to consider the philosophical assumptions that are active as participants share their experiences (Creswell & Poth, 2018). Here, I explore some of the key concepts I have identified as warranting awareness when conducting and interpreting the research, that may be situated in the researcher, presented by the study participants, and occur within the audience consuming the information.

The theories discussed in this section are considered "sensitizing concepts." According to Blumer (1954), sensitizing concepts provide general reference and guidance, suggesting directions in which to look when interpreting research data. In qualitative research like grounded theory, sensitizing concepts are helpful in beginning the inquiry, and are evaluated throughout to

determine if, when, how, to what extent, and under which conditions they are relevant to the study (Charmaz, 2014).

The concepts outlined in this section are primarily psychosocial and refer to the relational aspects of my inquiry. They were derived from a wide-ranging review of literature, providing a closer look at some of the key constructs that are foundational to this study. This section will discuss (a) disability theory; (b) inclusion and social identity; (c) social capital and relational energy; (d) symbolic interactionism; (e) dramaturgy; and (f) managing differences through text-based workspaces.

Disability Theory

The role of disability in the workplace may be influenced by various models of disability, which focus on either the medical aspects, social or structural factors, and/or minority or civil rights. As described in Brown et al. (2009), the medical model views disability as a functional impairment, the social/structural model identifies environmental factors as the cause of disability, and the minority model sees a lack of equal rights as the barrier to equality. In the Brown et al. (2009) study, focus group participants often equated their disability with their medical impairment, but notably, grounded their “disability identity” in combination with the structural and minority models of disability. Especially as people moved into employment, they pointed to the social and environmental factors they encountered (structural model) or the discrimination they overcame (minority model) in finding and performing their jobs.

Disability theory and inquiry in the U.S. have mainly moved from the medical model of disability, focused on illness or defect, to the social model of disability, reflecting a dimension of human difference and meaning derived from social construction, or society’s response to individuals with a disability (Creswell & Poth, 2018). The social model of disability views disability not as a condition characterizing individuals who have limited functioning but as the result of the interaction between individuals and their surroundings. This concept was reflected

in the findings of a study by Stribling (2015), in which participants related social experiences as a far greater influence on their disability than the physical limitations.

Chan et al. (2010) found that managers were moderately positive (3.54 on a five-point scale) about PWD as productive and reliable employees, but they identified systemic barriers that made it difficult for them to hire and retain PWD. Some of these barriers were the lack of a strong commitment to include disability as a cultural group in their companies' diversity plan, lack of resources to recruit and retain PWD, and inadequate training in ADA and workplace accommodations for PWD. Regression analysis results indicated that knowledge of ADA and job accommodations and inclusion of disabilities in the company's diversity plan were the two most significant factors in predicting corporate and manager commitment to hiring PWD.

The social and minority models of disability reflect challenges similar to other groups that experience discrimination. In addition, PWD may also belong to other traditionally marginalized categories. This intersectionality, or the influence of socio-historic and political contexts around factors such as race, gender, and class, influence one's individual, relational, and collective experiences (Booysen, 2018). Harlan and Robert (1998) drew on the theory of the social construction of gender, race, and class in organizations, which offered insights into how work is structured to reflect and reproduce the hegemonic power of elite White, able-bodied males. They found that job salary grade, gender, and race were associated with the likelihood that an employee would or would not request a disability-related accommodation as well as the outcome of that request (self-reported by study participants). For instance, of the 50 people interviewed for the study, only 4 of 13 (29%) identifying as African American requested an accommodation compared to 30 of 37 (83%) identifying as White. Women in the lowest-grade jobs were the most likely of all to have unfavorable outcomes, with 40% of their accommodation requests rejected.

Organizations and advocates for traditionally marginalized groups, including those who represent PWD, have opportunities for learning from one another and working together. At the same time, different issues confront PWD, and specifically people who are B/VI. For instance, because B/VI is a low-incidence disability, those they encounter may have never met a person with a visual impairment and may not be aware that they are fully capable of using a computer. Incorporating consideration of disability theory in a qualitative study like grounded theory can address the complexities of the disability experience, to describe and illuminate the interdependence of human interaction, cultural attitudes, and institutional processes (O'Day & Killeen, 2002).

Inclusion and Social Identity

*"*Think of diversity as being invited to a party, and inclusion as actually being asked to dance when you get there*"* (Henke, 2018). Diversity is about whom you hire. Equity is about promoting fairness. Inclusion refers to the extent to which diverse employees are valued, respected, accepted, and encouraged to fully participate in the organization. In inclusive environments, individuals are appreciated for their unique characteristics and therefore feel comfortable sharing their points of view and their authentic self. Inclusion is harder to define and achieve than diversity or equity. Diversity and equity can be mandated, legislated, and measured, while inclusion largely stems from everyday voluntary actions (Winters, 2014). A combination of factors contributes to the challenge of achieving inclusion, including lack of exposure and experience, unconscious bias, and fear around people with disabilities.

Organizations that consider diversity, equity, and inclusion (DEI) to be important may then manage diversity in the workplace differently. Spataro (2005) introduced three types of organizational culture in terms of managing diversity: culture of differentiation (power and status differences are salient), culture of unity (differences are suppressed), and culture of integration (different perspectives are valued). The author posited that the theoretical underpinnings for

much of the existing research on differences among coworkers focuses on binary distinctions of similar or different, but does not distinguish between differences of one characteristic versus another (e.g., having a physical or a mental disability), nor between the different states of a characteristic (e.g., being a worker with a disability among coworkers without a disability versus being without disabilities among a majority of workers with disabilities). The nature of the difference is an important factor in the experiences of those who are “different.” An example of navigating within such a work team was described in Adams (2019),

> I have a core group of people at my company who work on accessibility and understand disability. Many of them are people who do not have disabilities or any background in it, but who have worked with people with disabilities or worked with me in particular over the years. (p. 144)

Inclusion reflects the degree to which an employee perceives that he or she is a respected member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness (Shore et al., 2018). Brewer (1993) wrote extensively on optimal distinctiveness, a foundational concept for examining inclusion. This social psychology theory proposed that social identity is a reconciliation of the opposing needs for assimilation and differentiation from others. Brewer’s model explained the need to balance a sense of belonging and a sense of personal distinctiveness in order to achieve optimal group identity. The framework of optimal distinctiveness is important in the context of workplace inclusion, where an indistinct path must be navigated between encouraging assimilation into the corporate or team culture and valuing individual differences that strengthen the group’s cohesion and performance. Figure 2.1 illustrates this combination of value for belongingness and uniqueness as Exclusion, Assimilation, Differentiation, and Inclusion (Shore et al., 2011).

Figure 2.1

Inclusion Framework

	Low Belongingness	High Belongingness
Low Value in Uniqueness	**Exclusion** Individual is not treated as an organizational insider with unique value in the work group but there are other employees or groups who are insiders.	**Assimilation** Individual is treated as an insider in the work group when they conform to organizational/dominant culture norms and downplay uniqueness.
High Value in Uniqueness	**Differentiation** Individual is not treated as an organizational insider in the work group but their unique characteristics are seen as valuable and required for group/ organization success.	**Inclusion** Individual is treated as an insider and also allowed/encouraged to retain uniqueness within the work group.

Note: 2x2 inclusion framework in terms of high or low value in uniqueness and high or low belongingness. From Inclusion and Diversity in Work Groups: A Review and Model for Future Research by Shore et al., 2011, *Journal of Management,* 37, 1262–1289. Reprinted with permission.

Self-concept (who one believes they are) and social identity (how one presents themselves to others; Goffman, 1959) expand and contract across different levels of belongingness and uniqueness (Shore et al., 2011), as may occur within support groups such as a company's Employee Resource Groups (ERGs). These formalized groups of employees with similar backgrounds or interests network and provide a collective voice within an organization (Matos, 2014). ERGs serve to create a categorical identity from a shared feature. What may be difficult at an individual level becomes a source of enjoyment at the group level, as a trait of distinction rather than a mark of otherness (Shore et al., 2011). Collective identities, such as ERGs, facilitate the balance between belongingness and individuality and act as a buffer for integrating into the larger organization. However, individuals are uncomfortable in social situations in which they are either too distinctive or too indistinctive. Classification into groups by race, gender, or disability is likely to exceed the level of inclusiveness that is ideal for

satisfying self-identity needs, thus increasing the need for differentiation and recognition of interpersonal differences within the group. Although individuals may not reject classification, they will seek further differentiation and will be alert to distinctions between themselves and other categorized members (Brewer, 1993).

Social identity is how people segment, classify, and order the social environment and their place in it (Tajfel & Turner, 1979). It is largely relational and comparative, defining how individuals are similar or different, and “better” or “worse” than members of other groups (e.g., social class, sports team). According to Booysen (2016), social identity is the bridge between individual and group identity. It explains how individual identity, group-level identity, and national cultural identity integrate. Social identity is an individual’s sense of who they are, based on their group membership(s). The co-construction of identities is largely based on individual agency (identity claiming) along with others’ recognition (identity granting; Roberts & Creary, 2013). Further, Hannum et al. (2010) described identity as a combination of three components—given identity (e.g., ethnicity, disability), chosen identity (e.g., hobbies, religion), and core identity (e.g., beliefs, values), which function simultaneously on the individual, relational, and collective levels. Workplace identity construction is similar to identity formation and includes an additional level of influences—specific workplace organizational dynamics (Booysen, 2018).

People with disabilities often have a desire to share their disability narrative as part of their identity. Individuals have different comfort levels with what characteristics they share with their colleagues. Employees with disabilities sometimes actively conceal their disability to protect their image of competency at work. People with disabilities may be stereotyped as being helpless, dependent, and in need of care by people without disabilities. Further, they are often viewed as less skilled or less productive in the workplace, requiring more training and support than people without disabilities (Rimmerman, 2012). Under these circumstances, it is little wonder that PWD are hesitant to reveal their disability identity in the workplace. However, for

people with a visible disability, this may not be an option. In this case, as a study participant in Antonelli et al. (2018) explained, “Being comfortable with my disability and showing it was part of me and even a possible asset rather than a setback” (p. 39), was important to overcoming difficulties finding a job.

PWD may develop a disability identity, but it is not their only, or even dominant, identity trait. Snyder (2018) described a snippet of his journey in maintaining a sense of his social identity. Snyder lost vision from an improvised explosive device (IED) blast while serving in the military, was a gold-medal swimmer in the Paralympics, taught leadership at the Naval Academy, and had a home, family, and friends. Yet, he described how others treated him differently because of his blindness, describing his feeling as if he is on the outside listening in on the lives of others. People were afraid to talk to him for fear of saying the wrong thing and offending him. When a stranger he was seated next to on an airplane started a conversation with him following a comment about his unusual watch, even sharing her own life struggles, he said that for the first time in a while, he did not feel like an outcast, but like a friend.

Allport’s (1954) contact hypothesis suggested that prejudice might be reduced by equal status contact between majority and minority groups in pursuit of a common goal, as is commonly required in the workplace. Cooperative and interdependent interactions help shift peoples’ categorizations from “us and them” to “we” (Plous, 2003). Cooperative tasks where institutional support is provided and group norms are clear can lead to positive team outcomes (Alvídrez et al., 2015).

For someone with B/VI, fitting one’s unique self within the norms of the team may depend on the characteristics of the group members and how the person is introduced into the group. Approaching and entering a workplace that is familiar with B/VI or has experience with people who are B/VI, certainly provides a head start toward being valued and included. A reason so many people who are B/VI work for agencies and organizations that support PWD is

that this is where most of the employment opportunities are. As organizations make progress toward a truly diverse, equitable, and inclusive workplace, the hope is that people with B/VI will be more commonly represented in a variety of jobs throughout the labor market. A next step is for people with B/VI to develop networks with others who can connect them to those jobs.

Social Capital and Relational Energy

Putnam (2000) explained social capital as the “connections among individuals—social networks and norms of reciprocity and trustworthiness that arise from them” (13:36). It is an important asset used to find support and advance careers. For people in groups that are socially marginalized, the ability to form positive relationships can have a significant impact on their access to social capital, or a network of resources that lead to opportunities and job satisfaction. According to *U.S. News* (Morgan, 2014), more than 70% of people got their jobs through networking and a study by *LinkedIn* (Adler, 2016) reported that 85% of people in professional staff and management roles found their job through networking. Jobs are often filled either internally or through a referral before they are ever posted online.

The act of helping someone find work or succeed in the workplace creates energy by generating positive emotions (Baker, 2016). Owens et al. (2015) maintained that relational energy is a powerful motivational force, and an important personal and organizational resource. Relational energy reflects the psychological resources one receives from another. It is not necessarily reciprocal and can occur between any two individuals, not only within the leader-follower relationship. Importantly, relational energy enhances engagement on the job, providing meaning, values alignment, psychological safety, and enjoyment (Owens et al., 2015).

This relational energy can be facilitated and extended through high-quality connections (HQCs). Dutton and Heaphy (2003) described the cultivation of HQCs as a means of accessing valued resources, such as trust, to build relationships. They maintained that a HQC between two people is dynamic, and the individuals have affected one another in some way. The

connection is not necessarily enduring or recurring, nor does it require intimacy or closeness (Dutton & Heaphy, 2003). HQC's rely on psychological resources, such as a perception of trust, and may be drawn upon only periodically and/or over extended periods of time, so this relational energy would appear to be fragile and require sustained cultivation.

Granovetter (1973) explored the value of weak interpersonal ties in the diffusion of influence and information, mobility opportunity, and community organization. By analyzing prior studies and applying mathematical modeling, Granovetter (1973) argued that one need not be in a friend relationship that extends beyond the workplace to create positive ties; it is sufficient, and sometimes preferable, that the relationship be that of an acquaintance. Further, it was speculated that the social structure may not need to be face to face. This suggested that casual conversation via virtual communication technologies could work to generate these beneficial ties.

In Walther's (1997) study of university students from the U.S. and U.K. working together by email only, anecdotal evidence indicated that the content of electronic dialogue between foreign partners seemed to shift midway from group-level information processing to interpersonal processing. Coparticipants developed a level of attention to their partners, wanting to know more about each other's personal characteristics. One participant wrote, "Working with people you perceive as friends is FAR easier—there seems to be a sense of commitment/loyalty" (Walther, 1997, p. 361).

Evidence suggests that building relationships in virtual spaces democratizes the workplace, affording everyone on the distributed team an equal opportunity to accumulate social capital (Teevan et al., 2021). As the CHRO at IBM described, in the virtual-first workplace "digital technology has flattened hierarchies, with everyone connected and getting information at the same time, and so many channels for employee input and involvement in decision-making" (Horch, 2020, Remote work as an employee equalizer section, para. 5). The opportunity for

acquiring social capital certainly exists in text-based workspaces, and although the tactics may differ from those used when face to face, at the foundation is the back-and-forth of social interaction. The mechanism at play is described through the theory of symbolic interactionism, discussed next.

Symbolic Interactionism

Symbolic interactionism is both a theory about human behavior and an approach to exploring human and group behavior (Annells, 1996). Clarke and Star (2007) purported that symbolic interactionism and grounded theory make a powerful “theory-methods package.” Social interaction is foundational to the theory of symbolic interactionism. Fundamentally, human association in all its forms is based on two human beings interacting upon each other, with each fitting their actions to the actions of the other. Blumer (1969) explained that,

> Taking another person into account means being aware of him, identifying him in some way, making some judgment or appraisal of him, identifying the meaning of his action, trying to find out what he has on his mind or trying to figure out what he intends to do. (pp. 108–109)

This taking account of the other happens not just at the initial point of contact, but throughout the interaction. Each person involved continuously monitors and interprets movements within the interaction as they unfold.

As described by Mead (Mead & Strauss, 1956), the self-object emerges from social interaction through which other people are defining the person to themself. This self-object arises through social experience as one takes part in interactions with others and is aware of the other in determining how to respond. As the symbolic conversation is taking place with others, it is also occurring within the individual. The person imaginatively acts with the positions of others in mind and looks back to assess a proposed action. Mead highlighted that this internalized conversation allows one to bring future into an act, to consider the meanings and consequences of potential acts, and to delay or control one’s own action. According to Mead,

formation of self is a continuous process. One's truth and one's rules change as we make decisions in a continuous stream of actions, and what we are right now is different than what we were a moment ago (Charon & Cahill, 2004).

Identity is an integral part of self-concept and represents who the individual thinks they are and how they announce themselves to others in word and action. It arises in interaction, it is reaffirmed in interaction, and it is changed in interaction (Charon & Cahill, 2004). Identity is how one names themself and is usually what that person announces to others to reveal who they are as they act in certain circumstances. Stone (1962) described identity as the perceived social location of the individual, or where one is situated in relation to others. According to Berger (1963), identities are "socially bestowed, socially maintained, and socially transformed" (p. 98). Further, as significant others label a person, so that person comes to label themself (Charon & Cahill, 2004). However, this identity is a process that constantly transforms through an interactive negotiation of "This is who I am"— "No, this is who you are" (Charon & Cahill, 2004, p. 149).

In this negotiation process, the individuals are simultaneously labeling others and attributing identities to the others while announcing the identity they attribute to themselves. Often, when interacting with someone new, that person is tentatively labeled based on qualities one assumes they possess, and that person's acts are interpreted based on these imagined qualities. As people proceed to act back and forth, people's definitions of one another are revised many times over (Charon & Cahill, 2004). However, when people are very different, and do not regularly interact and communicate, it is difficult to assign a definition of the other.

The separate acts of individuals participating in the social process are linked in the joint action of a collective group (Blumer, 1969). This applies to small groups like families or work teams or larger groups like a business corporation. According to Mead and Strauss (1956), every group develops its own system of symbols and norms around which group activities are

organized. As group members act toward and with reference to each other, they assess that activity in communal terms.

Often, interactions within extended communities require the individual to consider the collective social group, or “generalized other” (Mead & Strauss, 1956). The community exercises influence over the conduct of an individual member as the person thinks about the likely attitude of the generalized other toward themself. In this way, the individual comes to reflect the systematic pattern of social group behavior. However, Mead explained, each person will possess a unique viewpoint, as their self is formed through interactions with a wide variety of groups and others, and thus, their relational patterns are distinct.

Symbolic interactionism examines and explains the processes of social interaction. The theory of dramaturgy, introduced by Goffman (1959), provides an intriguing juxtaposition in describing what may be happening in the minds of the selves participating in the interactions. The next section introduces dramaturgy and how it may manifest itself in the workplace and in this study.

Dramaturgy

Like symbolic interactionism, Goffman’s (1959) *Presentation of Self in Everyday Life* is also based on the idea that individuals interact, people are aware that what they say and do matters to others, and that individuals act toward one another according to their interpretation of the other in the interaction. As a result, people make efforts to act in a way that influences others to think of themself in the way that one wants. Interaction is a stage where all act out parts that they choose to present to others (Charon & Cahill, 2004). One takes an active role in telling others who they are and controls their actions to present the image they want, believing that this will in turn affect how they will be acted toward in return. In this way, people are both actors and audiences.

Dramaturgical analysis focuses on how actors attempt to control their scenes, situations, interactions, and self- presentations, which is common in workplace settings (Charmaz, 2014). People's presentation of themselves or their performance is socialized or molded to fit the understanding and expectations of the society or situation. Since it is commonly believed that first impressions count, the self that is presented is typically an idealized version (Goffman, 1959). This is difficult to maintain, over time, though and ultimately most people want to be valued as their authentic selves.

Individuals commonly seek to acquire information about others. This information helps define the situation, so one will know what to expect of the other and how best to act in order to receive a desired response in return (Goffman, 1959). If unacquainted with the individual, clues can be gleaned from the person's conduct and appearance which allows one to use previous experience to apply untested stereotypes to that person. Another source of information is reliance on what the individual says about themself or evidence they provide about who they are. If there has been prior interaction with the person, one may assume the persistence and generality of their traits to predict present and future behavior (Goffman, 1959).

Group stereotypes comprise averaged attributes on which people base their judgments about the likelihood of members possessing one or more of these traits. When such members reveal a behavior that does not match those attributes, both these traits and the likelihood of possessing them are thought to be challenged (Alvídrez et al., 2015). A line of research in intergroup relationships focuses on changes in stereotyped perceptions produced by contact interventions with individual group members who present a stereotype disconfirming behavior.

Baym (2010) explored personal interactions through technological mediation. In looking at how people use new media to present themselves to others and get to know one another, she suggested that the absence of social and identity cues can make people feel safer and create an environment in which they are more honest. According to Walther (2009), studies

frequently show that visually anonymous groups cohere better than groups whose members see each other—or their pictures. Baym (2010) found that distributed groups built more favorable impressions and relationships over time without photos. It was found that seeing one another's pictures actually decreased attraction and affection toward group members. Ramirez and Wang (2008) described this introduction of photos into the relationship as a violation of expectations. Specifically, Goffman (1963) discussed stigma as a discrediting attribute (such as disability) that could be hidden but complicate interactions if revealed. Recently, this theory was demonstrated when people removed their COVID masks. People who had worked together did not recognize their colleagues without their masks, and further, were sometimes surprised or disappointed by the face that was revealed (Levitz, 2021).

Dramaturgy theory focuses on the presentation of the self to others, as an actor performing on a stage. This performance has typically been assumed to unfold in person, as in a job interview (SSA, 2021). Changes in technology have challenged the status quo and transformed the way people curate their identities, e.g., online. The following section explores this transformation, the opportunities that could mitigate stereotyping and stigmatization, and the challenges of presenting and deciphering intention in the absence of visual cues.

Managing Differences Through Text-Based Workspaces

Most people have experienced the workplace as a physical space where the organizational culture is easy to discern through the layout, the décor, and other visual cues. Likewise, we make assumptions and draw conclusions about our colleagues based on clues such as style of dress, photos on a desk, and often characteristics such as race and gender. These cues are generally missing in the remote workplace, so the methods of developing and maintaining a cohesive team differ. While it would seem that there are significant barriers to promoting inclusion in the virtual workplace, it turns out there are also some intriguing opportunities.

Lessons from Global Teams

For more than a decade, companies have increasingly organized as distributed teams that work together remotely across continents and across the globe. The trend began with open-source technology development. Thousands of software developers from around the world would voluntarily come together to design and improve computer programs (Fried & Hansson, 2013). Through asynchronous text-based e-collaboration, the code base would be built and improved over time. Distributed teams have the advantage of sourcing subject experts wherever they are. The trend expanded exponentially, as most organizations were forced to adopt the remote workplace model due to the COVID-19 pandemic.

Research studies have suggested that remote work teams can work very effectively across global cultures, using text-based e-collaboration tools. In fact, some studies have shown that teams using text-based computer-mediated communications (CMC) may be better at building long-term trust relationships than teams meeting face to face. Although it may seem intuitive that face-to-face interactions are better at creating cohesion, the ability to develop personal relationships over time, without the visual cues that may result in stereotypes being assigned to coworkers, can create a more equitable and inclusive work culture. By exploring how remote teams successfully relate across a culturally diverse workforce, representing different ethnicities and religions, for instance, while using text-based collaboration technologies such as Slack or Microsoft Teams, some parallels might be drawn that would apply to marginalized groups, including people with disabilities such as B/VI.

Studies have found that because text-based CMC offers the potential to engage collaborators without seeing the physical features of their partners, stereotypes are less likely to be aroused (Walther, 2009). Bowker and Tuffin (2002) suggested that when visual cues that would typically trigger early judgement are not seen in electronic exchanges, individuals can manage what information they do and do not reveal about themselves, reducing stereotyping

and prejudice. This theory has been tested in a number of studies. Although some mixed results have been reported in the use of CMC to reduce intergroup prejudice (Walther et al., 2015), several studies have reported promising outcomes. These studies were conducted with university students as participants rather than within commercial enterprises, however, they supported the perspective that communication technologies can develop intergroup relationships that are unlikely in person and that CMC has the potential for facilitating interactions for people in marginalized intergroup contexts.

Alvidrez et al. (2015) investigated the impact of CMC intergroup contact on prejudiced and stereotyped perceptions toward an outgroup, based on an ethnic minority in Spain. The results suggested that when an outgroup member exhibited nonconfirming behavior, prejudiced perceptions were reduced, although stereotypes were not (though this may have been related to the short duration of the interaction). In Stiff (2017), participants demonstrated that they were more likely to choose a partner who shared their religious tendencies only when they anticipated working face to face; when electronic communication was expected, the bias disappeared. In the Walther et al. (2015) study that included participants from a mix of religious Jews, secular Jews, and Arab Muslims plus control groups with subjects from the same religious sectors that did not participate in the virtual exercise, participants who were initially the most polarized, who took part in the virtual groups, showed significant reductions in their prejudice toward the outgroup they had most disliked at the outset. Students who participated in the virtual groups had significantly less prejudice toward their respective outgroups at the end of the study period compared to the control subjects who did not participate.

Lea et al. (2001) investigated the effects of group-based self-categorization and stereotyping of others on group attraction within visually anonymous CMC in comparison to video-based groups communicating online. English participants were led, falsely, to believe that some of their CMC partners were German. The researchers expected to find that visual

anonymity would decrease group attraction by increasing impersonal task focus. Instead, structural equation modeling showed that visual anonymity increased group-based self-categorization, which directly increased attraction to the group.

Bowker and Tuffin (2002) explored how people with disabilities managed disability disclosure within social context in the online medium, by interviewing participants from disability organizations in New Zealand. Findings showed that people with disabilities felt the online medium offered them a social space where they could express themselves without being judged based on their impairment. Participants described the medium as a “levelling ground” (p. 327) allowing them to be treated as a person rather than a disabled person. Respondents noted how the online medium gave them the ability to control the way they presented themselves in social interactions.

Rasters et al. (2002) discussed the variations of Media Richness Theory, whereby the richness of a communication medium is evaluated along a continuum based on four criteria: capacity for immediate feedback, number of cues, personalization, and language variety. Particularly in the context of task uncertainty, communication is considered to be richer the more ways information can be transferred, such as speech, writing, and nonverbal cues including seeing, smelling, and touching, but also tone of voice and physical gestures. As such, face to face is seen as the richest medium while CMC is considered lean media. However, strong evidence exists that the quality of decisions made and ideas generated by groups using CMC is stronger than predicted by Media Richness Theory, and further, CMC group performance indeed matches face-to-face group performance (Rasters et al., 2002).

Perception of equal status is inhibited by differences that are apparent in face-to-face contact (Walther et al., 2015). CMC studies have triggered social identification by hiding personal information about participants (e.g., blocking each participant’s name or photo) while making salient a group category by introducing numbers, logos or codes shared by all

participants (Alvídrez et al., 2015). Conversely, displaying individual visual cues (e.g., photos of faces) was thought to diminish group identification as users focused their attention on idiosyncratic characteristics rather than on depersonalized perceptions of group members.

Since CMC users remain relatively anonymous, team members may not have the opportunity to acquire first-hand information about other team members, so may instead import trust from a context they are familiar with, often stereotypical impressions of others (Rasters, 2001, as cited by Henttonen & Blomqvist, 2005). Therefore, whatever subtle social context cues do appear in CMC take on greater value. These over attributions may be either positive or negative (Walther, 1997). The hyper-personal approach to CMC (Walther, 1996), was rearticulated to suggest that an initial impression may be activated not only by stereotypes based on group identifications, but through individual stereotypes such as personal characteristics or a vague resemblance to a previously known individual (Walther, 2011).

This very circumstance was recently demonstrated with Qube, a virtual reality tool developed to teach executives remotely. It is a cartoonlike 3-D campus filled with meeting rooms and common spaces. Professor Obeng, creator of Qube, learned through the clients and students using the program that when avatars were humanlike, people were too focused on their own appearance and the appearance of others. According to Professor Obeng, “If the avatar looked like your old schoolteacher who [sic] you hated, you would stay away from them” (Bindley, 2020, para. 24). Now the avatars have block-shaped heads.

Overcoming Missing Visual Cues

Despite the positive potential of reducing bias, text-based communication grapples with the challenge of missing contextual cues such as body language. Connelly and Turel (2016) noted the difficulty virtual team members may have in perceiving authenticity within the context and style of communications when they cannot see nor hear the person speaking. Social information processing (SIP) theory (Walther, 1992) looked at the adaptive use of cues available

in CMC to transmit and receive interpersonal and social information. For instance, a chronemic cue indicates how one perceives, uses, or responds to time in CMC. A person can send a text message, and when a response is received, can gauge how much time elapsed between messages. According to SIP, a prompt reply signals deference and liking in a new relationship or business context while partners who are more comfortable with each other may not need to respond as quickly. Darics (2010) highlighted strategies that virtual team members adopt to recreate audio-visual prompts in CMC, such as using obvious politeness or indicating hesitation through ellipses, adding emoticons, and including casual or non-task language. Considering linguistic, cultural, age, and educational differences among group members, teams may need time to equalize their differing expectations in CMC or develop their own communication norms (Darics, 2010).

Because CMC relies on the written word, a solid command of a team's common language is critical (Fried & Hansson, 2013). This common language extends beyond simply expecting English-speakers in the U.S. and might also be specific to the backgrounds of the team members or the acronyms understood in their field of work. Gelles (2020) pointed out that, while many people may get by with so-so language skills face to face, text-based collaboration requires better than average writing skills. However, because CMC messaging applications allow employees to exchange information quickly, it often results in a more informal tone. More casual interactions can allow people to let their guard down and act unprofessionally. This can cause an uptick in agitation and bullying, where the CMC platform becomes "a dumping ground for grievances, passive aggressiveness and other exchanges best left for private conversations" (Cutter & Tilley, 2020, p. 1). CMC may not be the best option for having long, nuanced conversations. In remote teams it is important to create a culture of respect and mutual support (Cutter & Tilley, 2020).

Sherblom et al. (2018) reported that the trust-building process for virtual teams is similar to teams who meet face to face, but it may take longer and require more effort. The greater the need for the interdependency, task complexity, and creativity, the more important it is to be able to build trust rapidly (Blomqvist & Cook, 2018). Jarvenpaa and Leidner (1999) explored the challenges of creating and maintaining trust in global virtual teams, with a focus on CMC groups, cross-cultural communication, and interpersonal and organizational trust. Participants were 350 students from 28 universities representing every continent except Antarctica. The results suggested that global virtual teams may experience “swift” trust (Meyerson et al., 1996). Swift trust was attributed to temporary teams, but assignment to short-term working groups is a common occurrence even within the larger context of a distributed organization. In addition, some of these communications behaviors have been observed at the inception of longer-standing virtual teams. The results of a study by Jarvenpaa and Leidner (1999) suggested that when faced with task or technical uncertainty early in the group’s life, CMC teams with higher levels of trust were able to solve problems and resolve conflicts more effectively. These teams communicated both task and social information, often within the same messages. It seems social communication that complements task communication may strengthen trust.

These research studies, together, suggest that remote teams or organizations collaborating via CMC can work as effectively, if not more so, than face to face. Tellingly, eliminating visual cues such as photos and life-like representations such as avatars can help reduce anxiety and facilitate psychological safety. In turn, this may lead to increased trust and opportunities to develop relationships that facilitate group cohesion. Achieving this unity requires practice, though, to understand group norms and transmit emotion and intention effectively.

Summary

In this chapter I looked systematically at concepts and theories that speak to my research question. To start, I introduced an understanding of the terms blind or visually impaired, accessibility, and text-based workspaces. Next, I reviewed literature on sensitizing concepts to remain aware of in the design and analysis of the study. Investigation of the experiences of “people who are blind or visually impaired” through disability theory correlates with Clarke’s (2005) approach to understanding social and cultural forces that may be salient to explaining and interpreting events. As Holloway and Schwartz (2018) described, grounded theory methods are well-suited to studying workplace experiences of marginalized individuals, such as PWD. The intersection of disability identity (Brown et al., 2009) with social identity in the workplace is manifest in interactions that affect inclusion and exclusion, which in turn impacts the ability to create meaningful connections and acquire the social capital (Putnam, 2000) that facilitates work success. A focus on the “experience of relationships” corelates so closely with the concept of social interaction in symbolic interactionism (Blumer, 1969) that it recommended a closer review. Looking at interactions on the stage of “text-based workspaces” suggested the connection with self-presentation, described by Goffman (1959) as dramaturgy. And finally, the potential of mitigating stereotypes and bias in non-visual, text-based workspaces (Walther, 2009) was explored through the lens of several research studies.

The next chapter will describe design choices for this study, centered on grounded theory methodology. In grounded theory methodology, theories and conceptual frameworks generally emerge from the data, however, in some cases, existing theories are fundamentally salient as sensitizing concepts. In my study, the core of the inquiry was to explore and assess the process of social interaction between individuals, team members, and the generalized other in the context of the larger organization, specifically in text-based workspaces. The concepts I

have described in this section are those I deemed relevant as a beginning to this inquiry but were continuously evaluated as relevant or not as the analysis progressed.

Chapter III will discuss in detail the approach I took in designing the study and its fitness for disability-related research. I will describe the process employed in data collection, analysis, and management. Further, ethical considerations and strategies to ensure trustworthiness are specified.

CHAPTER III: METHODOLOGY

This study employed constructivist grounded theory methodology with dimensional analysis. In this chapter, I will outline constructivist grounded theory and explain why it is a good fit for disability-related studies and for this study specifically. Next, I will describe the research process and study design decisions, and then frame the components of the data analysis. Finally, I will present the ethical considerations and strategies to secure trustworthiness.

Grounded Theory

Qualitative research methods, like grounded theory, enable exploration of questions about how people make meaning from experiences, investigate social and institutional practices, and identify barriers and facilitators of change (Starks & Trinidad, 2017). In this study, I used grounded theory to examine a phenomenon and develop explanatory theories of the social processes studied within context. Further, I looked at how social structures and processes influenced how things were done through social interactions.

Society is individuals engaged in social interaction. Groups, organizations, and communities are made up of individuals who interact (Charon & Cahill, 2004). Individuals interact over time, act with one another in mind, and adjust their own acts as they interpret one another's acts (Blumer, 1969). Grounded theory explores social processes to understand the wide array of interactions and the resulting variations in that process (Heath & Cowley, 2004).

While differences have emerged in the practice of grounded theory, the foundations are based on the theories of George Herbert Mead (Mead & Strauss, 1956) and Herbert Blumer (1969). Classic grounded theory represented the postpositive approach to research, emphasizing modified experimental research and hypothesis falsification, but also recognizing the value of qualitative research in acquiring knowledge (Annells, 1996). In contrast, the constructivist approach emphasizes that data are mutually constructed through the interaction of

researcher and participant. Constructivist grounded theory assumes that multiple realities exist based on multiple perspectives on these realities (Morse et al., 2009).

From a methodological standpoint, Morse et al. (2009) described grounded theory as data manipulated by “constant comparison” to develop theoretical ideas or “hunches” (p. 68). These theoretical ideas usually identify a central process and associated social structural processes that occur within a given context. The resulting discovered mid-range theory is intended to add to the knowledge of existing theory. “Mid-range theory” generates statements abstracted from an empirical phenomenon that can be verified by data (Merton, 1968).

Grounded theory methods are considered inductive, in that theory is built up from the data through comparative analysis. In later versions like the constructivist model, logical abductive reasoning, or making a probable conclusion from what you know (Merriam-Webster, 2021), is also used in each stage of analysis, and especially in the analysis of categories that leads to theory development (Birks & Mills, 2015). Theory abstracted from generated and collected data is fashioned by considering all possible explanations, then examining them to determine what is most plausible.

Fundamental to the method is concurrent data collection and analysis (Birks & Mills, 2015). Throughout, the researcher engages in the constant comparison of incidents, codes, and categories. The work culminates in an abstract theoretical understanding of the studied experience. This grounded theory “explains the studied process in new theoretical terms, explicates the properties of the theoretical categories, and often demonstrates the causes and conditions under which the process emerges and varies, and delineates its consequences” (Charmaz, 2014, p. 10). Its intended outcome is the generation of theory grounded in data, with the power to explain a phenomenon from the perspective and in the context of those who experience it (Birks & Mills, 2015).

Methodological Fit for Disability Studies

Qualitative research, such as grounded theory, is an effective approach for disabilities studies as well as for diversity, equity, and inclusion (DEI) topics (Groggins & Ryan, 2013; Vaccaro et al., 2018). The social model of disability views disability not as a condition characterizing individuals who have limited functioning but as the product of the interaction between individuals and their surroundings. Qualitative methods address the complexities of the disability experience, with the power to describe and illuminate the interdependence of human interaction, cultural attitudes, institutional processes, and public policies (O'Day & Killeen, 2002). Study participants speak in their own voices rather than conform to words or categories chosen for them by others.

One of my objectives for this study was to uncover relational undercurrents taking place in the text-based workspace, with the goal of generating understanding for employers and support systems that work with people who are B/VI. Investigating the social dynamics occurring when people with B/VI interact with coworkers, customers, and constituents in a text-based context exemplifies the social processes that can be explored with grounded theory. I found that this is an area of exploration that has little existing research and is important for understanding the impact of new technologies and work paradigms like telework. Grounded theory methodology is generally a good fit when there is little existing knowledge available about the area of study.

Constructivist Approach

My choice of the constructivist grounded theory framework reflected its good fit when exploring social processes between and among people. It originates from symbolic interactionism, which posits that meaning is negotiated and understood through social interactions (Blumer, 1969). These processes have structures and implied or explicit codes of conduct. The goal of grounded theory is to develop an explanatory theory of these social

processes within the environments in which they take place (Glaser & Strauss, 1967), in this case within text-based workspaces.

A number of “second generation” methodologists (Morse et al., 2009), who followed the original developers of the theory, introduced revisions to aspects of the original grounded theory method. Among these were Charmaz (2014), known for her work in developing constructivist grounded theory.

Morse et al. (2009) described Charmaz’s approach to constructivist grounded theory as,

> a relativist epistemology, [that] sees knowledge as socially produced, acknowledges multiple standpoints of both the research participants and the grounded theorist, and takes a reflexive stance toward our actions, situations, and participants in the field setting—and our analytic constructions of them. (p. 129)

It is considered a contemporary revision of Glaser and Strauss’s classic grounded theory, sharing the principles of theoretical sampling, constant comparison of data to theoretical categories, and focus on the development of theory through theoretical saturation (Hood, 2007). The differences lie in the implementation, as constructivist grounded theory promotes flexibility and creativity in the process and encourages researchers to leverage familiarity with the existing literature in their field of study.

Pre-Conversations

In preparation for this study, I intentionally engaged in pre-conversations with people who have had direct experience with the topic (Holloway & Schwartz, 2018). These conversations were mainly informal but were key to informing my research plan. In this era of remote work, it was easy to find people who used text-based communications on the job. It was useful to talk to people that are sighted as well as those who are blind, as a way of beginning to explore “what all is going on” (Schatzman, 1991). I had a lively discussion around what a person might be revealing about themselves to a new client by using the term “y’all.” Another described a recent interview process that involved a significant amount of texting with the Human

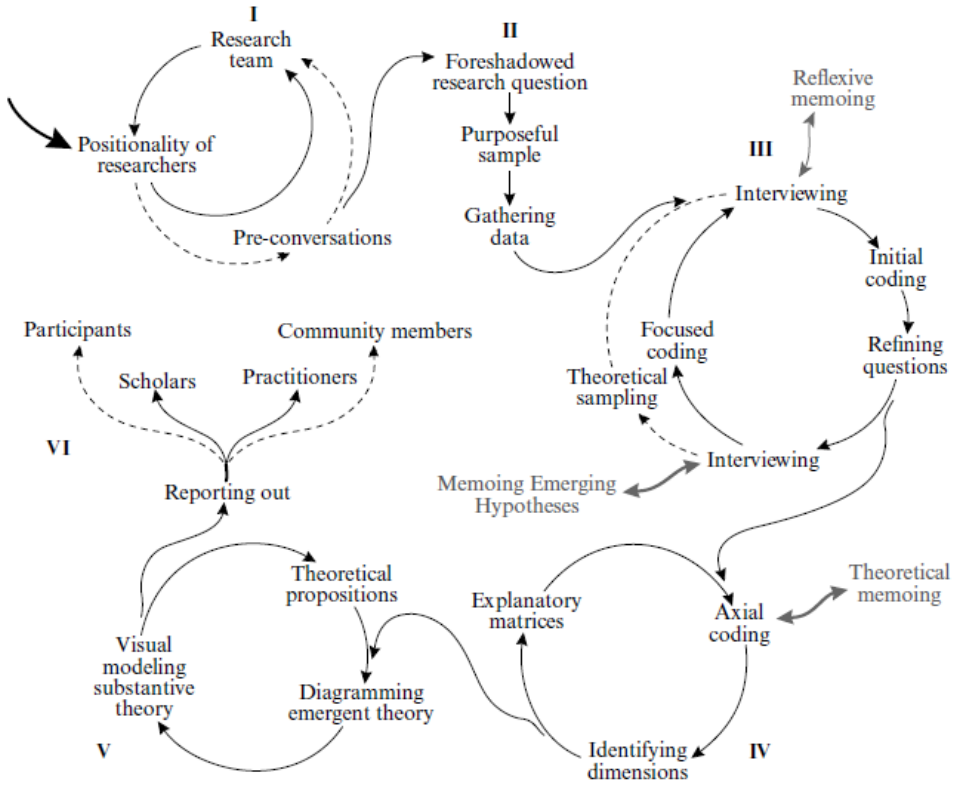
Resources representative that became more informal and friendly over time (she got the job). Even discussions about non-work use of text were instructive; for instance, people can get very animated about how they and others interpret text messages based on use of punctuation and emojis. This was all valuable input in sensitizing me to concepts associated with my topic. However, while the pre-conversations were interesting and informative, they remained separate from the data generated from interviews with the study participants, who shared their own unique experiences of the phenomenon.

Research Process and Design

Figure 3.1 depicts the grounded theory process I used in this study and will describe in more detail in this section. This includes determining the research question, defining the sample, and collecting data through interviews. The data analysis methods will then be described in the following section.

Figure 3.1

The Grounded Theory Research Process



Note: The dotted lines represent those instances when the researcher determines the relevance of including these activities in the research process. The greyed text represents the researcher's reflective journaling of the ongoing analytic process. The Roman numerals reference the phases of action in the research process.

Note: From Drawing from the Margins: Grounded Theory Research Design and EDI Studies, by E. L. Holloway & H. L. Schwartz (2018), in R. Bendl, L. Booysen, & J. Pringle (Eds.), *Research Methods on Diversity Management, Equality and Inclusion at Work.* Edward Elgar Publishing. Reprinted with permission.

Research Question

From the start of my doctoral journey, I had a sense of what I was interested in studying, based on my observations from more than 25 years working with professionals who have visual impairment. As Naraine and Lindsay (2010) explained, social interaction in the workplace, such as interacting with colleagues in the lunchroom or socializing around the water cooler, is

important to integrating into the workplace. These opportunities allow for networking and keeping current with workplace culture and enhance job satisfaction and enthusiasm for the work. Feeling connected and included has important implications for succeeding at work. According to Casciaro and Lobo (2008), people in the workplace seek out resources from someone they feel positively toward. The workplace has been rapidly changing, with an explosion of reliance on text-based tools in the pandemic-driven remote workplace. Beyond task-based collaboration, managers have endeavored to replicate the water-cooler experience and encourage socializing through software like Slack. What did this mean for people who are B/VI? To explore this reality, my overarching research question was:

How do people who are B/VI experience relationships in text-based workspaces?

The interview format was unconstructed, with only one question to start the conversation: How are you using text-based communications at work?

Sampling

The purposeful sample of this study included individuals with B/VI, of working age 18 years and older, that use assistive technology (such as a screen reader or magnifier) and participate in text-based workplace applications, such as Microsoft Teams or Slack or smartphone instant messaging. For the purposes of this study, I defined B/VI in accordance with the American Community Survey (ACS) as “blind or has serious difficulty seeing even when wearing glasses” (U.S. Census Bureau, n.d.-c). Further, to set a clear threshold, a participant’s “serious difficulty seeing” would be significant enough to require use of assistive technology to read text. At the start, my intention was to include a demographically diverse sample, recognizing that demographic attributes of the sample might be influenced by their salience as data assessment evolved. Interviews and data gathering ended upon theoretical saturation, when I had determined that there was nothing substantially new to be discovered regarding emerging theoretical ideas. Although this sampling method does not lend itself to specifying the

number of participants required to reach this saturation, for this study, I interviewed 18 individuals. Since an individual can generate hundreds of concepts, large samples are not necessarily needed to achieve rich data sets (Starks & Trinidad, 2017).

Theoretical sampling is unique to grounded theory and supports a process of conceptual emergence. Initial sampling is established through criteria identified by the researcher as a starting point for exploring the area of study. Then, to sample theoretically, the researcher must make strategic decisions about who or what will provide the data needed to further the research analysis (Birks & Mills, 2015).

A common error in theoretical sampling is looking to gather data until patterns reoccur (Charmaz, 2014). Patterns describe themes, which is not the purpose of grounded theory; instead, theoretical sampling is intended to further develop theoretical categories derived from the data analysis. Data collection continues until enough has been gathered to fit the study and give a full picture of the study topic. This is often referred to as “theoretical saturation.”

Ultimately, theory development is the goal of a grounded theory study. Theorizing is the “act of constructing from data an explanatory scheme that systematically integrates various concepts through statements of relationship” (Strauss & Corbin, 1998, p. 22). Creating relationships between concepts is what enables a theoretical statement to explain or predict events within a social phenomenon. However, it is not unusual to encounter outlying cases that seem contrary to the theory, and this in fact, reflects the reality of life as imperfect and complex. Capturing variation to the theory’s “storyline” adds depth and dimension and increases its reach and explanatory power (Strauss & Corbin, 1998). Further, as Heath and Cowley (2004) pointed out, the aim of a grounded theory study “is not to discover *the* theory, but *a* theory that aids understanding and action in the area under investigation” (p. 149).

I have worked in the field of B/VI for many years and have established a wide network of connections through which I could draw referrals to potential study participants. This network

includes professionals from B/VI organizations and leaders of Diversity, Equity, and Inclusion, Human Resources, and Accessible Product Development within large corporations. No less important, I have personal connections with friends and colleagues who are B/VI that could spread the word and refer potential participants. I made it clear to those who suggested participants that each person's participation would be completely voluntary, and no pressure should be placed, implicitly or explicitly, on individuals to participate in the study. Anyone with whom I have had a prior relationship was not considered for inclusion in this study.

Data Collection

To avoid potential conflicts of interest and being mindful that an employer might be concerned about an employee sharing their workplace experiences, I recruited individuals from a variety of organizations and connected with them outside the purview of their workplace. Further, if I contacted a professional connection from ABC company for referrals, I requested connections with people that did not work at ABC. Potential participants were instructed to contact me directly by email or by completing an online Google form. Screening, scheduling, and interviewing took place away from a physical worksite and outside work hours.

Prospective participants were contacted through the publicly available email address they provided on the Google interest form. After initially identifying potential participants from the interest form, I sent an email to those individuals to request completion of a short survey that collected demographic information and characteristics of the type of organization they worked for. Midway through the study, questions were added to ascertain other information, such as the types of text-based technology they were using. Email was also used to solicit their informed consent. Midway through recruitment, potential participants were given the option of responding to the survey and the informed consent by email or by Google form, as I discovered that the online form format was easier for most to navigate in reply. All letters and forms were prepared

in formats accessible for people who are B/VI with the use of screen-reader or magnification software.

The recruiting strategy was to start by inviting participants from a modest targeted group and then to reach out to other sources and use snowball sampling, as the data collection and analysis proceeded. In the end, the snowball sampling technique was not utilized. As an incentive, and in appreciation for their time, participants were offered a $25 gift card. Sources I drew from were based on recruitment of participants with specific characteristics. For instance, individuals who participated as Fellows or Mentors in American Foundation for the Blind's Blind Leaders Development Program (AFB BLDP) represented a range of potential participants that met the study criteria. This group was invited to participate in the study through their private LinkedIn group. (Permission was granted to engage this group.) At the time, the program's Fellows and Mentors network included about 60 diverse individuals who are B/VI, employed in the corporate, public, and nonprofit fields. Mentors have at least eight years of work experience and Fellows are potential emerging leaders with fewer years of work experience. Additional resources included referrals from professional contacts and posting in the New York City & Tri-State Blind and Low Vision Community Facebook group.

I conducted interviews remotely through Zoom audioconference or videoconference. This provided participants flexibility and convenience, which eliminated most barriers to participation. Conversations were recorded and transcribed, as described in the next section, generating a rich repository of data for analysis. To safeguard privacy, data protection protocols were followed, and the identities of participants and companies were anonymized. In addition to interviews, I generated field notes to record facts and research impressions, and memos to capture conceptual ideas to support development of emergent theory.

I coded data from interview transcripts using Dedoose qualitative analysis software and then used Excel spreadsheets to categorize and sort the coded data. Along with data coding, I

recorded themes, wrote and reviewed memos and field notes, and refined questions, as needed. Factors, such as context and conditions, were assessed through dimensional analysis that looked at attributes within the data (Schatzman, 1991). Recognizing my inherent subjectivity as a practitioner in this field, measures to ensure rigor included working with two additional people who coded portions of the data independently. I also reviewed my construction of the study findings with a cultural consultant. Throughout, I constantly analyzed and interpreted the data toward development of an emergent theory and diagramming an illustrative model.

Interview Protocol

Participants were asked to sign a consent form and were notified about their ability to withdraw from the study at any time. They had the option to provide their consent electronically via email, which most did. In a few instances, consent was captured orally before the interview began. Interviews were scheduled at a time that was convenient for the participant and I let them know I was monitoring my email as a means by which they could easily contact me if they experienced any technical difficulty connecting with the meeting software. For those that expressed interest but were not selected as a study participant, I sent a note to thank them for their time and interest in the study.

Interview questions started with the broad question, “How are you using text-based communications at work?” If the flow of the interview did not lead to emergence of how relationships were experienced, I prompted with a follow-up question, such as “How do you see the role of text-based communications at work in developing connections and relationships?” The objective of the grounded theory interview is to elicit the participant’s story. Throughout the interview, I remained alert for interesting leads (Charmaz, 2014), and asked follow-up questions to clarify statements and to encourage the participant to elaborate on the details (Starks &

Trinidad, 2017). One way to gather accounts as completely as possible was to ask for specific examples (Charmaz, 2014).

"Intensive interviewing" is typically the key to collecting data in qualitative research like grounded theory. It is a good fit for grounded theory because it is "open-ended yet directed, shaped yet emergent, and paced yet unrestricted" (Charmaz, 2014, p. 85). Charmaz (2014) described intensive interviewing as a gently guided one-sided conversation that explores participants' perspective on the research topic, formed as a reflection on their personal experience.

Interviews were conducted over Zoom videoconferencing software, to easily record and transcribe the interview. Each individual had the option of participating with or without video; because I regularly work with people who are B/VI, I am very comfortable meeting with video off. Most of the participants stated no strong preference; however, since nearly everyone entered the meeting with cameras off, only four interviews were conducted with the cameras on. I recorded interviews with permission and later had the recordings transcribed by Rev.com, a private and secure transcription service. Only the audio portion of recordings were used. I reviewed each transcript for accuracy, making minor changes as needed and changing the names of all participants and identifiable references, such as company names, locations, and coworker names. If a participant inadvertently revealed any information that might be considered by an employer as confidential, it was immediately removed from the transcript. The transcripts were sent to the participant within 10 days of the interview for verification, and the participant was invited to comment on, correct, or change the contents of the transcript. When approved, the transcript was anonymized, and a pseudonym assigned to each participant. Only de-identified transcripts were shared with other data coders. As interviews proceeded, data analysis began and informed the progression of the interview process.

Data Management and Storage

All data was and will be protected, and the identities of individual participants were kept confidential throughout the process. Pseudonyms have been used to maintain confidentiality and all related information (company, location, identifying characteristics, etc.) that could lead to potential identification of participants has been removed. I will maintain study records for three years from the date of the publication on a separate and secured computer drive. I will destroy the audio recordings (except any excerpts authorized for publishing) once this study, and any related study, has been published.

Analysis of Data

In addition to theoretical sampling, other distinctive elements of the grounded theory method are its coding protocols and memo writing. In this study, I integrated dimensional analysis to explore the complexities of social processes. Fundamental to grounded theory is constant comparison, with concurrent data collection and analysis. In this section, I outline key elements of grounded theory—coding, memo writing, dimensional analysis, and constant comparison.

Coding

Concurrent data collection and analysis using codes and categories is essential to grounded theory. Data is typically generated by conducting interviews but may also include observations. During initial coding, I analyzed data from the interview transcripts in fragments—words, lines, segments, or incidents (Charmaz, 2014). Codes closely reflected the data, accounting for the use of language (in vivo), meanings, and perspectives. Initial coding is sometimes referred to as “open” coding because it opens up the text as concepts (Strauss & Corbin, 1998). Intermediate, or focused, coding synthesized and organized the data. In this phase, I grouped codes into categories, linking and integrating them (Birks & Mills, 2015). An optional third type of coding, axial coding, was used to identify and analyze dimensions or

properties of categories, e.g., time or place. Axial coding is used to build out relational structures from the larger concepts (Holloway & Schwartz, 2018). As interpretation of data progresses, categories become more theoretical (Charmaz, 2014). Discussions with others working with the data provided the opportunity to consider different perspectives and ideas.

Charmaz (2014) described grounded theory coding as the bones of the analysis that will be formed into a working skeleton. Through the process of coding, patterns begin to emerge. Open-coded data is conceptualized, categories are defined and developed, and relationships are hypothesized (Strauss & Corbin, 1998). Thus, the foundation and structure of theory is built.

Dimensional Analysis

This study integrated dimensional analysis, a contemporary interpretation of the grounded theory method introduced by Leonard Schatzman (1991). Dimensional analysis shares a great deal with other grounded theory methods but differs in seeking to learn all that is involved in the complexity of social life, rather than searching for a single social process (Morse et al., 2009). Dimensionality addresses the complexity of a phenomenon by noting its attributes, context, processes, and meaning (for example, age is a dimension with a wide range of properties from youngest to oldest). The designation of dimensions allows for both specificity and comparisons of concepts in the data (Kools et al., 1996).

In grounded theory, participants are sought with differing experiences of the phenomenon, to explore multiple dimensions of the social processes being studied (Starks & Trinidad, 2017). Dimensional analysis helps anchor the research at the individual level by reflecting on the context in which meaning was assigned. By dimensionalizing the data, provisional concepts may be revealed. It provides a framework that helps move the analysis from merely description and toward explanation (Kools et al., 1996).

Memo Writing and Diagramming

Memos and diagrams are essential to theory building and were used to track the analytic process. I employed memo writing to explore ideas and I used diagramming for visual representations of the relationships among concepts (Strauss & Corbin, 1998). My memos were sometimes as short as a thought captured in a single sentence or a list, or they may have included multiple pages (Chametzky, 2016). These memos were organized in the Dedoose analytical application and labeled as Content (theoretical) or Process (operational). Capturing the flow of thoughts throughout the study allowed me to apply my instincts and intuition to the exploration of ideas.

Birks and Mills (2015) described memos as the written records of a researcher's thinking in the research process. Memos are important to quality research and serve as a reference and guide for the analysis and theory development. According to Birks and Mills (2015), procedural precision can be demonstrated by maintaining an "audit trail" and showing the logic that is followed throughout the process. Memo writing helps to create this documentation.

Diagrams provide a means of exploring theoretical ideas through visual modeling. Since grounded theory is based on social processes and human interactions, relationships and movement between them is important to understand (Holloway & Schwartz, 2018). Further, visual models of the concepts and processes help illustrate and articulate theoretical propositions and the construction of substantive theory.

Constant Comparison

Charmaz (2014) noted that it often takes considerable work to discover the subtlety and complexity of respondents' words and meanings. Fundamental to the grounded theory method is concurrent data collection and analysis. Throughout this study, I engaged in the constant comparison of incidents, codes, categories, and concepts. It is through constant comparison that categories arose and data saturation developed (Chametzky, 2016).

Glaser (1978) noted that “comparing the apparently non-comparable increases the broad range of groups and ideas available to emerging theory” (p. 42). Memo writing is the process through which these conceptual relationships can be explored (Chametzky, 2016). The work culminates in an abstract theoretical understanding of the studied experience.

Charmaz (2006) cautioned that the qualitative researcher may confuse seeing the same pattern repeatedly with reaching saturation. Further, Glaser (2001) described saturation as the point at which no new properties of a pattern emerge. This results in conceptual density that leads to theoretical completeness.

Ethical Considerations

Before participants were recruited or data collected for this research, the study design was reviewed by the Antioch University Institutional Research Board (IRB), to ensure ethical research practices. This is a minimal risk research study. That means that the risks of participating are no more likely or serious than those encountered in everyday activities. There is no direct benefit to participants in this study, but their participation may generally help people with disabilities in the future. Additionally, participants may benefit from having an opportunity to reflect on their practice and experience as a person who is B/VI engaging in text-based workspaces.

If there was any indication that an individual’s participation would put them at any risk, they would have been excluded from the study. All participants were informed that their participation was voluntary and that their consent could be withdrawn at any time. At all times, the participant’s identity was protected and de-identified. If a participant inadvertently revealed any information that might be considered by an employer as confidential, it was immediately removed from the transcript.

Conducting qualitative studies requires engagement between the researcher and study participants. Thus, qualitative research requires an especially careful examination of the

question of ethics. Awareness of the questions around authenticity and power is crucial (Rowan, 2000).

In my position as an employee of AFB and as a board member at the Vision Loss Alliance of NJ (VLANJ), I may have had a professional or personal relationship with a person that would refer a participant for the study. In association with this research project, I would not have any position of power, but there could have been a perception that I have a position of influence. I did not include participants that work for organizations I am associated with as an employee or a board member. I did not include as a participant anyone with whom I have a direct relationship and I made it clear to those who suggested participants that each person's participation would be completely voluntary, and no pressure should be placed, implicitly or explicitly, on individuals to participate in the study.

I approached this work with decades of prior knowledge and experience in the field of B/VI. Further, I have identified and explored sensitizing concepts in the literature review for this study. Recognizing my inherent subjectivity as a practitioner in this field, measures to ensure rigor included engaging with two coding partners to get other perspectives on the data. I endeavored to balance my prior knowledge and experience with intentional openness to what emerged from the data.

My coding partners coded the data independently. Members of the coding team were from fields other than those related to disabilities, so there was very little risk of knowing who the respondents were. Transcripts were de-identified prior to sharing them with the coding team. No audio portions of interviews were shared with the coding team.

Trustworthiness

Factors that influence quality in grounded theory research include methodological congruence, procedural precision (Birks & Mills, 2015), and insightful analysis (Charmaz, 2014). Methodological congruence is present when there is compatibility between researcher

philosophy, the stated objectives of the research, and the methodological approach employed in the study. Grounded theory is a good methodological fit for disability studies, and especially for a topic focused on experiences in social interactions. This congruence was described earlier in this chapter in the section on methodological fit.

To ensure procedural precision, I remained attentive to maintaining an audit trail through memo writing and managing data through procedural logic (Birks & Mills, 2015). Grounded theory methods are inherently logical, as the developed mid-range theory is grounded in the data. At the same time, qualitative analysis is subjective because the researcher or research team makes judgments about coding, categorizing, and contextualizing throughout the analysis (Stark & Trinidad, 2017). To foster rigor and trustworthiness, reflexive practices included consulting with others about the data analysis and writing memos that closely examined evolving ideas.

Ultimately, analytic credibility depends on the coherence of the findings and how well evidence from the interviews was used to develop a convincing explanation. Blumer (1969) recognized that validating social psychology research would be quite different than the methods employed in natural science. He suggested that research propositions be assessed on reasonableness, plausibility, and illumination. Among the criteria for assessing the credibility of a grounded theory study, Charmaz (2014) suggested assessing sufficient data to merit claims, creating strong logical links between categories, offering new insights that contribute to the knowledge in the field, and presenting useful and understandable analyses and interpretations.

In developing grounded theory, Glaser and Strauss aimed to move qualitative research beyond descriptive studies to explanatory theoretical frameworks that provided conceptual understandings of the studied phenomena (Charmaz, 2014). Clues for confirming the methods used in a study include evaluating whether a “theory” is, in fact, a conceptual explanation of

processes and relationships, or is instead a descriptive list of themes (as in ethnography). Trustworthiness and rigor were pursued throughout this research.

Scope of the Study

In this study, I investigated the experiences of individuals with B/VI, age 18 and older, that used text-based applications in the workplace. For the purposes of this study, B/VI was defined in accordance with the American Community Survey (ACS) as “blind or has serious difficulty seeing even when wearing glasses” (U.S. Census Bureau, n.d.-c). My intention was to include a demographically diverse sample, recognizing that demographic attributes of study participants might be influenced by their salience as data was assessed. Interviews and data gathering ended upon determination of theoretical saturation.

Summary

This chapter described my reasons for choosing grounded theory as the methodology for this study. Constructivist grounded theory is a good fit for disabilities-related research, for examining social interactions, and for topical areas with a spare knowledge base. It also coincides with my personal appreciation for the combination of postpositive perspective in the empirical generation and collection of data, as well as the constructivist perspective that recognizes my long-time relationship with the field of visual impairment. This methodological perspective was highly relevant to my research question, as I considered constructions of social interaction that explain how people create meanings and actions (Charmaz, 2014).

The study design and process were detailed, including conventions that shape grounded theory method—theoretical sampling, coding and memo writing, and constant comparison of data. These foundational elements, when well executed, lead to procedural precision and lend trustworthiness to the research findings. Ultimately, thorough analysis and logical interpretation result in a theoretical model toward advancing understanding in a fast-changing workplace milieu. The findings of this study will be described in the next two chapters.

CHAPTER IV: FINDINGS OF THE STUDY

My research question for this study was *How do people who are blind or visually impaired experience relationships in text-based workspaces?* By speaking directly to individuals who experienced this phenomenon, I was able to uncover relational undercurrents taking place in text-based media that serve predominantly as a means of conducting task-based work. The social processes involved were discovered by investigating the social dynamics occurring when people with B/VI interacted with coworkers, customers, and constituents in text-based communications media. As described by Blumer (1969), these social processes have structures and implied or explicit codes of conduct, and meaning is negotiated and understood through social interactions.

Many of the experiences described by study participants are nearly universal and will be easily recognized by anyone who takes part in task-based or relational interactions in the workplace. For instance, I also make assessments about my audience when making choices about the formality or informality of my message or the medium I use to send that message. However, there are unique considerations associated with how communications may be sent or received or interpreted by someone who is B/VI.

Software applications and study participants used a variety of words for actions in the text-based medium. For consistency, throughout this chapter and the next, I will refer to these actions in the following way:

- texting: text messaging from a smartphone
- messaging: instant messaging through applications like Slack, Teams, or Google Chat
- chatting: public or direct messaging through videoconference applications like Teams, Zoom, or Google Meet
- emailing: sending a message through an application like Gmail or Outlook
- posting: sharing information on social media or messaging apps
- commenting: responding to a post with a written message

- reacting: selecting an icon to represent a reaction to a post, such as Like or Wow

This chapter will outline the findings of the study. First, I provide a summary of the participant sample included in the study. Next, I present the results of my dimensional analysis and a matrix that organizes the primary dimensions and the subdimensions of context, conditions, processes, and outcomes. Finally, these dimensions and subdimensions are illustrated through the concepts that were extracted and analyzed from the participant interviews.

Participant Overview

Participants were drawn from a purposeful sample of employed professionals who are B/VI, age 18 years and older, that used text-based communications applications in the workplace. Examples of these technologies included email, messaging apps such as Microsoft Teams and Slack, smartphone text messaging, videoconference chat in Zoom and other meeting applications, and social media such as LinkedIn and Facebook. For the purposes of this study, B/VI was defined in accordance with the American Community Survey (ACS) as “blind or has serious difficulty seeing even when wearing glasses” (U.S. Census Bureau, n.d.-c).

Eighteen individuals meeting the criteria participated in the study. I recruited participants through B/VI affinity groups, including a group engaged in a professional training program and a regional Facebook group. A few participants were referred through professional contacts. All participants met the definition of B/VI, and all reported using screen reader software; four also used magnification. In addition, two participants mentioned an additional disability, one related to mobility and another to hearing loss. Most of the first few interview participants identified as White. Therefore, I added specific outreach to include a more racially diverse sample. Otherwise, the participants naturally represented a mix regarding gender, age, and employment, including organizational structure.

Just over half noted that they worked for an organization that included PWD in its mission, though this was interpreted broadly to include companies that did not specifically provide services to PWD but expressed a commitment to DEI for PWD. Although I often did not know the specific organization a

participant worked for, it appeared that 10 individuals either worked for an organization or a department within an organization that served PWD. Everyone involved in the study worked in a profession that would be considered managerial, administrative, or technical, as would be most common for someone working extensively in text-based workspaces. Thus, this study did not capture the experiences of individuals working in jobs such as the service industry. Professions included management, law, social work, counseling, human resources, training, sales, and technology support, among others. Tables 4.1 through 4.6 provide a breakdown of participant descriptors in a format to mitigate identification of individuals who may know one another.

Table 4.1

Gender (from the option to write in the gender they identify as)

Female	8
Male	10

Table 4.2

Race/Ethnicity (from the option to write in the race/ethnicity they identify as)

White	13
Asian American	2
African American	1
Hispanic	1
Indian American	1

Table 4.3

Age

25–34	6
35–44	6
45–54	5
55–64	1

Table 4.4

Assistive Technology

Screen reader	10
Screen reader + magnifier	4

Table 4.5

Organization Type

Government	7
Corporation/Company	4
Other Nonprofit	4
Education	2
Self-employed	1

Table 4.6

Organization Size

1000+	7
100–999	9
1–99	2

In addition to the descriptive data collected by survey, the interviews revealed a wide array of text-based, other mainstream, and assistive technologies used by participants, as shown in Table 4.7, Table 4.8, and Table 4.9.

Table 4.7

Text-Based Workspaces Mentioned

Software	Type
MS Outlook	email
MS Office	productivity & collaboration
MS Teams	messaging & collaboration
MS Yammer	social networking
Gmail	email
Google Chat	messaging
G Suite	productivity & collaboration
Zoom chat	messaging
Slack	messaging & collaboration
Skype	messaging & conferencing
Facebook Messenger	messaging
WhatsApp	messaging
GroupMe	messaging
Chatter for Salesforce	collaboration
CRM	collaboration
LinkedIn	social media
Facebook	social media
Instagram	social media
Snapchat	social media
Twitter	social media
Discord	social media
Listserv(s)	email & messaging
ZipRecruiter	job posting & search
LinkedIn Jobs	job posting & search
Indeed	job posting & search
Flexjobs	job posting & search

Table 4.8

Other Mainstream Technology Mentioned

Technology	Type
iPhone & iPad & iPod	device
Android smartphone	device
Mac desktop/laptop computer	device
Windows desktop/laptop computer	device
MS OneDrive	file management
Google Drive	file management
iCloud	file management
Dropbox	file management
MS Teams	videoconferencing software
Google Meet	videoconferencing software
Zoom	videoconferencing software
WebEx	videoconferencing software
Donut	social networking software
Nextdoor	social media
YouTube	video viewing & sharing
Cisco Link	remote connectivity software

Table 4.9

Assistive Technology Mentioned

Technology	Type
JAWS	screen reader software
NVDA	screen reader software
MS Narrator	screen reader software
MS Read Aloud	screen reader software
Read & Write	screen reader software
iOS VoiceOver	screen reader software
Google TalkBack	screen reader software
Fusion	screen reader + magnifier software
MS Immersive Reader	reading assistance software
ZoomText	magnifier software
iOS Magnifier	magnifier software
MS Magnifier	magnifier software
iOS Siri	input-output software
iOS Dictation	input software
iOS Braille keyboard	input software
Bluetooth keyboard	input device
Braille display	output device
BrailleSense notetaker	input-output device
Spectacle Microscope	magnifier device
Color inversion	device setting
Large font	device setting
AIRA	visual interpreter service
MS Seeing AI	visual interpreting app

As I connected with study participants, I began the iterative process of coding the interview transcripts and analyzing the resulting data, employing constant comparison. Eventually, I began to categorize concepts using dimensional analysis, reworking the categories as new ideas emerged.

Dimensional Analysis Matrix

In grounded theory, participants are sought with differing experiences of the phenomenon, to explore multiple dimensions of the social processes being studied (Starks & Trinidad, 2017). This study integrated dimensional analysis (Schatzman, 1991), seeking to learn all that was involved in the complexity of the social phenomenon, rather than searching for a single social process (Morse et al., 2009).

Dimensional analysis addressed the complexity of the phenomenon by noting its attributes such as context, conditions, processes, and outcomes. Dimensionality provided a framework to help move the analysis from description and toward explanation (Kools et al., 1996).

Fundamental to grounded theory is constant comparison, with concurrent data collection and analysis (Charmaz, 2014). Following each participant interview, I coded each transcript line-by-line, highlighting phrases or segments that represented concepts and assigning them short codes, naming them while staying as close to the participants' own words as made sense. Over time, through analyzing, sorting, and combining codes, I was regularly working with a list of more than 3,000 unique codes. These were synthesized and organized into categories that linked and integrated the concepts (Birks & Mills, 2015). As categories began to emerge, they became more salient to subsequent interviews, where the concepts might be further explored. At 18 interviews, I believed I had reached saturation, the point at which I determined that I was not discovering any new insights.

Categories were further analyzed to shape a process map, represented in Table 4.10, Dimensions for B/VI Text-Based Workspace Relational Experiences. My investigation and interpretation revealed four primary dimensions: *Operating in Text-Based Workspace, Reworking the Weak Spots*, *Curating Professional Identity*, and *Weaving a Social Fabric.* I found Curating Professional Identity to be the core dimension, central to the other dimensions. For each of these dimensions, I further identified the properties (subdimensions) of context, condition, process, and outcome, defined as follows (Kools et al., 1996):

- Context: the scope of the dimension, what is relevant in the study
- Condition: property that determines the actions that follow
- Process: the action that occurs
- Outcome: the result of those actions

Each dimension and subdimension uses the gerund form. This is because grounded theory focuses on processes and actions.

Table 4.10

Dimensions for B/VI Text-Based Workspace Relational Experiences

Dimension	Context	Condition	Process	Outcome
Operating in Text-Based Workspaces	Intertwining Communications Structures Reflecting on Changes Wrought by the Pandemic	Organizing as a Remote or Hybrid Workplace Navigating an Organization's Communications Culture Availing of Accommodations, Accessibility, and Usability	Accessing the Medium for the Moment Introducing Informality	Producing Options and Opportunities Sparking Disorder
Reworking the Weak Spots	Encountering Systems Designed Without Consideration of B/VI Wanting to Press Pause	Having Options Staying Within Norms	Checking for What May Have Been Missed Switching Devices and Media Evaluating Consequences Advocating	Managing Workarounds Getting What One Needs Maintaining Quality Work and Relationships
Curating Professional Identity [CORE]	Experiencing Stereotypes Relating Through Time and Proximity	Being B/VI in a Sight-Centric World Working Remotely Versus Hybrid or In-Person	Proving Ability Preparing for Disclosure Reassuring Others	Acquiring Recognized Competence Building Trust
Weaving a Social Fabric	Participating in Visuals Side Talking	Finding Relatability Leveraging Mainstream and Assistive Technologies	Checking In Collaborating as Connection Sharing and Setting Boundaries	Developing Colleague Friend(s) Being Part of the Team Balancing Safety

Dimension	Context	Condition	Process	Outcome
			Disclosing B/VI Asking For and Accepting Help	Presenting the Whole Self (and Opening Up to Bias) Mitigating Barriers

Operating in Text-Based Workspaces

Who do I need? Click. What do I want? Enter, send. (Participant 01)

The first primary dimension, Operating in Text-Based Workspaces, represents the setting in which the interactions explored in this study took place. Pre-pandemic, text-based applications existed and were growing, beginning with email: “For the most part, I use email as we've been doing since the invention of email” (Participant 17). Then instant messaging was introduced, evolving into Teams and Slack applications.

> Everything’s primarily in chat [messaging] and email . . . More so in the chat, just the messaging back and forth. It’s rare that we get on calls, usually we can just handle stuff through chat [messaging]. (Participant 12)

Cell phones that were originally used for phone calling transformed into a platform for text messaging and apps. As Goode (2022) noted in WIRED magazine, phones have “morphed into a pocket computer that also happens to make phone calls” (p. 17). As a result of the COVID-19 pandemic and the rapid expansion of distributed work, text-based platforms proliferated: “We’re very text based. We’re always just sending things back and forth via some form of text” (Participant 04).

Trends point to the continued use and expansion of text as a significant means of communication. The generations moving into the workforce grew up with computers and smartphones, as described by Participant 10:

> A lot of people like myself, a young professional, texting has been a thing in my life. I got my first cell phone when I was 14, I’m [in my 30s] now. So texting is my preferred method of keeping in touch with really anyone. (Participant 10)

Study participants appreciated the simplicity and mobility of the text medium.

> Normally [text messages] are short. It's either checking in on somebody, asking them where they're at because they're not at a meeting, or if I'm running late to something, telling them that. Or it could just be a reminder of, I'm not in the office, but can you please do X, Y, and Z. (Participant 02)

Many described features of text-based workspaces that they particularly liked: "[In Teams] you can tell directly if the person is online. You have a way of video chatting with them, with seeing if they're on a call or meetings, so it's a more direct link to people virtually" (Participant 01). Also, "Slack I actually enjoy because I use Slack by posting in channels, posting links, being able to share documents, being able to share the links to websites, and . . . collaboration" (Participant 02). Those with additional disabilities found text particularly helpful in certain situations. For someone with a mobility impairment, it was easier to text than to move around the building to find a colleague. Similarly, the text medium allowed someone with a hearing impairment to better understand the communication, since rereading the message was easier than asking someone to repeat themself.

Table 4.11 details the categories associated with the dimension Operating in Text-Based Workspaces.

Table 4.11

Dimensions for B/VI Text-Based Workspace Relational Experiences – Operating in Text-Based Workspaces

Dimension	Context	Condition	Process	Outcome
Operating in Text-Based Workspaces	Intertwining Communications Structures	Organizing as a Remote or Hybrid Workplace	Accessing the Medium for the Moment	Producing Options and Opportunities
	Reflecting on Changes Wrought by the Pandemic	Navigating an Organization's Communications Culture	Introducing Informality	Sparking Disorder
		Availing of Accommodations, Accessibility, and Usability		

Context: Intertwining Communications Structures

The reality is that text-based workspaces rarely stand alone as the sole communication medium. Study participants regularly described interactions that flowed between varying combinations of in-person, audio-visual and text communications. These media together were the intertwining strands that developed into communications threads between individuals and groups: "[My supervisor and I communicate] about five days a week, just about every day . . . in-person, email, text, and sometimes over the phone conversations" (Participant 18).

There were clearly situations where people preferred to speak in-person, or alternatively, over a phone or teleconference call: "If the surroundings allow, I'm going to always talk on the phone or talk in person . . . I want to utilize more of those verbal cues by talking in person . . . Email would be a third choice" (Participant 08). These might include longer conversations or those where tone or spoken cues would be especially important, e.g., giving someone bad news.

> If you think of how much you can say in a phone call, how much you can say in a text, could you imagine trying to have this conversation back and forth over text? It would be almost impossible. You couldn't do it without it being a 10-day long thing. (Participant 07)

However, where in-person was not possible or necessary, text media were a critical strand that maintained connections. For example, "When I walk into work, I walk past her office and kind of check in . . . If I don't find myself being able to talk much, I'll say, 'I'll message you'" (Participant 01). Similarly,

> Shorter, we [my supervisor and I] text. We do text for shorter and email. Mostly text. If I need an answer really quickly and it's a short question, I text him and he's really quick to respond. Email takes a little longer because he gets a lot of them and phone, he doesn't always answer. (Participant 03)

So, while there were preferences, often situational, everyone in the study participated in all three strands of communication: in-person, audio-visual, and text. "Yeah, everything is free game with me. Verbal, written, text, it's all free game" (Participant 02).

Context: Reflecting on Changes Wrought by the Pandemic

Organizations and employees quickly adapted to new communication structures because they had no choice, as a result of suddenly closing offices in March 2020 due to the COVID-19 pandemic. Within only weeks, organizations had introduced new technologies:

> In April 2020, so we had probably been home not even a month, and we got an email from IT indicating that the department was going to be transitioning to utilize Microsoft Teams as the preferred communication platform . . . When the transition came of Microsoft Teams, all of it got pushed onto our devices from IT . . . I just think that it's interesting how we were able to adapt so well and transition because we had no choice. (Participant 13)

Or they started leveraging existing technologies to account for a new way of working, in particular, videoconferencing and messaging platforms.

> COVID . . . forced us to have to work remotely and in a collaborative way where we were using Teams. It was a good push for people to use it more, but we were also using it in a different way where it was more live, where we were actually working on things live, which we weren't doing before, it was very static. (Participant 02)

> It [Teams] was around before the pandemic, but it was not gaining lots of traction. It had its evangelist and its few who bought in heavy into it and then, the rest just were like, "Meh. I don't need this" or "Okay, you put me on this Teams, but what are we going to do with it?" Then, we figured out all the things you could do with it . . . So, you've got teams and channels inside Teams, and I don't know what we would do without that now. (Participant 07)

Missing in-person connections led to efforts to create alternative social spaces, including virtual events, messaging channels set up as internal social media, and regular videoconference check-ins in both small and large groups.

> Especially during COVID, we were sending pictures on [our messaging app] all the time. We saw everybody's everything. Look, this is my garden, this is the craft project I just did. This is my new house. It didn't matter. We were just so desperate to talk to each other. We were on that incessantly . . . For about a year and a half [when everyone was working from home] . . . We were all so lonely for that interaction that we were just sharing everything . . . It's mellowed out because people are not at home as much to do their projects and seeing their kids. (Participant 04)

> When we went virtual [during COVID], when everybody went remote, the . . . team created a chat [messaging channel] . . . Everybody knows each other in there, because it's just the people that were in that hallway . . . We're a very transparent and communicative team. We have [messaging] chats at work, but we also have each other's cell phone numbers, and we text each other . . . It's all really normal. (Participant 12)

Some of the study participants had only worked remotely for a few weeks, due to the nature of their jobs. Many worked mostly remotely for up to a year or more, and some were continuing to work remotely for the long term. Everyone was experiencing some version of remote or hybrid structure, because even for those working in-person some or all of the time, other colleagues were continuing with remote or hybrid work. Hence, it was rare that everyone on a team was in the office at the same time. As a result, "There hasn't really been many times where my whole team was in the [hybrid] office simultaneously. So, we still use the same virtual communication means that we had been using since 2020" (Participant 17). Similarly, "Most of our staff is in the office right now, but still largely communicating in the free open-end way that we've become accustomed to" (Participant 16).

Condition: Organizing as a Remote or Hybrid Workplace

Decisions on remote and hybrid work were being made as the study was progressing:

> We are looking at the future of our workplace, post-COVID. We filled out some paperwork in January, but the paperwork is just very confusing because they title it "reoccurring telework," then they title it "virtual," then they title it "remote." (Participant 13)

Many of the participants' organizations were in a hybrid configuration.

> Right now, we're on a rotating basis. So, there will be, let's see, maybe three or four people come in one week and then the other group will come in the next week, and it just rotates like that. So, there are, give or take, from my particular unit, four to five people coming into the office in a week, and everyone else is teleworking. (Participant 09)

Factors that influenced the structuring included the ability to house a full staff onsite, those hired with the agreement to be remote or hybrid, employees who now lived far from an office location, or organizations that were distributed across buildings, cities, states, or countries. As a result, many pandemic-inspired communication processes continued.

> I personally am working from home . . . The rest of my team is working in one office building, but in separate offices . . . The people that are in the building, they are actually just as isolated because they go into the building, they go into their office, they shut their door. So, they're just as isolated in the office as they were when they were at home. They just happen to be isolated all together . . . You could literally be emailing or texting the person sitting right next to you or you could be doing it to somebody on the other side of the planet. (Participant 04)

> We're using a hybrid model. Some people are in the office two days a week, some people one day a week, some people are still just going in periodically, some people going three days a week. It varies. [And] we have . . . different work sites. Sometimes it's easier to just drop a quick message to somebody, between locations and sometimes between areas of the same office. (Participant 17)

Condition: Navigating an Organization's Communications Culture

The communications culture described by study participants varied widely, based on factors such as size and structure, i.e., teams within teams or local versus distributed. A combination of messaging, texting, and emailing created a critical text-based strand for

connecting both personally and professionally. In videoconference meetings, this was often accomplished through the meeting chat.

> We use email incessantly. Actually, we use email more than we use phone calls. [And] our email system has a texting [messaging] feature, and we can do one-on-one text or we can do group texts with it, which gives us the ability to do brainstorming. (Participant 04)

> We have a [Teams] channel specifically for the overall organization, for 250 people. And then we have it just for the leadership team. There's a group specifically for the team that I oversee. And then there are specific one-on-one groups or business unit groups that we have. We also use it not just as a repository, but as a tracker as well, to track previous communications. (Participant 02)

Another factor in several cases was regulation, which might be in the form of unwritten rules or expectations:

> In all my meetings, I'm expected to have the video on. Even when we have our small group meetings, I'm expected to have my video on. In small group meetings, I am expected to be unmuted. In a large group meeting . . . basically, I think what I've come to find out is, when you enter the meeting and you are unmuted, you're expected to stay unmuted. If you join a meeting and you're muted, then don't unmute it. But the video is supposed to be on in all our meetings. (Participant 15)

> For those that are newer to the organization or to the method of communicating in that [sales system] format. One, you can get overwhelmed quick if you're not prepared for how to understand how to react or respond to the various messages. Two, some people can come across very, I don't want to say needy, but very demanding, if you do not know the context in why they're sending it. (Participant 08)

Or more strictly applied as company policy or subject to federal or state regulations:

> We'll have these things called [Q&A] . . . and it's all text based, so someone posts a question and then we'll answer it . . . And at the beginning of it they'll say, hey, please follow our privacy policies and our best practices, and shy away from using any profane language. They just basically have a statement at the beginning that just says, hey, behave, or we'll kick you out. (Participant 12)

> We constantly have to remind our newer people, our younger people, that we are subject to some pretty stringent public records laws. I always tell people don't put anything in an email, don't put anything in a file, that you're not willing to read back in a deposition . . . I could regale you with all kinds of horror stories of inappropriate things I've seen entered in case files and entered in our office computer system, but you try to catch those as you can and correct them. (Participant 06)

Condition: Availing of Accommodations, Accessibility, and Usability

An organization's culture was reflected in their approach to providing accommodations for PWD, as described by Participant 02:

> That's been an eye opener, just because of the experience that I had at my last employer, of good companies to work for that really value diversity, and diversity beyond gender, sexuality, race. Because a lot of people, as much as they talk about diversity, it's very narrow. And I always say that disability is the D that's missing from diversity . . . You say that you're diverse. You want to hire diverse employees, but you're unable to support them . . . A lot of organizations are just not aware of accommodations and the need and the advantage of offering accommodations like that. (Participant 02)

Workplace accommodations are essentially technologies and techniques that facilitate the participation and inclusion of employees with disabilities, both physically and socially (Moon & Baker, 2010). Participants described accommodations misses, for example,

> Everything is so bureaucratic and so streamlined. We don't have the most recent version of JAWS and they don't update it very frequently, so sometimes there's problems with accessibility or the version of JAWS we have is behind and it's not working well with whatever software is on the computer necessarily . . . Sometimes we'll call IT and there's really only one person there that I know that really knows JAWS. Sometimes he's able to come and fix things or give us an update every few years. (Participant 18)

Organizations directly affect B/VI employees' productivity and inclusion through the accessibility and usability of their chosen software and workplace practices. Accessibility addresses discriminatory practices, and means that PWD can equally perceive, understand, navigate, and interact with the technology. Usability means that technology's design facilitates a user experience for everyone that is effective, efficient, and satisfying (W3C, 2016). Unfortunately, several of the individuals I spoke to encountered accessibility problems during their job search. In some instances, it was difficult to complete online applications, and in at least two cases, individuals believed they were not hired because the software required to perform the job was not accessible or the employer was not sure if it was or not. On the job, difficulties with accessibility or usability determined how people preferred to interact with their technology.

> [On my iPhone] I double click or triple click and I get VoiceOver . . . VoiceOver, but I do not use zoom. I don't know how to use it. Once I zoom, I can't seem to unzoom and I get lost . . . Screen's not big enough for me to zoom. (Participant 02)

> Some things work better with VoiceOver on the Teams mobile apps, some things work better on the computer with JAWS, whereas email is pretty equal. Everything works on all the apps. I just prefer it. It's so much easier to navigate . . . For one thing, I'm not having to go through and find the right team, then find the right channel and find the right, whatever. Just open up Outlook, a couple keystrokes, go. Much faster, much simpler. (Participant 07)

Other areas discussed by participants included gaps in providing technology support specific to B/VI, including support for assistive technologies, providing advance meeting materials in accessible formats, and regularly describing visuals such as graphics, setting, and what is taking place. A recent trend in some organizations has been for speakers to provide visual descriptions of themselves:

> [Company] has been doing a lot of announcements at the beginning too for blind people. You basically say, my name's [Name]. I'm a [age, race, gender]. I have brown hair. I'm wearing a blue shirt. You'll open the call like that when you first start speaking, so that people that are blind can get a visual description. It doesn't happen often, so a lot of people are still getting used to it. (Participant 12)

It was encouraging to hear the positive experiences participants had within their organizations:

> I was pleasantly surprised to find out how forward-thinking and how onboard these folks were when I started because I didn't know anything about the institution really when I started. But it's really part of their culture to try to be accessible and inclusive. They've always tried to even just informally, sometimes somebody will reach out to me and be like, "Hey, I'm sorry. We rushed out this flyer," and be like, "Can you please make sure that it's accessible? And if we need to fix anything, let's fix it." (Participant 16)

And some individuals described efforts and awareness of best practices by teams and the individuals on those teams:

> The person who is, I think he might be the chairman of this board that I'm on, he is very, very good about follow up related to accessibility issues. He will send out to the group all the links that got put in the chat. His emails will consist of a Zoom invite for the next meeting, an attached file that has the agenda. Then in that agenda, another link to the Zoom, just making it as easy as possible to find the Zoom links. (Participant 05)

> For the holiday party, it was really nice because the lady, [Name], she explained each picture as she was going through the PowerPoint. She explained each picture. She was

> like, “Oh, this is a picture of Such and Such’s table setting.” She did explain each picture, which was nice. (Participant 13)

So, accommodations, accessibility, and usability within organizations was a mixed bag. The people who worked closely with B/VI colleagues gained an awareness about practices that would facilitate inclusion. However, in most organizations, these best practices were not the norm nor the default, so had to be requested or advocated for.

Process: Accessing the Medium for the Moment

Individuals were continuously assessing, consciously or unconsciously, the communication medium to employ in the moment. Deliberations included assessment of the situation (who, what, where), rapport with the recipient, and the preferred media of both sender and receiver. An example of assessing the situation:

> I think a lot of times it depends on, one, the setting. As we know, sending a text message in a quiet setting, I can do that pretty inconspicuously as opposed to picking up a phone and saying, “Yes, I can bring that report over in 20 minutes.” Or, “Yes, I’ll pick up the kids after work today.” From just a simple standpoint of surrounding privacy. Also, if I don’t want the person next to me hearing what my message is as I’m voicing [dictating] it or as I’m calling it, talking to someone, I can send a text message. (Participant 08)

An example of assessing rapport:

> We can always tend to judge at least on the most recent experience with that person and overall experience with that person. Depending on your rapport with that person and what you’re trying to get across, do you want to do the banter or do you not want to try and do the banter . . . It’s basically gauging the relationship with that person at that time . . . You look for cues, you just kind of gauge the environment, the past, present, and future, whether it be five minutes, five hours or—. (Participant 01)

And when assessing preferred medium:

> But really, it’s time, place, and the audience. And a lot of times it’s just knowing who the audience is. I know that person A, they like to be communicated by text. And so I’m going to honor that, respect that, I’m going to talk to them via text. Person B, they’re okay with talking on the phone, so I’m going to talk on the phone with them. And person C, they don’t care. So just make sure they get the information one way or another and it really doesn’t matter. (Participant 08)

Considerations might be practical, such as “If I have a quick question for a coworker, that’s another good way to get an answer is with the Teams chat without a call. If it’s a longer thing, I will call on Teams” (Participant 03). They may also be influenced by the intent: “For some reason, the email to me is not very . . . that’s not where the friendly things happen, at least for things at work” (Participant 16).

People referred to a process of “mirroring” the messages of those they were communicating with.

> Mostly [in emails to vendors], it’s going to be . . . grammar, punctuation, if they’re using emojis at all, how frequently? Are they putting jokes into their emails? The frequency with which they communicate, things like that. (Participant 04)

In some instances, the medium was actively negotiated between the sender and receiver, perhaps as an accommodation request.

> I’m like, “Look, I know that this may be your preferred way, I’d like to continue the conversation, but to make it easier on me and minimize reading, I’ve been reading all day, can we please get on a call?” I’ll be very frank and to the point with them that, “Look, this is taxing on me, and I’d appreciate it, it would be a personal accommodation to me for you to get on a call or do this on voice, versus going back and forth.” (Participant 02)

Further, agreeing on communications protocols in advance could lead to more efficiency:

> I have had people ask me, “Which is your preferred method to communicate?” and I would tell them, the more complicated the message, the longer the message, the more email is the way to go. If you’re going to send a file, attach it to an email. Don’t put it in the Teams chat . . . It’s a lot simpler to open an attachment. I’m all about fewer keystrokes and less time. (Participant 07)

Process: Introducing Informality

Traditional email was typically used for formal text-based communications, but otherwise, most text-based communication tended toward informal, including shorthand phrases rather than full sentences, little formatting, and generally no need for punctuation.

> Conversations got a little bit less formal, which I’m not too thrilled about because it’s more . . . incomplete sentences. I’m going to show my age now. It’s kind of when the kids are texting, and you’re seeing these short-cutty things and it’s kind of “What are you

> writing?" Or the typos that autocorrect does, or I don't know if it's just their spelling or autocorrect is just not doing it, where it's kind of, "Huh, what are you talking about?" Or incomplete thoughts, where it's, now we're in the middle of a discussion, you're putting an incomplete thought in there, and I'm just, "Are we still talking about the same thing?" (Participant 02)

> For a cover letter, formatting is really important. For reports formatting is important. I think for just a text message, I wouldn't say formatting is important, but I would say good typing is important . . . There's a difference to me between an email and a text. I don't write OMW or BRB in an email. I would write, "Hey, I'm on my way," or "I'll be right back." I just feel like you're more wordy in an email, where texting it's more like abbreviations are okay or more emojis. (Participant 03)

Informality in text often involved joking, sarcasm, and playfulness. For example, "The one [texting] group is . . . a [sports league] group . . . That's five people . . . That is 100% informal. I mean there may be some work that comes into it" (Participant 07). Or more commonly, something like,

> I've got the phone numbers of some of my work people. We'll text back and forth and it's not always work-related. You know, there is some jocularity that goes on there, "Where the hell are you? I've been looking for you." (Participant 06)

Outcome: Producing Options and Opportunities

Text-based communications platforms facilitated remote work and the flexibility of remote work that provided advantages such as spending more time with family, logging in from a vacation, and working more flexible hours.

> I think it's really helpful from so many angles keeping things text-based . . . when this could have been an email or a Teams message and not dragging somebody into a meeting or to a video call or whatever. I think it's helpful especially in this virtual environment, for example, right now, I'm at my kitchen table not because it's where I work but because I've been traveling . . . and my office area is disastrous right now. And I don't have to be on camera. (Participant 16)

Networking commonly occurred through text-based groups such as listservs and affinity groups on Discord and Facebook. Several participants noted that they had found their current job or had assisted someone professionally in these venues, as well as through professional

organizations and committees that used messaging platforms like Slack and videoconference meeting chat.

> We're in a technological revolution. It's great that we have different ways that we can communicate with people. We have options . . . When you communicate via email or I would send them a [messaging] chat or whatever, I wasn't thinking about anything other than this person would be able to point me in the right direction because they know whatever it is that I'm looking for. So, I just think that different communication mediums make it possible for so many different types of people that you would've never thought would communicate, would now communicate and have a connection in some shape or form. (Participant 13)

> We'd stayed connected mainly through Facebook, just in terms of exchanging comments on statuses or really just polite but friendly communication and not really thinking anything of, at least on my end, . . . "Oh, this is a person that's going to be really important in my career one day down the line." Just, "Oh, this is a nice lady. She's a little bit older than I am, she's really interesting and she's a nice person . . . but she's posting interesting things so I might as well tell her that I think they're interesting." (Participant 10)

Outcome: Sparking Disorder

Text-based media had some drawbacks. Many participants reported that tone was missing in text-based communication, so delivery did not always translate well.

> I'm monitoring how people respond, because this is the issue with written, you don't know, you're bringing a lot to the table when you're reading something written. Because you're bringing in your perspective or feeling about the person. Everything is neutral for the most part. The way you see things is what makes it a negative or a positive. And if there's some sort of animosity or some misunderstanding, it can go the wrong way. So, if I'm getting that sense of something's not happening, even in email, I'll do the smiley face, even if it's just the colon and the open paren, just to ease it, this is supposed to be a friendly message. (Participant 02)

To indicate intent or tone, individuals frequently received or sent messages that included emojis, or similar clues like an LOL (laughing out loud). "Tone and delivery, that doesn't always translate well through text, unless you throw a bunch of emojis in there . . . Tone gets lost over text, I think, and you have to go the extra mile to convey that" (Participant 16). However, this was not always successful, particularly when interpreting the most visual elements, like GIFs and memes.

> Sometimes I do struggle in those sorts of settings. What does that really mean? Someone has a winky face. Is that a good thing? Is that a bad thing? I really don't know. So, sometimes I just kind of let it go, or I'll ask my wife later, or I'll ask a colleague, "What's that mean?" (Participant 08)

Misunderstandings could easily happen in the short blasts of text-based communication.

> When I would ask [the vendor] these questions, they'd be like, "Oh, well, that's not really what we meant." Well, then why do you write it? And they go, "Oh, well, you know what we mean." No, I don't. I know what you wrote. So, their communication skills were a good indicator of their abilities. They could not do the job they were hired to do, and they could not communicate effectively. (Participant 04)

The informality and relative anonymity of text sometimes led to unprofessional or negative messages, and Participant 01 noted that he would regularly ask himself, "Would you say this to that person in person?" For example,

> And then one email she sent was super intense and I didn't know how to respond. And so I asked my boss, I'm, "Hey, can you read this and help me figure out exactly how to respond. I'm not totally sure what she wants or what is wrong with—" Something had happened and she just kind of went crazy on it and I didn't think it was that big a deal. (Participant 03)

> There's another guy . . . that was saying, "This is bullshit," which is really hilarious, because then he signed it "Respectfully." He writes his nasty vitriolic, "This is a bunch of bullshit." Then he signs it, "Respectfully." Actually, that wasn't respectful at all. (Participant 05)

In turn, the individual would have the challenge of remaining professional in their own response.

> Basically, it was the same song and dance. She would just be very accusatory [over email]. I would just try to provide an explanation and try to say, "Let's deal with this professionally and not be quick to blame." That's the interesting thing about text, right? There's no tone, you just have words to go by . . . When I'm responding to those types of emails, I have to think long and hard and proofread and read it over and over again before I send it, so I don't come off as judgmental or accusatory myself or snippy. (Participant 18)

Reworking the Weak Spots

> *Not having visual cues can make communication tough.* (Participant 08)

The second primary dimension is Reworking the Weak Spots. This dimension addresses how hurdles in text-based communications resulted in potential snags to the full participation of

a B/VI employee in the workplace, and individuals' strategies for mending them. Barriers included accessibility and usability issues with the communications software as well as processes and expectations. The most frequently mentioned challenge was following and participating in the chat feature of videoconference applications. This turned out to be a problem for receiving information, but also left some out of the social, relational aspects of the feature.

> The literal chats, visiting with each other, obviously I don't need to know that. Although socially, when you miss all that, it's a bummer, but you cannot do chats on Zoom if you're using JAWS. At least, my brain can't do it. (Participant 05)

> One of my colleagues did send me a message when we had an all-staff meeting, . . . by email just saying, "Good to see you." But I'll be honest with you, one of my shortfalls and there's a couple of times in the meetings where my supervisor sent me an email, or the manager sent me an email, and I didn't see it till later on. Because I turn JAWS off when we are in a big meeting. Because I don't want this distraction. (Participant 15)

Both blind and low vision participants reported problems with the chat feature. Those using a screen reader during the meeting had trouble with the verbosity when the screen reader spoke over the meeting content, while those not using a screen reader missed chat notifications or other communications. Relying on notifications from a multitude of text-based platforms could be a challenge:

> If I miss a notification on Teams, then I got to hope I can find it on the phone or have somebody ask me like, "Oh, did you get my Teams message?" "Well, no. Well, I probably did but I didn't get the notification, so I missed it." In the first three to six months? Probably [missed a Teams notification] a few times a week at least. Now, I would say once or twice every two or three weeks. (Participant 07)

Other challenges included visual elements like screensharing, retrieving documents from online storage drives, and reading and/or creating highly formatted documents.

> Aesthetically, [my email] is probably a nightmare . . . I make sure the tone is professional and everything. In terms of professional . . . spelling and grammar are correct. But I imagine that visually, sometimes things probably get messed up with Outlook, . . . mistakes happen. I might end up hitting the tab key and not catch it, for example. (Participant 16)

Interestingly, the most recent email I had sent to Participant 16 had included a copy and paste of information that mistakenly resulted in some black text interspersed with some random purple text. When I mentioned it, he replied, “Yeah, see, I wouldn’t have even caught that.” (Participant 16)

Table 4.12 details the categories associated with the dimension Reworking the Weak Spots.

Table 4.12

Dimensions for B/VI Text-Based Workspace Relational Experiences – Reworking the Weak Spots

Dimension	Context	Condition	Process	Outcome
Reworking the Weak Spots	Encountering Systems Designed Without Consideration of B/VI Wanting to Press Pause	Having Options Staying Within Norms	Checking for What May Have Been Missed Switching Devices and Media Evaluating Consequences Advocating	Managing Workarounds Getting What One Needs Maintaining Quality Work and Relationships

Context: Encountering Systems Designed Without Consideration of B/VI

Videoconference applications like Zoom, Microsoft Teams, and Google Meet proliferated during pandemic remote work. In response, software developers expanded features such as chat and polling. Organizations and teams adopted processes for remote meetings, like requiring or expecting participants to be on-camera. Chat was used to post meeting materials, manage Q&A, cheer group members, and vote. These processes did not always consider how usable they were for B/VI participants. Features to address accessibility were built out in the software, but sometimes with unintended consequences, such as the extreme verbosity of announcing when people entered or left a meeting: “I don’t [use Zoom chat] because I am using

JAWS. And JAWS, when someone puts something in the chat, it obliterates all sound of anything else" (Participant 05).

Relying on screensharing during videoconference meetings was another barrier to participation unless people had received materials to review in advance. "They did a screenshare of pictures. And so, I didn't know what it was until people started commenting in the chat" (Participant 13).

> It's hard to give real-time feedback on something that's, "Hey, see where my mouse is. I'm going to click here and look at cell C6." Sometimes it's overwhelming, very, very, and it's a lot of information coming quick. Unless I was the creator of the document and I know exactly what's going on. Sometimes I have to provide my feedback in an alternative method [after the meeting] through direct questions and things like that if it's a screen share type of format. (Participant 08)

Further, the advanced materials themselves were not always helpful.

> In Europe, they're trying to pass some laws about requiring accessible documentation . . . It would pivot the way that organizations think. Not everybody always makes sure their PowerPoint is accessible and people don't do that by default, they just create stuff and never think about it. (Participant 12)

As a result, B/VI individuals missed out on opportunities to participate in meetings, by speaking out or through the public chat. They also may have been unable to connect with people in the private direct chat.

> I am disappointed because there's times where people have direct messaged me [in Zoom chat] and I don't see it or I don't know. And people then follow up with me and are like, "Well, you didn't respond." And I was like, "I didn't see it." And then I think about how many other people . . . have done that, but never followed up with me to ask me why I never responded. So, I find that a miss. I hope that Zoom does something soon about that. (Participant 02)

The people who were most skilled with their technology seemed to be the most effective and satisfied with their experiences in text-based workspaces. As new technologies and features were adopted at a rapid pace, training opportunities may not have kept up. Individuals often relied on their own research to learn how to use software, and when they received formal

training through their employer, IT or tech support were not familiar with how instructions might differ for someone using assistive technology.

> I sat down on a Microsoft Teams video call with one of the IT technicians. And he was giving me some pointers on how to use it, but he's not a blind person. So, I just played around with it a lot. I looked online, what things blind people were posting about Microsoft Teams. And that's how, just using it, just using it all the time and trial and error. (Participant 13)

In fact, tech support, particularly for remote-only employees, was a challenge that some organizations were not adequately prepared for.

> In the beginning, when I first started, I had to pretty much set up my computer on my own with my screen reader. That was a little difficult, I had to call tech support and let them know the situation that I'm just being onboarded. And I had to use Narrator to download NVDA, because I use NVDA as my premier screen reader. But no, when I first powered on my computer, all I really had was Narrator. So, I had to try to use that to do what I could do, and it was a little difficult. It was stressful those first couple days of getting everything set up. (Participant 14)

Context: Wanting to Press Pause

Text-based communications have been fully integrated into the ebb and flow of work and interactions may move at a fast pace. Participants described difficulties keeping up with the volume and speed of communications in texting, messaging, and email exchanges, but especially in meeting chats. The meeting chat was described as "moving fast," "getting a little crazy," and "getting busy." Relying on screen magnification or screen reader to track the meeting chat could become overwhelming while also trying to focus on what the meeting speakers were saying.

> Challenges with [chat in a large meeting], I'm a JAWS user, I'm blind. It's fairly accessible. Where I struggle is not keeping up with others who are chatting or putting questions in the comment box or answers. Sometimes they go so fast and I'm not keeping up as quick as they're coming in, or I'm getting lost. I'm getting lost in the weeds of answering a subquestion compared to the actual question. (Participant 08)

> We use Zoom for our weekly meetings, but we also use Teams. Sometimes people will put chat into Zoom and then sometimes people will put chat in Teams. So, I switch back and forth. It can get a little crazy because people don't always remember that the Zoom chat only really lasts until the meeting's over, whereas the Teams chat, you can go back

> and it's more permanent. So, they'll say, oh, I put it in the Zoom, oh wait, let me put it in the Teams too . . . So, that can be a little bit confusing to keep up with it. (Participant 14)

Condition: Having Options

Individuals appreciated having multiple devices and applications to work with, and most used both a computer and a smartphone to accomplish their work. Some described using their phone as their computer: "I basically use my phone as my computer. I just hook up a Bluetooth keyboard and use VoiceOver . . . I don't need the larger screen" (Participant 01) and "I use my phone with a keyboard for editing" (Participant 03). In addition, flexibility was generally acceptable in choice of communications medium, so one could opt to make a phone call or send an email or a text message.

> I'm able to utilize a combination of the iPhone for text messaging, for social media. I do it also on my laptop . . . So just an array of things . . . I have a work iPad and I have a work phone, so it just makes it easier to be able to have different devices, to be able to accomplish different tasks . . . It just makes life easier when you have an array of options . . . I am just in awe, how we've been able to expand the way that we communicate, because some communication mediums feel more comfortable to people than others. (Participant 13)

Condition: Staying Within Norms

Communications options typically conformed to organizational or team norms, so one would consider the preferred or required communication medium as well as the message. Considerations might also include professional etiquette or following the unspoken rules, like "I try to be respectful of people's time. If I know somebody is extremely busy, I'm not going to start doing dumb Teams chats with them" (Participant 03). This was particularly salient when employees were new to the team or organization, and participants described their own experiences as new employees or awareness of the challenges for others joining the team.

> I think, when [new employees] start to see how other people [communicate], they kind of revert to the mean. They may be extreme one way or the other, but over time, they see, one, how their messages are being responded to in the timeliness of their responses and also how others are asking the questions . . . and over time, it reverts to the mean. (Participant 08)

Participants had a variety of attitudes about cameras being on or off during meetings, often driven by norms, if not rules. Most appreciated having the option, but also made decisions based on conforming to group expectations.

> No one has really insisted that I have [my camera] on, which has been great . . . I'm the only blind employee, at least within my unit anyhow. And I think for most people, they just have it on out of comfort and there's just the unspoken expectation that they'll have [it on]. (Participant 16)

> [Camera on] is always optional. Usually if I see people on, I'll go on . . . And if you only see one person on, another common respect thing is, if you're not presenting, go off because it gets distracting to the other people unless everybody's on. (Participant 12)

Norms particularly affected personal communications. Opportunities for informal interactions might be limited, for instance, small talk might happen only briefly at the end of a videoconference meeting. In these situations, there was a lack of connection and comradery with coworkers, or colleagues took their informal chat offline as side talk in the form of direct chat or texting.

> I think everyone— it wasn't a fear, a tone of fear, like, oh, if I say something, even just greeting someone in the morning, like, "hi everyone," "good morning," "hope you have a great day." It wasn't like that was looked down upon or anything. So, I think people were free in some way, but they had to be very subdued in how much they spoke outside of work-related questions, because that was what that [messaging system] was developed for . . . I don't remember exactly how it started, but someone initiated and just started the greeting in the morning or the greeting at the end of the day . . . Other people would join in . . . I think it started by just someone saying "good morning" in the morning. (Participant 09)

In a highly regulated environment where their conversations would be captured or documented, coworker friends chose to interact using their personal devices or apps:

> If I don't want it to be known in public information, then the best thing is to call. Or call [or text] them from a personal phone or send them an email from my personal email to their personal email. (Participant 15)

Condition: Checking for What May Have Been Missed

At times, participants did not know what they had missed.

> Let me just read this thing—I think there's an extra channel that seems to be personal. That's kind of embarrassing, because I haven't really been reading this channel. All these messages, oh, I guess I should read this channel. Anyway, there seems to be an extra goofy, not work-related channel in here. (Participant 05)

However, most recognized certain areas where they were likely to have missed important information, professionally or personally, and developed strategies for checking. For instance, Teams meeting chats are automatically saved, so a person would return to the thread after the meeting to review the exchange.

> I'm a little more diligent looking at [Teams app messages]. I forced myself to look at it, even though I would rather send email. I know situations when I need to use it, so that's just my excuse for looking at some other things and seeing if I've possibly missed something else. (Participant 07)

> It's hard to listen to them [meeting participants] talk and listen to my screen reader doing a lot of Teams at the same time. Usually, I would just go back to the chat after the meeting's over, make sure I didn't miss anything important. Take a couple notes if I need to. (Participant 14)

Similarly, they may have followed up with a colleague to ask what they had missed, either in the chat or in a visual element like a screen share. This applied to personal, relational information as well: "I do ask trusted people around me, 'Hey, if there's something big, keep me in the loop'" (Participant 08).

Process: Switching Devices and Media

Individuals used multiple mainstream and assistive technologies to communicate in the workplace.

> It's easier to follow the chat on the computer . . . When I'm typing on the phone and listening, it's tough, and you can't dictate so much. Really, you can't dictate at all. And I can't connect my braille display to my Android phone. So, I have more trouble with the chat on that. But on my computer, I have no trouble following it, I can enjoy it. (Participant 03)

The choice was driven by a combination of preferred medium for sender and receiver, the task to be accomplished, whether one was sitting at a desk or on the move, the content, formality,

and desired privacy of the communication, and the accessibility or usability of the device and/or medium.

People often chose to use a smartphone app because they found it easiest to navigate the mobile version; however, if they expected to be typing at the same time—in chat or taking notes—they were more likely to choose the computer desktop version.

> I find specifically for me, a lot of times I will use Zoom or Teams on my phone just because I like the app layout better than using it on the computer . . . if I know that it's a situation where I might need to be chatting more, if that's a conference presentation where I might have to answer questions, if that's a Teams meeting for this committee where I'm going to be multitasking, I'll tend to use the computer program because it's a lot easier to type using my keyboard, my computer versus having to pick and peck on the inherent keyboard in the iPhone. (Participant 10)

> For me to type out a text message on an iPhone, I am not the fastest of typer-outers, if that's a word, and so that's sometimes a hindrance too to me. In utilizing [email] on a computer, on a standard keyboard, hey, I can fly right through it, type out whatever's needed. On a phone I'm not nearly as fast, typing that out. So that plays into it as well from a convenience and a patience standpoint. (Participant 08)

Participants described both consecutive and concurrent switching.

> I might be using my computer to read the [work document] and then maybe on my phone, instead of going between two browsing tabs, I might just use my phone to look up a certain term real quick if I need to . . . I do have a braille notetaker . . . and that actually has some internet capabilities too. That's an Android-based device and I can do Google searches on that too. (Participant 14)

Process: Evaluating Consequences

Participants reported risks when using text-based media, like "I've gotten myself in trouble on Teams, where if I have multiple threads going at the same time, that I've sent the message to the wrong person . . . It becomes very complex . . . to juggle that" (Participant 02). Other examples of mishaps included:

> God forbid I have the VoiceOver on, because this has happened as well, where I've had VoiceOver on, somebody sends me a message and the phone starts speaking in the middle of a meeting . . . Never a dull moment when you have a disability. (Participant 02)

> If [texting] on the phone where it's a voice activated [dictation], I really struggle with that. I know there's ways to go through, again, line by line, word by word, letter by letter, but

> sometimes I don't have the time nor the patience or the audience that really requires that detail. And I know there's auto corrects and things like that and everybody struggles with those sorts of things, but I know I've sent some pretty creative text messages in my time. (Participant 08)

They also considered the potential consequences, such as ignoring the meeting chat or a messaging thread.

> I've actually had to shut down the chat, like I have to cut it off. If someone chats something to me, I have to cut it off because I can't tell what else is going on in the meeting. In fact, it's quite problematic . . . people will put all kinds of very useful things into the chat. It'll be a website and it'll literally read every single letter. By the time [JAWS] gets to the end of the website, I'm like, well I have no idea what the heck was going on in the meeting when that person put the chat in. So, I hit a button on my keyboard which stops reading the chats as soon as someone puts something in the chat. (Participant 05)

> I just don't read all the threads. People know that if there's a group thing or if there's a side conversation and they see that [Participant 02] is quiet and has not responded, the likelihood is she doesn't see it. And so, they will reach out to me one on one and let me know, and I'm fine. And if they don't reach out and let me know, then I wasn't intended to be on there and you didn't need me, and it wasn't that important to me. (Participant 02)

If they turned off their screen reader, would they miss an important message from their supervisor or appear to be ignoring a coworker who was saying hello?

> During the meeting, especially if it's a big meeting, I honestly mostly turn my JAWS off and just focus on the meeting. Because in a large meeting, it announces somebody's coming in, somebody's going out or people's chat messages . . . To me, it distracts me from what the presentation is if my JAWS keeps speaking over it . . . One time by the manager and another time by the supervisor, [they sent a message] you need to turn your video on, or you needed to unmute, and I didn't see that until later on. (Participant 15)

Perhaps less obvious, but also important, did they miss opportunities to be heard if they did not actively participate in online discussions?

> I've actually been abstaining lately in these really big meetings because the voting [in Zoom chat] is not that earth shaking . . . and it's easier for me to just block it all out and wait till the vote is done which is not exactly what you want to have happen. (Participant 05)

Process: Advocating

Most participants advocated for themselves when they received inaccessible materials.

> When there's screen share and things like that come up, "Hey, let me share my PowerPoint presentation," or "Let me share this Excel spreadsheet with you," I usually always like to ask for those documents ahead of time so I can keep them on my own device and access them in the format that's most accessible to me, or analyze those after the meeting. (Participant 08)

> I'm used to going back and telling people, "Hey, I am visually impaired. Could you please send this material to me in an external format?" So, I'm pretty good at advocating for myself . . . When I was in college, I had to go all the time to the professors and ask them to send me the material in electronic format. (Participant 15)

However, this typically related to their decisions regarding if and when to disclose their B/VI.

> If this individual sent a screenshot of something and that's not necessarily always readable with JAWS, I would respond, would you mind, could you please send this in a different format so that I can read this and that I'm a screen reader user, I'm visually impaired, and that's where it would come up for me. (Participant 09)

When working with someone who was not aware of their B/VI, such as an outside customer or client, one might not immediately have requested a more accessible format and instead asked for assistance from a coworker. Then, once some level of trust and competence had been established with the person, they would speak up to request a visual description or a cleaner format and explain why.

> If I'm around people long enough, if I'm working with another team or something like that, . . . I'll tell people, "Hey, your PowerPoint sucks. It's not accessible, fix it. Here's how we fix it." and we'll work through it together. I won't boldly come out and tell them, "Hey, you're just insensitive." I'll show them. (Participant 12)

It appeared that advocating was more forthcoming in lower-stakes interactions, so one might not hesitate to ask for a copy of a presentation from a vendor but would be more hesitant to disclose to a high-value customer.

Outcome: Managing Workarounds

Individuals found a variety of ways to manage their access to information: "When I'm on the computer, [JAWS] tells me pretty quickly when somebody has chatted and what they've

said. And I think it's easier now that I can put JAWS in just one ear and Zoom in the other ear" (Participant 03). For instance, they teamed up with a sighted colleague:

> I held a workshop . . . [and] people were writing in the chat, but there was a moderator, a co-moderator that I was working with. He basically read, if the people didn't ask the questions themselves, he read the questions or comments in chat to me. (Participant 18)

They utilized deductive reasoning to guess at visual content by considering the comments and reactions of others.

> That's the way that for me has become very helpful [in figuring out screenshare pictures]. People immediately react. So even if in that moment, I'm like, "Oh, I don't even know what I'm looking at," it doesn't matter because in that moment someone's reacting to it. Someone's putting a heart or someone's saying, "Oh, I love that smile." People immediately react. (Participant 13)

They sometimes used their technology in unique ways to stay in the loop, such as learning advanced features of the software,

> With Teams, one helpful thing is, when you click on a chat, if you ask me a specific question and then it got buried by a bunch of other people's chats, I can find yours, and then I can right click on it and choose reply, and then it will bring your chat bubble and my response to the bottom and then paste it. And then it will notify you that I answered it in Teams. (Participant 12)

receiving visual cues from a coworker through a Bluetooth headset,

> Whereas two sighted individuals may be able to have a visual cue, a nod, or a kind of a finger-pointing or something like that, I'm just getting a verbal note via my earpiece through a phone text message that says that. (Participant 08)

or assigning unique notification sounds or songs to smartphone contacts.

> At least with text, I've got specific tones that I've picked for some people. Even my default is a long enough sound that if I'm unmuted, I'm going to catch it every time. It's not just a little bing, it's a song. When I hear that song, I know this is a text and this may or may not be somebody important, but I try to do that so that I have a better idea, the priority text you've got to answer. (Participant 07)

Outcome: Getting What One Needs

By navigating disclosure, finding workarounds, and advocating for their needs, study participants successfully found ways to perform their jobs and form engaging relationships.

> I use assisted technology and I did a demonstration [for colleagues] . . . They do have more general awareness, maybe how they describe things, etc. My boss tries to make sure that he explains things in a way that I can understand. Like if there's something he's showing that's visual on the screen. (Participant 14)

> One time he [supervisor] sent us something, I don't know, it was from HR. He forwarded it. But it was a picture that was scanned. Maybe a picture that had text, the screen reader JAWS or whatever it was, a PDF file or something, it wasn't really reading it properly. He typed it out in just plain format that we could read or decipher with JAWS. He's good at adapting. (Participant 18)

Text-based applications facilitated access for the most part: "Things being handled electronically ultimately give way to things being more accessible. At least they tend to trend that way" (Participant 16). At the same time, people made decisions about when to just let it go if they did not know the specifics of a colleague's vacation photo or found it onerous to respond to a Zoom poll question. This left space to focus on the most relevant and important information in a meeting or discussion thread.

Outcome: Maintaining Quality Work and Relationships

When vendors, customers, or coworkers were approached about the need for more accessible or usable materials, participants reported that the response was generally positive. People appreciated knowing how they could improve communications by providing description of photos or knowing that it was okay to send emojis. "I do have really good friends and really good colleagues that think about me, especially when it comes to the disability aspect of it" (Participant 02). Study participants described numerous examples of high-quality relationships with supervisors, coworkers, customers, and clients: "My job revolves around influencing people and convincing people to get things done. And the only way I can do that is by building relationships and getting to know them" (Participant 02). For example:

> I will routinely, I don't work with that gentleman anymore, or that customer that he works with, but he'll routinely, I would say at least every couple weeks, ping me with questions and say, "Hey, I'm trying to get this done, what do you think," or I'll get on calls with them and just touch base on stuff. I just help him out. (Participant 12)

Curating Professional Identity

The white cane is an extension of myself. However, it is not who I am. (Participant 13)

The third primary dimension is Curating Professional Identity. This dimension also serves as the core dimension, around which the other dimensions revolve. Curating Professional Identity influences the choice of communications medium, the effort taken to mend the weak spots, and decisions made daily in workplace social interactions.

Professional identity intersects individual, relational, collective, and group identity, with social identity as the bridge between personal identity and group identity (Booysen, 2018). Further, professional identity is essentially one's core personal identity adapting to the environment, continuously being co-constructed and re-negotiated by both internal and external forces. This process is particularly salient for individuals who are B/VI and may be considered different than the norm by people without disabilities. Participants in this study described ways that they navigated curation of their professional identity.

Getting to know someone, even a little bit, could have a positive effect at work. This might be the case with peers:

> We had the meeting with the person who was new to management, and it was like the meet and greet where he wanted to get to know all of us. And in that meeting, there was another person who I would say that when she came to me with questions, . . . she felt comfortable to come to me with questions maybe more than say someone else. (Participant 09)

It was also important with one's supervisor: "I actually requested that we [my supervisor and I] set up a biweekly meeting . . . It helped to develop the relationship . . . It was more just an understanding that I wanted to do well, to do better, by having those biweekly meetings" (Participant 09).

Further, individuals described ways that they extended recognition of their professional identity to a broader network, by sharing their stories and successes on social media: "I was interviewed by a couple of different people on podcasts. I think I might have shared a link to the

podcast, talking about my blindness and professional stuff" (Participant 05) and "Usually, when I have some kind of professional success, then I'll put that on both LinkedIn and Facebook and sometimes Twitter" (Participant 11).

> I've spent some time trying to update my [LinkedIn] profile so that the whole idea of branding yourself, trying to make it into a story . . . I use it just to provide a landing place for people if they want to know something a little bit about me . . . I always go back and say, how can I do this better? That's really showing how your interests and passions have developed, because I don't think of those things as necessarily stagnant . . . just showing how you've come from a certain point to where you are now. (Participant 09)

Clearly, B/VI was wound up in considerations about professional identity, and what one could and would choose to share or not.

> If we're going to talk about when people communicate with you, they are not doing it solely on blindness. They're doing it because you may have the knowledge. You're the subject matter expert. You have a great personality. Somebody told you that you should talk to this person because they knew what they're doing. It's an array of things . . . When you send an email, you do not know that I'm a JAWS user. You just don't know that. So, I just feel it's great because someone, the receiver is not like, "Oh, this is a blind person!" (Participant 13)

> If it [blindness] comes up in the natural course of the day, I will talk about it, but it's really something I speak about very minimally because I don't feel like it's that important to my identity, it's just, it's there and that's how it is . . . I sometimes feel like visual impairment, at least for me, my viewpoint on it is it's very much similar to a race. I'm Caucasian but I feel like if I was working with someone for a long period of time and we were just mainly talking through phone or through email or text or whatever and I was Black, I don't know that I would be like, "Just so you know, I'm Black," or "just so you know, I'm Jewish," or "just so you know, I'm 74." (Participant 10)

Some individuals, especially those who were younger or had lost their vision more recently, were still working out how best to present themselves as a B/VI professional.

> My job search process was its own adventure. I was a little over a year out of college, completely blind. I had a really good job, but I had a job that typically somebody doesn't get right out of college . . . So, I had a lot of experience and really good experience, but it was a matter of just trying to find the opportunity that would accept somebody with such a unique background. (Participant 14)

Table 4.13 details the categories associated with the dimension Curating Professional Identity.

Table 4.13

Dimensions for B/VI Text-Based Workspace Relational Experiences – Curating Professional Identity

Dimension	Context	Condition	Process	Outcome
Curating Professional Identity [CORE]	Experiencing Stereotypes Relating Through Time and Proximity	Being B/VI in a Sight-Centric World Working Remotely Versus Hybrid or In-Person	Proving Ability Preparing for Disclosure Reassuring Others	Acquiring Recognized Competence Building Trust

Context: Experiencing Stereotypes

Participants, to one degree or another, had experienced stereotypes, bias, and uncomfortable interactions related to their B/VI: “I know that [visual impairment] has deterred me from certain job opportunities because there is discrimination out there, regardless of whatever anyone wants to say” (Participant 02). The assumptions others make about B/VI negatively impacts opportunities to find good jobs but also manifests itself in the workplace: “Occasionally [when you disclose your B/VI] you’re going to get some like, ‘Oh, well, is there anybody else I can talk to instead?’ or, ‘Is there anybody else that can help me out instead?’” (Participant 08).

> When I used to be in the office or when I used to go to the cafeteria, and maybe somebody wanted to ask me my medical history, I would redirect it by changing the subject. I would get the vibe like, “Look, I don’t really want to talk about this.” I wouldn’t say that, I would just change subject. (Participant 13)

They also recognized that interacting with someone who is B/VI might be unfamiliar to others: “A lot of people don’t know much about blind people, so unless they have somebody in their life, or a lot of people just go by whatever they see on TV, which sometimes is accurate, sometimes it’s not” (Participant 14). Participants noted that people are less likely to have met someone BVI than people of other races or ethnicities, ages, etc. and so may be curious and/or uncomfortable with B/VI.

> I feel like it's [B/VI] very much just a part of my identity that is irrelevant because I feel that it's super irrelevant to me and I just do my life and that's fine. But occasionally, because I know it's different and interesting, everyone is going to have met someone who's Asian, or everyone's going to have met someone who's older than them or Jewish or even Muslim or something like that. (Participant 10)

> A lot of people, they've never interacted with anybody who's blind and so it gives them a chance to say, "Okay, hey . . . "Put stereotypes to the side and they're like, "Okay, this guy's just a normal guy, he likes to have a good time." (Participant 08)

Some supposed a responsibility to represent B/VI as an example to counter stereotypes.

> Maybe [using emojis] would show, somebody might say, "Oh, this blind person actually uses emojis. I'm a little surprised, but hey, he's just like us." I guess it's not a huge deal, but I guess it doesn't always hurt if it's something that everybody else is doing. (Participant 14)

And yet, it was aptly noted that if someone has met a B/VI person, they have met only one because every person is unique.

> Every blind person's different not everybody's the same. So, if you've met one blind person, you've really only met one. I know blind people who are a lot like me. I know some who have some vision. I know some who are employed, some who are not. There's blind people of all stripes just as any other people. We're a cross section, as they say. (Participant 14)

Context: Relating Through Time and Proximity

Teams, as small groups that worked together closely and frequently, tended to get to know one another well, and as a result, formed close bonds: "She was . . . working for me for eight years. In that time, we developed a very friendly relationship . . . I loved working with her" (Participant 06). These could be strictly professional, but teammates may also have become what they considered to be friends. "It could also be length of time that I've known these people over time. I don't know anybody that I've ever worked with that I didn't really get to know them on a personal level" (Participant 02).

> [My work mom] worked in our department . . . and we had extra offices and . . . she went down there and . . . she would always get there early and just gear up for the day, start coffee, watch movies at the beginning of the day, or just, she's a funny lady. And I went there early too. Eventually, we started talking and kind of went there. (Participant 01)

Situations that tended to form bonds also included connections made in college or colleagues met early in a career, for instance, “When we were in an internship together, we all shared one giant workroom where we did our notes, and so there was a lot of just natural camaraderie that came about from that” (Participant 05), and “I had just graduated from . . . school . . . I was working with a bunch of young [colleagues] at my same level of experience. We developed a camaraderie. It’s the kind of environment where when you work closely with people, you do develop camaraderie” (Participant 06).

Participants described bonds that developed and deepened over months or years of working together: “I would say probably [seven months] is about the time when we were starting to work together more, and that trust was starting to develop” (Participant 09). Most also felt that the richest relationships were supported by interacting day-to-day, especially in person. Coworkers’ skills, preferences, nuances, and commonalities became known through these ongoing interactions, particularly with those who worked in the next cubicle or that they regularly encountered in the breakroom.

> Those relationships have evolved in a multitude of ways, but mainly just through day-to-day interactions in the office . . . You work with people 40, 50 hours a week, they know you, they know where you’re soft at and sometimes they want to get a rile out of you a little bit, get a smile . . . colleagues, friends, people I’ve been working with for 10 years. (Participant 08)

> It’s easier when you’re in person. And you go to their cubicle, or you go with someone that knows them, usually . . . A lot of my coworkers have been there a long time, so they know the go-to people. When I needed something, my coworker that used to sit behind me, I call her my work mom because her and my mom are the same age. And . . . she calls me her work daughter. (Participant 13)

Instances of close proximity, such as spending time together on business travel and at conferences was mentioned for enriching relationships, especially when some element of informality was introduced.

> We had a lot in common and getting to spend time with her in person [at a conference] was a really good way of laying the framework of a relationship, because we spent more time in person. We had dinner together, we hung out for breakfast, we walked our dogs

> together. Having that longer term face-to-face connection, I really feel like helped us to stay friends more than just texting and Zoom chats. (Participant 10)

> That conference, they have a night where you get to go to the parks, and I hung out with him [the customer], and then my colleague, . . . us three went and rode rides, and ate some burgers, had a beer and just hung out at the park that evening. (Participant 12)

Participants who had worked in-person pre-pandemic already had these relationships. It was more challenging to develop them as a new person on a team or when adding a new member to one's team when working remotely. Relationships were still being built but tended to require more time and intention.

> There's people I've been working with out in the community that I've been working with for 15 months that I've never even seen before, I've never been in the same room. So, our conversations are a bit more focused on the [work]. And in that, you get to be curious about people that you are sharing in the work with. So, you do talk about other stuff, but it's certainly not the same as the people that I'm seeing every day around the water cooler and while I'm making copies and who talk about their kids and their lives and what they like to do for fun simultaneously as I'm doing it. (Participant 10)

> [Getting to know someone] it's harder obviously to do it, just via email. Because now you have to introduce yourself like, "Hi, my name is . . . and I do this. And such and such told me . . . "But you're doing it through an email. It's just a tad bit harder. Not impossible, but a little harder. (Participant 13)

Condition: Being B/VI in a Sight-Centric World

The majority of participants were the only B/VI employee in their team or unit. Everyone worked with others, internally or externally, that did not know about their B/VI. Even in-person or on videoconference, unless there were specific indications of one's B/VI, people assumed the person was not B/VI, even when told otherwise.

> He's like, "A cane?" And I'm like, "Yeah I use one of those." And he is like, "Do you have difficulty walking?" He didn't realize . . . And I was like, "Oh yeah, [Name], I happen to be a blind person." He was like, "No." And I'm like, "Yeah, yeah." He's like, "No." And I'm like, "Yeah." I'm like, "Here, let me show you." So, I went and got my cane. (Participant 13)

Clues to B/VI could be physical appearance, but more typically were the presence of a cane or guide dog or hearing a screen reader in the background.

> The fact that I'm legally blind, if anyone is paying any degree of attention, they'll figure it out. Although, it always amuses me that people sometimes don't figure that out . . . I don't use a dog. I don't use a cane. There have been employees that just didn't pick up on it . . . I've got a great story where I was at a bar with someone, I was chatting up a girl and she asked me what kind of car I drove. She had no idea. (Participant 06)

People regularly encountered undescribed graphics or screenshares, instructions in mouse-clicks, or the expectation that cameras would be turned on in videoconference meetings.

> In today's communication society, we're so used to, I'm just going to take a screenshot and send it over to you. Screenshot, send it over to you. Take a picture of it, I'll send it right over to you. Whereas a picture is not always accessible, especially if we're talking about a concept. (Participant 08)

> Sometimes [in Zoom chat] when people just put a bunch of emojis as reactions, or applause, that kind of irritates me. If it's too many of them. It's like, "Okay. That's irritating. You're interrupting my flow." (Participant 03)

Condition: Working Remotely versus Hybrid or In-Person

Hybrid work situations were common during the study period. Arrangements varied widely, with some participants going to the office a few days per week or per month and others going to the office only for specific reasons like a holiday party or all-staff meeting, or to pick up technology or work with tech support. Most individuals liked teleworking, at least part of the time.

> There was a period where I had hybrid work, where I was home for two days a week, but that was short lived . . . I love being remote when I have that opportunity. I can listen to music . . . I don't want to worry about being disturbed by anything else except the occasional choir of leaf blowers. (Participant 01)

> I'm in [the office] rarely or almost never. The paratransit system here is an absolute disaster. It's horrible. You take the worst one you've ever seen and then just make it 50% worse. Driver shortage, competence shortage, . . . I try to avoid going into the office unless there's a big gathering . . . Otherwise, there's no need for me to be there. I can do literally 100% of my job remote, so the transition for me was great. I didn't look back. (Participant 07)

Some had worked onsite until the pandemic and now wanted to continue to work remotely. In addition to inadequate and/or expensive transportation, reasons included fewer disruptions and the flexibility to work from anywhere or work flexible hours. "Because of the

teleworking, . . . we have a variety of other childcare help, but I also have some downtime at work, so I can actually do some childcare too" (Participant 11).

> Since we're in the virtual environment, it doesn't matter when you do your work, as long as you get it done. My brain functions better in the late afternoon to evening, so that's when I do my work . . . If I can stay remote, work from home, then I want to take advantage of that. (Participant 13)

A few participants had always worked remotely or worked remotely because they had acquired their current job during the pandemic.

> My first job . . . was actually remote as well. I like that set up, because I can work from anywhere. Like, for example, when I first started with [Company], my family and I went on vacation . . . and so we were down there for a whole week, but I worked for three days and took two days off, and I just told them where I was. (Participant 14)

For PWD, remote work could mean that they had more agency over disclosing their B/VI: "[I'm] completely teleworking right now . . . Let's see, my supervisor knows [that I'm B/VI], and my trainers know, but not anyone else outside of that" (Participant 09).

> The virtual experience has become something very, very different because there are new colleagues that I'm working with that are new to our organization. I've never met them in person. So, when they reach out to me because they need something from me or whatever, they don't know that I'm blind. (Participant 13)

Communications early in the pandemic included frequent check-ins by videoconference or other media, particularly within teams or organization-wide, though the frequency moderated over time. Challenges with the remote work setup included difficulties monitoring the work of remote employees:

> [There are] things that you probably would've picked up on if you were working in person, at least I think so. You usually get a good read on your staff when you're interacting with them all throughout the day. But maybe if you're only talking to them once or twice a day, they're putting on their best game face. (Participant 17)

In addition, a few noted that while interdepartmental communication was robust, communications between departments suffered.

Process: Proving Ability

Participants described an awareness that sighted colleagues and customers might closely judge the quality of their work. Therefore, there was pressure to perform their job without mistakes until they had achieved a degree of trust by demonstrating their competence and proving their ability to do the job.

> Because I happen to be the only blind person in the organization, I'm setting an example. But I'm also not going crazy about trying to be the best either. Because you know what, my work will show that . . . I proved myself. Do I have to continue to prove myself? Yeah. But I do it in different ways. (Participant 13)

> I always like to write something in Microsoft Word first, spell check it, make sure it sounds good, and copy and paste it into any sort of text or chat box, just because—I would assume there are some spell check features, but visually and accessibility-wise, and at the speed that it needs to be done, sometimes I don't always keep up as quick as I need to. And so that poses some challenges, because I don't want to spell "accept" as "except." It's like, oh, oops, I should know better. And from a visual-sighted individual, they're going to see that and, oh, here, let me just correct this. (Participant 08)

When possible, they kept email plain and simple, avoiding formatting that could go awry including bullets, unusual fonts, and colors. Informal text communications were appreciated because there was little expectation of formatting, and even punctuation and grammar were given some latitude.

> From a technical standpoint, I try and keep my communications, especially with emails and things like that, black and white font, 12-point, no frills. Excel spreadsheets, no frills, nothing, no extra animations, graphics, things like that. Namely, because unless I do a lot of checking myself, sometimes I may have accidentally turned all the font blue or green and without going in and checking that, I may send an email off and it's all in green font. And so, I try and always keep things black and white, as simple as possible, not a lot of bullets, not a lot of formatting, very plain Jane. (Participant 08)

Extra care was taken to account for autocomplete mistakes or dictated messages that were inaccurate. "Sometimes [dictation] will translate your words into some crazy other words. So, proofreading. Dictation I almost always check" (Participant 17).

Another practice mentioned repeatedly was setting oneself up for meetings in advance, particularly so that their camera was positioned well for a videoconference. In several instances,

individuals had go-to colleagues who would send them meeting chat or text messages to suggest they adjust their camera angle or lighting.

> Where maybe presentation is a little bit more important, I will ask for internal help. As an example, “Hey, we’re going to do a Zoom call. Okay, can you, colleague [Name], could you, here’s the link to this call, jump on it 10 minutes ahead of time?” “Okay, is my camera pointing the right direction? Is my angle angled at a good angle?” “No, [Participant 08], move it up a little bit. Okay, you’re good to go.” And then, “Thank you. That’s all I need.” (Participant 08)

Individuals described tactics for keeping their communication professional, particularly at the initiation of a conversation or relationship.

> Typically, well, I think I tend to be too verbose when I write. Also, sometimes I think faster than I type, and so I’m prone to typos. I will generally just blurt something out, so to speak, just get it written and then I’ll do a pass through and look for typos and then I’ll do a pass through and look for grammatical errors. Then I’ll do a pass through looking to eliminate extra words and sentences and paragraphs. (Participant 06)

> Always hello, introduce myself, give a little background of what I’m writing, what the goal of this, and then always end with, if you’ve got any additional questions, if you’ve got any concerns, please let me know. And then thank you, my name, contact information. I’m going tell you what I’m going to tell you. I’m going to tell you. I’m going to tell you what I just told you. (Participant 08)

Process: Preparing for Disclosure

A number of scenarios were shared in which individuals worked with others that were not aware of their B/VI. These included working in a distributed organization (across buildings, cities, or states), working with employees newly hired during the pandemic where one or both were remote, or working with people outside the organization, such as clients, customers, and vendors. Participants described a range of feelings about working with other professionals without their B/VI being a factor, including some sense of relief.

> There are instances where my disability is not really relevant to the conversation or the task at hand, and so it’s been interesting to me to work collaboratively with folks and not have it come up. Whereas, if I was in person, I am visibly disabled which there’s no not disclosing that. It’s not a problem. It’s interesting to just have that not be a factor at all. (Participant 16)

Many did ultimately disclose their B/VI, for personal or practical reasons. But they frequently chose not to disclose immediately, and instead began establishing relationships that would facilitate disclosure in the future. Some believed they could determine within just a couple of interactions, such as email or phone exchanges, if a person was someone with whom one could build a relationship.

> Email or phone calls, usually after two or three interactions, I can understand what kind of person that I'm interacting with . . . I can just kind of read between the lines . . . to gauge what kind of person I'm interacting with, and then I can tailor my communication back to them, again, to establish that relationship early on, before the blindness even comes out. (Participant 08)

> Not a lot [of people I communicate with know I'm B/VI] . . . If I've talked to them more than a few times, like if I'm working with a customer for three or four times, if they send inaccessible stuff, . . . I'll say it. And I'll just be like, "Hey, it's really easy to use this checker." (Participant 12)

Process: Reassuring Others

Individuals spoke about strategies for reassuring others about their B/VI. In some cases, it was by directly addressing potential concerns.

> And I'm, "No. I'm totally open to [questions about B/VI], whatever." And then she must have told another manager, because the person said, "Hey, so and so said I could ask you this stuff, and I'm not going to talk to you all day about it. But could I ask you a couple of questions?" (Participant 03)

> If I'm going to meet them in person, I like to give them a heads up, especially if I'm going to be traveling with a service animal. I think that that's important, just to give them or their staff a heads up . . . and just to reassure them, "Hey, I'm going to be coming by your office. I am blind. I do utilize assistance of a service animal. There's nothing extra you need to do. I didn't want to alarm you when you saw a . . . guide dog coming into your office." (Participant 08)

Remotely, they might have explained or demonstrated how they use assistive technologies to do their work. In other instances, reassurance was indirect and leveraged humor. Participants described getting colleagues to laugh to put them at ease, from using phrases like "I didn't see that" to general joking to participating in silly stunts.

> In college I became a standup comic for five years and for that, you had to learn to read [people] a little bit better. And one of my main reasons for comedy was so people would feel better about talking with somebody with a disability. Like you get them laughing, they feel more at ease. (Participant 01)

> When I'm talking to my boss, when I'm talking to my coworkers, when I'm talking to the secretaries, when I'm talking to my clients, I have a really good sense of humor. I don't shy away from saying things like, "Oh, I didn't see that." Or "I can't do this." I'm very just upfront about, well, this is who I am and this is how it is. And I understand too that blindness makes people uncomfortable or it can, but I have no time and no energy most of the day to not confront that it's here and it's not going anywhere. (Participant 10)

Outcome: Acquiring Recognized Competence

Participants described their satisfaction at being recognized for their competence and ability; something as simple as "[A colleague] will reach out to me, she's like, 'we're thinking about doing a . . . event for the organization, what are your thoughts on it?'" (Participant 13). Similarly,

> She's [my colleague] not really good with grammar and spelling. And so, when she writes something, she'll send it to me so that I can look it over for her. I have two colleagues that do that . . . And I love the fact that they trust me to do that, but they're not looking at my blindness. They're looking at my capability. And that's what I think it's all about. (Participant 13)

In addition to performing their core job responsibilities, some reported that they were relied on to perform certain tasks because of their B/VI. When using a screen reader, they might be more likely to pick up on grammar and spelling errors in a document, or they might be asked to review materials for their accessibility.

> If they're switching to a new platform, they'll want to know if things are accessible. And they'll send me the documentation that they got from the vendor . . . to fact-check people . . . Sometimes they want to give it to a person who actually does use the stuff in real life. Just to make perfectly sure, I guess. (Participant 16)

> With most of these folks, I'm the accessibility person in the group. So, I come into it with, "I have this knowledge that none of you have. That's why I'm in this particular position and you don't need me to do a lot of the work that you do, but you do need me to check it and make sure that other people can read and understand what you've created." (Participant 07)

Feeling respected by one's supervisor was especially important. Interacting regularly for check-ins was appreciated, particularly when the supervisor would reach out to see how one was doing or feeling. These relationships tended to maintain a professional formality, yet some degree of familiarity was welcome, such as chatting about families or pets. Having the support of a supervisor was also a signal to others that one was a valued contributor. For instance, "[My manager] challenges me. She recommends me for some part of a project management team . . . She just says, 'You know, . . . I was looking at this and I thought about you and so I think you should do it'" (Participant 13).

> With the new supervisor, the way that that relationship developed is, because of showing them the work that I was doing to the best of my abilities . . . She saw that I had a desire to do well in the particular position. And so, I guess there was that trust that developed as time went on. (Participant 09)

> At first, if I missed a call from [my supervisor], if I was in the bathroom or something, I was so nervous and, "Oh, I'm really sorry." He's, "You don't have to worry. You're allowed to go to the bathroom. You're allowed to take a break." . . . He knows I was working. I've been on the phone all day . . . It's more comfortable now because I know he knows I work really hard because I'm getting results. (Participant 03)

Inversely, not having full support and respect from the supervisor was a particular blow.

> I had heard through another person that they observed one of the supervisors mocking me, basically belittling my ideas, . . . overexaggerating [my disability]. So, the fact that you work for somebody for so long and you think, hey, I'm doing a good job and then just to find out that they're disrespecting you behind your back, it's kind of a blow to your ego. (Participant 01)

Outcome: Building Trust

Trust was generally established over time, frequently as a result of knowing one could trust the other in work collaborations.

> I think we trusted— we saw each other's work and that we were team players that we had— our goal was to do a good job and to do the best that we could, I guess. And so, there was just that trust between us that I think she felt like she could open up. (Participant 09)

> Once you build trust, that's my whole goal with every single conversation with the customer is to build the trust, help them solve some problems. And once you help them solve some problems that they have, there's a trust and comradery built there, so you can help uncover and solve other things. (Participant 12)

> You have to know the person for a while, and you have to get to know their personality. You have to have seen them in a couple of different situations, honestly, spend some time really working with them, getting to know them before you make those decisions. It helps to know that you can trust them . . . It's more of an instinct than anything else. (Participant 04)

Some sensed that within three or four interactions they knew if a person might be a potential friend. These people were described as "who you can talk to," "who you can trust," or their "go-to people." These relationships became more invested over time, generally evolving toward informal and social in addition to professional and involving mutual support, understanding, and respect. Individuals felt comfortable with these people and able to interact with them as a person rather than solely as a B/VI person.

> In the line of work that I do, I build relationships across organizations, and one of the things that I leverage to be able to do that is really building trust with people. And one of the ways of doing that is by getting to know the person, so you slowly start opening. (Participant 02)

> It makes it a lot easier when you are able to build that personal relationship because you become human and it's not just about the business, that they need to understand and to see and to trust you, that you are looking out for their wellbeing. (Participant 02)

However, support for them as a person who is B/VI could also be a cue to establishing trust.

> Part of the reason I know he is friendly is that he just seems really sensitive to my blindness and remembers to describe things and is very open to questions I have about accessibility concerns. (Participant 05)

Weaving a Social Fabric

Sometimes those Teams chats or texts are like a little connection that isn't necessarily task related, but just fun related like connecting as people. (Participant 03)

The fourth primary dimension is Weaving a Social Fabric. This is where the most activity was happening, where relationships and networks were created and changed. Most of the

participants described social interactions in the workplace positively and were especially animated in describing their closest work relationships. Pandemic-related remote work had a decided impact on relationships, with the long-term effect still to be seen. For instance, some relationships may have lapsed: “Unfortunately, we haven’t been able to stay as connected as I would like, and we both have acknowledged that, because like I said, texting was sparse. It was occasional, but it was sparse. I mean, it was sporadic.” (Participant 07)

> I think we’ve all been sharing less as not working in person, because it just seems like you’re connecting on a virtual space and that there’s a purpose, and the purpose is to communicate what you need to do, and then jump off. At least that’s how a lot of people are. (Participant 17)

For some study participants, proximity mattered: “I already got my cup filled with the social information from somebody else [on site]. So, it [coworkers working remotely] did not impact me as much just because I had alternative in-person means to get that taken care of” (Participant 08). For others, moving their relationship online did not affect their friendship: “We still communicate . . . the two that have moved out of the area, we still communicate via text messaging and Microsoft Teams calls. So, I’m okay with still being remote then” (Participant 13). The process of weaving the social fabric appeared to be evolving.

> I always tell people, I’m like, “Look, what I miss the most of being in the office is not the work. I miss the socialization.” Like slapping a co-worker like, “Did you hear that?” . . . I do miss the socialization a lot, but I feel like the socialization just took a different look, it just sort of changed. It has shifted and it’s okay. I’m okay with that. (Participant 13)

Further,

> I think it makes it easier with someone that I have communicated before the world went crazy. However, I find that now what’s happening is that I’m hearing of the new people that do something and then I have to reach out to them. And I’ll say, “Welcome aboard. Nice to meet you, my name is [Participant 13]. I do such and such.” I would say it’s a little harder, but it’s okay. It’s workable. (Participant 13)

Still, people presented as more isolated if they did not have opportunities to connect with colleagues beyond task-based communication.

> There was really no place to build the kind of relationships that I think everyone wanted to have. I think the individuals . . . for that meet and greet, . . . I saw the value of having something informal like that, how that really develops relationship. How it develops people's perspective of one another, and probably overall the morale. (Participant 09)

Further, building networks over time remains essential to professional success. Samuel (2020) discussed the value of honing networking skills online when one cannot be face to face. One of the suggestions was to blur the line between professional and personal, or between business contact and friend. She also emphasized that quality is more important than quantity. As Participant 01 explained, "I try and maintain those connections because sometimes a good connection is hard to find."

> Of course, you weed your network over time, right? You weed through, but there's certain people, like people that I know very well, people who we have commonalities, even though I may not speak to them recently, and there's people that get added all the time. (Participant 02)

Social media, like LinkedIn and Facebook, represented a means of staying loosely connected with an extended network.

> I have a Facebook account and I've got like 1400 friends or something crazy like that . . . Facebook is a weird place for a lot of aspects of my life to come together. There are people I know from work, people I know through church. (Participant 06)

Table 4.14 details the categories associated with the dimension Weaving a Social Fabric.

Table 4.14

Dimensions for B/VI Text-Based Workspace Relational Experiences – Weaving a Social Fabric

Dimension	Context	Condition	Process	Outcome
Knitting a Social Fabric	Participating in Visuals Side Talking	Finding Relatability Leveraging Mainstream and Assistive Technologies	Checking In Collaborating as Connection Sharing and Setting Boundaries Disclosing B/VI Asking For and Accepting Help	Developing Colleague Friend(s) Being Part of the Team Balancing Safety Presenting the Whole Self (and Opening Up to Bias) Mitigating Barriers

Context: Participating in Visuals

Study members regularly received visual information, including screenshots, screenshares, emojis, GIFs, memes, and photos. A couple of people noted that they were more likely to receive emojis from younger people and women. Unless alternative text or description was included with visuals, there was typically no way to know what they were receiving.

> I have two co-workers that share pictures with me. And when they send me a picture, they'll write another message underneath and say what it is. Those are my direct co-workers, but they already know that I'm blind. So, they'll do that. (Participant 13)

Individuals participated in visual communication as well, particularly sharing photos and sending emojis.

> We had to submit pictures, if we wanted to obviously, for the holiday party. So, I did do that. I took a picture of myself in front of the Christmas tree. We also did pictures for Veterans Day. You could submit a picture of your veterans. So, I submitted a picture of my dad . . . I didn't tell [my colleague] that I was blind. I was just like, "Oh, here's a picture of my dad." And I put his name. (Participant 13)

Research has suggested that using emoticons in text messages facilitates social connectedness and identity expressiveness between users (Hsieh & Tseng, 2017). Fortunately, emojis are designed to be read by a screen reader, so someone who is B/VI knows that they have received a “thumbs-up,” though some interpretation may be necessary. “I find that the screen readers do a really good job. VoiceOver does a good job, even when I’m connected with my braille display, it’ll show me what the emoji is” (Participant 03).

> Apple’s done a really good job of describing the emojis when a text message or something comes through. It’ll say blue heart, red heart, blue heart, red heart. Which is very helpful to know that. Now, I don’t know that it’s an emoji, but I can just, based on the conversation, know that that is going on. Sometimes I have to think twice. In a church setting, I may get a message that says, “Please pray for [Name]. He is ill, old man with light skin with folded hands,” so that tells me that the message was we need to pray for [Name]. There was an image of an older man with light skin that has their hands folded, I would assume, in praying. So, that takes a little bit of getting used to. (Participant 08)

> [I receive] quite a lot [of emojis]. And JAWS, which is what I use—Sometimes there are some emojis which it is fine with, but one of them it’s like, it says “modifier Fitzpatrick.” I don’t know if you’re familiar with that one. I guess that’s supposed to be a leprechaun kind of thing. It’s come up on Facebook too, outside of work. I should look into what that one is. (Participant 11)

Of note, I became curious about “modifier Fitzpatrick” and discovered that, in fact, it represents skin tone using the Fitzpatrick scale. So, Participant 11 was not receiving a leprechaun, but instead the sender had selected a specific skin tone for an emoji such as the thumbs-up.

Emojis are more difficult to use without the screen reader, since they tend to be small and similar looking, unless they are highly magnified: “Yeah, on my screen they’re [emojis] like 900 million feet tall. They’re basically the size of the Empire State Building” (Participant 04).

> I’ll turn on the VoiceOver and VoiceOver is good about saying, “smiley face” or “flushed face,” or whatever the case may be so that I could see it or understand it. I don’t send emojis often, but if I really want to, again, I will turn on the VoiceOver. But you find me clicking on every single one of them until I find something that I like, or that I’m looking for, because I have no clue what they are by looking at it. (Participant 02)

Recognizing the importance of illustrating tone in text-based messages, many individuals used emojis, as well as typed emoticons such as the :-) (smiling face), text like LOL (for laughing out loud), or reaction icons such as the Like available in messaging and social media apps. However, almost everyone agreed that they kept the number of emojis in a message to just one or two.

> Sometimes I just want to break up the text, it's just very black and white. And then sometimes I'm like, okay, there could be a picture that just shows the emotion or the response that I want to give, for example. I'm not one to put red heart, black heart, flower, blue—I don't put many of them. We're talking about one or two emojis, a happy birthday could have a balloon and a boxed gift, a present or a cake. (Participant 02)

> I would do that [insert tone] with punctuation sometimes. I would do that with emojis. Punctuation and emojis. And or emojis. I'm probably not even as expressive as I ought to be over text. And I usually . . . I'll use a smiley face or the smiley face with the sunglasses to just convey that something's neutral or not. Just convey that something's innocuous or light-hearted or whatever, just in case that something I said in the text itself might have been ambiguous. (Participant 16)

However, use of these visual elements varied by person, communications norms, person one was interacting with, communications medium, and ease of use.

> I use emoji sometimes with my boss. And that's usually when I'm trying to be sarcastic about something, like it's a good thing you missed this meeting because—And then I'll put some sort of emoji to it. It could be the poo, the smiling poo, I use that quite a bit at work, believe it or not, smiling poo. Or it could be the sideways—The laughing out loud emoji or the girl with the hands, question mark, like, I have no clue what is happening right now. (Participant 02)

> I'm a practical person. If I want to get a message out, I want to get the message out as quick as I can get it without wasting a lot of time. Now, for the "okay" hand and the different facial expressions or "thumbs up." Yeah. Okay. That's quick. That's not too difficult, but I don't need six, eight different emojis in my messages. I just don't need all that. Yes, I'm glad to know that I can do it. I should be able to do it. I have the right to do it. They should be accessible. But there's a limit to how much time I want to spend on all that. (Participant 07)

A few people wondered if using emojis might either make them more relatable or demonstrate that people who are B/VI could do it.

> Maybe [using emojis is relatable]. I don't know how much, but maybe just X much more, probably not significantly, but a little bit, it could make you stand out in a positive way depending on the situation. (Participant 14)

Context: Side Talking

A phenomenon largely attributed to remote work was the side talk that took place during meetings, notably over text-based communications. The majority happened in the meeting chat, either publicly or privately, or as smartphone texting. In many instances, there was a professional practicality to the side talk, such as people posing questions in the meeting chat for Q&A, or sharing links to relevant resources in the chat bubble, or texting to move the camera to a better position. Other examples included,

> A lot of times it [texting] is side comments that someone wants to give to me that visually I may not pick up on. As an example, and again, this is going to sound really bad, but it's reality, it happens, "Hey [Participant 08], [Name] at the front of the room, he has a scowl, he is not happy as he's talking about this" . . . So, a lot of times they're little verbal cues that I'm not going to pick up on that others at the table may really pick up on. (Participant 08)

> There are meetings where people definitely utilize the chat, so I try to focus on that and have the real-time alerts come in. And I will often also have it on my braille display. It's to avoid talking over others basically . . . If somebody has a long topic that they're discussing and, for example, somebody will ask a question in the chat that someone who's not the presenter might be able to answer, that's when that will come in. So, there is overlap and it's not disruptive, and we can keep things moving on time. (Participant 16)

Similarly, coworkers might create short messages in the meeting chat to inform others that they would BRB or "be right back" or to celebrate an announcement with "congratulations" or the clapping-hands emoji. On the other hand, side talk could also be informal, sometimes very much so. This included innocuous "nice to see you" direct messages but sometimes devolved into sarcasm and joking about the meeting content or delivery.

> Since we were all working from home, I would use the Zoom chat feature quite a bit to be in touch with my coworkers during the presentation, even if it was making dumb jokes about a presentation that we didn't find super interesting or talking about what we were doing simultaneously as we were watching these sometimes monotonous presentations. (Participant 10)

The most informal conversations were conducted over text messaging so they remained apart from the meeting platform where the texts might be viewed later by a meeting host or participant. Side talk could be just a few comments or ongoing rapid-fire commentary that included emojis and GIFs. “[Texting] in the meetings, it’s generally running commentary. ‘Do they really see that happening?’ ‘Great in theory, bad in execution,’ ‘Nope, that’s not going to happen’” (Participant 04).

> I love to do that [texting during meetings] when we’re talking crap about someone that’s asking a really stupid question, yep. Oh yeah. Oh yeah. That is mandatory. So, let’s say you are on our Teams call and we heard somebody ask you a really stupid question. And I just literally grab my phone and I’m like, “Do you hear?” And it is amazing. I’m like, “Thank you technology so much” . . . It’s great. (Participant 13)

> Especially if you don’t know why they’re sending this random emoji, if all of a sudden you see a television screen emoji and you’re like, okay, I don’t know what that means, but fine. Here’s a spaceship. And you just randomly start sending emojis back and forth. And if you’re really obnoxious, then you bring somebody else in on it and you just see how many people you can get in on an emoji war. (Participant 04)

Due to usability issues, some people chose to refrain from side talk, though they would have liked to participate. “If I were to do that [texting during a meeting], it would be very obvious. For me, when I’m texting, I use large print, but I’m still putting the screen close to my face” (Participant 02).

Condition: Finding Relatability

The word “commonality” was mentioned frequently in terms of how relationships developed in the workplace. In fact, individuals actively sought to find commonalities with coworkers.

> Is there common ground here? Something that we have in common that maybe we don’t have a lot of other things going on, but there’s something, even if it’s something as simple as, “Oh, I love Reese’s cups too.” Something, because anything I can grasp onto so that I can develop some level of comfort. (Participant 07)

Commonalities that typically appeared in workplace banter included weather, kids, animals, holidays, hobbies, and vacations. “I have co-workers that we talk about books, because we like

to read. TV shows, because I binge watch certain shows. And I found out [my colleague], we actually have a lot of shows in common" (Participant 03).

Contributing to this banter was considered critical to developing professional and personal relationships with colleagues, so one might regularly inquire about a coworker's kids even if they did not themself have children. "Several of them [coworkers] have kids and by talking about their kids was one of [the ways communications became informal]. That's always a good topic to talk to people about" (Participant 04).

> I get a sense of their personalities and I think, "Wow, this might be a person that I have a lot in common with," or I really like their view on mentoring or their view on the world or they're just really interesting so now maybe I'm going to text them something interesting that we talked about. (Participant 08)

> We're talking about books that we read and that's something that we both have in common. So then after the fact, I might text the person and say, "Oh, you mentioned to me you've read this great book and I forget what the name of it was, can you find it, can you tell me?" or "Oh, hey, we were talking about when I went to [Country] with my husband and you and your girlfriends want to go, here's the link to one of the places I stayed that I think you might like." (Participant 10)

Some participants spoke about how important it was for them to be seen as a person, not just a B/VI person. They did not want to be known only as the person who uses a screen reader but for being someone who enjoys books or sports. A few wondered aloud about how relatable they were to their coworkers.

> I do feel like sometimes—I sometimes wonder if it [B/VI], for some people, makes me not as easily relatable to them . . . I try to be relatable on a social level surrounding things that everybody talks about and not well, oh, it's so amazing or so impressive that I'm reading braille, or I have this guide dog or whatever. And more so like oh, it's so interesting and impressive that, I don't even really know something interesting or impressive about me, but like it's so interesting that I've read a hundred books this year or so impressive that last year I went skydiving or that I'm a really good aunt or I'm really terrible at cooking, things that I think transcend boundaries of any kind of how I'd be relatable. (Participant 10)

In situations where others were B/VI, this itself might become a commonality through which to develop a closer connection with someone else who was B/VI or had a B/VI family member or friend.

> She's [supervisor] also blind herself. So that's the commonality we do have . . . There's shared challenges, shared understanding . . . She can also share with me various JAWS key strokes to use. (Participant 15)

> I have a standing meeting with a gentleman that has [eye condition], just like me, and we just share tips and tricks . . . We've probably been on four calls, five calls. And then we'll chat back and forth on Teams as well if we can't get on a call. (Participant 12)

Sometimes this was expressed in connections to individuals and sometimes this was present in group settings, such as workplace Employee Resource Groups or more generally in Facebook affinity groups.

> There's a couple that are visually impaired, not on my immediate team, but there's a huge group internally called the [ERG], it's [Company] Visually Impaired Persons. And we have monthly calls. We have a chat. We all support each other with, if we learn of something new internally, we always share it with each other. It's a big accountability group that just helps each other out. (Participant 12)

Additionally, a sense of commonality might be understood when working with people in demographic groups that had also experienced challenges such as bias based on gender or race or ethnicity.

> She's [coworker] African American, and she happens to be gay. She's married to a woman. So, she's shared a lot of personal stuff with me, but most importantly she has this drive about her. I admire that very much, being a woman who is, I'm first generation American . . . When I look at the women that surround me, I'm motivated and inspired because I don't even count blindness as a factor. I just look at how women around me have been able to work with what they have and make it better and improve themselves and improve the opportunities for their families and want to count on themselves. I just feel like when I have—it helps. (Participant 13)

Those who were considerably younger or older than their colleagues were more challenged to find relatability with coworkers. "In the workplace, most typical families are like, oh, we put the kids to bed and then we watch the latest season of this. I'm not a TV watcher. I don't have kids" (Participant 01).

> A lot of them are older than I am, they're more experienced [professionals]. A lot of them married, have children, I'm only [in my 20s], I live with a roommate in apartments. I'm much younger in my career, but I have found their mentorship to be helpful. (Participant 14)

> I had a bunch of friends that we had the camaraderie . . . As time went on, a lot of the people that I was really tight with, my crew, for lack of a better term, they . . . left the office . . . I'm not as close with a lot of people in the office like I used to be 20 years ago . . . Now all the young people that have been around five years or less, generally speaking, they're pretty tight with one another. I'm an old guy. I'm not terribly relatable, in their eyes, and I'm okay with that. (Participant 06)

Condition: Leveraging Mainstream and Assistive Technologies

Individuals who had the most skill using their mainstream and assistive technologies seemed to be the most satisfied with their communications systems and used them most extensively. "Technology has totally come a long way and I am here for all of it" (Participant 13).

> If it's a big meeting, the [Teams] chat's moving pretty fast. If I'm scrolling through it and I see something I want to read, I just click on that chat bubble, and it will stop the chat from scrolling. If it's small, if it's two paragraphs or one paragraph, I'll just read it in there. If it's a really big chat, I will right click it. I'll bump it out into Immersive Reader. (Participant 12)

> Now [I use] the Seeing AI app. If my coworker sends me a meme now, I open the picture of the meme and then I'll click where it says share. And it says scan with Seeing AI. So, I'll click on that. And then the Seeing AI app will then read me the meme. So now I'm not left out anymore. It describes it. It'll say like "Two people by a tree" and then it'll read the text, like whatever the picture is. It's awesome. (Participant 13)

However, they likely acquired this skill through their own research because formal technology training either was not available or did not take into account how the technology would be used by someone who is B/VI. For instance, instructions would not include directions specific to a screen reader user.

Several people commented on the association between age and tech use. "I definitely know for a fact that two of my coworkers that are a little older, they weren't sure how to use Teams that well" (Participant 13). However, this was sometimes based more on frame of mind

than actual age. “I’m a young body in an old soul. I like e-mail more than these little fad things that popped up” (Participant 01).

> I think I do use technology differently and have a different attitude about technology than my younger colleagues. The group that I’m in ranges from mid-thirties to late sixties. It’s not only age related. The woman who’s in her late sixties uses it all the time. So maybe I shouldn’t blame it on my age. (Participant 05)

Participants experienced barriers to fully leveraging their technologies, from difficulties setting up or upgrading systems remotely to features with accessibility or usability problems. As a result, they may have turned to sighted assistance from a family member, coworker, or visual interpreting service.

> The state applications I did, I actually used AIRA [visual interpreting service] because they were really, really tough. I was having a lot of trouble with it. And so, they [AIRA] had this free employment offer. You had a half an hour free to do employment related things. And that worked out really, really well. And the agent I had was really good about making sure, confirming what she’d entered and making sure she’s, “I don’t want you not to get the job because of me.” And you had to check boxes and sign stuff and she was really good about reading it all. (Participant 03)

Several individuals noted that they used their smartphone apps frequently, instead of a computer, because the phone apps were more usable than the desktop versions and because features such as the Apple VoiceOver screen reader worked well.

> There is in your iPhone, if you’re going under the accessibility settings . . . there is a way to add different keyboards. A lot of times that’s if your family is Russian, you could add a Russian keyboard . . . But there’s also a braille keyboard that you can add there that pops up under accessibility. Basically, what that is, is any text field that you would type into, you can switch to a braille overlay . . . I just feel like it’s faster. And I’ve been reading braille and writing braille since I’m four. (Participant 10)

> I’ve got weird light sensitivity issues. On my phone, I jack up the font pretty significantly. I don’t magnify it, but you can go into settings and increase the font. I do that. I do on the iPhones, they have what’s called the classic invert and the smart invert where you can change it so instead of black text on a white background, you’ll have white text on a black background and that’s much—For the way my eyes work, that’s much preferable for me. (Participant 06)

Process: Checking In

To maintain relationships, both short- and long-term, check-ins were widely employed. “I still make a point to go by her office once every couple of weeks and a lot of times when I’m texting her, it’s because the two of us have not been able to catch up” (Participant 06). Video and audio media were utilized, but text check-ins were common, such as a quick “how are you doing” to or from a colleague or supervisor. This might be a formally scheduled meeting:

> We connect once a quarter just to see how things are progressing and if there’s anything that we can do to help one another. We’ve kept it through Slack, through the one-on-one chat of Slack. We have a thread going and so we continue with that. (Participant 02)

Or it could be a quick text to a coworker or member of one’s network, like “If I know they’re going through a rough time or if they’ve got a really big meeting, I may text them and just be, ‘Hey, how’d your meeting go yesterday?’ Just little check-ins, things like that” (Participant 04).

> A conversation in Teams . . . me and my one coworker in a different department say, “Hey, good morning” and share little funny stories once in a while, just back and forth, like “ha-ha-ha, lol, this person is driving me nuts.” (Participant 01)

A received check-in message might have included a “congratulations” or “here’s something you may be interested in,” and made people feel that they were being thought of. The check-in strand was important to maintaining the strength of a connection.

> That’s sometimes how I’ll check in with people. If I just I’m feeling kind of disconnected, I might send a quick Teams chat to someone like, “Hey, how are you doing? I’m feeling kind of lonely here today” or something. I have a couple coworkers I can do that with . . . Once in a while it’s, “Oh my gosh, it’s so quiet here. I just need social—” So often, I’ll do a Teams chat and then, once in a while, somebody will call me if they have time and if not, sometimes even just that chat is nice. I feel like, oh I’m still connected. They’re still thinking about—I’m still around, that kind of thing. (Participant 03)

Process: Collaborating as Connection

Several individuals spoke about how well their teams collaborated and pulled together during pandemic remote work. However, some noted that collaboration between departments suffered. Collaboration was typically task-based, but included brainstorming or helping, and even commiserating.

> We have what I jokingly refer to as the brain trust . . . We will get the brain trust together and sometimes we do it in person, sometimes we do it over email. It's a very helpful process because everybody brings a different strength to the table. By the time you have 13 people fly spec something, generally, you will have addressed most, if not all, of the concerns that may come up. (Participant 06)

> [Texting], we would talk about clients and invariably when you start talking about a client, it leads you to an "Oh, my God, craziest client ever" story or best client ever story or worst client ever story. And when you start talking about that, things tend to get more informal because you tend to exaggerate and get more emotional, more animated and you make people laugh when you're doing things like that. Once you're comfortable with people and you know who to talk to about what, it becomes easier. (Participant 04)

Coworkers developed respect and understanding of one another by working together.

> I was working with an individual and I would reach out to her with questions, and we would bounce ideas off of each other. Eventually, we had an understanding with each other, and we were talking about a lot of personal things inside the chat . . . I had the best relationship with [that coworker] just because we'd spent the most time talking with each other, but talking in quotes because it was all within the [messaging] chat." (Participant 09)

> You might work multiple times with the same [external professional] where they get to know you and you get to know them. So that relationship changes over time where we both drop the air of formality a bit in terms of our communication styles. And we don't normally get to a point where we're so close that I'm saying, "Well, how's your daughter Susie and how did her art project go?" But it's more like, "Thanks so much for your help." Or like, "I'm really frustrated with this guy because . . . "It's more like we're doing this work shoulder to shoulder. (Participant 10)

This was often a key to developing beneficial relationships with current colleagues that became the foundation for becoming career-long network connections. Informal chats wove their way into work collaboration, as teams tended to open or close meetings or work sessions with more casual communications; this occurred even when work was conducted over text-based media.

> We have a couple group [messaging] chats . . . [The] marketing people and I have a group chat. That one does get— Because they're both kind of goofy and they joke around a lot, so that one occasionally will get some joking to it, but mostly, that's business as well. (Participant 03)

Focus on a task or goal could remove B/VI from the interaction.

> If, for example, we were editing language to put up on a website, we're looking at the same document and then we're talking. We're both at our respective computers, we

> were talking on Zoom or on Teams and looking at this document in real time. I'm getting the feedback through my screen reader in my ears or in Braille, what changes are occurring. My disability really isn't relevant to that task at all. (Participant 16)

Process: Sharing and Setting Boundaries

Most participants indicated that their closest work relationships were with those they had shared personal information with. "I would say that there is a small group that know me relatively well, and most of the rest know what I let them know" (Participant 07). Sharing as a group created a sense of camaraderie and sharing individually created a level of personal comfort and connection. With most coworkers, individuals shared about topics discussed in the section on relatability, such as kids or weekend plans. However, some individuals over time became very close to a few colleagues and had conversations that revealed more about their core values and beliefs that they knew introduced a degree of vulnerability.

> The relationships have just evolved over time because I'm open and I love to talk. I love to get to know people and through that try and come up with commonalities between us so that we can have conversations and we can have a multi-level approach or an understanding of who each other are, and our beliefs and what we hold true near and dear to each of our hearts. So that we can respect each other as we are going about doing our work or our activities. (Participant 08)

Participants also described boundaries about what they shared: "I try not to blend my personal, professional too much" (Participant 16).

> Some people you spend all day with every day. If we gel well, then we talk about a lot of stuff and get to know each other's mannerisms and sense of humor and things like that. Even some personal things . . . They may not know me as well as I know them. I think they just know that's how it is. (Participant 18)

> I guess there's certain things I'm private about, or I don't want to pry into . . . There's things you just don't touch, and you don't touch on race or religion. I don't talk about politics generally with people. I guess I try to keep the line of joking but not being intrusive. Or there's some people you just, you kind of know instinctively they're not going to take a joke well. (Participant 03)

In some cases, setting boundaries was an issue of caution or professionalism, if they interacted regularly with clients or students. Also, individuals were careful to maintain boundaries with supervisors.

> It turns out, the lady that's my supervisor now, wasn't when we started. So, we are [Facebook friends], but if I had come into the office and she would be my supervisor, I would've automatically said no. My understanding was you just don't do that . . . I'm not going to take my supervisor off my page now if she is, but I wouldn't add her just on principle. (Participant 07)

> I always want to maintain boundaries. And honestly, that's how I am with all supervisors. Realizing what the relationship is, I've never gotten close to it, to my supervisors. I always wanted to maintain boundaries. I always want to keep in mind, this person is my supervisor after all. So, you don't want to share too many personal things. (Participant 15)

There seemed to be a continuous balancing act between sharing and setting boundaries in the workplace. This was clearly illustrated in thoughts about connecting with colleagues on social media, especially Facebook. "There are a few [current colleagues I'm connected to on Facebook]. As a result, I am very mindful of what I put on Facebook. I am very, very cautious about what I post on social media" (Participant 06).

Process: Disclosing B/VI

Information considered for sharing or not was disclosing one's B/VI. "I don't think I would offer [being B/VI] just voluntarily" (Participant 09). As noted in the dimension Curating Professional Identity, as individuals built relationships with coworkers or customers who did not know about their B/VI, they evaluated whether, when, and how to disclose.

> That's one thing about visual impairment, is people don't know what they don't know. So, it's really hard to, it's a hidden disability, unless you're at a store where I'm using a menu and I'm taking a picture, or my wife's reading it to me, or my kids are reading it to me. You'd have no idea. (Participant 12)

> She was reaching out to me via email. And then she asked to chat with me via Microsoft Teams. And I was like, "Yeah, of course." And so, we got on a Teams call and she was like, "I'm so happy to meet you and see you on video." I said the same, right. We exchanged pleasantries. Now obviously, I can't see her. But I'm not saying, "Oh yeah, whatever her name is now, what do you look like?" (Participant 13)

In some instances, the disclosure was prompted when one would be meeting another in person or when advocating for accessible materials.

> I might have a meeting in person with a vendor for example, and they might give out a bunch of print material on paper. And then, the barrier becomes, “Well, how am I going to access this information,” and it’s out in the open. (Participant 16)

> If I’m meeting somebody at a dinner establishment or something like that. “Hey, I’m probably not going to come up and greet you. If you don’t mind, I’ve got a blue suit on. I’ll be over in the first couple seats of the bar area, and I will have a . . . guide dog with me.” (Participant 08)

> I’ve been better over the years of explaining myself to people so that people do not think that I’m stuck up or I’m upset with them, because that’s happened as well. When people do not realize that I don’t see, they assume that has happened . . . My classmates . . . were like, “Are you upset with us? . . . Because we were across the street and we saw you and we waved at you and you just didn’t respond to us” . . . I was like, “I didn’t see you.” They were like, “You were looking right at us.” I was like, “No, I didn’t see you because I don’t see. I can’t see that far.” (Participant 02)

At other times, the disclosure resulted from an individual wanting to share that information about themselves.

> I’m very open about my disability and that I have low vision, I’m legally blind. A lot of times people are very just curious about that, and my openness to that, they then open up. Or connecting with me on a level of, oh, they have children who have some sort of disability. (Participant 02)

In some cases, it was described as “casually disclosing” or “slipping it in.”

> The [external contacts], most of them, the vast, vast, vast majority have no idea I’m visually impaired. For the ones that I’ve worked with now pretty closely because we’ve had multiple conversations, it might come up at some point. I don’t bring it up normally unless I’m saying, “Oh—” I just kind of slip it in. Not for any sense of I feel like they should know, but I might say something like, “Oh, I’m so sorry I missed your call, I was outside walking my dog.” And some people might say, “Well, why are you walking your dog?” And I would say, “Oh, he is my guide dog. He’s here with me at work, I’m visually impaired.” (Participant 10)

Similarly,

> If I’m doing stuff at my computer and I’m on the phone, they might hear JAWS in the background. So, a lot of times it’ll come up and they’ll say, “Is there another person on the phone?” Like, “What is that talking?” And I'll just laugh it off and I’ll say, “Oh, I’m

> actually, I'm blind and this is the screen reader I use to enter the information." (Participant 10)

> I understand that blindness, for whatever reason, is often very fascinating for people and very not common, I guess I would say. So sometimes I'll throw it out there as, okay, well maybe this is interesting for them to know. (Participant 10)

There was awareness that the other person might then view them differently:

> When I was younger, I would say that I wasn't as comfortable in the identity of being a blind woman that I am now. But at [this age], I'm just kind of like, "Well, I'm blind, I'm okay with it and if other people are not okay with it, well, oh well." (Participant 10)

However, when they sensed they had established a relationship, the reaction to their disclosure was considered positive most of the time.

> Most are pretty good because I've established an earlier relationship where people know it's coming or they know, maybe they've been given a heads up from a colleague of theirs that, "Oh, [Participant 08] is blind. He may be reaching back out to you and getting a little bit more information with this." 90%, 95% of the interactions are all positive. (Participant 08)

> I think most of them [remote team] know that I'm blind. Most of them I've shared that I use assisted technology and I did a demonstration . . . of how that works, how I do my job, access LinkedIn, how I access Teams, etc. . . . A lot of them were just like, "Wow, this is cool," or "I didn't really know about this," or "Keep up the good work," or "I learned something fascinating," or "That's inspiring," a wide range of interactions. (Participant 14)

Process: Asking For and Accepting Help

People sometimes relied on a trusted colleague for assistance interpreting visual information: "I put a headshot on there [LinkedIn] once and I got a phone call within five minutes. 'Do you realize your headshot is upside down.' 'Uh, no, I didn't know that. Thanks for letting me know'" (Participant 11). For instance, they would ask someone to describe an image or a screenshare.

> When it gets to a point where I need to have a little bit more illustration or a little bit more pizzazz in the communications, I'll do one of two things, depending on who it's going to and what it is. I will have a colleague screen it for me and say, "Hey, yep, that looks good. Your spacing looks good, your format looks good." That sort of thing. (Participant 08)

In a number of instances, people had colleagues who would let them know if their camera was positioned properly and their lighting was adequate when on videoconference.

> I have another coworker that actually has texted me during our employee meetings if my camera is out of alignment, which is really helpful, because she'll be like, "Hey, I can only see the top of your head. Is that how you wanted it to be?" . . . She's texted me, "Hey, just tilt a little bit left, or a little bit down." And then she'll text me, "Bingo," and a couple of smiley faces, and then we're good. (Participant 03)

These interactions commonly took place in text-based workspaces as side talk in texting, messaging platforms, or direct meeting chat.

> There are sometimes some visual cues that I may ask a sighted colleague to say, "Hey, throughout this, just send me a couple of messages and let me know what the nonverbal sense of the room is, or what the demeanor of a particular individual may be throughout the conversation." (Participant 08)

> [In the private meeting chat], I might say something to them [colleague] like, "This PowerPoint, I feel like there's a lot of information on it that they're not talking about because it's visually presented. Can you tell me what they're actually saying here in terms of this chart? Can you explain this a little bit better to me?" (Participant 10)

The dynamic of giving and receiving assistance sometimes resulted in growing the trust between colleagues or might have been an opportunity to reach out to a coworker as a way of beginning a connection.

Outcome: Developing Colleague Friend(s)

Study participants articulated a difference between coworkers they considered acquaintances versus friends. "We are also friends, and sometimes we'll communicate with each other, supporting each other personally" (Participant 05).

> One of my supervisors, it was always just . . . very straightforward, but because we were sharing so much [on the messaging app], I discovered a lot more nuances to her likes, her interest, her home life or things like that. And actually, we now have much more of a friend relationship. And so, it's become rather amusing that because of COVID, we've actually become closer. (Participant 04)

> Nobody really does [send a Facebook friend request], unless it's normal. I think around the timeframe of three or four conversations, you're beyond that work focus to where they could be a friend, where it's not just a work relationship. (Participant 12)

And although it was not always articulated, there was a clear difference between those considered a colleague friend and a personal friend. Colleague friends had more regular check-ins or added informality around their task-based communications. In person, they may have had lunch together in the breakroom and a couple of people had a “work mom” they felt especially close to.

> That person has been a very good friend of mine and we have a relationship where it’s not so much give and take and because we never really worked together on a project or anything. Yeah, she is like my work mom. (Participant 01)

> It [Facebook connection] happened after [we were no longer coworkers] . . . There are people that I wouldn’t mind having in my inner circle. I use Facebook more for socializing, but also—And, again, I don’t use it very much. I’m not a huge social media person, but these are individuals who I wouldn’t mind seeing socially outside of work. Let’s say if they were to come to [City] or we were able to find some time to meet in a social setting. (Participant 17)

A key indicator that someone had moved toward being a personal friend was spending time together outside work, socializing through after-hours phone calls or meeting up for meals. “If it’s someone that we’re friends with work where I speak to them by phone a lot, or we text, we might hang out after work” (Participant 10).

> One of my colleagues that lives . . . [nearby], we might go out to eat together once in a while. Or we might hang out together once in a while. Just somebody that is not just a colleague but is a friend. (Participant 15)

Outcome: Being Part of the Team

Participants spoke about their interactions within their team much more frequently than within the larger organization, and actions most reflected team norms. “You could get things done with the people that you worked with quite often and it was great. We did great. Our department just killed it. I mean, we always do . . . It’s a good department” (Participant 07) and “We have a really great team because it’s not about the blindness” (Participant 13).

Five individuals had entered a new job or team during the pandemic and five described having a new person join their team. Participant 03 had joined her team within the past year:

> I have two people that I work really closely with. We're part of the [department] team . . . The three of us, that relationship went pretty quickly . . . Our executive assistant, we've joked about funny errors that spellcheck doesn't catch. Or somebody will write manger instead of manager. Goofy things like that. So, if I see something real funny like that, I know I can email her. (Participant 03)

> My team of people that I know, we all knew each other prior, but there's one gentleman on our team that none of us have met in person, but we've had so many candid conversations that he's a part of the team, but that's one thing we're excited about when we do get to, when things open back up and we're traveling again, just to be able to have dinner one night and hang out and chat. (Participant 12)

Building both professional and personal trust happened through a flurry of check-ins and collaborations early on, then moderated to fit with the normal flow of the group over time.

> At least in the beginning, we [the team] knew each other fairly well. So, understanding your audience was definitely something that you had a handle on. But you try to keep it [the joking] mild, at least for that type of communication and whatever's being communicated. If somebody new was added to the team, I think we actually even scaled it back a little bit, just because we didn't know that person. (Participant 17)

Communications were more likely to be audio-visual early on but became more text-based if that fit the team's style.

Outcome: Balancing Safety

Individuals, consciously or unconsciously, considered sharing and setting boundaries in finding a safe balance for being included and engaged in their workplace. "I'm really a private person. I think there are certain colleagues that I have a higher level of trust and a professional and personal relationship. We both understand the balance and where that is" (Participant 17).

> It's all good and we can joke and laugh, but there's also a place and a time for that, and there's a place and a time for, when you're doing work and you need to be professional and it's balancing the two. (Participant 02)

> I'm feeling more comfortable talking with them than I would be with other colleagues. More comfortable sharing my feelings. If I want an email that I want somebody to look over before I send it, I might choose that person . . . I might feel more comfortable asking them a question than I would with somebody else that I'm not as close to . . . And it's more comfortable in that way, we have this more interpersonal relationship. (Participant 15)

In line with the theory of symbolic interactionism (Blumer,1969), participants spoke of reading between the lines in communications, and opening up in a slow and measured way.

> As I get to know people [clients] more in the natural progression of things and as our relationship changes and becomes a bit more—we're both a little bit more invested, I do tend to open up more. Unless I continue to have some feelings where a person makes me uncomfortable and I feel like I don't feel safe or I don't feel like disclosing different information to that person because I feel it's not in my best interest . . . I need to have some indication from the other person that they want to know these things and that it feels good for both of us to be sharing in a more casual way. (Participant 10)

Those who had joined their organization or team within the last two years during the pandemic were especially aware of the dynamics of entering a group.

> They form little safety nets. This is my safety net. This is my group. This is my clique. And when that group feels cohesive, it's hard for a new person to come in . . . Think of it like animals on a Savannah where we get protection by having multiple animals around us. You're better, you get more protection by being in a group than by being alone. (Participant 04)

Outcome: Presenting the Whole Self (and Opening Up to Bias)

The special value of finding a work friend was the ability to engage in an authentic, trusted relationship.

> They are people that I have trusted and have trusted me with stuff, where you can actually share stuff that's not just factoids. You can share reactions to the factoids. You can share—even if they're not always positive. You can get into other stuff that's not work-related and might even be controversial and be able to actually talk about it and not worry about it being a problem. They're the people that you've put enough trust in that you can have those kinds of conversations. (Participant 07)

This was sometimes considered challenging in that others tend to think of B/VI people as different. Although colleagues might be friendly and respectful to them, participants did not want to be interesting and impressive because they could function as a person with B/VI. For many, it seemed okay to recognize B/VI as one part of who they were to be fully understood, but individuals preferred conversation around their B/VI to be minimal. Individuals spoke of wanting their coworkers to know that B/VI people are normal and like to have a good time and that every B/VI person is a unique individual.

> I answered a couple of his questions [about my B/VI] and then we just started continuing our conversation about whatever it was that we were talking about. So, I don't want to spend too much time on it because, obviously, that is not what we're talking about. I don't feel like it's that important. We were talking about everything else under the sun. (Participant 13)

> I'm kind of one of those, you get what you get, and you know who I am coming in, I'm going to have a good time, we're going to talk, we're going to laugh and we're going to get down to work. (Participant 08)

Fatigue was evident when discussing incidents where their B/VI became front and center when interacting with others in the workplace. In a few instances, revealing their B/VI had clearly negative reactions, such as a customer or client asking to talk to someone who was not B/VI. Those who had been involved in a job search encountered a less obvious bias about their B/VI, but a bias nonetheless when turned down for jobs they were qualified for. Finally, coworkers occasionally asked inappropriate questions about their B/VI or treated one as a curiosity. Though frustrated, participants described getting to the point that they simply did not have the time nor energy to confront people in these situations, but instead transferred the customer, accepted the rejection, or redirected the conversation.

> I kind of throw it [my B/VI] out there as—For people that I have worked with really closely, I'm just very casual about things. And so, if it comes out, that this is how it happens, just because I would say it's anyone else that I've gotten to know, then that's how it is. And if it becomes a stumbling block in our relationship, then lesser on them than on me for that fact. (Participant 10)

Outcome: Mitigating Barriers

Trusted workplace friends participated in facilitating the success of their B/VI colleagues by offering visual information such as image descriptions, camera advice, and cues about what was happening in meetings that was not being verbally articulated. B/VI individuals noted that they could trust these friends to let them know what was happening that they may have missed.

> I've prepped them [colleagues], I've talked to them, and we've done enough of these meetings and interactions and things like that, at the end of the day, they know what I'm needing and what I'm needing from them during some of these conversations. (Participant 08)

> I think when I was younger, I had that FOMO [fear of missing out] mentality. I think as I'm getting older, I really don't care. If I need to be a part of it [Zoom chat], they'll [colleagues] loop me in. If they really need me to be a part of it, they'll loop me in. (Participant 02)

These relationships were helpful in mitigating issues that might arise when working with others that were not familiar with B/VI and might be subject to assumptions and biases. "[Receiving text messages in meetings] allows for me to be able to be on a similar level as sighted peers" (Participant 08). They also provided a means of reacting or responding to communications with people who were unaware of their B/VI unless and until they were comfortable disclosing to them.

> I imagine that most people's cameras were on. If I remember correctly, mine was not. And they were going through this proposal and somebody shared their screen, which is not going to be accessible to me, so someone had spoken up and said, "Hey," and tried very hard not to identify me but they said, "Hey, would you mind just reading off the bullet points that are up there because there might be some people here who won't be able to see the content." (Participant 16)

Summary

As these findings demonstrate, B/VI employees navigate a maze of technical and social challenges, particularly related to decisions about disclosing their disability. Text-based communication media may provide the space that allows individuals to collaborate, to build relationships, and to enjoy more agency in curating their professional identity. This has both near-term and long-ranging implications, as people who are B/VI seek employment, perform their jobs, and develop professional networks.

To further illustrate the relational processes revealed through this investigation, I have developed a theoretical model. Chapter V introduces and explains this model. Further, I will discuss the implications of the study findings for leadership and change and suggestions for further research.

CHAPTER V: DISCUSSION AND IMPLICATIONS FOR LEADING CHANGE

This study explored the dynamics of human interactions in the context of people who are B/VI using text-based communications in the workplace. This was my interest even pre-pandemic, but the massive move to remote and hybrid work structures set the stage to make the topic especially timely. Although I found my research question fascinating, I was sometimes unsure how important the subject might seem to potential study participants. However, I had no difficulty finding individuals willing to share their experiences, interviews easily went the entire 90 minutes, and several thanked me for investigating an important topic. In addition, as I reviewed the findings with other people, to get their perspectives and feedback, I was struck by how those who are not B/VI but belong to other marginalized groups recognized and identified with many of the dimensions and subdimensions presented in this analysis.

The findings of this study suggest that it is vital that B/VI employees have the opportunity to fully participate in text-based workspaces. Organizational culture, access to technology and training, and opportunities for both task-based and social connections influence the ability of B/VI employees to be a true part of a team and feel fully included in their workplace. The findings presented in the previous chapter highlighted some of the challenges to full participation and true inclusion for B/VI individuals, and described strategies they may use to "make it work."

This chapter will outline the Experiential Workspaces Model for B/VI Professionals, a theoretical model and mid-range theory to depict the processes that are taking place for B/VI employees in text-based workspaces. I suggest several theoretical propositions based on a synthesis of the study results. I describe the study's implications for leadership and change practices. Finally, I propose recommendations for future research on the topic.

Theoretical Model

This section of the discussion will examine the *Experiential Workspaces Model for B/VI Professionals* more deeply, and the theory development associated with the four primary dimensions: *Operating in Text-Based Workspaces, Reworking the Weak Spots, Curating Professional Identity,* and *Weaving a Social Fabric*. I will describe these dimensions or processes individually and how they work together. I also present a model diagram to illustrate the concepts.

Charmaz (2014) noted that theories offer accounts for what happened, how it happened, and perhaps why it happened. Conceptualization may be positivist or interpretivist, or somewhere along a continuum between the two. The social interactions captured in this study are complex and individuals' interpretations of experiences differ. Therefore, my theorizing in this study leans toward the interpretive, giving more weight to abstract understanding than attempting explanation. The theoretical model I present considers patterns and connections rather than seeking causality.

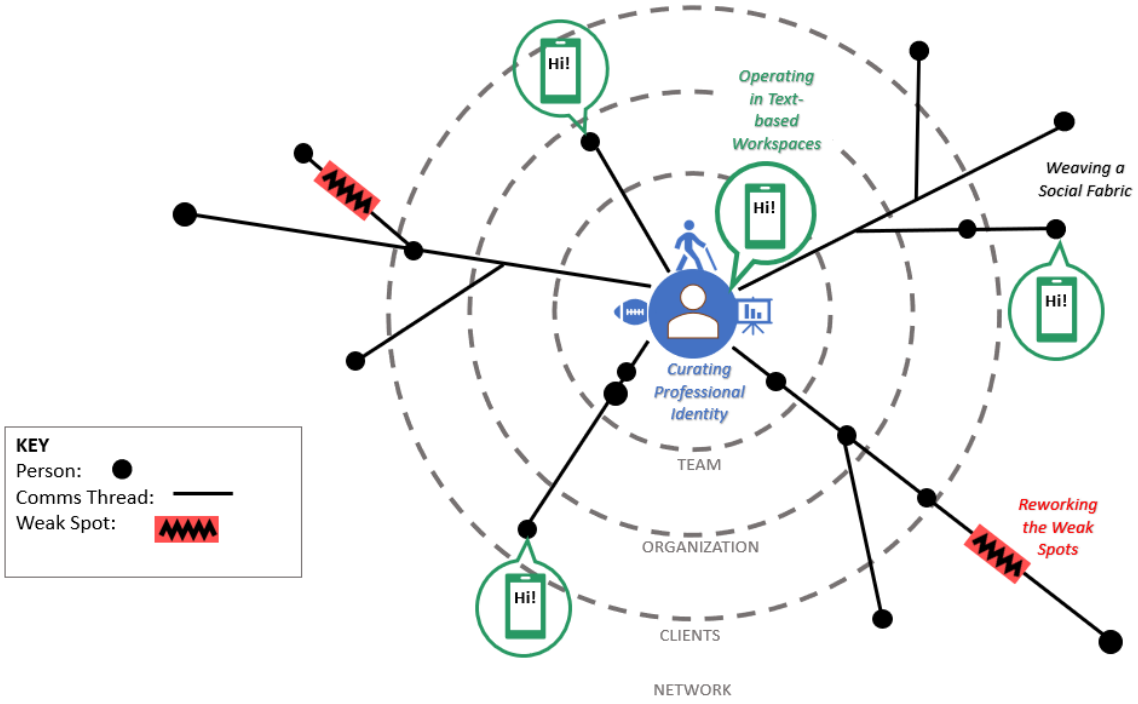
Using a constructivist grounded theory framework, this study explored how people who are blind or visually impaired experience relationships in text-based workspaces. The constructivist approach focuses on shared experiences and relationships during the data analysis. It recognizes that the resulting theory is interpreted through the lens of the researcher (Charmaz, 2014).

The following model depicts and describes my interpretation of the results of interviews with 18 individuals who are B/VI and using text-based applications in the workplace. It illustrates the experiences of the phenomenon that were shared by the study participants, as interpreted by me, the researcher. The beauty of grounded theory is that it is a way of looking beyond the common themes to discover "what all is going on here" (Schatzman, 1991).

Figures 5.1 offers a visual representation of the theoretical model and includes the four primary dimensions: Operating in Text-Based Workspaces, Reworking the Weak Spots, Curating Professional Identity, and Weaving a Social Fabric.

Figure 5.1

The Theoretical Model: Experiential Workspaces Model for B/VI Professionals



Note: a) Starting from the center of the diagram, the outline of a person is encircled in blue. To the left of the circle is a football icon, above the circle is an icon of a person walking with a long cane, and to the right is a screen with a graph on it. Underneath are the words *Curating Professional Identity*. b) A green speech bubble is attached to the center circle. In the speech bubble is a cell phone icon with the word Hi! Above the speech bubble are the words *Operating in Text-Based Workspaces*. Three similar speech bubbles appear throughout the diagram. c) Emanating from the center circle are several black lines, representing communications threads. At intervals there are black dots, each representing a person. The dots vary in their placement within concentric circles that represent Team (innermost), then Organization, then Clients, then Network. Near a cluster of lines and dots are the words *Weaving a Social Fabric*. d) On two of the lines/threads is a zigzag area encased in red. Near one of these are the words *Reworking the Weak Spots*.

The core dimension, Cultivating Professional Identity, is situated at the center of the diagram. This dimension drives decisions when one is Operating in Text-Based Workspaces, about what communication medium to use, in this case what text-based application and delivery device. Curating identity also determines how the person will respond to Reworking the Weak Spots, addressing the obstacles to their productivity and evaluating the consequences of their actions. Finally, the professional identity is continuously Weaving a Social Fabric through ongoing interactions with their teams, organizations, clients or customers, and extended network.

Operating in Text-Based Workspaces

Interviews for this study took place nearly two years into the COVID-19 pandemic, between November 2021 and April 2022. Vaccines were widely available, and some organizations had begun returning employees to the workplace or planning for their return. For a few participants, telework had lasted for only a few weeks early in the pandemic. Some had initially worked remotely for a year or more, but were back in the office, at least part time. At the time of their interview, half of the participants were working remote-only (except for the occasional visit to the office to pick up equipment or attend a special event). Regardless of their workweek configuration, each was still communicating with colleagues and customers/clients in a remote or hybrid setting.

Most conveyed satisfaction with the option to telework full-time, or at least part of the time. Half expressed a strong desire to work remotely in the future. Reasons for preferring telework arrangements included the lower expense of commuting, relief from difficulties with transportation, and fewer distractions resulting in improved productivity. In addition, some participants said that they appreciated the accessibility of electronic materials (versus paper) inherent in telework or the ability to interact with people professionally without necessarily disclosing their disability.

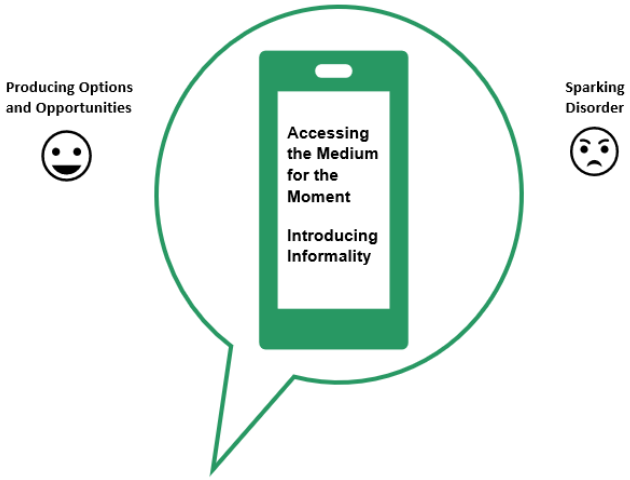
For most participants, telework had not been an option pre-pandemic, and the transition happened very suddenly. Two years later, individuals were still balancing the benefits of working remotely while missing the personal interactions in the office. Some participants indicated that during the pandemic, the colleagues with whom they were friendliest in the office were also continuing to work remotely, so there was little motivation to return to in-person work. They had found new ways to stay connected.

The study investigated the effects of text-based media, but all of the individuals interviewed also participated in audio and/or video interactions in relation to work. In fact, most of the participants had developed their closest connections with colleagues they had worked with in person. Each medium—in-person, audio and video, and text—had a role to play in workplace interactions. The text-based medium offered a critical strand that wove through communications threads, with the special value of providing touch points that could maintain connection over the long term. With text-based workspaces playing such a significant role in facilitating connections, it was unfortunate that the medium also resulted in some accessibility barriers.

Figure 5.2 illustrates the processes and outcomes taking place when Operating in Text-Based Workspaces.

Figure 5.2

Experiential Workspaces Model for B/VI Professionals: Operating in Text-Based Workspaces



Note: Centered in the diagram is a green icon of a cell phone inside a text bubble. On the screen are the phrases Accessing the Medium for the Moment and Introducing Informality. To the left is the grinning-face emoji and the phrase Producing Options and Opportunities. To the right is the angry-face emoji with the phrase Sparking Disorder.

Participants described multiple considerations in selecting the medium to use in interactions, such as familiarity or rapport with the receiver, intent of the message, situation (e.g., when on the move or in the presence of others), and the preferred medium of both sender and receiver. In some circumstances, the communication called for voice cues and tone to be conveyed, so the choice was in-person, telephone call, audioconference, or videoconference. Even within text-based spaces, the best medium to access in that moment was continuously assessed.

Email was used at work in some capacity by nearly everyone in the study, and several people identified email as their preferred text medium. Email is a familiar tool, as it has been central to workplace communications for a long time and the interface is generally accessible and usable. A recent report on the workplace technology used by B/VI employees found that most used Microsoft Outlook, followed by Google Mail, and then Apple Mail. Of the 293

respondents to the question, half said they used one email platform, but more than a third used two email clients and a few (26) even used all three email applications during a typical workweek (Silverman et al., 2022).

Smartphone text messaging was used extensively at work for both task-based and social communication, to a much greater extent than I had anticipated. Stern (2022) proclaimed that texting is the new email, only more fun. The smartphone is always at hand, and people have simply gotten used to communicating with family, friends, and now coworkers via the quick text message. For people who are B/VI, it is easy to use with the VoiceOver screen reader or dictation. Another explanation was offered by Participant 17:

> It's interesting. A lot of times I would get text messages from somebody that say, "Hey, can I give you a call?" I think that even though you're working, it feels more intrusive to call somebody when they're at home. (Participant 17)

The other text-based platform that became ubiquitous, often as a direct response to remote work, was instant messaging like Microsoft Teams (reported by 11 participants), Google Chat, and Slack. Most participants reported that either their organizations had introduced a messaging platform early in the pandemic or they had started using their existing platform in a more focused way. As Participant 07 noted, "Teams is huge."

Situations where a call or in-person interaction was preferred might include longer or more complex conversations, or those that would benefit from the cues available when conversing orally. Participants described instances where they may have started a discussion in a text format, but then moved it to some version of live, synchronous interaction. For example, Participant 01 said that, following a rocky interaction, "I thanked him over a text message, but he wasn't really receptive. So, I kind of doubled down just to save face in person." Indeed, a study by Gajendran et al. (2022) found that resolving complex problems over a text platform (email in their study) was not only taxing and frustrating, but also worsened one's performance on subsequent tasks, compared to conversation.

Although each of the central text platforms—email, text messaging, and instant messaging—had some of their own accessibility and/or usability challenges, the more frequently cited difficulty was following and participating in videoconference chat. In fact, some of the very features that were designed to be useful, like announcing when a person had entered or left the meeting or had posted in the chat, were the same elements that created so much verbosity that one could not hear the meeting content. Better chat management would have been particularly helpful, such as letting meeting attendees know when something of importance was about to be shared in the chat. This was also an area where it clearly made a difference in how well versed an individual was in using the software features, as certain settings and workarounds might have improved their situation. Most of the time, training or instructions on how to leverage the new features were not readily available, so individuals were left to “figure it out after a lot of trial and error” (Participant 14) or “just played around with a lot of stuff to get the hang of it” (Participant 13).

Reflecting the inherent informality of the text medium (other than email which was most used for formal communications), some participants wished they could participate in the videoconference chat feature not just professionally, but also socially, to send or reply to a “nice to see you here.” Because of the possibility of meeting administrators being able to view the public or direct chat, or fear of inadvertently sending a casual message to the wrong person when navigating multiple chat threads with a screen reader, side talk in meetings frequently occurred by texting. At times, the informality and playfulness might escalate in the extreme. For instance,

> One time one of my supervisors had us all on video. It was horrible. And so, I sat there, and I started texting. One of my coworkers, she laughs at anything, so I randomly started texting her dad jokes and she’s sitting there on video trying not to laugh. She’s turning redder and redder, then she’s getting purple. And all of a sudden, her screen goes blank and you can hear her, because she forgot to mute herself, bawling out laughing in the background. I was bad that day. (Participant 04)

Several people looked forward to these silly interactions. Hsieh and Tseng (2017) proposed that the perceived playfulness of mobile text messaging produces positive affect and strengthens friendship. In remote and distributed work situations, the text-based medium produced options and opportunities to stay engaged and connected.

Over time, this connectivity might result in expanded networks internal and external to the organization. Business and personal communications tended to overlap in unstructured moments and cultivated relationships that could lead to access to resources important to one's work or a future job opportunity (Vigeland, 2022). In fact, five of this study's participants had found a new job during the pandemic and others spoke about how they had learned about their current position, and most of them had heard about the opportunity through their network of friends and acquaintances.

The text medium has many positives; however, its long-distance situation can lend itself to misunderstanding or aggressiveness, such as the messages Participant 06 sent in frustrating situations, "I don't mind saying, in some of those instances, my emails became kind of scorched earth." Many of the individuals I spoke to noted that it was difficult to express or determine the intended tone in text-based messages. The use of emojis or LOLs helped, but still sometimes left someone thinking "what does this mean?"

Reworking the Weak Spots

B/VI individuals regularly use problem-solving skills to address the challenges they encounter on a daily basis (NRTC, 2022a). The participants in this study described a variety of ways they handled barriers to their productivity that resulted from software and processes that had clearly not considered people with B/VI. These barriers created snags or weak spots in the communication and connection thread, that needed to be worked through.

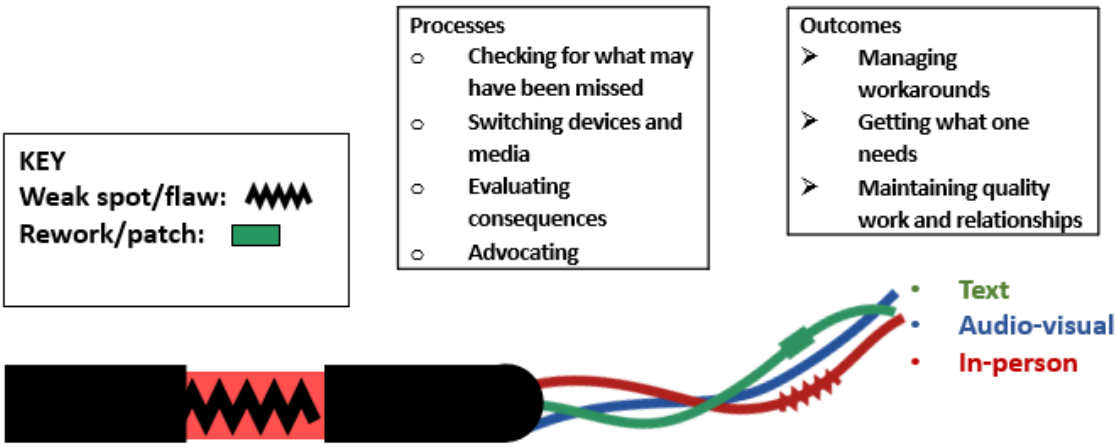
In addition to the meeting chat mentioned earlier, a frequently cited problem was others' dependence on visuals such as screenshares, complex graphs, screenshots, and photos.

Coworkers who were aware of one's B/VI or simply demonstrated an inclusive mindset, incorporated description with their visuals. However, since almost everyone in the study communicated regularly with people who were not aware of their B/VI, individuals weighed how best to get what they needed.

Figure 5.3 illustrates the processes and outcomes taking place when Reworking the Weak Spots.

Figure 5.3

Experiential Workspaces Model for B/VI Professionals: Reworking the Weak Spots



Note: A thick black line represents a communications thread. It is split in the middle by a zigzag line encased in red, representing a weak spot or flaw. From the right-side end of the thread are three smaller strands in green, blue, and red, representing text, audio-visual, and in-person communications. The red strand has a zigzag in a small area and the green strand has a thicker area representing a rework or patch. A text box above the diagram lists the Processes: Checking for What May Have Been Missed; Switching Devices and Media; Evaluating Consequences; Advocating. A text box to the far right lists Outcomes: Managing Workarounds; Getting What One Needs; Maintaining Quality Work and Relationships.

Individuals were dismayed that sometimes they did not know what they did not know, or what they may have missed. Therefore, especially if there was a possibility that the missing information might be important, they took the extra time to go back to copies or transcripts of

meetings and chats. In other instances, they made sure to reach out after a meeting to ask a colleague what they may have missed. Some had colleagues who would be sure to “keep them in the loop.” These coworkers might provide description through a direct meeting chat or text message as the information was being presented or would share the information later.

Another strategy was to switch devices and media. For example, if one were not able to participate in the meeting chat, they would reach out afterwards to share their thoughts over email. Or, if it was difficult to follow a communications thread over the desktop application, someone would opt to switch to the smartphone app. Throughout the workday, for a variety of reasons, individuals moved between their mobile phone, iPad, and computer. This was mostly driven by task and was done consecutively, but also happened concurrently, as would be the case when using the laptop to join a meeting but texting or taking notes on their iPhone.

Decision-making around advocating for access to information varied. While most stated that they would ask for descriptions of graphs, request meeting materials in advance, or explain to others that they needed information in a more accessible or usable format, this seemed to be dependent on their relationship with the other person. Because advocating meant that the other person would know that they were B/VI, individuals hesitated to ask for what they needed if no prior relationship existed, particularly if the reaction of the other person presented greater risk, like a potential or new customer.

Throughout the process of reworking the weak spots, individuals were evaluating the consequences of their actions and interactions.

> From an email standpoint, sometimes it’ll say “image,” and from a text to speech, JAWS screen reading standpoint, and so I’ll need to investigate that a little bit more or I’ll just kind of let it go and just ignore it. (Participant 08)

Would one be able to adequately participate in a discussion if they had not reviewed the materials in advance that would otherwise be presented by screenshare? What would one possibly miss if they turned off their screen reader in a meeting so they could concentrate on the

speakers? How would a connection respond to finding out that one was B/VI? Orbe (1998) posited that “preferred outcome” is a fundamental factor influencing communication behavior. Nondominant group members (in this case B/VI), consciously or unconsciously, consider how their communication behavior will affect their relationship with dominant group members (not B/VI).

Ultimately, by managing their workarounds, study participants were able to get what they needed to successfully perform their jobs. Many of these approaches relied on strategic use of text-based workspaces, like having a coworker text to let one know if the lighting was adequate when they were on-camera. The individuals I interviewed appeared to have effectively navigated the challenges to maintain quality work and work relationships.

Curating Professional Identity

The individuals who participated in this study conveyed a broad perspective, as they represented a wide range demographically as well as in their experience of being a person who is B/VI. Some had been B/VI since birth or very young, while others had become legally blind much later in life. Some had a strong technology background, while others participated in technologies more “grudgingly.” As Participant 14 put it, “There’s blind people of all stripes just as any other people.”

Similarly, participants had different experiences related to stereotypes and biases and had developed their own views on how to craft professional identity, including the presentation of their B/VI. Though not a study participant, the experience described by Thomas (2022a) was instructive:

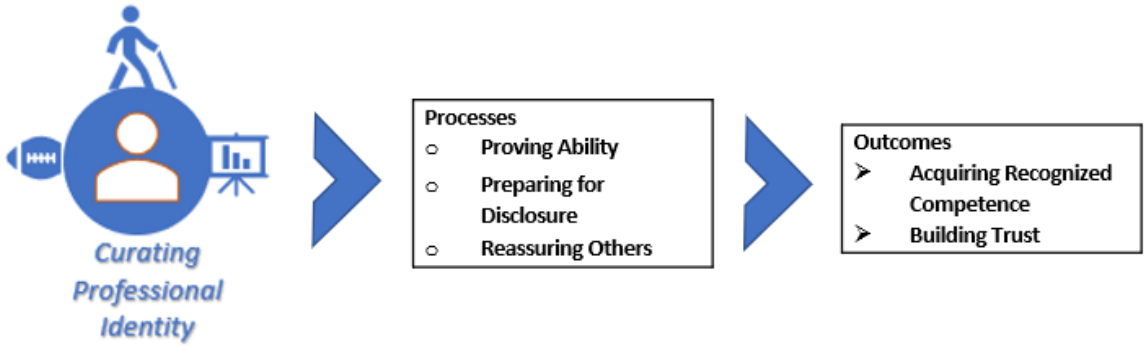
> In my 20+ years of disability, there has been a lot of work I have had to do to educate people about what that [being disabled] really means. Whereas it has not been the same for being female and Black. People make assumptions about my abilities in thinking I can’t work, go to college, travel safely, cook in my kitchen, own my own home, enjoy a movie or date and the list goes on and on. I find myself constantly having to explain to people that I can do all these things and much more. Sometimes people are not convinced until they “actually see it” and then not even then.

Since text-based workspaces do not announce one's B/VI, individuals may have the choice, at least initially, to leave their disability out of the conversation. As Participant 13 put it, "Instead of it saying at the bottom, sent from my iPhone, it doesn't say sent from a blind person." Yet, whether a study participant's B/VI was known or not, curating all the aspects of one's professional identity employed tactics, techniques, and maneuverings in interactions. As Glaser (1978) remarked, people strategy people through various mechanisms within a social organization.

As denoted previously, Curating Professional Identity is situated as the Core primary dimension of the theoretical model, as it directly influences each of the other primary dimensions. Curating Professional Identity shaped how one was Operating in Text-Based Workspaces, the decisions one made in deciding when and how to be Reworking the Weak Spots, and determined one's activities when Weaving a Social Fabric. Figure 5.4 illustrates the processes and outcomes taking place when Curating Professional Identity.

Figure 5.4

Experiential Workspaces Model for B/VI Professionals: Curating Professional Identity



Note: From the far left, the outline of a person is encompassed in a blue circle. To the left of the circle is a football icon, above the circle is an icon of a person walking with a long cane, and to the right is a screen with a graph on it. A blue arrow points right to a text box that lists Processes: Proving Ability; Preparing for Disclosure; Reassuring Others. A blue arrow points further to the right to a text box that lists Outcomes: Acquiring Recognized Competence; Building Trust.

As articulated by Thomas (2022a), people may have low expectations regarding the abilities of people who are B/VI. Some individuals in this study expressed awareness that they were being judged by their sighted colleagues and inferred extra pressure to meet high standards. Text-based workspaces, particularly email, was an area where professional standards and communication skills could be assessed by others. So, participants typically took good care to proofread their messages to ensure the accuracy of dictation and spelling and grammar. When possible, they kept formatting minimal, to guard against an erroneous tab, misaligned list elements, and odd font combinations. One of the benefits of the texting and messaging platforms was that there was often no expectation of formatting, including paragraphing and punctuation. As Participant 08 described, “I’m notorious for misspelling a lot of things in text just because that’s the way that the software interpreted my speaking,” but also took the extra time to proofread when needed: “If I’m talking to a client or the CEO of my company, I want to make sure I’ve got my spelling correct and verb tense correct.”

Some individuals mentioned that their use of graphics, like sending photos or using emojis, was a way to subtly show their sighted colleagues they had that ability. McDonnall and Cmar (2022) found that employing a person with B/VI impacted employers’ understanding that they could perform the work, even if they did not know how they did the work. Participants in this study conveyed with pleasure some of the skills that they were recognized for in their workplace.

Demonstrating professional competence was also a strategy used in preparation for the eventuality of disclosing one’s B/VI. A few participants noted that developing relationships early on was a way of facilitating disclosure because some degree of trust had been developed. Through collaborative interactions, the coworker or customer would likely be reassured that their colleague was able to handle the work.

Participants described other ways they offered reassurance about their disability to others. One was to be open to explaining or demonstrating how B/VI employees do their jobs or to answer other questions that someone might be curious about.

> Some of the sighted managers . . . across the country haven't worked with, especially someone who's totally blind. One of the managers was asking me something just like, "Oh, if this is offensive, I don't want to bother you or whatever. But I just really have always wanted to know this." (Participant 03)

Several spoke about leveraging humor, and even those that did not declare it as a tactic, shared stories about interactions that clearly used humor to be relatable or approachable.

Affinity grew as colleagues demonstrated more comfort with their B/VI coworkers. This might have provided opportunities related to their work or toward developing friendships. Individuals in the study were in a regular state of assessing or "gauging" their interactions to determine if and when a sufficient level of trust had developed to take certain actions, like disclosing their B/VI or becoming a Facebook friend. In line with the concept of symbolic interactionism (Blumer, 1969), people would be continuously monitoring and interpreting movements in their interactions with others as they curated professional identity.

Weaving a Social Fabric

Participants related that they felt closest to the people at work that they had met in person, and usually had spent considerable time with. As individuals continue to work in person less frequently or not at all, the way work relationships develop is bound to change. Ellis (2022) reported that as remote work has become more common, employees are placing less importance on having friends at work and focusing more on work-life balance.

Still, several instances in this study seemed to suggest that people working in distributed work settings will continue to form connections that are more than just acquaintances. Ramirez and Zhang (2007) found that partners who did not previously know one another and communicated through media like text-based workspaces, incrementally gained intimacy and social attraction, formed rewarding associations, and sought more information over time than

did partners who met in person after connecting remotely. As Participant 13 noted, getting to know someone in a text-based workspace is “not impossible, but a little harder.”

Study participants shared an abundance of fun stories about their social interactions in the workplace, and they were clearly energized and engaged by the encounters. These included “emoji wars,” food challenges, and “talking smack.” Some of these events took place in person, but a significant number of them happened online in text-based spaces. This was particularly visible in meeting side talk. While a fair amount of side talk was relevant to the professional meeting content, many individuals regularly took part in poking fun over text messaging. Phrases like “Not gonna happen” (Participant 04) and “Can you believe . . . ?” (Participant 13) were part of lively text interactions.

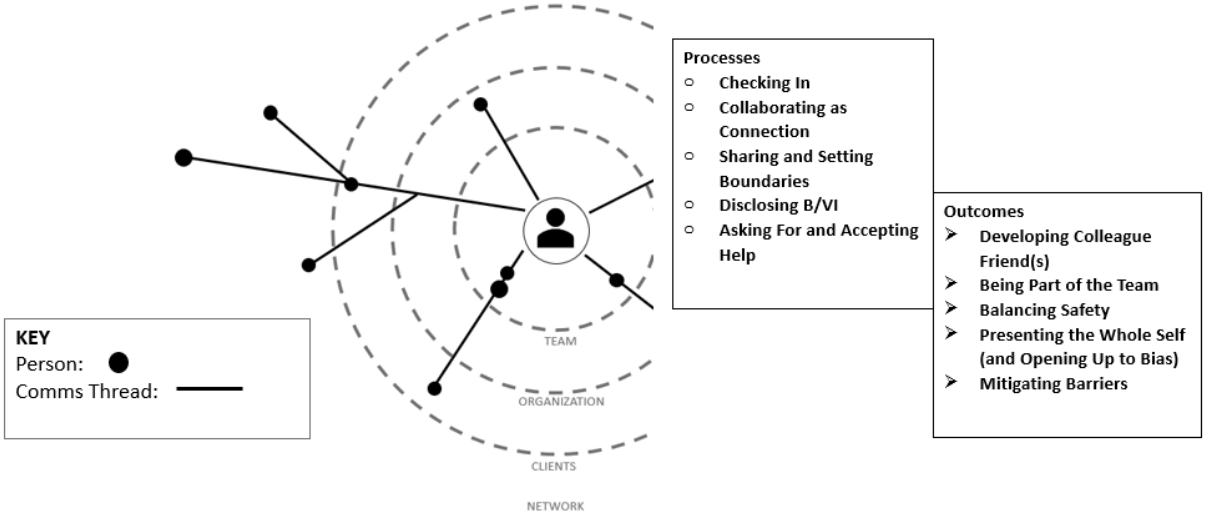
Partaking of lighthearted side talk and participating in visuals like use of fun emojis was a way of finding and cultivating relatability. Individuals and groups related over common workplace topics like families, TV shows, and sports; similarly, they might relate over that boring Zoom webinar or a customer’s funny story. Venting and commiserating were commonly referred to as a way to process information with coworkers in a helpful yet informal way. As Participant 04 described, “When you start talking about a client, it leads you to a, ‘Oh, my God, craziest client ever’ story.”

Taking part in these text-based interactions required the availability of user-friendly technology, and for people who are B/VI, skill in using both mainstream and assistive technologies. Participants mentioned working with many different devices and software applications, as detailed in Table 4.7, Table 4.8, and Table 4.9. An indicator of satisfaction with text-based workspaces was having options, to choose the most personally accessible and usable configuration.

Figure 5.5 illustrates the processes and outcomes taking place when Weaving a Social Fabric.

Figure 5.5

Experiential Workspaces Model for B/VI Professionals: Weaving a Social Fabric



Note: Emanating from a center circle showing the silhouette of a person are several black lines, or radii, that represent communications threads. At intervals along these threads are black dots, each representing a person. The dots vary in their placement within concentric circles that represent Team (innermost), then Organization, then Clients, then Network. Overlaid on the right side of the diagram is a text box listing Processes: Checking In; Collaborating as Connection; Sharing and Setting Boundaries; Disclosing B/VI; Asking For and Accepting Help. Further to the right is a text box listing Outcomes: Developing Colleague Friend(s); Being Part of the Team; Balancing Safety; Presenting the Whole Self (and Opening Up to Bias); Mitigating Barriers.

This dimension is where much of the activity took place, weaving together a social fabric around work. Longer term, this grew into a network one could draw upon for professional support. One of the key strategies study participants used to maintain their network was checking in. Check-ins were largely initiated via text message, email, or social media, and included touching base with current coworkers and supervisors, catching up with a former colleague or classmate, or occasionally commenting on a connection's post on LinkedIn or Facebook. These actions allowed one to loosely stay in touch in between more substantial interactions, and these more significant interactions could happen months or years apart.

According to Liu et al. (2022), a brief check-in was appreciated more than people thought, and the more surprising check-ins, from those who had not been in contact recently, tended to be especially powerful.

A person's network might grow from social interactions, but frequently they developed from working together collaboratively, perhaps as a departmental or project teammate. Collaboration is a natural way to connect with others and does not require the interaction to be based on anything more than the task at hand. Ernst and Yip (2009) described how coming together toward a common goal was a strong foundation on which to build trust and affinity.

In some way, all of these workplace interactions required determination of how much sharing one would do and what boundaries would be observed. Again, this represented the concept of symbolic interactionism (Blumer, 1969) in which a person is continuously taking another into account, interpreting their actions and determining their own actions accordingly. Individual participants had widely variable comfort levels with what they shared about themselves in the workplace. A few had certain coworkers that they fully trusted and had become very close with, even knowing one another's families. On the other hand, several specifically said that they were "private" or "careful" with coworkers. Participant 18 did not want to be "an open book," however, as we continued talking, reflected "maybe they know me better than I think they do."

Disclosing B/VI voluntarily was governed by considerations about the expected response based on one's interpretation of past interactions. According to Jain-Link and Kennedy (2019), only 39% of employees with disabilities had disclosed to their manager. Even fewer had disclosed to their teams (24%) and only 4% had revealed their disability to clients. Of this group, 13% of employees had reported that their disability was visible. In my study, participants usually worked in circumstances where their manager and their team members knew they were B/VI. Beyond that, many worked with others in their organization or external contacts like clients that

were not aware of their disability. Participants reported that, when they did disclose their B/VI, the result was typically positive, especially when they had laid the groundwork by establishing even a rudimentary relationship with the other person.

The last process identified, asking for and accepting help, assumed that the other person in the interaction was aware of one's B/VI. In Silverman et al. (2022), 24% of survey respondents agreed that they had concerns that when they ask for assistance in the workplace, others will think they are not capable due to their B/VI. According to Thomas (2022b), help is a stereotype about the disabled community. In this study, many participants occasionally asked for assistance, usually from a trusted colleague. This might include advice on presenting oneself on camera, providing situational information that was only available visually, and support interpreting graphics and other inaccessible materials. A survey by NRTC (2022b) reported that just 10% of respondents said they did not need sighted assistance for any job tasks.

These processes or activities individually or in combination wove together a social fabric of colleague friends and teammates. Most of the stories shared with me described methods of navigating social relationships in ways that would balance psychological safety (Edmondson, 1999) and potentially allow someone to present themselves authentically in the workplace, whatever that meant to them. When individuals had developed trust relationships, understanding one another helped mitigate barriers. For example, a colleague might know when to loop their B/VI coworker into what was happening in the room over text message or send a direct chat with a description of the information on the meeting screenshare.

Summary of the Model

Returning to my research question, how do people who are B/VI experience relationships in text-based workspaces? The findings of this study and my interpretation of the data through the constant comparison of grounded theory led me to develop a model to illustrate the processes at work in this setting. There is no one process or outcome to represent

the complexity of relationships, so my model characterizes numerous actions and interactions that are taking place within the setting of text-based workspaces.

Theoretical Propositions

Ultimately, what are my takeaways from this investigation? While the dimensions and the model are an interesting presentation of the study results, what is their value in framing how practitioners and scholars apprehend these concepts? Reflecting on the findings of my study, I developed a series of theoretical propositions, which I present next, followed with a summary of the implications for the field.

Proposition 1: Recognizing the Importance of Text-Based Media

The study results showed there is a continuous intertwining of three types of communication methods in the workplace: in-person, audio-visual, and text. Text-based media have become an integral strand in the communication thread. Physically, three strands twisted or braided together into a thread is stronger than a single strand, as the multiple strands share the load. (Outdoor Is Home, n.d.). The text strand is a persistent connector that fills the spaces between more complex interactions. Text serves as a means for quick check-ins, collaborative consultations, and socializing.

Other than email, text has not traditionally been considered a “real” communications medium in the workplace. However, now, text-based communications have been seamlessly integrated into work, beyond the traditional email medium. Messaging platforms like Microsoft Teams have proliferated, and text messaging has become a regular stream of connectivity both professionally and personally. This study’s investigation uncovered regular interplay between these professional and personal communications over text and feelings of affinity or friendship with colleagues. For example,

> When I see the photos and stuff [posted in the messaging app], I’m like, “Oh, that’s so cool.” I get all excited by it. I’m like, “I love it” because it gives me insight into people that I might not have had the insight into before. So, for me, that’s awesome. (Participant 04)

Frays in a strand or thread can damage its integrity and reduce its strength (Outdoor Is Home, 2022). To optimize the experiences and opportunities for people who are B/VI in text-based workspaces, organizations and teams should account for technological barriers. In Silverman et al. (2022), survey participants who are B/VI were provided a list of possible actions they might take when their mainstream technology and assistive technology did not work together. Many of the respondents indicated that they were primarily responsible for their own troubleshooting and used strategies such as collaborating with friends or coworkers who are also use AT, writing their own JAWS scripts, using a visual interpreting service or sighted person for assistance; and contacting vendors on their own. Additionally, when IT staff were not able to assist, 32% reported using their own technology and 25% said their productivity was decreased.

Organizations may deploy elaborate systems to roll out new technology, but beyond that, people are often left to learn on their own (Bhattacharyya, 2022). The short lifespan of new digital platforms, and the rapid integration of new features has made learning new technologies even more difficult, particularly in remote work environments. Further, sometimes the hardest part is learning how the organization uses the technology, as Participant 08 described,

> It's a lot about training and just understanding, "Here's how the platform is used. Here's how it's best utilized, or how we found it best utilized." . . . People have come and gone, and everybody has said the same, "Why is this person doing this or reacting this way?" "They're new," or "Here, let's explain to them better, as an organization, culturally, how we use this type of thing."

Text-based workspaces are clearly here for the long haul, especially since the professionals now entering employment grew up relying on their smartphones for texting, and almost everyone has their phone, a multi-media communication device, in their pocket. For people who are B/VI, this is especially significant, since smartphone apps are often more usable than the desktop version and phones, particularly iPhones, have a variety of accessibility

features embedded, like the VoiceOver screen reader and the braille overlay keyboard. As Participant 01 professed, “I basically use my phone as my computer.”

As organizations continue remote and hybrid work, and employees are thus distributed across locales, it is highly likely that the trend to text-based workspaces will continue. Several participants noted that, even when back in the office, pandemic-era communication was continuing, including quick and relatively informal texting and messaging. It will be critical for organizations to recognize that this shift is permanent and expanding, and to plan for what that means for their organization’s communications culture.

Proposition 2: Allowing for Flexibility in the Workplace

Respondents to a survey of executives in the U.S. explored workplace policy and operational changes resulting from the pandemic, including compliance with workplace regulations (Littler, 2022). Only 6% were shifting to all-remote work, but when asked to what extent their organization has offered, or is considering offering, more flexibility or remote work options to help attract and retain employees, nearly half (47%) said they had to a great extent. Littler (2022) further described how companies have integrated remote work into their corporate cultures and some tech companies have implemented “work-anytime” policies. However, nearly 90% of respondents expressed concern about maintaining company culture and employee engagement, and just more than half were concerned about fairly offering remote/hybrid work flexibility and about the efficiency of communication and meetings that are a mix of remote and in-person staff.

The participants in my study that had the opportunity to connect with their colleagues in multiple media seemed more engaged within their team or organization. In instances where communications procedures had to be strictly enforced due to the nature of the work being subject to corporate policy or public information regulations, informal connections were less likely to happen in the course of the workday, particularly when working remotely. Even when

communication was not strictly regulated, organizational culture instilled unwritten rules. A work culture may implicitly signal conformity (Jain-Link & Kennedy, 2019). Expectations about cameras on or off, or use of the meeting chat were typically adhered to even when not mandated. For instance, when presenting in a team meeting, “As each person’s on, you’ll turn your camera on, you’ll do your section, and then you’ll turn your camera off” (Participant 12).

According to Hofstede et al. (2010), “Organizing always requires answering two questions: (1) who has the power to decide what? and (2) what rules or procedures will be followed to attain the desired ends?” (p. 302). Most of this study’s participants described ways that they worked within their organization’s culture and endeavored to meet their coworkers’ expectations. A colleague I discussed the findings with pointed out that this approach to communication was a symptom or outcome of power dynamics, of status quo, and the unspoken negotiation between B/VI and sighted colleagues in terms of what a B/VI person needs to do to fit it. It reflected whether the undercurrent was one of inclusive integration, assimilation, or simply trying to not get excluded (Anonymous, personal communication, August 12, 2022).

Many participants described ways that they “mirrored” the communications of others. This is not an uncommon practice in workplace communication; however, it has more salience for someone who is B/VI, especially in use of media that relies heavily on graphics and formatting. Mirroring is essentially adopting dominant group codes to make one’s identity as a member of the nondominant group less, or not, visible (Orbe, 1998). Although participants described instances in which they would advocate for more accessible materials, it was rare that accessibility and usability were the default standard.

An organization’s role in establishing a thoughtful communications culture appeared to influence individual’s satisfaction with their work situation. Baker (2021) found that those who worked on hybrid teams were more willing than onsite employees to accommodate their

teammates' work preferences (69% vs 54%). Demonstrating respect for employees with disabilities was clearly appreciated, as Participant 16 noted with "I was pleasantly surprised to find out how forward-thinking and how onboard these folks were [about accessibility]." Policies espousing inclusion, such as promoting description of visual information, were declarative in text-based workspaces.

There is no one-size-fits-all and organizations that support flexibility in the workplace benefit all their employees including those with B/VI. The ability to successfully operate as remote or hybrid has largely been proven, so it should be considered a viable option beyond a disability accommodation request. In addition, the communication culture should allow for options that adapt to user preferences when possible, such as cameras-optional or less dependence on visuals to share information.

Proposition 3: Creating Agency Around Disclosure

Research partners who looked at the data with me and I, were struck by how intentional some participants were about disclosure of their B/VI. Tactics varied, but often happened within text-based workspaces, particularly email, but also by phone. Most had thought through the process that would likely develop and had created schemas, or mental maps, guided by their interpretations of past experiences and expectations of the future (Harris, 1994). In many cases, building an initial relationship with the other person was a key step toward the possibility of revealing their disability. Strategies were no doubt based on considering past experiences and the role their B/VI played in their own identity, and specifically in their professional identity. As Participant 10 shared, "When I was younger, I would say that I wasn't as comfortable in the identity of being a blind woman that I am now."

Cultural mindsets are deep, assumed patterns of thinking that shape how we understand the world and how we normalize existing social order (Frameworks, 2020). Shifts in mindsets are part of institutional and structural change, with adjustments in thinking and social and

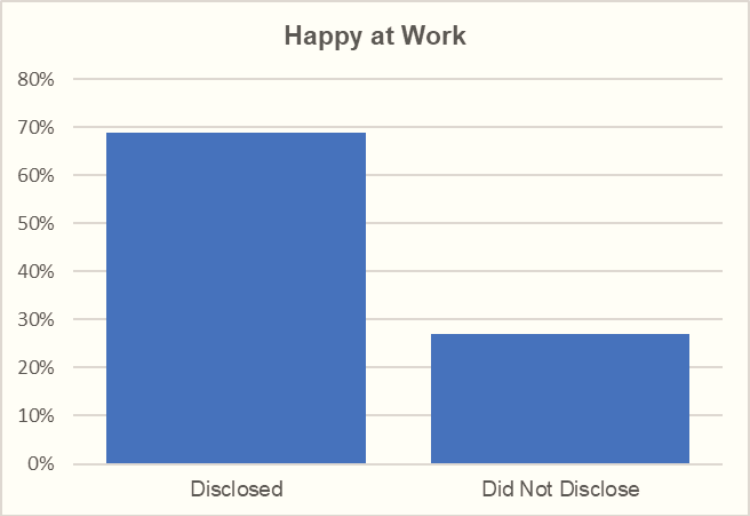
material changes influencing one another in an ongoing, iterative way. Interactions have the potential to shift people's thinking, and the power of personal interaction does not appear to derive primarily from the content of communication so much as having a direct experience with another person. These encounters reduce prejudice by enhancing knowledge about the other, reducing anxiety, and encouraging people to imagine the experiences and perspective of the other (Frameworks, 2020).

Participants described an awareness that sighted colleagues and customers might closely judge the quality of their work. As a colleague I discussed the study with commented, as employees, these B/VI individuals had a sense that they were constantly being judged, on stage, observed and watched, so had to be careful and on their best A-game. Even when on their best A-game, the energy required in interactions was different than normal or casual conversation others may have (Anonymous, personal communication, July 27, 2022). Further, the ability to feel "normal" in communities of other people with B/VI, would be a reason for individuals to spend time in affinity groups, such as a Facebook group or ERG.

Some people choose to make it known they are disabled; others might identify only when necessary; still others might not identify at all. In addition, one might consider intersectionality in the equation, for instance, "I am blind, female, and Black. That makes me a member of three different marginalized communities" (Thomas, 2022b). People may be concerned that disclosing their disability will alter their relationships with coworkers or with their manager and impede their career progress. However, one study found that employees with disabilities who disclosed to most people they interacted with were more than twice as likely to feel regularly happy or content at work than employees with disabilities who had not disclosed to anyone, 65% versus 27% (Jain-Link & Kennedy, 2019), depicted in Figure 5.6.

Figure 5.6

PWD That Report Being Happy at Work, by Disclosure Status



Note: Adapted from Why people hide their disabilities at work by Jain-Link, P. & Kennedy, J. T. *Harvard Business Review*. June 3, 2019. (https://hbr.org/2019/06/why-people-hide-their-disabilities-at-work)

The advantage of working in the relative anonymity of text-based workspaces is that each person can decide if, when, and how to disclose their B/VI. As Participant 14 pointed out, "Every blind person's different not everybody's the same." Situations differ as well, so there is no one clear choice to make. The same is true for sharing other aspects about oneself, as was evident in the various feelings about sharing and setting boundaries. The text medium affords individuals a unique ability to curate the multiple facets of their professional identity.

Proposition 4: Facilitating Opportunities for Collaboration and Connection

Relational energy reflects the psychological resources one receives from another. Owens et al. (2015) maintained that relational energy is a powerful motivational force, and an important personal and organizational resource. Relational energy enhances engagement on the job, providing meaning, values alignment, psychological safety, and enjoyment. As Participant 13 put it, "I totally love the connection that we have. And I love the fact that we're

able to cultivate it in different ways. Like I said, whether it's me doing something that is work-related or if it's non-work-related."

Cultivating relational energy, then, is highly beneficial for individual employees and for the organization as a whole. As this study's participants highlighted, engagement came from both task-based and social interactions. Bonds resulted from high-quality collaborations, as individuals worked together toward a common goal, or as Participant 10 described, "doing this work shoulder to shoulder."

I perceived that energy as participants were describing their interactions over text. Messaging channels were intentional spaces where teams and teammates could create flow. For instance, Participant 07 worked in a dedicated Teams environment and declared that during pandemic remote work, "Our department just killed it." Similarly, Participant 12 described the interactions that took place continuously in his group's messaging channel:

> They're consistent chats, back and forth. Like, hey, I'm heading out to lunch, or one is, I need to take time to run an errand, stuff like that. And then training like this one, this person posted, I just did this really cool training. Here's a link to it. (Participant 12)

Another important connection was with one's supervisor. Nearly all of the participants spoke about the importance of having space to communicate regularly with their supervisor, mainly around task-based work, but also on some personal level, even if just for a check-in: "[Our one-on-one meeting] always starts out with, he wants to know am I doing okay? Am I happy? Happy in work, happy in life?" (Participant 03). While much of this happened in audio-visual or in-person interactions, several also described regular communications with their supervisor over text, particularly smartphone texting. "I feel that [texting] is another way of like, okay, she's more open, like the office door being open, she's provided all these various ways for me to get in touch with her" (Participant 09).

This has especial implications for employees who are new to a team, especially in a remote or hybrid work arrangement. Participant 12 shared how their new team member had fit

into the group, “Even though we haven’t met him in person, the [messaging] chats and the conversations that we’ve had on calls, we know stuff about him.” For Participant 09, teleworking with a new team in a text-based workspace, even the smallest bit of social context mattered. She noted that “[This colleague] felt comfortable to come to me with questions maybe more than someone else . . . and I guess the common denominator was this very informal meeting, which was virtual.” For people with B/VI to compete and succeed in the workplace, they should have occasion to get to know their colleagues. This means having the ability and opportunity to fully participate in multiple media—audio and/or video and text-based.

Implications for Leadership and Practice

This research study was conducted to gain better understanding of the social processes that are taking place within the phenomenon of people who are B/VI relating in text-based workspaces. Eighteen B/VI professionals discussed their personal experiences, and by analyzing this information, I developed mid-range theory. Next, I present four practical implications from the study findings.

Implication 1: Recognize the Possibilities in Remote Work

Two years of remote work has proven that it can be done successfully. According to the Ladders Quarterly Remote Work Report (2022a), only about 4% of paying jobs were available remotely prior to the pandemic. By the end of 2020, that jumped to 9%, by the end of 2021 doubled to 18%, and in the first quarter of 2022, 24% of all professional jobs in the US and Canada were hired for permanent remote work (Ladders, 2022b). The accelerating change to permanent remote employment means that over 20 million professional jobs will not be in the office.

> Yeah, it’s interesting because before the pandemic, they didn’t have anybody doing telework or any kind of remote work. Everybody was always there in person. And then COVID shut a lot of the—. . . everybody went home and worked remotely, and it worked for the most part. There were a couple people that did not do well in that kind of environment but for the most part, it worked really well. So our CEO and my boss were like, “Oh.” It just opened up some new horizons to them. (Participant 03)

Little data are available to support suppositions about the longer-term effects of the COVID-19 pandemic on the employment of people with disabilities, including B/VI. On the one hand, it has been speculated that widespread telework has demonstrated its feasibility as an accommodation (Headrick, 2022). Further, when there are more jobs available than people to fill them, employers may be willing to hire from a more diverse pool of candidates. In March 2022, available jobs in the U.S. rose to the highest number on record, at 11.5 million, and job openings were greater than the number of unemployed workers by about 5.5 million (U.S. Department of Labor, 2022). On the other hand, trends from previous upheavals such as economic recessions are cautionary, since people with disabilities who experienced job loss have typically been slower to recover their previous employment status. During the Great Recession of 2008, the employment rate fell more for people with disabilities than for people without disabilities, the rate of recovery for people with disabilities was slower, and as a result, more people filed for disability benefits (National Governors Association, 2021).

As the participants in this study demonstrated, B/VI employees can very successfully work in remote or hybrid organizational structures. Most of the individuals I spoke with conveyed satisfaction with the option to telework full-time, or at least part of the time. Although not asked specifically, half expressed a strong desire to work remotely in the future. As Participant 07 shared, “There’s no need for me to be there. I can do literally 100% of my job remote, so the transition for me was great. I didn’t look back.”

Burnison (2022) discussed some of the benefits of not being in the office together. For instance, being virtual may create helpful distance to guard against group think. He posited that perhaps the psychological safety of being in one’s own space gives more freedom to speak up and provide candid feedback, instead of just trying to get along. This is an important benefit for those who may otherwise hesitate to speak up or have difficulty being heard. Despite difficulties with the verbosity of videoconference chat, a number of study participants took the opportunity

to contribute: “If I’ve got questions, comments, or concerns, [I’ll] drop those in the chat box” (Participant 08).

Rockwood (2022) reported that the pandemic workplace broke down barriers between team members and between employees and managers. As Participant 04 experienced in their organization’s shared messaging channels, “Now it’s different in that everybody is all over everybody’s everything. So, the cliques are still there to a degree, but much less so.” The relationship with supervisors may have changed as well: “We now have much more of a friend relationship. And so, it’s become rather amusing that because of COVID, we’ve actually become closer” (Participant 04). A report by Microsoft (Teevan et al., 2021) similarly found that senior leadership became more accessible online rather than being mostly unavailable when working from a corner office, though it was speculated that this would revert once hybrid work replaced all-remote.

Early in pandemic remote work, some organizations tried to recreate the physical office online, but over time the most effective realized that thinking needed to change to embrace the uniqueness of remote work. While some organizations are not able to become fully remote, the hybrid workplace with part-time telework has found traction even in industries like manufacturing (with teams rotating between on-site and telework). As Burnison (2022) noted, the workplace is no longer either/or, but has transformed to AND, so leaders need to understand how the “where” intersects with the “why.”

Implication 2: Provide Accessible Technology and Ongoing Training

Having the requisite technology and technology skills is critical for people who telework. This is particularly important for B/VI employees who are navigating the complexity of mainstream and assistive technologies working together. As Participant 13 experienced, “There is a database for us . . . that’s not super, super JAWS-friendly . . . I’ll be like, ‘Oh God, JAWS hates using this database.’”

As Makkawy and Long (2021) pointed out, consideration of accessibility is especially important in virtual workspaces where even the simplest task is completed using technology. Further, accessibility can be both a technical and a social challenge. Employees with B/VI must navigate inaccessible technologies while taking care not to be confrontational with the majority, people without disabilities. They must utilize communication skills that are assertive but not aggressive, and have a good understanding of both mainstream and assistive technologies themselves. As Participant 12 noted about telling someone they had sent an inaccessible document, “I won’t boldly come out and tell them, ‘Hey, you’re just insensitive.’ I’ll show them.”

The current rate of development within technology platforms is rapid, so regular opportunities to receive training and information about feature updates is imperative. One study participant described a new feature of the Seeing AI app that assisted with interpreting visuals:

> It’ll [Seeing AI app] say like “Two people by a tree” and then it’ll read the text, like whatever the picture is. It’s awesome. So now I’m not excluded anymore, cause now you can send me something with a funny meme and I’m not excluded. (Participant 13)

As I was writing this chapter, I received a notification about a new feature from the Zoom desktop app that I could “continue the chat” when a meeting had ended. Hopefully, the tech support in the represented organizations will ensure that B/VI employees learn how to use these new features. As gatekeepers, supervisors should be accountable for ensuring B/VI employees get the up-to-date, ongoing, B/VI specific training they need.

Implication 3: Create a Healthy Communications Culture

Organizational schemas are a repository of expected event sequences and appropriate behavior in specific situations (Harris, 1994). For example, the script for a staff meeting might indicate when one should arrive, that the group may speak informally until the meeting starts, and that questions should be posed politely. The organization’s schemas represent the culture including values and beliefs, appropriate behaviors, traditional ways of doing things, and peer and normative pressures.

Study participants shared many such schemas and scripts from their organizations, especially around meeting etiquette or expectations, such as when cameras and microphones should be on or off, how much off-task sharing would take place, and what would be posted in the chat. For instance, in Participant 03's organization, "It's [cameras on] their expectation. Our CEO is very into, he likes that connection, he feels that's a connection point, an extra layer of connection. So, he really encourages people to do it." Although some study participants were comfortable with cameras on during videoconference meetings, others were less so and some had colleagues who refused to appear onscreen. As Microsoft (Teevan et al., 2021) found when surveying their employees, individuals with disabilities could be stressed and stigmatized when cameras-on meant their disability would be disclosed.

Other areas that participants mentioned that reflected organizational culture included when to use email versus messaging, document and case management protocols, and use of visuals such as screenshares and screenshots. Most practices within their organizations did not consider the effect on employees with B/VI. As a research partner reviewing the study findings noted, with just a few exceptions, B/VI employees often tried to adapt to the norms and practices of the organization rather than colleagues adapting to B/VI preferred practices (Anonymous, personal communication, July 27, 2022). For instance, inaccessible materials with undescribed graphics or poor formatting were commonly encountered, as Participant 12 described: "Not everybody always makes sure their PowerPoint is accessible and they always—people don't do that by default, they just create stuff and never think about it." In an inclusive organizational culture, employees would be expected, as a standard, to create accessible documents. Information and training are easily available at sites like the General Services Administration (2021) and Microsoft (2022).

When B/VI employees encounter barriers to information, it can unfairly affect their productivity. As individuals in this study indicated, they regularly needed to advocate for

accessible and usable materials and applications, as Participant 14 did: “I took the initiative, and I said I want this to be accessible. I want to be able to do this myself.” However, advocating for what one needed might also have required revealing their B/VI. As reported by Teevan et al. (2021), professionals with disabilities are likely better served through adaptation and accommodations that honor privacy and autonomy.

As Seay (2022) expressed, it is particularly important in these newer remote and hybrid structures to be intentional about creating a supportive and healthy organizational culture. Norms and expectations should be clearly defined, to reduce uncertainty about how employees and teams should interact. Further, organizations should be explicit about previously unwritten rules. Thinking through the new work paradigm is a perfect opportunity to ensure a healthy communications culture, including creating schemas that ensure inclusive practices.

Implication 4: Reach Out and Connect (With Others, Between Others, Among Others)

Janin (2022) suggested that individuals in underrepresented groups prefer to work remotely because it minimizes exposure to subtle acts of exclusion and expressed concern that these remote workers would face the chance of being overlooked by management. A survey from the SHRM (2021) found that 42% of supervisors say they sometimes forget about remote workers when assigning tasks. This may have profound consequences for B/VI employees who face additional barriers to inclusion.

Participants in my study frequently spoke about the importance of their relationship with their supervisor. For example, “My director, she’s very cool. She would send me a text message, and she’d just be like, ‘Oh, just wanted to see how everything was going. Let me know if you need anything’” (Participant 13). In addition to putting individuals forward for new opportunities, supervisors were important to demonstrating to others in the organization that one was considered a valued contributor. Wright et al. (1997) introduced the extended contact

hypothesis, showing that prejudice can be reduced by knowing that an ingroup member has an outgroup friend. I suggest that this theory would apply also to an outgroup colleague.

Organizational leaders are important conduits to opportunities for connecting and building a network. Participants relayed instances when a supervisor or mentor suggested contacts that furthered their career. Additionally, leadership had an important role in creating intentional spaces for colleagues to connect, professionally and/or socially. Seay (2022) suggested that helpful workplace interactions might include holding non-meeting meetings, bringing in fun, and helping others find common ground. In text-based spaces, messaging platforms were frequently used in this fashion, with channels designed around projects for collaboration or informal sharing spaces for socializing.

Microsoft (Teevan et al., 2021) surveyed employees about their experiences during remote work resulting from the pandemic. They found that the strength of people's indirect connections was perceived to be getting weaker due to the lack of spontaneous interactions. However, most of the study respondents reported making new connections while working remotely or forming new working relationships with existing connections. In addition, an analysis of "meaningful connections" made by email, messaging, and calls showed that most employees did not drop these connections during remote work and in fact increased the size of their networks by 24% more than in the month prior to shifting to remote work. The researchers suggested that this was supported by the organization's deliberate efforts to adapt to the new work conditions.

There was a marked difference in study participants' experiences with remote work between those who did not have space to connect somewhat informally with colleagues versus those who did. "There's not really time or the space to talk about things outside of work or even about work necessarily with coworkers," shared Participant 09 who clearly missed that

opportunity and had considered organizing a remote after-work happy hour to fill the gap. This contrasted with a workplace culture that allowed for more connection:

> We do that sometimes on Teams too, once in a while after we've done a task or right before the end of the day, somebody will check in with a little chat and it's not necessarily strictly work based. It's, "Hey, what are you going to do tonight?" (Participant 03)

Boundary spanning leadership (Ernst & Yip, 2009) bridges social identity boundaries such as gender, age, or disability, as well as job function. Within an organization, teams and team members reach out to obtain important resources and support. One of the ways boundary-spanning leaders forge opportunities is by building relationships through person-to-person linkages within a neutral space to facilitate trust (Ernst & Chrobot-Mason, 2011). Organizational leaders should take the lessons learned during pandemic remote work to craft regular spaces and opportunities that allow employees to connect, collaboratively and socially. For some study participants, this had been done through videoconference and/or messaging media. For Participant 17, "We did a lot of team-building activities to keep people engaged, keep people's spirits up. We had a Friday night game night or trivia night," using videoconferencing, and "In the morning, somebody would share a funny story" using their messaging platform. Text-based platforms like messaging and chat can serve as spaces that allow individuals to connect while deciding how much they choose to share.

While managers may encourage friendly collaboration, they should not insist on it (Cohen & Prusak, 2001). While connection is important, it is best to let it develop rather than attempt to control it. There is no need to invade people's sense of privacy by requiring everyone to share information about their personal lives, which may instead backfire and cause people to shut down. Instead, leaders can nurture community through example, by articulating common goals, and strategic use of technologies like conferencing and messaging.

Recommendations for Future Research

When I initially considered investigating the use of text-based workspaces by employees who are B/VI, I assumed that I would conduct a survey and collect mainly quantitative data. However, I realized that I did not have more than a hunch about what I would want to measure. I chose to utilize grounded theory methodology to hear from individuals experiencing the phenomenon to discover what was happening, and to develop a theory that would be foundational to future research. Various aspects of the model could be further analyzed to provide more depth and breadth, and perhaps result in findings that could be generalizable.

One of the areas for further exploration would be to conduct a survey that would target a larger number of respondents and analyze correlations between the use of text-based media by B/VI employees and feelings of engagement or inclusion at work. The research could evaluate the effects of the types of platforms used or the frequency of use, for example. Such a study might include validated scales like the Social Encounters Scale (SES), that measures organizational social dynamics, or the Work Environment Scale (WES; MindGarden, 2022).

Another study that could be illuminating would be to use an interactional sociolinguistic approach to evaluate naturally occurring communications in text-based workspaces (Darics, 2010). Analysis might look at communications in the context of forming relationships and/or could assess factors such as response time or use of emojis. By analyzing what has already been written, a researcher would gain insight into the phenomenon by evaluating actual interactions rather than, or in addition to, what was described in participant interviews.

A number of individual or related processes from the theoretical model would be valuable to pursue further. One is the influence of access to technology and training and the skills needed to navigate accessibility workarounds; this might include either an assessment or self-reporting of individuals' technology skills together with a survey to evaluate success in performing work-related tasks. Another, mapping B/VI employees' social networks (Donath,

2020) would be fascinating; for instance, it might reveal the prevalence and role of B/VI affiliations in comparison to non-B/VI connections. Further, the intentionality of the disclosure process is ripe for further research, qualitatively and/or quantitatively, to better understand the scripts individuals follow for disclosing their B/VI, and their awareness of the specific measures they enact in presenting themselves (Goffman, 1959).

Conclusion

This grounded theory study investigated the experiences of 18 professionals who are B/VI using text-based e-collaboration applications in the workplace. Their perceptions matter because, after more than two years of leveraging technology and learning behaviors to facilitate telework, text-based workspaces are here to stay, whether employees continue to work remotely, in-person, or in some hybrid combination. The research findings suggest that relating both professionally and personally through multiple media, including text-based workspaces, is an important aspect of fully participating in the workplace. Employers' policies and practices for providing an accessible and inclusive communications culture are essential for promoting the success of B/VI individuals and the teams they work with.

Through my doctoral studies and this research, I came to have a deeper appreciation for qualitative methodologies. I found grounded theory to be an ideal mix of hearing directly about individuals' experiences and analyzing datasets. Theoretical modeling was also a good fit for me, as I had created simple diagrams for some of my earlier analysis papers in the program—it is the way I tend to sort out information. Grounded theory is also a good fit for disability studies and explorations of DEI topics, especially when investigating the processes of social interactions. Although the grounded theory framework is complex and time-consuming, my methodologist assured me that it would be worth it in the end, and it was.

My hope is that this dissertation study enhances understanding of the considerations B/VI employees face in the workplace, particularly in the unique circumstances of remote and

hybrid work. I have worked for many years alongside talented individuals with B/VI who have become valued colleagues and friends. Employers would be lucky to have them on their teams. Progress has been made. If organizations made further improvements in their workplace practices, as suggested in this research, they could reap the benefits and provide opportunities for having B/VI professionals on their teams.

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APPENDIX A: STUDY ANNOUNCEMENT

An Invitation to Participate in a Research Study on Text-based Communications in the Workplace

I am writing to invite you to participate in a research study about the experiences of people who are blind or visually impaired using text-based communications tools in the workplace. In this time of widespread telework, understanding the use of text applications is especially relevant and important. Through interviews to explore personal experiences, this research project will investigate the factors that affect work relationships and participation of people who are blind or visually impaired when using text-based communications. Examples include smartphone text messaging, email, LinkedIn, Slack or Teams.

I am conducting this study for my doctoral dissertation at Antioch University. Participation is voluntary and confidential and involves taking part in a 60–90-minute interview. In appreciation for your time, you will receive a $25 Amazon gift card. Participants should be blind or visually impaired (have difficulty seeing even when wearing glasses), use assistive technology to read text (such as a screen reader or magnifier), be employed (including self-employed), age 18 and above, and use smartphone text messaging, email, LinkedIn, Slack or Teams, or some other text communication tool in the workplace.

If you are interested in participating, or have any questions, please complete this linked form or feel free to contact me at [email].

Thank you!
Kelly Bleach

APPENDIX B: INFORMED CONSENT FORM

RESEARCH STUDY CONSENT FORM

This informed consent form is for a potential participant in a study about how people who are blind or visually impaired experience relationships in text-based workspaces.

You will be given a copy of the full Informed Consent Form

Name of Principle Investigator: Kelly Bleach

Name of Organization: Antioch University, PhD in Leadership and Change Program

Name of Project: How People Who are Blind or Visually Impaired Experience Relationships in Text-based Workspaces

Introduction

I am Kelly Bleach, a PhD candidate enrolled in the Leadership and Change program at Antioch University. I am conducting a research study on How People Who are Blind or Visually Impaired Experience Relationships in Text-based Workspaces. The study will be overseen by faculty of the Antioch University PhD in Leadership and Change Program. As you are an employee of an organization that uses text-based communications and a person who is blind or visually impaired, I am inviting you to participate in this project. You may talk to anyone you feel comfortable talking with about the project and take time to reflect on whether you want to participate or not. You may ask questions at any time.

Purpose of the Research

For this study, I will examine the use of text-based communications tools (for example, MS Teams, Slack, Zoom chat, phone text messaging, email, or LinkedIn) in the workplace by people who are blind or visually impaired. I would like to learn about the experiences in text-based workspaces that are associated with work relationships. This information may be helpful to employers, vocational rehabilitation counselors, employment network professionals, and others in understanding the challenges and opportunities presented by the use of these text-based tools by people who are blind or visually impaired.

Project Activity

As a part of this project, I will gather information through an interview of approximately 60 to 90 minutes. The interview may be conducted through your preference of Zoom audio- or videoconference. I will record the interview and transcribe it for analysis. Only the audio portion of the recording will be used, and the video deleted. Transcripts will have any identifying information removed before they are shared with the research team. Recordings and transcripts will be stored in a secure manner. I will destroy recordings once the study has been published and I will delete the de-identified transcripts after three years. My study report will not identify you or your company by name, and associated information that might identify you or your company will be changed or deleted.

Participant Selection

You are being invited to take part in this project because I believe your experience as an employee using text-based communications in the workplace can help me understand how relationships are experienced in text-based workspaces.

Voluntary Participation

Your participation in this project is completely voluntary. You may choose not to participate. You may withdraw from this project at any time. You will not be penalized for your decision not to participate or for any of your contributions during the project. Your position in your company will not be affected by this decision or your participation.

Risks

I do not anticipate that you will be harmed or distressed as a result of participating in this project. You may stop being in the project at any time if you become uncomfortable.

Benefits

There will be no direct benefit to you, but your participation may help me to learn more about how people who are blind or visually impaired experience relationships in text-based workspaces and will contribute to a published report on the findings. Study participants sometimes find it helpful to reflect on their experiences.

Reimbursement

In appreciation of your contribution of time, you will receive a $25 gift card for taking part in this project.

Confidentiality

All information will be de-identified, so that it cannot be connected back to you. Your real name will

be replaced with a pseudonym in the write-up of this project and only I, as the primary researcher, will have access to the documentation connecting your name to the pseudonym. This documentation, along with audio recordings of the discussion session, will be held in a secure manner. The recording and will be destroyed once I have completed the project, and the transcript will be destroyed three years following publication.

Limits of Privacy Confidentiality

Generally speaking, I can assure you that I will keep everything you tell me or do for the project private. Yet there are times where I cannot keep things private (confidential). I cannot keep things private (confidential) if,

- a child or vulnerable adult has been abused;
- a person plans to hurt him or herself, such as commit suicide;
- a person plans to hurt someone else.

There are laws that require many professionals to take action if they think a person is at risk for self-harm or are self-harming, harming another, or if a child or adult is being abused. In most states, there is a government agency that must be told if someone is being abused or plans to self-harm or harm another person. Please ask any questions you may have about this issue before agreeing to be in the study. It is important that you do not feel betrayed if it turns out that cannot keep some things private.

Future Publication

This project will be published as a dissertation to satisfy the requirements of a doctoral degree program, and may be published in articles and reports, and/or shared through other professional venues such as conference presentations.

Right to Refuse or Withdraw

You do not have to take part in this if you do not wish to do so, and you may withdraw from the study at any time without your job being affected.

Who to Contact

If you have any questions, you may ask them now or later. If you have questions later, you may contact Kelly Bleach at [email]

If you have any questions for the supervisor of this project, feel free to contact Dr. Mitch Kusy at [email].

If you have any ethical concerns about this study, contact Lisa Kreeger, PhD, Chair, Institutional Review Board, Antioch University Ph.D. in Leadership and Change, at [email].

RESEARCHSTUDY CONSENT FORM

Name of Principle Investigator: Kelly Bleach
Name of Organization: Antioch University, PhD in Leadership and Change Program
Name of Project: How People Who are Blind or Visually Impaired Experience Relationships in Text-based Workspaces

Do you wish to participate in this project?
I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to participate in this project.

Print Name of Participant_____

Signature of Participant _____

Date (Month/day/year) _____

Do you agree to be audio recorded as part of this project?
I voluntarily agree to be audio recorded for this project. I agree to allow the use of my recordings as described in this form.

Print Name of Participant_____

Signature of Participant _____

Date (Month/day/year)_____

To be filled out by the person taking consent:
I confirm that the participant was given an opportunity to ask questions about the project and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of person taking the consent_____

Signature of person taking the consent_____

Date (Month/day/year) _____

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Table 1.2

Factors Affecting Treatment of PWD in Organizations

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		Expected presentation date	2022-12-09
Instructor name	Dr. Mitchell Kusy		

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Figure 1.1

Percentage of Organizations Reporting the Future of Remote Workers Pre- and Mid-pandemic.

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Exhibit A

Sample

Figure 1.1
Percentage of Organizations Reporting the Future of Remote Workers Pre- and Mid-pandemic.

Note: From *Adapting to the reimagined workplace: Human capital responses to the COVID-19 pandemic*, by The Conference Board, 2020, p. 7. (https://www.conference-board.org/topics/natural-disasters-pandemics/adapting-to-the-reimagined-workplace). Reprinted with permission.

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By: [redacted]	By: [redacted]
Name: James Slamp	Name: Kelly Bleach
Title: EVP CFO	Title: Student
Date: 10/7/2022 | 10:52:03 AM EDT	Date: 10/7/2022 | 2:18:58 PM EDT

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Figure 2.1

Inclusion Framework

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Figure 3.1

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Figures 5.1 through 5.5

Theoretical Model

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