Identity cues influence sexual minorities' anticipated treatment and disclosure intentions in healthcare settings: Exploring a multiple pathway model

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Abstract

The present work experimentally examines how identity cues that signal minority inclusion contribute to sexual minorities' (SM) healthcare visit expectations. We find that minority representation cues reduced SM's ($N = 188$) expectations of a healthcare provider's bias and increased perceived provider cultural competency which was, in turn, associated with lower anticipated identity-based devaluation and greater sexual orientation disclosure comfort. Providers' diversity-valuing statements had mixed effects highlighting the importance of more concrete indicators of inclusion in this context. This work suggests that a lack of identity safety cues in healthcare settings may contribute to disparate health outcomes for sexual minority populations.

Sexual minorities (i.e. people with same-sex attraction and/or a non-heterosexual identity) have greater overall mortality (Cochran et al., 2016) and poorer physical and mental health when compared to heterosexual people (Dovidio et al., 2017; Hatzenbuehler, 2010; Institute of Medicine, 2011; Lick, et al., 2013). Differences in health status have been attributed to both structural and interpersonal experiences of discrimination (Hatzenbuehler et al., 2013; Williams and Mann, 2017), poorer health behaviors (e.g. smoking; Gruskin et al., 2007), and experienced devaluation and discrimination in healthcare settings (Penner et al., 2018; Ryan et al., 2017). Notably, sexual minorities report low satisfaction with healthcare visits (Clift and Kirby, 2012) and anticipated stigmatization in healthcare settings

(i.e. being stereotyped, discriminated against, or treated differently because of their sexual orientation) which reduces healthcare utilization and facilitates disparate health outcomes (Blosnich et al., 2014; Buchmueller and Carpenter, 2010; Charlton et al., 2011; Harris Interactive Poll, 2005; Heck et al., 2006).

Moreover, expectations of stigmatization impede sexual minorities' interactions with healthcare providers in a variety of ways

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(Beehler, 2001; Institute of Medicine, 2011). For example, sexual minority patients who anticipate provider bias are less likely to disclose their sexual orientation (Austin, 2013; Durso and Meyer, 2013; Eliason and Schope, 2001), which has been documented to reduce their satisfaction with healthcare visits (Ruben and Fullerton, 2018). Further, identity concealment can reduce the quality of treatment that sexual minority patients receive (e.g. lack of proper preventative treatments or screenings; see Petroll and Mosack, 2011) and contributes indirectly to poorer health outcomes (Frost et al., 2007; Ruben and Fullerton, 2018). Importantly, disclosure of one's sexual orientation may not uniformly be relevant to provider's treatment decisions, but when sexual minority patients receive positive responses to their identity disclosure in this context they report greater comfort with their healthcare provider and greater intentions to utilize healthcare services (Gessner et al., 2019; Martos et al., 2018; Petroll and Mosack, 2011). Research documents that sexual minorities are also more likely to utilize healthcare and disclose their sexual orientation when they believe the healthcare provider is informed about sexual minority issues and relationships (e.g. Gessner et al., 2019; Politi et al., 2009). Together, reducing expectations of provider bias and improving providers' knowledge of sexual minority experiences and needs can improve sexual minorities' healthcare utilization, satisfaction, comfort, and disclosures during healthcare visits (see Mosack et al., 2013; Steele et al., 2006).

Sexual minority inclusion cues in healthcare settings

To date, the literature has suggested several ways in which healthcare providers can provide more inclusive practices for sexual minorities. For instance, including all-gender bathrooms, inclusive intake forms (e.g. not assuming heterosexuality), and implementing staff training on sexual minority issues and experiences have been suggested to improve the experience of sexual minority patients in healthcare offices

(e.g. Dean et al., 2016; Schilder et al., 2001; Steele et al., 2006). Importantly, LGBTQ (i.e. lesbian, gay, bisexual, transgender, and queer) friendly offices are now advertised through online platforms, which are often comprised of providers who advertise themselves as providing an inclusive environment (e.g. outcarehealth.org; glma.org), sometimes complimented with reviews from satisfied sexual minority patients. Patients who view healthcare providers on such websites may assume that the provider is greater in awareness of LGBTQ populations unique needs or cultural competency (Butler et al., 2016). Indeed, sexual minorities may be more likely to visit healthcare providers with these inclusive signals due to greater perceived ability to address their unique healthcare needs (see Nápoles-Springer et al., 2005; Qureshi et al., 2018) or lower expectations of experiencing sexual prejudice at their offices.

LGBTQ-friendly provider platforms utilize varied identity safety cues (i.e. cues that signal protection from identity-based devaluation; Davies et al., 2005) that have previously been examined in academic and corporate contexts. Grounded in social identity theory (see Abrams and Hogg, 1990), this past literature highlights that cues of minority representation (i.e. the presence of minority group members) and diversity-valuing ideologies can reduce minority group members' expectations of encountering stigmatization and increase minority group members' feelings of comfort in the setting, among other outcomes (e.g. trust; Cohen and Swim, 1995; Good and Inzlicht, 2006; Hall et al., 2018; Murphy et al., 2007; Purdie-Vaughns et al., 2008). Conversely, contexts which lack identity safety cues may be particularly threatening for stigmatized group members when the context has a history of discrimination and stereotyping (e.g. medical institutions pathologizing same-sex relationships; Steele, 1997; Steele et al., 2002).

While theoretical reviews have discussed the potential impact of identity safety cues on expectations of stigmatization in healthcare settings (Burgess et al., 2010; Cipollina and Sanchez, 2019; Fingerhut and Abdou, 2017;

Ryan et al., 2017), no research has experimentally examined the impact of identity safety cues on sexual minorities' expectations of healthcare visits and providers. However, research has begun to explore how identity safety cues in this context influence other stigmatized groups' expectations of healthcare. This research found that Black and Latinx participants perceived White providers with racially diverse clientele (i.e. the minority representation cue) as less racially biased and as more culturally competent than providers with all White clientele, which had a downstream positive effect on participants' expectations of treatment quality (Cipollina and Sanchez, 2020). Conversely, the same package of studies found that healthcare providers' statements of valuing clients with diverse cultural/ethnic backgrounds did not significantly influence expectations of treatment quality or provider's racial bias or cultural competency. This finding is in line with recent research suggesting that diversity statements/philosophies can be viewed as a false-promise or a ploy (Wilton et al., 2020), perhaps especially when low levels of minority representation are present (Apfelbaum et al., 2016; Purdie-Vaughns et al., 2008).

Present research

The present work experimentally examines if cues of minority representation and a healthcare provider's diversity statement influence sexual minorities' perceptions of a novel healthcare provider and their expectations of stigmatization during a healthcare visit with the provider. Such expectations of stigma have the ability to impact not only healthcare utilization, but later health outcomes as documented by Fingerhut and Abdou (2017) and Mosack et al. (2013). The present work adds to past literature manipulating identity safety cues within healthcare settings (Cipollina and Sanchez, 2020) by (a) examining identity safety cues in healthcare contexts for sexual minority participants for the first time, and (b) by including both a specific diversity valuing statement (i.e. valuing LGBTQ clientele, not valuing "diverse" clientele) and a
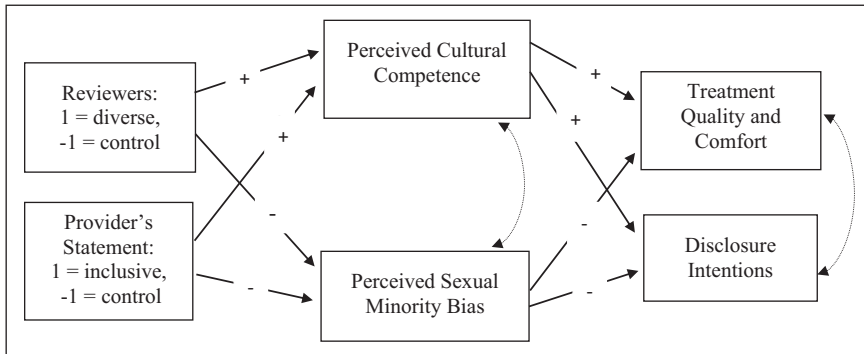
display of the provider's history working with sexual minority groups. Importantly, due to past research on the small or non-significant influence of diversity-valuing statements on expectations of identity safety (e.g. Cipollina and Sanchez, 2020; Wilton et al., 2020), we hypothesized a small or negligible effect of diversity statement on anticipated identity safety, though it is worth noting that including the provider's history treating sexual minorities may offset concerns that this statement was an empty promise (see Wilton et al., 2020).

As such, the present work examines if the diversity statement alone, or in conjunction with minority representation, signals identity safety to sexual minorities in healthcare settings. We hypothesized that the minority representation cue would facilitate greater expectations of provider cultural competency working with diverse groups, lower expectations of provider's bias, and greater anticipated identity safety. Our anticipated findings, depicted in Figure 1, suggests that the presence of the identity safety cues will be associated with more positive perceptions of the healthcare provider (i.e. greater cultural competency, lower bias) which will in turn be associated with greater anticipated treatment, comfort, and disclosure intentions. Together, the present work seeks to explore the impact of minority representation and provider diversity statements on sexual minorities' expectations of stigma in a healthcare setting and to explore the mechanisms through which these identity cues influence visit expectations.

Methods

Participants

Participants recruited from Amazon's Mechanical Turk (MTurk; $N = 197$) had to identify as a sexual minority (i.e. lesbian, gay, bisexual, or with another sexual orientation like pansexual), as over 18 years old, and as residing within the U.S. to participate. All participants were treated according to IRB approved protocol granted from a large public university in

Figure 1. Proposed path analysis model examining the relationships between the two manipulated identity safety cues and protection from identity-based devaluation through perceived provider cultural competency and bias.

Northeast U.S. and provided electronic consent. Participants who failed the manipulation check question twice ($n=6$) and participants who failed two or more attention checks (i.e. select "strongly agree" for this answer", $N=3$) were removed from the present analyses. Participants who failed a single attention check ($n=12$) were retained as removing them does not significantly alter the results. Thus, all participants were unaware of inclusion criteria and did not fail more than one attention check.

Minimum sample size was determined using G*Power a priori power analysis (Faul et al., 2009) for a planned 2×2 between-subjects design (suggested 199 participants for $d=0.40$ at 80% power). However, due to unexpected data exclusions our final analytic sample was under the suggested a priori power recommendations. As such, we conducted a post hoc power analysis suggesting that the present sample achieved 77% power instead of 80% as desired. However, imputing the average found effect size for minority representation in the present analyses (i.e. $d=0.44$) to the post hoc analysis suggests the study achieved 85% power for these effects.

Most of the participants (Total $N=188$) identified as women (61.7%, $N=116$), with 34.6% ($n=65$) identifying as men, and 3.7% ($n=7$) identifying with another gender identity (e.g. gender non-binary, queer). Most participants identified as bisexual (61.7%, $n=116$), 30.3% ($N=57$) identified as gay or lesbian, and 8.0%

($N=15$) identified with another sexual orientation (e.g. pansexual). Participants had a mean age of 32.14 ($SD=10.43$) and ranged from 18 to 69 years old. Participants identified as White ($N=125$, 66.5%), Black/African/Caribbean American ($N=29$, 15.4%), Latino/Hispanic ($N=12$, 6.4%), South Asian or East Asian ($n=9$, 4.8%), Native American/Alaskan Native ($N=7$, 3.7%, Biracial or Multiracial ($n=4$, 2.1%), and two participants identified with another racial category. All participants reported having been to a healthcare provider's office in their lifetime and 85.1% ($n=160$) of the sample had health insurance at the time of participation. Including insurance status as a covariate does not influence the pattern of results (see supplement).

Procedure

Sexual minority participants were recruited to participate in a study on "Medical Doctors" wherein they were told they would evaluate a random medical provider. Specifically, the present work utilized a 2 (Minority representation: Present or absent) by 2 (Diversity statement: Present or absent) between-groups design wherein the two examined identity safety cues were displayed on a mock provider's website. Participants were randomly assigned to one of the four online provider webpages that listed the provider's professional statement, his specialty (i.e. family physician), and reviews from previous clientele in that order.

After webpage manipulation checks (detailed below), all participants answered questions about their perceptions of the provider, followed by anticipated visit quality questions, and lastly, participants reported on anticipated disclosure intentions and comfort.

Materials and measures

Provider's online webpage. All webpages were identical except for the two manipulations (i.e. section of statement about diversity and reviewers' identities). The format of the website was adapted from a widely used provider search engine for added believability. The webpages as viewed by participants are published on the open science framework (OSF; Link: https://osf.io/ewtnc/?view_only=9a0b2802430b4c99b aeae49f83b562e1).

Those in the inclusive statement condition read:

> "Dr. Mayhew. . . is strongly committed to providing a supportive environment for families from diverse backgrounds. He believes that the quality of his medical practice has improved because of the experiences he has had with a diverse range of family types, including those from the LGBTQIA community. His office plans to maintain its reputation for professionalism, quality relationships with patients from varied cultural backgrounds and patient satisfaction."

Participants within the control statement condition read a similar paragraph of text without mention of diverse families or the LGBTQIA community. Specifically, they read:

"Dr. Mayhew. . . is strongly committed to providing a supportive environment. He

> believes that the quality of his medical practice has improved because of the experiences he has had with many different families over the years. His office plans to maintain its reputation for professionalism, quality patient relationships, and patient satisfaction."

As a manipulation check all participants had to correctly identify words that the provider mentioned in their statement, e.g. "professionalism,"

"seeing a diverse range of family types," among other filler items like where the provider received their medical degree.

Next, participants were randomly exposed to either sexual minority reviewers or all heterosexual reviewers. Specifically, those in the sexual minority representation condition saw two out of six reviews from same-sex couples, while those in the control saw images of all heterosexual couples. The patient images were pretested for intended sexual orientation of the couple and all feature children to add to the believability of the provider being a family physician. The displayed reviews all had a positive stance toward the provider with ratings that ranged from four to five out of five stars. After viewing the reviews, participants had to correctly identify words that were present within the reviews, for example, "a clean office" and "professionalism." Lastly, as a manipulation check, participants had to correctly identify two of the reviewer's pictures. If any manipulation check was failed participants were instructed to repeat the manipulation check questions again before moving forward in the study.

Cultural competence. Participants reported on an eight-item measure of perceived provider cultural competence (Cipollina and Sanchez, 2020). The items, e.g. "This doctor would" (1) "seek information on cultural needs of new clients and families of diverse backgrounds", (2) "be aware of health issues of minority groups" and (3) "work well with patients coming from different communities", were rated on a 1 (*Strongly disagree*) to 7 (*Strongly agree*) Likert scale ($M = 5.36$, $SD = 1.07$) and had high reliability ($a = .89$).

Perceptions of provider's bias. Participants' ratings of the provider's bias toward sexual minorities were rated with two PI-created items that measure the likelihood that the doctor held negative attitudes toward sexual minorities. The items, "How likely is it that this provider holds homophobic beliefs" and "How likely is it that this provider treats sexual minorities fairly" (reverse coded), were rated on a 1 (*Not at all*

likely) to 7 (*Very likely*) Likert scale (M=2.71, SD=1.43). The two items were positively correlated, r(188)=.42, $p < 0.001$, and were averaged such that high values indicate greater perceptions of provider's bias.

Anticipated treatment and comfort. Participants answered 18 items of anticipated treatment at this provider's office (Cipollina and Sanchez, 2020). The items included statements about the provider's treatment quality (e.g. "I think this doctor would listen to me carefully"), trust in the provider (e.g. "I trust that this doctor's office would have my best interests in mind"), and anticipated comfort in the medical office (e.g. "I would feel comfortable going to this medical office"). The items were rated on a Likert scale of 1 (*Strongly disagree*) to 7 (*Strongly Agree*) and had high reliability (a=.94, M=5.70, SD=0.98).

Disclosure intentions. Participant reported on six items assessing, likelihood, comfort, and methods of self-disclosure in the provider's office. Specifically, one item assessed likelihood of disclosure, "How likely would you be to disclose your sexual orientation to this provider?" which was rated on a 1 (*Not at all likely*) to 7 (*Very likely*) Likert scale, an additional item assessed comfort disclosing their sexual orientation to the provider (i.e. "How comfortable would you feel disclosing your sexual orientation to this doctor?"), which was assessed on a 1 (*Not at all*) to 7 (*Extremely*) Likert scale, and the remaining four items assessed methods of disclosure which were rated on a 1 (*Strongly disagree*) to 7 (*Strongly agree*) Likert scale. Sample disclosure method items include, "I would tell this doctor my sexual orientation on paperwork" and "I would tell this doctor my sexual orientation if the doctor asked". While the disclosure related items were not intended to be analyzed as a single measure, an exploratory factor analysis (Principal axis factoring with Oblimin rotation) revealed that the six items fell onto one factor. The items also had high reliability, a=.85, and, as such, were averaged into a single measure of disclosure intentions (M=5.12, SD=1.24).[1]
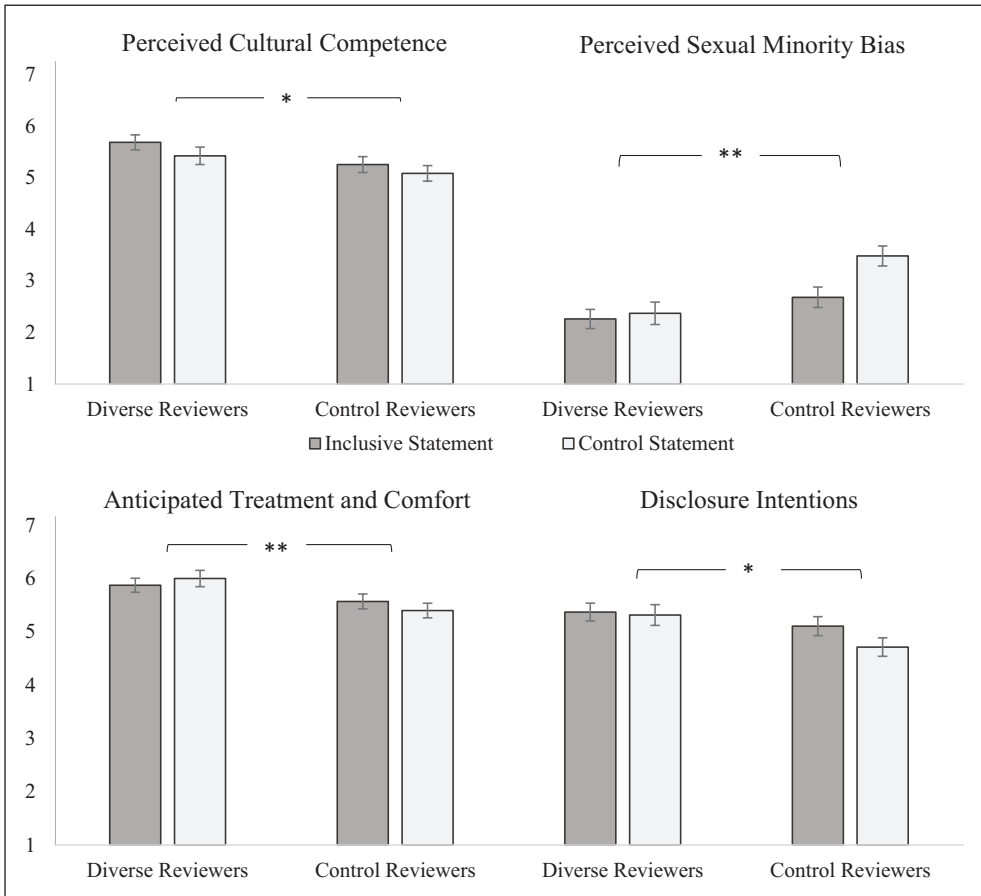
Planned data analysis

A series of 2×2 between-subjects ANOVAs were conducted to examine the role of minority representation (i.e. diversity of patient reviewers) and provider statement on perceptions of the healthcare provider, anticipated treatment, and disclosure intentions. To examine multiple pathways through which identity safety cues may signal inclusion to sexual minorities in this context, a path analysis was conducted. We tested our proposed model using path analysis on Mplus 6 (Muthén and Muthén, 2017). Estimates of the indirect effects were calculated using 10,000 bootstrapped samples. Model fit was determined by null chi-square values, root mean square error approximation (RMSEA) < .06, comparative fit index (CFI) ≥ 0.95 and standardized root mean square residual (SRMR) < 0.08 (Hu and Bentler, 1999; Kline, 2011). Indirect effect analyses were examined to determine the influence of minority representation and inclusive statement on treatment and disclosure expectations through perceived cultural competence and bias. An alternative model reversing the order of mediators and outcome variables had poor fit to the data and is presented within the supplemental text.

Data Sharing Statement: The current article includes the complete raw data-set collected in the study including the participants' data set, syntax file, and log files for analysis. Pending acceptance for publication, all of the data files will be automatically uploaded to the Figshare repository.

Results

Perceptions of the healthcare provider

There was a main effect of minority representation on perceived cultural competency of the doctor, F(1, 184)=6.28, p=0.013, d=0.37, such that those exposed to diverse reviewers evaluated the provider as significantly higher on cultural competence (M=5.55, SE=0.11) than those in the control condition (M=5.16, SE=0.11). There was not a significant effect of provider statement on anticipated treatment, F(1, 184)=1.89, p=0.17, d=0.20, nor was there a significant

Figure 2. Multipanel figure displaying the influence of minority representation (i.e. diverse reviewers) and provider's statement on study outcomes. Means and standard errors are depicted. Figure displays the significant effect of minority representation across all outcomes and the significant effect of provider's statement on perceived provider bias.
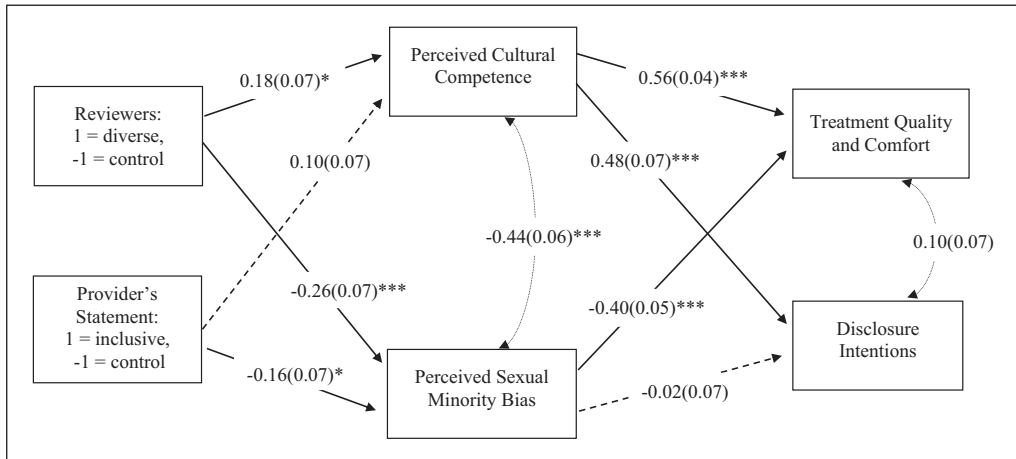$*p < 0.05.$ $**p < 0.01.$

interaction of conditions; $F(1, 184)=0.09$, $p=0.77$, $d=0.00$. See Figure 2.

There was a significant main effect of minority representation on perceived bias of the provider, $F(1, 184)=14.69$, $p<0.001$, $d=0.57$, such that those who saw the diverse reviewers believed that the doctor held significantly lower levels of negative attitudes toward sexual minorities ($M=2.32$, SE$=0.14$) than those who did not see representation ($M=3.08$, SE$=0.14$). There was also a significant effect of provider statement on perceived bias, $F(1, 184)=5.19$, $p=0.024$, $d=0.33$, such that those exposed to

the inclusive statement reported perceiving the doctor as significantly less biased ($M=2.47$, SE$=0.14$) than those in the control ($M=2.93$, SE$=0.15$). The interaction did not reach conventional levels of significance, $F(1, 184)=3.02$, $p=0.08$, $d=0.26$.

Anticipated visit outcomes

There was a significant main effect of minority representation on anticipated treatment quality and comfort, $F(1, 184)=10.28$, $p=0.002$, $d=0.47$, such that those who saw the brochure with diverse

Figure 3. Results of path analysis with standardized regression coefficients. Non-significant paths presented with dashed lines.
$*p < 0.05$. $***p < 0.001$.

reviewers reported higher anticipated treatment quality and comfort ($M = 5.93$, SE $= 0.10$) than those in the control condition ($M = 5.48$, SE $= 0.10$). No significant effect of provider's statement on anticipated treatment, $F(1, 184) = 0.02$, $p = 0.88$, $d < 0.001$, or the interaction of conditions was found, $F(1, 184) = 1.14$, $p = 0.29$, $d = 0.16$.

Lastly, there was a significant main effect of minority representation on disclosure intentions emerged, $F(1, 184) = 5.86$, $p = 0.016$, $d = 0.36$, such that those who saw diverse reviewers reported greater sexual orientation disclosure intentions ($M = 5.34$, SE $= 0.13$) than those exposed to control reviewers ($M = 4.91$, SE $= 0.12$). No significant effect of statement on disclosure intentions, $F(1, 184) = 1.57$, $p = 0.21$, $d = 0.18$, or the interaction of conditions emerged, $F(1, 184) = 0.88$, $p = 0.35$, $d = 0.14$.

Modeling pathways to identity safety

The proposed path model was a good fit to the data, $\chi^2(1, N = 188) = 0.48$, $p = 0.49$, RMSEA $= 0.00$, 90% confidence interval (CI) $= [0.00, 0.17]$, CFI and TFI $= 1.00$, SRMR $= 0.009$. The tested model, depicted in Figure 3, included estimates of the relationship between the two proposed mediating

variables and the two proposed outcome variables.

Indirect effect analyses revealed that the association between minority representation and anticipated treatment was mediated through cultural competence, indirect effect: $B = 0.10$, SE $= 0.04$, 95% CI$[0.02, 0.18]$, and through perceived bias, $B = 0.10$, SE $= 0.03$, 95% CI$[0.42, 0.16]$, such that representation signaled greater cultural competence and lower bias, which was, in turn, associated with better treatment expectations. Moreover, the indirect effect of minority representation on disclosure intentions was significant through cultural competence, $B = 0.11$, SE $= 0.05$, 95% CI$[0.02, 0.20]$, but not through perceived bias, $B = 0.005$, SE $= 0.02$, 95% CI$[-0.04, 0.05]$. Analyses also revealed a significant indirect effect of the provider's statement on treatment expectations through perceptions of bias, $B = 0.06$, SE $= 0.03$, 95% CI$[0.01, 0.12]$, such that the provider with LGBTQ+ inclusive statement was rated as lower in bias, which was in turn associated with better treatment expectations. There was not a significant indirect effect of statement on treatment expectations through perceived cultural competence, $B = 0.05$, SE $= 0.04$, 95% CI$[-0.02, 0.13]$. Lastly, indirect effects of provider statement on disclosure

intentions through cultural competence, $B=0.06$, SE$=0.04$, 95% CI$[-0.03, 0.14]$, and bias, $B=0.003$, SE$=0.02$, 95% CI$[-0.03, 0.03]$, were not significant.

Discussion

The present work used an experimental design to determine if two different identity safety cues or displays of a healthcare provider's experience with the LGBTQ+ community signal protection from identity-based devaluation for sexual minorities. Specifically, we find that sexual minorities' perceived providers with diverse reviewers as less biased against sexual minorities and as more culturally competent, when compared to providers who had all heterosexual past patient reviewers. Further, path mediation analyses suggest that the representation cue improved sexual minorities' treatment expectations and disclosure intentions through increasing perceptions of the provider's cultural competency and through reducing perceived provider bias toward sexual minorities. In addition, the present work found that provider's inclusive statements about sexual minority clientele reduced perceptions of provider's bias toward sexual minorities, relative to the control (no-inclusive statement) condition, but did not directly influence perceptions of cultural competency, treatment quality, or disclosure intentions. Together, the present work suggests that more concrete indicators of treating sexual minority patients (e.g. past sexual minority patient reviews) signal greater identity safety than less objective indicators (e.g. healthcare providers professing inclusivity).

The present work adds to past research on sexual minorities' expectations of stigmatization in healthcare contexts (e.g. Beehler, 2001; Durso and Meyer, 2013) by providing experimental documentation of novel identity-based cues which influence expectations of encountering sexual prejudice in this context. As such, the present work suggests that these cues are one indicator used by sexual minorities to determine expectations of identity-based devaluation in this setting which have implications in healthcare

utilization, satisfaction, and health outcomes (see Fingerhut and Abdou, 2017; Mosack et al., 2013). Moreover, it adds to the literature on identity safety cues in healthcare settings (see Cipollina and Sanchez, 2019, 2020) more broadly by documenting that cues of sexual orientation diversity (e.g. minority representation of past clientele) can signal cultural competency, in turn facilitating lower expectations of stigma for sexual minorities. Importantly, this work documents for the first time how identity safety cues may facilitate sexual orientation disclosure, which in the healthcare context has notable health outcomes (see Ruben and Fullerton, 2018). This research did not demonstrate providers' LGBTQ-valuing statements directly influenced anticipated treatment and disclosure outcomes. This may suggest that like past research (e.g. Wilton et al., 2020), diversity valuing statements do not strongly signal protection from identity-based devaluation. Instead, providers' statements that display inclusivity may likely need to include tangible steps taken to ensure an inclusive practice (e.g. staff trainings or displays of office qualifications to properly serve minorities).

Limitations and future directions

While the present work utilized a provider website comparable to those utilized to find LGBTQ friendly providers (e.g. glma.org), our manipulated materials included images of past clients to manipulate sexual orientation, which are not traditionally included on such websites. As such, in ecologically valid settings sexual minority representation would likely be gleaned from reviewers who self-identify themselves as LGBTQ+ as part of a review for that healthcare provider. However, it may be unlikely that past clientele belonging to the LGBTQ community will always disclose their sexual orientation when leaving a review for a provider's office. This further provides support for the need for additional research into ways in which healthcare providers can display the inclusivity of their office that do not rely on standard diversity valuing statements.

In addition, the present work utilized measures of anticipated stigma and disclosure intentions. Future work needs to explore how these identity cues can influence healthcare visit interactions (see review Cipollina and Sanchez, 2019). In addition, this work could explore other identity safety cues within office settings (e.g. the presence of a gender inclusive bathroom, see Chaney and Sanchez, 2018) or the representation of office materials (e.g. magazines or posters; see Albuja et al., 2019) to document the ways in which safety cues can influence healthcare visit outcomes, including adherence to provider's treatment recommendations (see Aronson et al., 2013) or comfort discussing sexual health (see Schwartz and Grimm, 2019). Further, research could also include focus groups discussing the effectiveness of varied identity cues at signaling an inclusive environment (Wilkinson, 1998).

Importantly, little or no research has explored the relationship between identity safety cues in healthcare settings and measures of provider bias. Specifically, it is unclear if provider's offices that do have varied identity safety cues are evaluated as more inclusive practices, relative to practices without such cues, by minority groups or if these offices have lower incidences of discrimination. While experimental examinations in this context are complex, this research could explore the impact of implementing identity safety cues into this context to examine if inclusivity cues (e.g. "we value diversity in this office") may impact staff or provider's attitudes or behaviors as suggested by Stevens et al. (2008). Future research should explore ways in which these cues are associated with bias as provider bias against sexual minority patients (see Sabin et al., 2015; Smith & Mathews, 2007) may persist even in settings with identity safety cues.

Future research should examine identity factors including participants' intersecting identities (e.g. race and gender identity) on expectations of identity safety from varied identity safety cues in this context (see Gessner et al., 2019). Specifically, sexual minorities of color may be less receptive to identity safety cues in this content due to valid medical mistrust (see Brenick et al., 2017; Powell et al., 2019), which in turn may contribute to racial disparities in health (see Volpe et al., 2019; Williams et al., 1997). Further, patients' chronic expectations of rejection or level of identity-based rejection sensitivity (see Pachankis et al., 2014), may reduce the efficacy of identity safety cues, which may be particularly detrimental to such populations that may be the least likely to disclose their sexual orientation to healthcare providers. Lastly, future research should explore other mechanisms and outcomes related to identity safety cues and sexual minority health and comfort in this setting. For instance, expectations of heteronormative assumptions, for example, "how likely is it that this provider would assume you are heterosexual" may be signaled through varied identity safety cues, and anticipated comfort discussing sexually transmitted diseases, same-sex intercourse practices, or Pre-Exposure Prophylaxis (PrEP) and HIV testing may be greater among patients with healthcare providers who effectively signal an inclusive practice.

Conclusion

Sexual minorities report anticipating stigmatization within healthcare visits which is associated with low healthcare utilization and poor satisfaction with healthcare providers. The present work examined how two identity safety cues, (i.e. identity-related cues which signal lower stigma) specifically provider clientele diversity and provider diversity statement, influenced sexual minorities' expectations of stigmatization in a visit with a healthcare provider. Specifically, we found that clientele diversity (i.e. a minority representation cue) signaled to sexual minority participants that providers were more culturally competent and less biased against sexual minorities which was, in turn, associated with greater perceived protection from identity-based devaluation and greater anticipated comfort disclosing one's sexual orientation. Conversely, providers who had a diversity statement mentioning valuing and working with sexual minority patients in the past were solely perceived as lower in bias.

Together, the dual pathway model suggests that identity safety cues in the healthcare

context can improve perceptions of healthcare providers, with downstream improvements in expectations of healthcare visits. Expectations of healthcare visits are of importance as they can shape visit outcomes and sexual minorities' health, through influencing how patients interact with providers, their rates of healthcare utilization, and sexual orientation disclosure (see reviews; Burgess et al., 2010; Cipollina and Sanchez, 2019; Fingerhut and Abdou, 2017). Moreover, the present work suggests that providers who seek to utilize identity safety cues to attract sexual minority clientele should seek to promote not just representations of diversity, but to implement inclusive practices (e.g. not assuming gender identity or sexual orientation of patients) and trainings (see Costa et al., 2016) for office staff to promote an inclusive climate. Ultimately, future work should examine identity safety cues present within healthcare settings to determine the influence of identity cues on sexual minority health disparities, including healthcare utilization and satisfaction.

Authors' note

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Supplemental material

Supplemental material for this article is available online.

Note

1. Manuscript results using subscales of the disclosure intention measure reveal a similar pattern of results and are presented within the supplement.

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