RESEARCH

Gendered Jobs and Gendered Pay: The Relationship Between Sexism, Racism, and Ableism, and Personal Care Aide Wages

Carli Friedman
CQL | The Council on Quality and Leadership, US
cfriedman@thecouncil.org

There is currently a personal care staffing crisis in the United States, with astronomical turnover, largely due to low wages. How attitudes may trickle down to impact funding decisions and personal care aide wages is unknown. The aim of this study was to explore the relationship between ableism, racism, and sexism, and states' personal care aide wages in the United States. We analyzed data about personal care aide wages, and prejudice data from 4.7 million people. Findings revealed a significant relationship between sexism and personal care aide wages – the higher a states’ sexism, the lower their personal care aide wage; this finding was consistent regardless of the state’s size, wealth, prevalence of the occupation, political leanings, or ableism or racism scores. Regardless of the strategies utilized to stabilize and grow the profession of personal care aides, it is important to examine the role sexism may play.

Keywords: personal care aides; direct support professionals; workforce issues; sexism; wages

Introduction

For older adults and many people with disabilities, personal care services are often critical for facilitating community living over institutionalized living (Doty et al., 1996). Personal care aides1 (also called direct supports or direct support professionals) assist people with disabilities and older adults with activities of daily living as well as other tasks necessary for community integration. As a result of the many different roles they may play, such as assistance with personal care, transportation, education, household tasks, and self-determination, personal care aides must utilize a complex balance of skills and competencies (Hasan 2013; Hewitt et al. 2008; National Direct Service Workforce Resource Center n.d. 2013; Robbins et al. 2013).

As a result of an increase in community living among people with disabilities, and the aging of the baby boomer population, the personal care sector is one of the fastest growing areas of the labor force in the United States (Bogenschutz et al. 2014; Micke 2015; Robbins et al. 2013). In 2011, there were approximately four million personal care aides in the United States (National Direct Service Workforce Resource Center 2013; Taylor 2008). By 2020, direct support is estimated to be the largest job in the country (Bogenschutz et al. 2014; Hewitt 2014).

Despite an increased need, there is currently a personal care staffing crisis, with astronomical turnover (American Network of Community Options and Resources 2017; Bogenschutz et al. 2014; Ligas Consent Decree Monitor 2017; Micke 2015). Estimates suggest that organizations supporting people with disabilities or older adults may see anywhere from 30% to 70% personal care aide turnover a year (American Network of Community Options and Resources 2017; Bogenschutz et al. 2014; Hewitt 2014; Keesler 2016; Micke 2015). The majority of this turnover is due to staff quitting rather than being fired, because despite the immense and growing need, personal care aides ‘are among the nation’s most vulnerable workers’ (American Network of Community Options and Resources 2014, 1).

This staffing crisis is decades in the making in the United States; its origins are in deinstitutionalization. With deinstitutionalization and an increase in community living, larger workforces were needed; staff’s roles also shifted from only supporting people’s basic needs, such as health and safety, to expanded tasks and roles wherein personal care aides were also responsible for supporting community integration, people’s goals, etc. (American Network of

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1 While the term direct support professional (DSP) is more commonly used in the United States, we are using the term ‘personal care aide’ in this manuscript because it is how it is defined by the Department of Labor Bureau of Labor Statistics (2017b).
Despite demanding work that requires a multifaceted skillset, the majority of personal care aides in the United States receive wages only slightly higher than the federal minimum wage. As of May 2017, the national average wage for personal care workers was $11.59 an hour or $24,100 annually (Bureau of Labor Statistics 2017). For comparison, the annual living wage in the United States in 2017 for a family of four (two working adults, two children) was $66,851–$66,851 an hour for each parent (Nadeau and Glasmeier 2019). Low wages, combined with very few positions offering benefit packages, such as health coverage, retirement, paid time off or personal leave, have resulted in many personal care aides relying on public assistance (Bogenschutz et al. 2014; Hewitt et al. 2008).

Low wages, a lack of benefits, a lack of training, and organizational cultures all culminate to produce immense turnover and recruitment problems. This is problematic not only for the lives of personal care aides themselves, but also because it negatively impacts people with disabilities and older adults. The personal care aide crisis not only hinders the community integration of people with disabilities, it can also put their very health and safety at risk. As such, a competent and stable workforce is a quality indicator in the lives of people with’ disabilities (McLaughlin et al. 2015, 267).

While individual human service agencies often cannot simply increase wage rates because they receive reimbursement through Medicaid, states have the flexibility to determine not only what services they provide in Medicaid, such as personal care, but the rates they provide for those services (American Network of Community Options and Resources 2014; Wachino, Schneider, and Rousseau 2004). States primarily fund their share of Medicaid through taxes and, as a result, state climates favoring tax cuts find reduced revenues dedicated to Medicaid services (Holahan et al. 2004). As such, decisions about dedicating revenues, including if and how personal care aide wages are prioritized, are impacted by factors such as states’ stances on taxation, ideas of ‘entitlements,’ and disability attitudes, among others. As a result, attitudes about not only people with disabilities, but also other prejudices and structural oppressions, can impact decisions regarding state policies and allocations, including personal care services and wages for personal care aides. For most individuals in society, including policy makers and those in positions to determine funding distribution, attitudes toward social minority groups are acquired over time, socially constructed, and influence the action of its members (Campbell 2009; Schwartz and Armony-Sivan 2001).

Complicating care

A multitude of different attitudes could play a role in decision-making regarding personal care aide wages. As personal care services are provided to people with disabilities, their prioritization in part reflects how much we as a society value people with disabilities. Problematically however, stereotypes tend to not only overestimate the dependency of people with disabilities, but also result in people believing people with disabilities are a financial drain on the system (Friedman and Awsumb 2019; Hughes et al. 2005). However, ableism does not exist in a vacuum, including when it comes to personal care aides.

Personal care services not only reflect how we value the recipients of these services, but also those providing these services. The overwhelming majority of care workers, including personal care aides (86% in 2015), in the United States are women—care work is gendered (Budig and Misra 2010; Campbell 2017; Chang 2017; Duffy 2007; O’Leary 2017). There is also an interaction between care work, gender, and race; care workers, including personal care aides, are largely women of color (Budig and Misra 2010; Campbell 2017; Chang 2017; Duffy 2007; O’Leary 2017). Nakano Glenn, as cited by Duffy (2007), notes, ‘The racial division of [care labor]… is key to the distinct exploitation of women of color… It is thus essential to the development of an integrated model of race and gender, one that treats them as interlocking, rather than additive, systems’ (316). The racialized and gendered nature of care work is reflected in the care work wages (Budig and Misra 2010; Duffy 2005). Care work is devalued because of its association as women’s work, and the assumption that women’s work is unskilled and should be unpaid or done by poor women of color (Budig and Misra 2010; Chang 2017). In addition, the structures of the labor market lead to more women, especially women of color, being funneled into lower paying care work positions (Duffy 2005).

Issues of care work are further complicated by the tensions between the oppression of care workers, who are often marginalized women, and the oppression of people with disabilities. Vulnerable care workers tend to be underpaid, and face exploitative and/or hazardous working conditions (Chang 2017; O’Leary 2017). Yet, care workers can have power over the people with disabilities they support as a result of their intimate work (Kelly 2013; O’Leary 2017). In addition, disability scholars have argued that not only are people with disabilities’ voices regarding care work often ignored, but the way care work is discussed can also objectify people with disabilities (Kelly 2011; Kelly 2013). Moreover, particularly related to wages, some disability rights advocates argue that if wages for home care workers are raised such that the cost of community-based care exceeds that for institutional care, then the hard-won rights of people with disabilities for independent, community-based living may be threatened (Chang 2017, 170). As such, in the capitalist United States system, there can be a tension between the rights and interests of people with disabilities, and those of marginalized care workers (Chang 2017; Jaffee 2017).
Purpose
In addition to care work and the associated wages being gendered and racialized, there is also a long and historic relationship between employment discrimination and racism and sexism in the United States more broadly (Budig and Misra 2010; Bureau of Labor Statistics 2018a; Bureau of Labor Statistics 2018b; Kelly 2013; National Women’s Law Center 2017; Pager and Shepherd 2008; Quillian et al. 2017, Yearby n.d.). While research has documented low care work wages, as well as the racialized and gendered nature of these wages, less is known about the relationship between sexist, racist, and ableist attitudes and how they impact personal care aide wages. For these reasons, the aim of this study was to explore the relationship between ableism, racism, and sexism, and states’ personal care aide wages in the United States. Doing so is important not only to expose structural barriers, but also because a better understanding of the factors that create these barriers is necessary to create a path toward eliminating these issues. As such, this study’s research question was: how do ableism, racism, and sexism impact personal care aide wages? To explore this research question, we analyzed data about personal care aide wages in the United States, and prejudice data from 4.7 million (M) people.

Methods
Personal care aide wages
Data regarding the mean wage of personal care aides in each state were obtained from the Bureau of Labor Statistics (2017a). The Bureau of Labor Statistics (2017b) defines personal care aides as people who

- assist the elderly, convalescents, or persons with disabilities with daily living activities at the person’s home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. May provide assistance at non-residential care facilities. May advise families, the elderly, convalescents, and persons with disabilities regarding such things as nutrition, cleanliness, and household activities.

As of May 2017, more than two million people were employed as personal care aides (Bureau of Labor Statistics 2017b). We obtained data about the mean hourly wage for personal care aides in each state for 2017. It should be noted that Vermont was not included in the data provided by the Bureau of Labor Statistics (2017a).

Ableism, racism, and sexism
There are two levels of attitudes: explicit (conscious) attitudes and implicit (unconscious) attitudes (Amodio and Mendoza 2011; Antonak and Livneh 2000). As people may feel pressured to conceal their biases, or may be unaware they hold biased attitudes, there are concerns that explicit measures do not capture all attitudes (Amodio and Mendoza 2011; Antonak and Livneh 2000). This may be especially true for topics where it is socially taboo to divulge having negative attitudes, such as against people with disabilities. For this reason, much attitude research has shifted towards examining implicit attitudes. Implicit attitudes can relate to automatic processes triggered by external cues and reflect associations between attitudes and concepts; “implicit” refers to [lack of] awareness of how a bias influences a response, rather than to the experience of bias or to the response itself (Amodio and Mendoza 2011, 359).

One of the most prevalent methods to measure implicit attitudes is the implicit association test (IAT). The IAT examines people’s associations and attitudes by measuring reaction time when items are sorted in stereotype congruent and incongruent ways; the quicker the reaction time, the stronger the association between groups and traits (Karpinski and Hilton 2001). IAT scores can range from −2 to 2. Scores of 0.15 to 0.34 reveal a slight preference for the social majority group, 0.35 to 0.64 a moderate preference, and 0.65 and greater a strong preference (Aaberg 2012; Greenwald, Nosek, and Banaji 2003). Negative values of the same ranges above reveal preferences for the social minority group, 0.35 to 0.64 a moderate preference, and 0.65 and greater a strong preference (Aaberg 2012; Greenwald, Nosek, and Banaji 2003). Negative values of the same ranges above reveal preferences for the social minority group, 0.35 to 0.64 a moderate preference, and 0.65 and greater a strong preference (Aaberg 2012; Greenwald, Nosek, and Banaji 2003). Negative values of the same ranges above reveal preferences for the social minority group, 0.35 to 0.64 a moderate preference, and 0.65 and greater a strong preference (Aaberg 2012; Greenwald, Nosek, and Banaji 2003). Negative values of the same ranges above reveal preferences for the social minority group, 0.35 to 0.64 a moderate preference, and 0.65 and greater a strong preference (Aaberg 2012; Greenwald, Nosek, and Banaji 2003).

Data about implicit ableism, racism, and sexism were obtained from Project Implicit (Xu, Nosek, and Greenwald 2014), a public website where people can test their implicit attitudes. A total of 7.60 M participants from all 50 states and the District of Columbia participated in the racism IAT (Black-White IAT), 0.70 M in the ableism IAT (disability attitudes IAT), and 2.00 M in the sexism IAT (gender-career IAT) (2002–2017). Of those 10.28 M participants, half of those participants (45.9%) also completed demographic information about their residency (state). Those without this information, or who lived in United States territories, were removed. This resulted in a total *n* of 4.7 M people (ableism = 0.3 M; racism = 3.5 M; sexism = 0.9 M). There was an average of 30,827 participants per state (ableism mean *n* = 6,401; racism mean *n* = 68,681; sexism mean *n* = 17,399). Participants’ residency was then used to aggregate IAT scores by state, with the state’s mean score serving as the state’s ableism, racism, and sexism scores.

Control variables
State size
In order to control for state size, each state’s population was utilized as a variable. Population data was obtained from the United States Census Bureau (2018). State population (2017) ranged from 578,934 (Wyoming) to 39,399,349 (California), with an average of 6,375,434 people (*SD* = 7,294,685).

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State wealth
A common argument against raising wages is that companies cannot afford to pay people minimum wage or above (Whittaker 2005). While many human service agencies struggle with limited funding, the wages they provide personal care aides are often restricted based on the Medicaid funding they receive. Medicaid reimbursement rates are set by the state. For these reasons, state wealth was used as a control variable. State total personal income was used to represent state wealth. Total personal income is:

...the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of world. It does not include realized or unrealized capital gains or losses. (Bureau of Economic Analysis 2016, n.p.)

Personal income for each of the states was obtained from the United States Bureau of Economic Analysis (n.d.). State personal income (2017) ranged from $32,570.4 M (Vermont) to $2,364,129.4 M (California), with a mean of $329,808.8 M (SD = $412,824.4 M).

Prevalence of occupation
The prevalence of personal care aides in a state was used as a control variable. Data regarding the prevalence of the occupation was obtained from the Bureau of Labor Statistics (2017a). The Bureau of Labor Statistics (2017a) defines the prevalence as the number of jobs in the occupation of personal care aides per 1,000 jobs in the state. The prevalence of the occupation (per 1,000 jobs) in 2017 ranged from 3.09 (New Jersey) to 31.19 (California); the mean prevalence was 12.66 per 1,000 jobs (SD = 6.60).

Political orientation
We included political orientation as a variable because of the link between conservatism, business interests, and the status quo in the United States. Research has found that not only do conservatives tend to be more favorable towards corporations than liberals, they are also more likely to favor maintaining the status quo and resist attempts to change it by rationalizing and accepting inequality (Graham, Haidt, and Nosek 2009; Jost, Nosek, and Gosling 2008). However, at the same time, both parties tend to favor neoliberalism. Data regarding states’ political orientation was obtained from Gallup (n.d.). The data detailed what percent of the state leaned Democrat and what percentage leaned Republican. Democrat lean ranged from –59% difference between Democrats and Republicans (favoring Democrats; District of Columbia) to 29% difference (favoring Republicans; Wyoming), with an average of –2.27% lean (slightly favoring Democrats; SD = 17%).

Analysis
This study’s research question was: how do ableism, racism, and sexism impact personal care aide wages? SPSS 23.0 was utilized for analysis. We ran a multiple linear regression to explore this question (p < 0.05). The dependent variable (DV) was states’ average hourly wage for personal care aides in 2017. The independent variables (IVs) included ableism, racism, and sexism. We also controlled (covariates; CVs) for: state political lean (both democrat and republican), personal care aide occupation prevalence (per 1,000 jobs), state wealth (personal income), and state size (state population). Univariate statistics were utilized for significant variables.

Results
The mean hourly wage for personal care aides ranged from $8.97 (Alabama) to $15.37 (North Dakota), with an average of $11.44 (SD = $1.51; see Figure 1). Ableism ranged by state from 0.45 (Colorado; moderate prejudice) to 0.53 (Connecticut; moderate prejudice), with a mean of 0.50 (SD = 0.02; see Figure 2). Racism ranged by state from 0.24 (District of Columbia; slight prejudice) to 0.37 (New Hampshire; moderate prejudice), with a mean of 0.32 (SD = 0.03; see Figure 2). Sexism ranged by state from 0.36 (Alaska; moderate prejudice) to 0.40 (South Carolina; moderate prejudice), with a mean of 0.38 (SD = 0.01; see Figure 2).

We ran a multiple linear regression model to explore the relationship between ableism, racism, and sexism (IVs) and personal care aide wages (DV), while controlling for state political lean (both democrat and republican), personal care aide occupation prevalence (per 1,000 jobs), state wealth (personal income in M), and state size (state population; CVs). The model was significant, F(7, 49) = 6.40, p < 0.001 (Table 1). The model predicted 51.6% of variance.

The regression equation for a state’s personal care aide hourly wage from the state’s prejudice (including controls) is:

\[
\text{State Average Personal Care Aide Hourly Wage} = 27.18 + 0.080(\text{Ableism}) + 11.40(\text{Racism}) - 47.66(\text{Sexism}) - 0.01(\text{Political Lean}) - 0.06(\text{Personal Care Aide Occupation Prevalence per 1,000 jobs}) + 0.00001(\text{State Personal Income in M}) - 0.0000006(\text{State population})
\]

The sexism score (t = –2.41, p = 0.018) was significant. The following CVs were also significant: occupation prevalence (t = –2.14, p = 0.038); state wealth (t = 3.78, p < 0.001); and, state size (t = –3.92, p < 0.001).
Figure 1: Mean hourly personal care wages by state. Data from The Bureau of Labor Statistics (2017b).

Figure 2: Ableism, racism, and sexism by state.

Table 1: Results of the multiple linear regression model.

| Variable                        | B    | t    | p     |
|---------------------------------|------|------|-------|
| Constant                        | 27.18| 4.20 | <0.001|
| Ableism                         | 0.080| 0.01 | 0.99  |
| Racism                          | 11.40| 1.75 | 0.09  |
| Sexism                          | -47.66| -2.41| 0.02  |
| Controls                        |      |      |       |
| Political lean                  | -0.014| 1.20 | 0.24  |
| Occupation prevalence per 1,000 jobs | -0.06| -2.14| 0.04  |
| State personal income (in millions) | 0.000001| 3.78 | <0.001|
| State population                | -0.0000006| -3.92| <0.001|
According to the model, the higher the state’s sexism, the lower its personal care aide hourly wages, regardless of the prevalence of the occupation, the state’s political lean, the state’s wealth, or the state’s size. For example, when all other state factors are equal (average ableism (0.50), racism (0.32), occupational prevalence (12.66), political lean (2.27), state wealth ($329,809 M), and state size (6,575,433.75)), a state with a sexism score of 0.40 is expected to have an average hourly wage for personal care aides of $11.18, whereas a state with a sexism score of 0.36 is expected to have an hourly wage of $13.09. When all other state factors are equal (average ableism, racism, occupational prevalence, democratic lean, republican lean, state wealth, and state size), states with no sexism—a score of 0—would be expected to have an average hourly wage of $29.77 for personal care aides.

While we were primarily interested in examining the impact of prejudice, a number of our control variables also resulted in significant relationships. The more prevalent the occupation of personal care aide in the state, the lower the average personal care aide hourly wage. Controlling for all other variables, the average personal care aide wage is expected to decrease by $0.06 for every 1 unit increase in prevalence—for every 1 job in the occupational of personal care aides per 1,000 jobs in the state. The higher the state’s wealth, the higher the average personal care aide hourly wage. Controlling for all other variables, the average wage is expected to increase $0.00001 for every $1 M increase in state personal income. Finally, the larger the state’s population, the lower the average personal care aide hourly wage. Controlling for all other variables, the wage is expected to decrease $0.0000006 for every 1 person increase in state population (equivalent to $0.60 decrease for every 1 M person increase).

Discussion

As a result of the long and historied relationship between employment and discrimination in the United States, as well as long-lasting and the problematic personal care aide staffing crisis due in large part to wages and funding allocations, we were interested in exploring how prejudicial attitudes may impact personal care aide wages. To do so, we examined the relationships between personal care aides’ wages in the United States and prejudice data from 4.7 M people. Findings revealed a significant relationship between sexism and personal care aide wages. The more prejudiced a state was in terms of sexism, the lower their average hourly personal care aide wage was projected to be; this finding was consistent regardless of the state’s size, the state’s wealth, the prevalence of the occupation in the state, the state’s political leanings, or the state’s ableism or racism scores.

The findings of this study regarding sexism and personal care aide wages are reflective of the larger systemic pay gap between men and women in general (National Women’s Law Center 2017). The relationship between sexism and personal care aide wages likely also reflects the fact that different people are funneled into different kinds of work; the more female an occupation, the lower the average wages (Reskin 1988). ‘Care’ work tends to be considered women’s work or pink-collar, especially in places like the United States that often ideologically separate ‘care’ (work for love) from ‘work’ (work for money) (Budig and Misra 2010; Campbell 2017; Chang 2017; Duffy 2007; Kunkel, Applebaum, and Nelson 2003; O’Leary 2017; Rummery 2009).

Policies surrounding care are often ‘premised on the notion that such work will be the responsibility of women’ (Hughes et al. 2005, 261) and, as such, tend to rely on unpaid labor to fill in the gaps in public services (Kelly 2013; Rummery 2009). Mirroring this point, the majority of the United States long term care system is built upon unpaid labor (Gallanis and Gittler 2012; Kunkel, Applebaum, and Nelson 2003). In addition, when care work is paid, people are often underpaid and have minimal employment protections; attempts to contain costs result in low reimbursement rates, and therefore often reinforced gender inequalities (Hughes et al. 2005; Rummery 2009). Hughes et al. (2005) suggest, ‘there is evidence to suggest that the gendered nature of caring work, both paid and unpaid, reinforces already existing inequalities in the labour market’ (p. 261). Even programs that aim to shift care work from unpaid to paid, such as self-directed services, can still ‘trap’ women into gendered expectations of delivering care while at the same time not adequately compensating them for the value of that care’ (Rummery 2009, 642). Moreover, gender stereotypes not only result in women being funneled into less financially valued kinds of work in which they are paid less, even in gendered pink-collar settings, men often have more opportunities for advancement than women (Miller 2017).

Although we did not find statistically significant relationships between ableism and racism and personal care aide wages in our study, this could be due to a number of factors, such as interactions with other variables, or differences within states themselves. For example, although exploring interactions was outside the scope of the study, it appears there may be an interaction between sexism and racism; the higher both are, the lower the wages. As ableism and racism, along with sexism, are interwoven into all structures and systems in the United States (Campbell 2017; Darity and Mason 1998; Kumari-Campbell 2009; Linton 1998; National Women’s Law Center 2017; Pager and Shepherd 2008; Quillian et al. 2017; Yearby n.d.), we suspect they also impact personal care aides and their wages. In fact, one only has to look to who it is that is doing this work—women of color as well as immigrants, often of color (Budig and Misra 2010; Campbell 2017; Chang 2017; Duffy 2007; Espinoza 2017; O’Leary 2017)—to find relationships between race, class, gender, and disability. Care work is not only gendered but racialized (Budig and Misra 2010; Campbell 2017; Chang 2017; Duffy 2007; Kelly 2017; O’Leary 2017). Moreover, despite the lack of significant findings in this analysis in regards to racism, existing evidence indicates unequal and racist treatment of people of color in the workforce, including in personal care services (Campbell 2017; Pager and Shepherd 2008; Quillian et al. 2017; Yearby n.d.). For example, women of color in direct care are more likely to live in poverty and rely on public assistance than White people and men of...
color in the United States (Campbell 2017). As such, we believe the lack of statistically significant findings should not draw attention away from the workforce issues people of color, especially women of color, face in personal care. In fact, attention to intersectionality and multidimensional discrimination and prejudice is particularly necessary given the personal care aide workforce.

In our analyses, we did not find a significant relationship between personal care aide wages and states’ ableism scores. One may theorize that states with more problematic views of disability may pay personal care aide workers less. However, states in our study with higher ableism scores did not necessarily pay personal care aides less on average. In addition, one might theorize that states lower in ableism (with more favorable views of people with disabilities) may pay personal care aide workers more for doing the work to support people with disabilities. However, we did not find a significant relationship between states being lower in ableism and paying personal care aide workers more. The lack of significant findings regarding ableism may be due to the conflicting ideas most nondisabled people hold about disability. Most nondisabled people experience a combination of ambivalent and positive feelings towards people with disabilities (Czajka and DeNisi 1988; Friedman and Awsumb 2019; Ostrove 2006; Phillips 1990). While people with disabilities are seen as less capable, less intelligent, more childlike, and more dependent, they are often treated with pity and condescension (Fichten and Amsel 1986; Hughes et al. 2005; Ostrove 2006). Although they may hold these problematic and negative views about disability, nondisabled people often associate positive socially desirable traits to people with disabilities. People with disabilities are often viewed as more affectionate, friendly, and warm than nondisabled people (Campbell, Gilmore, and Cuskelly 2003; Harris and Fiske 2007; Stern et al. 2007). These positive responses may be due to ‘sympathy’ that marks people with disabilities as more deserving of help, based on problematic stereotypes (Appelbaum 2001; Czajka and DeNisi 1988; Garthwaite 2011; Susman 1994). Conflicting ideology about disability means nondisabled people may both recognize people with disabilities are discriminated against and/or have empathy towards them, but also individualize disability and believe it is something people must overcome, otherwise they risk putting excessive demands on the system (Friedman and Awsumb 2019).

Since according to stereotypes people with disabilities are often associated with pity, one may think those supporting people with disabilities would be thought of favorably. However, perhaps since there is an assumption that women should be doing care work, this interaction may be another potential reason for the lack of significant relationship with ableism in this study. There may in fact be an interaction between sexism and ableism which was not explored in this study, but which impacts the wages of personal care aide workers.

While we did not find a significant relationship between ableism and personal care aide wages in this study, we believe our findings indicate the need for more research into the matter. Although our study found no significant relationships with ableism, one cannot separate out personal care aide work, gender, race, or disability; they are intimately intertwined, even if there is a tension of power dynamics (Hughes et al. 2005; Kelly 2013). Indeed, the wages of personal care aide workers will always, in some degree, be linked to ideas about disability, whether it be stereotypes that people with disabilities are dependent and need to be cared for, or ‘positive’ social desirability traits that portray people with disabilities as deserving. Attitudes towards disability, which are problematically resistant to change (Charlesworth and Banaji 2019), impact if and how personal care aides and the labor they provide are valued.

Although examining them was not the main aim of our analyses, a few of the control variables produced significant findings. Controlling for all other variables, the wealthier the state, the higher their average hourly personal care aide wage. Conversely, the more prevalent the job of personal care aide in the states, as well as the larger the size of the states, the lower the average personal care aide hourly wage. All three of these relationships are likely related to states’ Medicaid and Medicare funding; the more people with disabilities in the states, the more personal care aides will be needed, and the less funding there may be to go around. For example, during the Great Recession (between 2008 and 2009) more people were relying on Medicaid because of unemployment, resulting in a drop in the proportion of total federal Medicaid spending going towards people with disabilities (Braddock et al. 2015).

While we recognize many states are operating in a limited fiscal landscape, it is important to remember the critical contributions of personal care aides in promoting the quality of life and community integration of people with disabilities, and to recognize their work accordingly (Friedman 2018). Moreover, the prioritization of resources does not happen in a vacuum, especially when those resources are limited. It is important to remember that the prioritization of personal care aide wages is often based on more than their efforts and contributions alone, or even the states’ ability to pay said wages, but rather factors like sexism, including what and whose labor is considered valuable and important.

**Limitations**

When interpreting these findings, it should be noted that people volunteered to participate in the prejudice IATs and, therefore, there is a chance of selection bias. In addition, people may have participated in more than one IAT. It should also be noted that this was a secondary data analysis and we did not have the ability to ask the participants additional questions. Moreover, we did not explore interactions between variables. It should also be noted that the prejudice data in our study (ableism, sexism, and racism) was from 2002 to 2017, while the salary data was only from 2017. Along with the potential research directions we discussed above, we believe these limitations should also be interpreted as opportunities for future study.
Conclusion
In this study, we explored how ableism, racism, and sexism may trickle down to impact personal care aide wages in the United States. In doing so, our findings revealed a significant relationship between states’ average personal care aide wages and their sexism, wherein states that were more sexist had lower personal care aides on average. While we hope our research will help call attention to this relationship and related structural barriers to personal care aide wages, we do not intend to suggest that by tackling sexism alone the personal care aide crisis will be fixed. It is but a piece of a very complex problem decades in the making; as such, we recognize a multipronged approach is necessary. For example, Smith, Macbeth, and Bailey (2019) suggest the professionalization of direct support professionals will not only result in wage stabilization and expanded tenure of personal care aides as a result of a career ladder, but also better supports for people with disabilities as a result of competency-based training. Regardless of the strategies utilized to stabilize, grow, and recognize the profession of personal care aides, it is important to examine the role sexism plays in the wages of personal care aides. Until structural oppressions are addressed, there will be no justice—for personal care aides or the people with disabilities they support.

Competing Interests
The author has no competing interests to declare.

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