# Technology and Identity in the Public Library: An Audio Diary Study of Workers with Underrepresented Identities

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**Abstract.** Workplace technology has significantly changed the nature of work, including where and when work is performed and what tasks a worker is responsible for. Less is known, however, about the impact of these technologies on the identities of workers—particularly the ways in which technology threatens these identities. Through an analysis of audio diaries from 22 public library workers, this study considered the impact of technology in public libraries on the identities of library workers. Findings revealed several ways in which library workers perceive technology as threatening to the competency-based, value-based, and authenticity-based self-esteem they derived from their role, group, and personal identities.

Keywords: Identity Threats, Audio Diaries, Self-Esteem.

#### 1 Introduction

### 1.1 A Subsection Sample

In ubiquitous computing environments, like the workplace, technology "permeates almost everything" (Cascio & Montealegre, 2016, p. 353). And while this ubiquity significantly impacts the nature of work, it also impacts the identities of workers. This is particularly true for public library workers, who work to construct a cohesive sense of self within a profession marked by technological change. For library workers with non-normative identities, who already face a constant barrage of identity threats (Hathcock, 2015; Vinopal, 2016), workplace technology can threaten this sense of self in ways that exacerbate longstanding problems and challenges. The current study considers the role of workplace technology in the identity construction of public library workers with non-normative identities.

## 2 Literature Review

## 2.1 Identity and Identity Threats

People strive to *be something*, deriving their self-worth largely from who they believe themselves to be (Dickie, 2003). According to Identity Control Theory (ICT), these identities center around who a person is as a member of a social group, someone occupying a specific role, or a unique individual (Stets and Burke, 2005). People sculpt these identities over time, and through negotiation with others, to "carve a place" for themselves (Stein et al., 2013, p. 167) that provides meaning, purpose, and self-esteem. Yet, workers are not the only ones attempting to define who they are, opening the door to potential conflict as workers negotiate who they believe themselves to be with who others want them to be. These conflicts can represent a threat to a worker's identity as they hold the potential for a) devaluing their identity, e.g., reducing the prestige or worth they feel from membership in a group; b) changing the meanings they associate with an identity, e.g., changing how work is done in ways that change what it means to occupy a certain role; or c) preventing them from enacting an identity in ways that verify who they believe themselves to be (Petriglieri, 2011).

### 2.2 Technology as an Identity Threat

Technology has a particularly significant impact on a worker's identity construction. Stein et al. (2013) referred to technological artifacts as landmarks, or identity referents, for workers as they attempt to construct and enact their preferred selves. Yet, workers may also perceive technology as a threat to their identity. Adapting Petriglieri's (2011) framework, Craig, Thatcher, and Grover (2019) outlined three threats posed by technology to a worker's identities. First, technology can threaten the worthbased self-esteem or prestige a worker sources from their membership in a group. Workers of color at Amazon facilities, for instance, are concentrated in jobs that are heavily controlled and disciplined by technological surveillance, which suggests a devaluing and dehumanization of their racial identity (Alimahomed-Wilsom & Reese, 2021). Second, as workers struggle to adjust to technology's redefinition of their role and the tasks they work on, they may be deprived of opportunities that verify their belief that they are good at what they do and fully embody their role (Craig, Thatcher, & Grover, 2019). For instance, workers who feel that their current skillsets are inadequate given the constant change in workplace technology are subject to feelings of techno-uncertainty, which can lead to role ambiguity and role stress (Tarafdar, Pullins, & Ragu-Nathan, 2014). Third, technology can be perceived by workers as a threat to their personal identities, potentially depriving them of authenticity-based self-esteem (Craig, Thatcher, & Grover, 2019). This can be seen in the ways in which technology suggests that a worker should be someone they are not. For instance, technologies like boss-ware and artificial intelligence can threaten a worker's personal identities around autonomy (Cyphers & Gullo, 2020; Mirbabaie et al., 2022).

## 3 Methods

The current study adopted a social constructivist framework, which posits that knowledge is constructed through interaction with others as people attempt to make collective sense and meaning out of their world (McKinley, 2015). Identity construction is the "meaning-making about one's self" (Hung, 2011, p. 161) that is embedded within these social contexts, and workers often make use of *small stories* to build their sense of self as they interact with others (Bamberg & Georgakopoulou, 2008). These are stories that lack traditional narrative elements and are told in informal everyday settings. Because audio diary methods are uniquely capable of eliciting small stories (Monrouxe, 2009), they were used in the current study. Audio diaries also enable researchers to capture a worker's identity construction *in situ*, as data collection occurs closer to a participant's experience of an event than more retrospective methods like surveys (Bolger, Davis, & Rafaeli, 2003).

The study sample (Table 1) consisted of 21 public library workers in the South-eastern United States who identified with a group that is underrepresented in the profession, e.g., staff of color, LGBTQIA+ staff, staff with disabilities or chronic conditions, staff with mental illnesses. Each participant recorded five diaries about experiences during work that made them feel stuck, frustrated, or uncomfortable. They then uploaded these recordings to a secure cloud folder and participated in a 45-minute interview after submitting their final diary entry.

Table 1. Description of study sample.

Category	Description	Number of Participants
Classification	Professional Paraprofessional	11 10
Gender	Woman Nonbinary Man	17 3 1
Race/Nationality	White African American Asian	12 8 1
Sexual Identity	Heterosexual Queer Pansexual or Demisexual Bisexual Gay or Lesbian	10 4 3 3
Physical Disability	Yes No	7 13

	No Answer	1
	Yes	13
Mental Illness	No	7
	No Answer	1

Audio diary and interview transcripts were coded qualitatively, through the process of template analysis (King, 2012). This is a thematic coding approach that involves the creation of a list of hierarchically ordered codes that account for themes emerging from a detailed reading of transcripts. Codes in the final template were grouped according to the types of identity threats outlined by Craig, Thatcher, and Grover (2019), e.g., threats to worth-based, competency-based, and authenticity-based self-esteem. Within each category, codes included threat source, identity standpoint of the threat source, and worker responses to threats.

#### 4 Introduction

#### 4.1 Threats to competency-based self esteem

The most common type of identity threat perceived by participants targeted their belief that they were good at what they did. When technology made it harder to engage in identity validating work, changed work processes in ways they were uncomfortable with, or failed in ways that suggested they were at fault, participants perceived harm to their sense of achievement and competency. These threats consisted of two main types.

First, competency-based threats were introduced as technology led participants into non-validating work. Amelia noted that emails inundated her with suggestions about the work she should be doing. In one email session, she "found herself" applying for a summer reading committee, enrolling in an introductory language course, enrolling in a food training course, and jotting down ideas for a program—"It was lots and lots of stuff like that." Yet, none of these completed tasks led to feelings of accomplishment or productivity: "Today, I didn't really achieve all that much."

Second, technology could change work routines in ways that threatened a participant's belief in their own competency. Overnight, work that used to be an easy and automatic indicator of their skills became a reminder of their deficiencies. When April's library implemented a new self-checkout system, she struggled with the changes this brought to her work routine: "I'm so used to things going a certain way and not having any issues. And so, for me, it was more of a trying to wrap my head around that things are changing . . . [But] it gets kind of frustrating."

#### 4.2 Threats to worth-based self esteem

Technology could threaten a participant's worth-based self-esteem, which they derived from their membership in the library profession. While participants associated this membership with prestige and a sense of purpose, technology could change what it meant to be a member of this group or suggest that they were not good representatives of this group. For instance, participants often found themselves helping patrons with menial technology-related tasks like printing, faxing, and navigating web browsers. Although this type of request initially did no harm to their worth-based self-esteem, the frequency and expectations surrounding these requests could suggest that they were little more than personal assistants. When a patron asked Monica to print something for her, Monica noted: "That kind of rubbed me the wrong way, because my philosophy is I can show you how to do things, but I am not going to do it for you."

A similar feeling was expressed by staff who felt that library technology had helped to change the meaning of the profession to that of babysitter, which they felt devalued the profession. Rebecca felt that, because the library computers had games on them, e.g., Roblox, it encouraged parents to leave their children alone while they did other things: "We're not a babysitter. And even if your kids are well behaved, it's still an imposition when you leave them there for seven, eight hours for somebody to watch over them the whole time."

## 4.3 Threats to authenticity-based self esteem

Technology could threaten a participant's personal identity in ways that led to feelings of inauthenticity. These threats came as technology guided participants into work they personally objected to, or when technology suggested that a participant should be someone they were not. For instance, the system for checking materials out did not allow Jessica to process a patron's materials if they had fines. In order to continue, she had to put the patron on a payment plan—a process that she personally disagreed with: "I think the way that we, you know, restrict and treat people on payment plans just is not great." Zoom meetings came with an expectation that participants would turn both their cameras and microphones on. This suggested that workers, like Dora, who defined themselves as more introverted should be more extroverted—at least during Zoom meetings. Dora struggled with this demand:

"I have developed a lot of anxiety from Zoom. I do appreciate the meetings because that means I don't have to drive all the way to [work] several times a week for a meeting. But, I don't like to have my camera on."

## 5 Discussion

This study considered the ways in which workplace technology used during routine library work presents recurring threats to the identities of public library workers.

Findings revealed several ways in which these threats negatively impacted a worker's worth-based, competency-based, and authenticity-based self-esteem. These findings contribute to an understanding of the material world as a source of identity threats (Petriglieri, 2011), as well as extend findings suggesting the existence of technology-based identity threats in the workplace (Carter & Grover, 2015). Findings also contribute to an increased understanding of technology's impact on library identity, for which additional research is still needed (Hicks, 2014a; 2014b). By including only underrepresented and marginalized staff as participants in the study, findings can also inform efforts to increase equity, diversity, and inclusion in a profession that is dominated by Whit-IST (Mehra & Gray, 2020) practices.

These findings suggest a need for the library profession to more fully consider the identities of library workers and how those identities are threatened by workplace technology. This requires an approach to technological acquisition, implementation, and evaluation that goes beyond a consideration of technical capabilities to include the impacts of technology on the nature of work and the identities of workers. In the context of technology-driven identity threats, the current study's findings suggest that the profession can support workers by helping them identify and mobilize alternative identities in response to threats, providing adequate training to match technology-induced changes to work routines, minimizing what technology adds to their work, equipping them with the knowledge and skills necessary to work around technological limitations, and providing room for counterspaces that validate and legitimize their sense of self. Thus, the profession's response should include elements of digital literacy training (Diseiye et al., 2024), but also focus on the broader contextual supports (Webster et al., 2017) that make it easier for workers to be themselves at work.

#### 6 Conclusion

The library profession is uniquely tied to technological change, meaning that workers must continuously adapt themselves to new ways of working. Sometimes, these changes harm a worker's sense of self in ways that negatively impact the self-esteem they derive from who they believe themselves to be. When this harm occurs as part of repetitive work routines, technology becomes a source of recurring threats. Through an analysis of audio diaries from public library staff, this study found that identity threats were a result of the additions and restrictions of workplace technology that question a worker's beliefs about who they are as part of a group, as someone occupying a certain role, or as a unique individual. Findings have implications for identity research, library identity, and library practice.

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