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Anthony Lyons <sup>1</sup>

Beatrice Alba <sup>1</sup>

Andrea Waling <sup>1</sup>

Victor Minichiello <sup>1,2</sup>

Mark Hughes <sup>3</sup>

Catherine Barrett <sup>4</sup>

Karen Fredriksen-Goldsen <sup>5</sup>

Samantha Edmonds <sup>6</sup>

Michelle Blanchard <sup>7, 8</sup>

<sup>1</sup> Australian Research Centre in Sex, Health and Society; School of Psychology and Public Health, La Trobe University, Melbourne, Australia

<sup>2</sup> School of Justice, Faculty of Law, Queensland University of Technology, Brisbane, Australia

<sup>3</sup> School of Arts and Social Sciences, Southern Cross University, Gold Coast, Australia

<sup>4</sup> Alice's Garage, Melbourne, Australia

<sup>5</sup> School of Social Work, University of Washington, Seattle, United States of America

<sup>6</sup> Silver Rainbow, National LGBTI Health Alliance, Sydney, Australia

<sup>7</sup> SANE Australia, Melbourne, Australia

<sup>8</sup> Anne Deveson Research Centre, Melbourne, Australia

Correspondence:

Associate Professor Anthony Lyons

Australian Research Centre in Sex, Health and Society

School of Psychology and Public Health

La Trobe University

Building NR6, Bundoora, Victoria, 3086, Australia

Email: a.lyons@latrobe.edu.au

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This study was approved by the La Trobe University Human Ethics Committee.

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The authors report no conflicts of interest.

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## Abstract

This study examines the potential health-related impact of recent versus lifetime experiences of sexual orientation discrimination among older Australian lesbian women and gay men. In a nationwide survey, a sample of 243 lesbian women and 513 gay men aged 60 years and over reported on their experiences of sexual orientation discrimination and their mental and physical health, including psychological distress, positive mental health, and self-rated health. Among both lesbian women and gay men, recent discrimination uniquely predicted lower positive mental health after adjusting for experiences of discrimination across the lifetime and sociodemographic variables. In addition, recent discrimination uniquely predicted higher psychological distress among gay men. Experiences of discrimination over the lifetime further predicted higher psychological distress and poorer self-rated health among gay men after adjusting for recent experiences of discrimination and sociodemographic variables. However, there were no associations between lifetime discrimination and any of the outcome variables among lesbian women. Overall, recent and lifetime experiences of sexual orientation discrimination were related to mental and physical health in different ways, especially among the men. These findings have potential implications for policy/practice, and suggest that distinguishing between recent and lifetime experiences of discrimination may be useful when assessing potential health-related impacts of sexual orientation discrimination among older lesbian women and gay men, while also taking account of differences between these two groups.

Keywords: gay men, lesbian women, ageing, discrimination, well-being

## Introduction

Compared to the general population, lesbian women and gay men have poorer mental health outcomes on a range of variables including depression, anxiety, and suicidal thoughts (Bradford, Ryan and Rothblum 1994; Chakraborty *et al.* 2011; Conron, Mimiaga and Landers 2010; Mills *et al.* 2004; Paul *et al.* 2002; Plöderl and Tremblay 2015), as well as poorer physical health (Conron *et al.* 2010). Research has shown that these negative outcomes are linked to experiences of sexual orientation discrimination (Baams, Grossman and Russell 2015; Burns *et al.* 2012; Kelleher, 2009; Kuyper and Fokkema 2011; Lea, de Wit and Reynolds 2014; Mays and Cochran 2001; Mills *et al.* 2004).

While lesbian women and gay men of any age can experience sexual orientation discrimination, its impact on those who are older may be different for two reasons. One reason is that as well as potentially experiencing recent discrimination, older people are more likely to have accumulated a greater number of experiences of discrimination over their lifetime compared to younger people. The other reason is that older gay men and lesbian women lived through a time when stigma and prejudice regarding their sexuality was far greater than it is today, at least in most Western nations, where the law not only failed to recognise their rights but in many cases made homosexual acts an illegal and criminal offence (Fredriksen-Goldsen *et al.* 2015; Fredriksen-Goldsen and Muraco 2010; Lyons *et al.* 2015; Yarns *et al.* 2016). Experiences related to sexual orientation discrimination might also be further compounded by ageist beliefs that older people lack the capacity for sex or should not be having sex (Heywood *et al.* 2017). Also, the context in which discrimination occurs may be different for older people compared to younger people, such as discrimination in aged care settings. Therefore, it is important to examine the impact of both recent and lifetime sexual orientation discrimination, since the latter may have a more significant or potentially enduring impact in this population.

Both the cumulative effect of a lifetime of sexual orientation discrimination and more recent experiences of discrimination are likely to impact on well-being. This is clearly articulated by Minority Stress Theory, which outlines how the discrimination and prejudice that lesbian women and gay men are exposed to can lead to poorer mental health through chronic or repeated stress (Meyer 2003). Another pertinent ecological model, integrating a life course perspective is the Health Equity Promotion Model (Fredriksen-Goldsen, Bryan *et al.* 2017; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen, Kim and Shiu 2017; Fredriksen-Goldsen *et al.* 2014), which explains how health outcomes are influenced by both positive and negative pathways, which themselves intersect with structural and individual factors. These structural factors include ways that marginalisation and exclusion occur at the societal and institutional level, such as through legislation, policy, and stigmatising cultural norms. At the individual level, these factors include personal experiences of discrimination, victimisation, and abuse.

Both these structural and individual factors, as potential social determinants of health, intersect with health-promoting and adverse pathways, which include behavioural, social, psychological, and biological mechanisms. Importantly, the model also includes life course factors such as the role of the social and historical context in the lives of older lesbian women and gay men, given that they came of age during a time when homosexuality was far more marginalised than it is today in most Western nations (Fredriksen-Goldsen *et al.* 2015; Fredriksen-Goldsen and Muraco 2010; Lyons *et al.* 2015; Yarns *et al.* 2016). In addition, because the model accounts for health-promoting pathways, it can more effectively explain both positive and negative health outcomes than the Minority Stress Model.

Researchers have found some support for the predictions made by Minority Stress Theory and the Health Equity Promotion Model among older lesbian women and gay men. These groups experience a higher risk of negative mental and physical health outcomes than

older heterosexual adults (Fredriksen-Goldsen, Kim *et al.* 2013; Fredriksen-Goldsen *et al.* 2011; Gonzales and Henning-Smith 2015; Guasp 2010; Hughes 2017; Valanis *et al.* 2000; Yarns *et al.* 2016), in line with the research above on lesbian women and gay men of all ages. Furthermore, experiences of discrimination related to sexuality are known to be associated with poorer mental and physical outcomes among older lesbian women and gay men (D'Augelli and Grossman 2001; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen *et al.* 2015; Grossman, D'Augelli and O'Connell 2001). Of course, this is not unique to those who identify as lesbian or gay. Other marginalised groups, such as those who identify as bisexual or are transgender, have also been found to have disproportionately higher rates of mental and physical health challenges, sometimes at rates higher than lesbian and gay adults (Fredriksen-Goldsen *et al.* 2011; Jessup and Dibble 2012; Jorm *et al.* 2018). Research also suggests that discrimination impacts lesbian women and gay men differently, with some studies finding that the link between experiences of discrimination and poorer mental health outcomes was stronger for males than for females across a range of age groups (Almeida *et al.* 2009; De Graaf, Sandfort and ten Have 2006; Grossman *et al.* 2001).

Given the links between experiences of sexual orientation discrimination and well-being in older lesbian women and gay men, it is important to examine more closely how the nature of discrimination relates to mental and physical health. Since older individuals may have accumulated a greater number of experiences of discrimination across their lifetime, it is necessary to examine the unique impact of lifetime discrimination in comparison to more recent experiences of discrimination. Doing so would allow policymakers, researchers, health professionals, and support organisations to have a clearer understanding of the potential impact of discrimination over the lifetime on the current and future health of older lesbian women and gay men. Previous research on a nationally representative general population of

older American adults found that everyday experiences of discrimination of any form had a more negative relationship with mental health compared to major lifetime experiences of discrimination (Ayalon and Gum 2011). One U.S. study examined the association of both lifetime and what the authors referred to as day-to-day discrimination with the physical and mental health-related quality of life of LGBT older adults and found that only lifetime discrimination was negatively associated with both outcomes (Kim, Jen and Fredriksen-Goldsen 2017). Their paper, however, did not assess whether there were gender differences in these relationships.

The associations between recent and lifetime discrimination and predictors may also vary across differing cultural contexts, and there are currently no studies we know of that have examined this distinction in Australia. Experiences of sexual orientation discrimination are of potential significance in this context, given that Australia has been slow to legalise same-sex marriage compared to other developed countries (Johnson 2015), which only occurred in December 2017. Furthermore, most previous studies conducted elsewhere have assessed experiences of discrimination over the lifetime (D'Augelli and Grossman 2001; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen *et al.* 2015; Grossman *et al.* 2001), or combining lifetime experiences and day-to-day discrimination (Fredriksen-Goldsen, Kim, Bryan *et al.* 2017). Studies have also tended to focus on poorer mental health, such as symptoms of depression and anxiety, and less so on positive mental health. However, the absence of negative symptoms does not necessarily mean that an individual is feeling fulfilled or happy in life. It is therefore important to examine how experiences of discrimination might be related to positive mental health, and in particular whether more frequent experiences are linked to a lower likelihood of flourishing.

In this study, we investigated the unique relationships that recent and lifetime sexual orientation discrimination have with indicators of mental and physical health in a large



sample of older lesbian women and gay men in Australia. While we acknowledge that some lesbian women identify as gay, we refer to lesbian and gay women as lesbian women in this paper as a shorthand. To examine a broad spectrum of mental health, we included not only negative mental health, such as depressive symptoms and anxiety, but also positive mental health, such as flourishing. We had two main aims. The first aim was to identify sociodemographic factors that are uniquely associated with recent discrimination and lifetime discrimination. The second aim was to identify the degree to which recent discrimination and lifetime discrimination are uniquely associated with specific aspects of mental and physical health. Throughout, we examined lesbian women and gay men separately to identify whether patterns varied between the two groups.

## **Method**

### **Participants**

Australian adults who identified as lesbian or gay aged 60 years and older completed a national survey of health and well-being. Data collection took place between August 2017 and December 2017. A total of 895 participants completed the survey, of which 139 participants were excluded due to group sizes being too small for the purposes of this analysis. These included participants who indicated their gender as being transgender women ( $n = 35$ ), transgender men ( $n = 4$ ), or a gender identity other than male, female, transgender, or did not specify ( $n = 16$ ). Also excluded for the purposes of the analysis in this paper were those who indicated they were bisexual ( $n = 48$ ) or indicated a sexual orientation other than lesbian, gay, or bisexual, or did not specify ( $n = 56$ ). These groups can have a range of different experiences to lesbian women and gay men with regard to sexual orientation discrimination, and therefore would require dedicated, targeted analyses. Women who

selected gay as their sexual orientation were re-coded to lesbian ( $n = 10$ ). We also excluded any participants who did not respond to any of our key variables. This left a final sample of 234 cisgender lesbian-identified women and 505 cisgender gay-identified men who were all aged between 60 and 85 years ( $M = 65.97$ ,  $SD = 4.72$ ).

## Measures

The survey examined numerous aspects of the lives of participants. Measures relevant to this article included:

*Psychological distress.* We used the K10 Psychological Distress Scale (Kessler *et al.* 2002). The K10 is a validated 10-item scale that is widely used and shown to identify cases of depression and anxiety, including in the Australian population (Andrews and Slade, 2001; Furukawa, Kessler, Slade and Andrews 2003) and among older Australians (Anderson *et al.* 2013). Participants were asked “During the past 30 days, about how often did...” before being presented with 10-items such as “... you feel tired for no reason?” and “... you feel nervous”. Response options range from 1 “None of the time” to 5 “All of the time”. Item scores were summed (ranging from 10 to 50) with high scores indicating greater levels of psychological distress. Internal reliability, measured using Cronbach’s alpha, for the K10 in this study was  $\alpha = .92$ .

*Positive mental health.* The Short Warwick Edinburgh Mental Well-Being Scale (SWEMWBS) was used to measure positive mental health (Stewart-Brown *et al.* 2009) or the degree to which people are flourishing, and has been found to be similar in validity to the longer version of the scale (Fat *et al.* 2017). Participants were asked to respond to seven items describing their feelings over the last two weeks (for example, “I have been feeling optimistic about the future”). The SWEMWBS is measured on a five-point scale ranging from 1 “None

of the time” to 5 “All of the time”. Item scores were summed to compute a total score ranging from 5 to 35, with higher scores indicating greater experiences of positive mental health.

Internal reliability (Cronbach’s alpha) for the SWEMWBS in this study was  $\alpha = .91$ .

*General health.* Self-rated general health was measured using the question, “In general, would you say your health is...” to rate their overall health (1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent). Research has shown that this single-item subjective measure reliably predicts actual physical health as measured through objective means (DeSalvo *et al.* 2006; Idler and Benyamini 1997).

*Experiences of sexual orientation discrimination.* We took a broad approach to assessing experiences of discrimination in this study, specifically asking participants how often they felt they had been treated unfairly where they attributed this unfair treatment to their sexual orientation. Thus, our measure was subjective and self-reported. This is a common approach when assessing relationships between experiences of discrimination and health and well-being, as the subjective or psychological experience is an important factor. For lifetime discrimination, participants were asked, “Thinking back across your lifetime, to what degree have you been treated unfairly as a direct result of your sexual orientation?” (1 = “Not at all”; 2 = “Rarely”; 3 = “Sometimes”; 4 = “Often”; 5 = “Very often”). For recent experiences of discrimination, participants were asked, “In the last 12 months, how often were you treated unfairly as a direct result of your sexual orientation?” (1 = “Not at all”; 2 = “Rarely”; 3 = “Sometimes”; 4 = “Often”; 5 = “Very often”). Both these variables were recoded into dichotomous variables, such that responses of 1 or 2 were coded as rarely or never, and responses from 3 to 5 were coded as sometimes or often.

*Sociodemographic variables.* Participants were asked a range of sociodemographic questions. These included age, gender, sexual orientation, residential location (i.e., living in a

capital city or inner suburban, outer suburban, regional [pop. 5,000 or more], rural or remote area), highest educational qualification, employment status (such as working full-time, part-time, casual, retired), pre-tax income, country of birth, and their relationship status (i.e., have a relationship partner or not). A regional area in Australia was defined as one that exists outside the major state capital cities, and therefore comprises smaller cities or towns that are surrounded by rural areas.

## **Procedure**

Participants completed the survey either online or on paper. Study advertisements were distributed across a variety of platforms in order to reach a diverse sample. Paid advertisements were run through Facebook, and advertisements were also placed in LGBTI ageing and aged care newsletters. Relevant community organisations also promoted the survey to their contacts lists. Paper surveys were shared and promoted at a range of LGBTI seniors' events in Victoria, Australia, including at an LGBTI ageing conference in Melbourne. Attendees of this conferences included a range of practitioners and support workers from health and community organisations, as well as academics and older LGBTI people from the general community. All study advertisements contained the web address for the online survey as well as details of how participants could request a paper copy of the survey. Paper surveys were returned to the research team using reply paid envelopes. All participants were informed that their responses were anonymous and approval for the study was granted by the [removed for blind review] Human Ethics Committee.

## **Statistical Analysis**

We first compiled a sample profile by computing descriptive statistics for the sociodemographic variables conducted separately for men and women. We then conducted a

series of regressions to examine relationships involving the study variables and recent and lifetime sexual orientation discrimination. In all regressions, we controlled for one type of discrimination when examining the other type. In other words, when examining recent discrimination, we used lifetime discrimination as a control variable, and vice versa. This allowed us to analyse and present results for lifetime and recent discrimination separately for clarity. We first examined how the sociodemographic variables predicted experiences of recent and lifetime discrimination as outcome variables. Multivariable logistic regressions were conducted separately for recent discrimination and lifetime discrimination. All sociodemographic variables were included in each regression to identify significant independent factors. We then examined how experiences of discrimination predicted the health measures as outcome variables – psychological distress, positive mental health, and self-rated health. Recent and lifetime discrimination were treated as predictor variables and the health measures as outcome variables. For each discrimination variable, we conducted two sets of linear regressions. The first set did not make any adjustments for sociodemographic variables. This allowed us to identify simple relationships between discrimination and the outcome variables. The second set involved adjustment for the sociodemographic variables, which allowed us to determine the extent to which demographic factors accounted for any associations between discrimination and the outcome variables, especially as demographic factors are often linked to health outcomes. Where a participant had missing data on a variable, they were excluded from the relevant analysis. All analyses were performed separately by gender and were conducted using Stata Version 14.1 (StataCorp, College Station, TX).

## Results

### Sample Profile

Almost all participants completed the survey online, with only eight completing it on paper. Table 1 shows the sample profile, including descriptive data for all study variables. The largest proportion of participants was in the 60-64 years age group, with only about a fifth of the sample over the age of 70 years. More than a third of the men lived in a capital city or inner suburban area (36.7%), whereas the women were more evenly distributed across the residential locations. The majority of women (59.9%) and almost half of the men (46.7%) had a university education, and slightly more than half the sample were retired (women = 51.9%, men = 57.5%). Most participants (women = 88.9%, men = 88.2%) had a pre-tax income between \$20,000 and \$99,999, and were born in Australia (women = 68.9%, men = 75.0%). The majority of the women (66.1%) and just over half of the men (50.9%) were in a relationship. Given that approximately 18.4% of men and 17.4% of women in Australia aged 65-74 years have a university undergraduate (bachelor) degree or above, our sample was more highly educated than the broader community of older people (Australian Bureau of Statistics, 2018). This is consistent with previous research from the U.S. that has found that older lesbian women and gay men tend to have a higher education than heterosexual older people, however their incomes also tend to be similar to those of heterosexual older people (Fredriksen-Goldsen, Kim, et al., 2013). A total of 20.9% of women and 18.4% of men reported sometimes or often experiencing recent sexual orientation discrimination and 61.5% of women and 54.7% of men reported sometimes or often experiencing sexual orientation discrimination in their lifetime.

## **Sociodemographic variables associated with recent and lifetime sexual orientation**

There were no gender differences in experiences of recent sexual orientation discrimination,  $\chi^2(1) = 0.66, p = .42$ , although lifetime discrimination approached significance,  $\chi^2(1) = 3.09, p = .08$ , with a slightly higher proportion of women reporting experiences of lifetime discrimination, as displayed in Table 1. Table 2 displays the demographic variables that significantly predicted recent discrimination, while controlling for lifetime discrimination. For the women, more frequent recent experiences of discrimination were linked to being employed full-time ( $p = .04$ ) and having an income between \$0-19,999 compared to \$100,000 and over ( $p = .03$ ). None of the sociodemographic variables were significantly linked to recent discrimination among the men. Table 3 reports the demographic variables that significantly predicted lifetime discrimination, while controlling for recent discrimination. Among women, more frequent experiences of lifetime discrimination were linked to living in a suburban area compared to a capital city or inner suburban area ( $p = .02$ ) and having a tertiary education ( $p = .01$ ). For the men, more frequent experiences of lifetime discrimination were linked to not being in a relationship ( $p = .03$ ).

## **Recent sexual orientation discrimination and mental and physical health**

Table 4 displays the linear regressions for all outcome variables with recent sexual orientation discrimination as the predictor, first without sociodemographic adjustment and then with sociodemographic adjustment. Prior to adjusting for sociodemographic variables, recent discrimination significantly predicted greater psychological distress,  $F(1, 219) = 4.59, p = .03$ , and lower positive mental health,  $F(1, 228) = 8.68, p = .004$ , among the women, and greater psychological distress,  $F(1, 483) = 20.39, p < .0001$ , lower positive mental health,  $F(1, 498) = 15.90, p = .0001$ , and lower self-rated health,  $F(1, 501) = 7.91, p = .005$ , among the men. After further adjusting for the sociodemographic variables, recent discrimination

significantly predicted greater psychological distress,  $F(1, 434) = 23.00, p < .001$ , lower positive mental health,  $F(1, 450) = 17.40, p < .001$ , and lower self-rated health,  $F(1, 452) = 9.91, p = .002$ , among the men, and lower positive mental health,  $F(1, 190) = 5.48, p = .02$ , among the women. However, the association with psychological distress was no longer significant among the women. There were no significant links between recent discrimination and self-rated health in the unadjusted or adjusted results for the women.

### **Lifetime sexual orientation discrimination and mental and physical health**

Table 5 displays the linear regressions for all outcome variables with lifetime sexual orientation discrimination as the predictor, first without sociodemographic adjustment and then with sociodemographic adjustment. Prior to adjusting for sociodemographic variables, lifetime discrimination significantly predicted lower self-rated health,  $F(1, 231) = 4.14, p = .04$ , among the women, and greater psychological distress,  $F(1, 483) = 22.25, p < .001$ , and lower self-rated health,  $F(1, 501) = 6.68, p = .01$ , among the men. After further adjusting for the sociodemographic variables, lifetime discrimination significantly predicted greater psychological distress,  $F(1, 434) = 12.78, p = .0004$ , among the men. However, the association with self-rated health was no longer significant for either the women or the men. There were no significant associations between lifetime discrimination and the outcome variables for women in the adjusted analyses.

## **Discussion**

This study examined how recent sexual orientation discrimination and discrimination over the lifetime predicted indicators of mental and physical health in older lesbian women and gay men in Australia. Analyses revealed some notable gender differences. After adjusting



for sociodemographic variables and lifetime discrimination, recent discrimination was linked to higher psychological distress, lower positive mental health, and lower self-rated health among gay men, but only lower positive mental health among lesbian women. On the other hand, lifetime discrimination predicted higher psychological distress after adjusting for sociodemographic variables and recent discrimination, but only among gay men. Lifetime discrimination did not predict any of the outcome variables among lesbian women. It therefore appears, at least based on the measures used in this study, that experiences of sexual orientation discrimination, whether recent or lifetime, have a greater unique relationship to well-being for older gay men than for older lesbian women. This is not to say that experiences of discrimination more generally are not linked to the well-being of older lesbian women, as studies show (D'Augelli and Grossman 2001; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen *et al.* 2015; Grossman, D'Augelli, and O'Connell 2001), but rather, distinguishing between recent and lifetime discrimination appears to provide more information about well-being outcomes among the men.

Our findings for gay men are in line with previous research that has found a link between lifetime experiences of sexual orientation discrimination and poorer well-being among older gay men (D'Augelli and Grossman 2001; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen *et al.* 2015; Grossman *et al.* 2001). They are also consistent with research that suggests that the link between sexual orientation discrimination and well-being is stronger for males than for females (Almeida *et al.* 2009; De Graaf *et al.* 2006; Grossman *et al.* 2001). However, unlike previous research, this study examined the unique effects of recent and lifetime discrimination. For gay men, both types of discrimination were linked to psychological distress, but only recent discrimination was uniquely linked to self-rated general health. Previous research suggests

that experiences of sexual orientation discrimination across the lifetime among older lesbian women and gay men are linked to physical health (Fredriksen-Goldsen *et al.* 2015; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017). Our findings may suggest that recent experiences of discrimination may be a stressor that has more immediate consequences to general physical well-being compared to those experienced over the lifetime. While our findings do not suggest that experiences of lifetime discrimination do not relate to self-rated general health, they do suggest that recent experiences of discrimination might be a stronger unique predictor of self-rated general health than lifetime discrimination. On the other hand, it is also possible that poorer physical health can put people in contact with services that expose them to experiences of discrimination, which may be even more likely for older gay men who are living with HIV. Similarly, lower positive mental health was only linked to recent experiences of discrimination among men and women. These results are broadly in line with Minority Stress Theory (Meyer 2003) and the Health Equity Promotion Model (Fredriksen-Goldsen, Bryan *et al.* 2017; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen, Kim and Shiu 2017; Fredriksen-Goldsen *et al.* 2014). While neither theory explicitly distinguishes between recent and lifetime discrimination, both suggest that the accumulation of stressors related to stigma and discrimination can impact health. Our findings are consistent in that experiences of discrimination were uniquely related to poorer health overall. However, our findings also provide additional detail in showing that recent and lifetime experiences of discrimination can be linked to health in different ways, and differently again for older lesbian women compared to older gay men.

A possible explanation for the gender difference is that, although we did not find gender differences in the reported frequency of experiences of sexual orientation discrimination, the severity or the types of discrimination experienced by gay men may have

been different compared to lesbian women. Given that research has found that gay men report more experiences of sexual orientation discrimination than lesbian women when the measure includes acts of violence (Grossman *et al.* 2001), it is possible that the nature of the discrimination that the gay men in our sample experienced was different to that experienced by the women. Scholars have noted that gay men's experiences of homophobia are much more visible and direct, particularly around sexual practices and the HIV/AIDS epidemic (Harry 1990; Huebner, Rebchook and Kegeles 2004). This is often due to extreme homophobia, particularly in regard to gay men's sexual practices, such as the engagement in anal intercourse and outward affection, as well as subsequent concerns regarding valid expressions of masculinity (Adam 1998; Connell 1992; Coston and Kimmel 2012). Gay men are thus highly likely to be targets of violence and outward discrimination because of their sexual orientation. By contrast, older lesbian women are often noted to have experienced a triple invisibility to their age, gender, and sexual orientation (Brown 2009), as well as the overall fetishisation of lesbian sexual activity for the heterosexual male gaze (Diamond 2005). As such, it could be argued that such invisibility has resulted in lesbian women having less overt experiences of homophobia than gay men. However, it is worth noting that marginalisation can have other effects that can be just as damaging as overt experiences, such as internalised homophobia. However, further research that delves in specific types of discrimination experienced recently and across the lifetime would be needed to determine whether any of this is in fact the case.

It is also possible that older lesbians' primary experience of discrimination relates to their gender and/or age rather than their sexual orientation. Another possible explanation is that lesbian women may have developed coping strategies across their lifetime, such as seeking social support, to help counter the effects of discrimination. Previous research has indeed found that lesbian women tend to have larger social networks than gay men

(Grossman *et al.* 2001). They are also likely to have encountered gender discrimination across their lifetime (Swim *et al.* 2001), which may have prompted additional coping strategies that might be applied to their experience of sexual orientation discrimination. Indeed, many older lesbian women would have experienced the women's rights as well as the gay and lesbian rights movements, thus not only fighting for recognition of their sexual orientation, but also their gender identity (Vaccaro 2009; McGroven and Vinjamuri 2016). In addition, previous anti-homosexual legislation in Australia criminalised male homosexual activity, while overlooking female homosexual activity. This could further account for these gender differences by perhaps suggesting that the types of discrimination experiences have varied more greatly between recent times and other times across their lifetime for older gay men, which may make recent and lifetime discrimination more likely to serve as a unique predictor of their well-being. Again, however, these points are simply speculative and represent areas that could be investigated further to help explain our findings.

It is important to note that past research has shown that older lesbian women experience significant health disparities and have been found to have higher rates of disability and more chronic health conditions than older gay men (Fredriksen-Goldsen, Kim *et al.* 2013; Fredriksen-Goldsen, Kim, Shiu and Bryan, 2017). This could be the result of the systemic and institutionalised downplaying of women's health issues more broadly (Tuana 2009), with lesbian women experiencing additional discrimination factors due to their gender and sexual orientation. While chronic as well as acute stress has been identified as a mechanism linking discrimination to health (Williams *et al.* 1997), it may be that stress models better account for the experiences of older gay men compared to older lesbian women. One study, for example, found that day-to-day discrimination was significantly associated with excessive drinking among older gay men (Bryan, Kim, and Fredriksen-Goldsen 2017), which has been found to be strongly linked to poor health. Interestingly, the

same study identified a positive association between social support and adverse health behaviours and poor health outcomes among older lesbian women. Thus, the social network structures of older lesbian women may influence social support dynamics and community norms, which can result in adverse health outcomes in unique ways. Further studies are needed to understand the mechanisms that underlie such gender differences and the distinct mental and physical health trajectories of older lesbian women.

While previous research suggests that sexual orientation discrimination can affect the lives of older lesbian women and gay men in profound ways (D'Augelli and Grossman 2001; Fredriksen-Goldsen, Emler *et al.* 2013; Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Fredriksen-Goldsen *et al.* 2015; Grossman *et al.* 2001), our findings suggest that in some respects, discrimination may impact older gay men differently compared to older lesbian women. One exception is positive mental health. Recent discrimination predicted a lower likelihood of experiencing positive mental health among both the women and the men in our study. For women, in particular, recent sexual orientation discrimination was not significantly linked to distress, but it was to positive mental health. This suggests that discrimination may not always have implications for psychological distress, such as depression or anxiety, but may nevertheless have potential implications for the extent to which a person may feel happy and satisfied in their lives, or experience flourishing.

Overall, the differing patterns we found between the women and men in our study suggest that different strategies may be required when seeking to address experiences of discrimination. This is useful knowledge for support organisations, aged care services, and policymakers that are interested in the health and well-being of older lesbian women and gay men. In particular, recent and lifetime experiences of sexual orientation discrimination may be predictors for potential current and future challenges in physical and mental health for older gay men, such as psychological distress and poorer overall health. Interventions

designed to promote well-being in older gay men might focus on mitigating the negative impacts of current and past experiences of discrimination in particular. This is not to suggest, however, that discrimination does not have negative impacts on older lesbian women, and this was evident in our finding on positive mental health. It is also possible that discrimination impacts them in other ways, such as affecting their social networks (Fredriksen-Goldsen, Kim, Bryan *et al.* 2017; Grossman *et al.* 2001), or that their experience of discrimination relates more to their gender and/or age than sexual orientation. Indeed, as men and women age further, it is possible that age-related discrimination impacts more on their access to health and aged care services (Barrett *et al.* 2015).

To further assist with targeting support strategies, we found several sociodemographic variables linked to recent and lifetime discrimination. For the women, more frequent recent sexual orientation discrimination was linked to being employed full-time and having a lower income, which may be due to the fact that the workplace and lower-SES professions in particular may expose people to higher levels of sexual orientation discrimination. On the other hand, more frequent lifetime discrimination was associated with living in a suburban area compared to a capital city or inner suburban area, which may be due to greater activity of the LGBTI communities taking place in inner city areas. More frequent lifetime discrimination was also associated with having a tertiary education among women. Studies have found that lesbian women and gay men with a higher education are more likely to be open about their sexual orientation (Bariola, Lyons, and Leonard 2015), which might explain their greater exposure to experiences of discrimination. For the men, more frequent lifetime discrimination was linked to not being in a relationship. This may be due to experiences of discrimination leading to social isolation, and thus the lower likelihood of meeting a partner, but would require further research to investigate.

Surprisingly, none of the demographic variables predicted recent discrimination among the men. This may be because sexual orientation discrimination is currently so widespread that it affects those from all walks of life, at least for the men. These gender differences in the patterns further suggest that discrimination, or the causes or reasons for being discriminated against, may not be experienced the same by both men and women, whether recently or across their lifetimes. In any case, the above patterns suggest that there are some groups that are more likely to report experiencing sexual orientation discrimination and this could be taken into account when considering who might be most vulnerable to the impact of discrimination.

One limitation of this study was that it involved convenience sampling rather than a fully representative or probabilistic sample. Unfortunately, there is no available census data in Australia on the demographic profile of the older lesbian and gay population. This makes it impossible to construct a representative sample, as the baseline is not known. However, our sample was relatively large and was rather demographically diverse. Furthermore, we controlled for demographic differences in assessing associations between experiences of discrimination and health and well-being variables, which gives greater confidence in the robustness of the results. That said, additional studies are needed that use a range of different sampling strategies to corroborate our findings before drawing firm conclusions.

This study also involved a cross-sectional design, which means that we cannot infer causality about experiences of discrimination and their impact on mental and physical health. Longitudinal studies would provide a better picture of the accumulative impact of discrimination over time, and its relationship to trajectories in mental and physical health over these periods of time. It is also possible that there may be other factors that impact this relationship, such as sexual identity disclosure. Individuals who have been open about their sexual identity for longer periods of time may be more likely to have experienced

discrimination. Future research should examine this variable in relation to experiences of discrimination and well-being.

This study was also limited to older adults who identified as gay or lesbian. Research is needed that examines those with other sexual orientations, such as bisexual, pansexual or queer. Unfortunately, numbers of participants in these groups were too small to permit any reliable analyses to be conducted. As mentioned earlier, these groups may have a range of different experiences related to discrimination. For example, some bisexual men and women report feeling marginalised by both the gay/lesbian communities as well as the broader mainstream community (Roberts, Horne and Hoyt 2015). It is therefore important to conduct separate analyses of these groups, and it is recommended that future work focuses on recruiting larger samples to facilitate this. Transgender or gender diverse populations are also likely to have experienced considerable discrimination at stages in their lives (Fredriksen-Goldsen *et al.* 2011), and studies examining these experiences in relation to health and well-being in older age would likewise be valuable.

It is also worth noting that this study only focused on the frequency of discrimination related to sexuality rather than individuals' total experience of discrimination, their experience related to other personal or group characteristics (e.g., gender, age, ethnicity), or the intersection of these experiences in different contexts. It will be important in future research to investigate the potential additional impact of differing types of discrimination and their association with mental and physical health and well-being. Along similar lines, we do not know how far back in time participants experienced discrimination over their lifetime, regardless of how long they have been open about their sexuality. For some, experiences of discrimination may have only commenced a couple of years ago, while for others it may have been mostly in their younger years. That said, it is likely that many participants were experiencing discrimination at various times in their lives. It is further possible that



depending on life circumstances, some lesbian women and gay men may be more sensitive to the impact of discrimination. For example, those who are experiencing disabilities, such as physical impairments, may be more aware of discrimination in general and could potentially experience sexuality-related discrimination, and other forms of discrimination, more acutely. Thus, in future, a finer-grained analysis would be valuable that involves examining the self-reported occurrence of discrimination over the lifetime and in relation to a range of life circumstances and contexts in more detail. Finally, our sample was fairly highly educated and may therefore be less representative of the broader lesbian and gay community. Gaining a broader sample may therefore be important in future research.

In conclusion, this study found that making a distinction between experiences of sexual orientation discrimination either recently or in the lifetime were uniquely associated with poorer mental and physical health among older gay men, but less so for older lesbian women. While both recent and lifetime experiences were each uniquely linked to poorer mental health for older gay men, recent experiences were additionally linked to poorer self-rated physical health. Among lesbian women, only recent experiences of discrimination were uniquely linked to their mental health and specifically to positive mental health. Our findings suggest that it is important to examine recent and lifetime experiences of discrimination separately, particularly when considering the potential relationship to physical health among older gay men. Policymakers, health professionals, and support organisations can play an important role in addressing the effects of sexual orientation discrimination by considering the impact of these experiences when providing support and interventions, and recognising that the experience of sexual orientation discrimination and its links to health and well-being may have some differences between older lesbian women and older gay men.

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Table 1. Sample profile (N = 739)

	Women		Men	
	No.	%	No.	%
Age				
60-64 years	104	44.4	215	42.6
65-69 years	86	36.8	178	35.2
70+ years	44	18.8	112	22.2
Residential location				
Capital city or inner suburban	62	26.6	185	36.7
Suburban	58	24.9	131	26.0
Regional	62	26.6	132	26.2
Rural or remote	51	21.9	56	11.1
Education				
Secondary or lower	37	15.8	133	26.3
Non-university tertiary	57	24.4	136	26.9
Undergraduate university degree	72	30.8	145	28.7
Postgraduate university degree	68	29.1	91	18.0
Employment status				
Full-time	35	15.0	85	16.9
Part-time or casual	47	20.2	83	16.5
Retired	121	51.9	290	57.5
Other	30	12.9	46	9.1
Income				
0-19,999	25	11.1	58	11.8
20,000-49,999	92	40.7	202	41.2
50,000-99,999	66	29.2	140	28.6
100,000+	43	19.0	90	18.4
Country of birth				
Australia	157	68.9	372	75.0
Overseas	71	31.1	124	25.0
Relationship status				
No relationship	77	33.9	242	49.1
Relationship	150	66.1	251	50.9
Discrimination in past year				
Rarely or never	185	79.1	412	81.6
Sometimes or often	49	20.9	93	18.4
Lifetime discrimination				
Rarely or never	90	38.5	229	45.3
Sometimes or often	144	61.5	276	54.7
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Psychological distress	15.99	6.30	15.80	6.45
Positive mental health	26.79	4.97	26.87	5.13
Self-rated health	3.26	1.07	3.39	1.07

Table 2. Recent sexual orientation discrimination as an outcome of demographic variables among Australian lesbian women and gay men aged 60+

	Women ( <i>n</i> = 211) OR [95% CI]	<i>p</i>	Men ( <i>n</i> = 471) OR [95% CI]	<i>p</i>
Age		.30		.23
60-64 years	-		-	
65-69 years	1.51 [0.62, 3.70]		0.57 [0.29, 1.12]	
70+ years	0.56 [0.13, 2.30]		0.61 [0.25, 1.46]	
Residential location		.28		.26
Capital city or inner suburban	-		-	
Suburban	0.87 [0.25, 2.99]		1.47 [0.71, 3.05]	
Regional	1.51 [0.44, 5.19]		1.29 [0.65, 2.55]	
Rural or remote	2.37 [0.73, 7.76]		0.49 [0.17, 1.46]	
Education		.58		.18
Secondary or lower	-		-	
Non-university tertiary	0.84 [0.20, 3.48]		1.51 [0.68, 3.36]	
Undergraduate university degree	0.45 [0.11, 1.86]		1.13 [0.51, 2.51]	
Postgraduate university degree	0.69 [0.16, 3.05]		2.35 [1.00, 5.52]	
Employment status		.04		.70
Full-time	-		-	
Part-time or casual	0.09 [0.02, 0.50]		0.77 [0.30, 2.00]	
Retired	0.13 [0.02, 0.67]		0.61 [0.27, 1.40]	
Other	0.10 [0.01, 0.62]		0.73 [0.24, 2.19]	
Income		.03		.53
0-19,999	-		-	
20,000-49,999	0.70 [0.18, 2.70]		1.01 [0.42, 2.40]	
50,000-99,999	1.18 [0.28, 5.04]		0.58 [0.21, 1.61]	
100,000+	0.11 [0.01, 0.90]		0.87 [0.29, 2.57]	
Country of birth		.50		.74
Australia	-		-	
Overseas	1.34 [0.57, 3.16]		0.90 [0.47, 1.72]	
Relationship status		.17		.77
No relationship	-		-	
Relationship	2.00 [0.75, 5.31]		1.09 [0.61, 1.97]	

Note. Results are from a multivariable logistic regression. Lifetime discrimination was also included as a control variable.

Table 3. Lifetime sexual orientation discrimination as an outcome of demographic variables among Australian lesbian women and gay men aged 60+

	Women ( <i>n</i> = 211) OR [95% CI]	<i>p</i>	Men ( <i>n</i> = 471) OR [95% CI]	<i>p</i>
Age		.84		.16
60-64 years	-		-	
65-69 years	1.26 [0.58, 2.71]		0.77 [0.47, 1.26]	
70+ years	1.06 [0.41, 2.79]		0.56 [0.31, 1.01]	
Residential location		.02		.25
Capital city or inner suburban	-		-	
Suburban	2.77 [1.05, 7.32]		0.61 [0.36, 1.04]	
Regional	0.62 [0.26, 1.49]		0.92 [0.54, 1.57]	
Rural or remote	1.11 [0.43, 2.84]		1.10 [0.55, 2.18]	
Education		.01		.67
Secondary or lower	-		-	
Non-university tertiary	6.18 [1.89, 20.17]		1.13 [0.65, 1.99]	
Undergraduate university degree	6.44 [2.06, 20.14]		1.21 [0.71, 2.08]	
Postgraduate university degree	6.89 [2.13, 22.22]		0.84 [0.44, 1.58]	
Employment status		.28		.66
Full-time	-		-	
Part-time or casual	1.84 [0.55, 6.21]		1.07 [0.51, 2.23]	
Retired	2.01 [0.60, 6.75]		1.20 [0.63, 2.27]	
Other	4.33 [0.99, 18.96]		1.78 [0.69, 4.59]	
Income		.78		.86
0-19,999	-		-	
20,000-49,999	1.16 [0.35, 3.87]		0.79 [0.39, 1.58]	
50,000-99,999	0.73 [0.20, 2.77]		0.75 [0.35, 1.58]	
100,000+	0.77 [0.17, 3.46]		0.87 [0.37, 2.03]	
Country of birth		.43		.16
Australia	-		-	
Overseas	1.34 [0.65, 2.78]		1.40 [0.87, 2.26]	
Relationship status		.29		.03
No relationship	-		-	
Relationship	1.51 [0.70, 3.27]		0.61 [0.39, 0.95]	

Note. Results are from a multivariable logistic regression. Recent discrimination was also included as a control variable.

Table 4. Outcome variables predicted by recent sexual orientation discrimination among Australian lesbian women and gay men aged 60+

	Discrimination		Regression results					
	Rarely or never	Sometimes or often	Unadjusted <sup>a</sup>			Adjusted <sup>b</sup>		
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>n</i>	<i>b</i> [95% CI]	<i>p</i>	<i>n</i>	<i>b</i> [95% CI]	<i>p</i>
<b>Women</b>								
Psychological distress	15.38 (6.07)	18.33 (6.65)	222	2.30 [0.18, 4.42]	.03	200	2.04 [-0.15, 4.23]	.07
Positive mental health	27.40 (4.71)	24.51 (5.29)	231	-2.41 [-4.02, -0.80]	.004	208	-1.96 [-3.58, -0.33]	.02
Self-rated health	3.31 (1.08)	3.06 (1.03)	234	-0.13 [-0.48, 0.23]	.48	211	-0.09 [-0.46, 0.28]	.62
<b>Men</b>								
Psychological distress	14.90 (5.87)	19.84 (7.35)	486	3.49 [1.97, 5.01]	<.001	452	4.01 [2.39, 5.63]	<.001
Positive mental health	27.40 (4.99)	24.44 (5.12)	501	-2.53 [-3.77, -1.28]	<.001	468	-2.73 [-4.01, -1.44]	<.001
Self-rated health	3.48 (1.03)	2.98 (1.15)	504	-0.37 [-0.63, -0.11]	.01	470	-0.43 [-0.69, -0.16]	.002

*Note.* Results are from linear regressions conducted separately for each outcome variable. All analyses controlled for lifetime discrimination.

<sup>a</sup> Not adjusted for sociodemographic variables.

<sup>b</sup> Adjusted for the following sociodemographic variables: age, residential location, education, employment status, income, country of birth, and relationship status.

Table 5. Outcome variables predicted by lifetime sexual orientation discrimination among Australian lesbian women and gay men aged 60+

	Discrimination		Regression results					
	Rarely or never	Sometimes or often	Unadjusted <sup>a</sup>			Adjusted <sup>b</sup>		
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>n</i>	<i>b</i> [95% CI]	<i>p</i>	<i>n</i>	<i>b</i> [95% CI]	<i>p</i>
<b>Women</b>								
Psychological distress	14.73 (5.84)	17.22 (6.98)	222	1.70 [-0.07, 3.46]	.06	200	1.27 [-0.50, 3.04]	.16
Positive mental health	27.82 (4.80)	25.89 (5.16)	231	-1.24 [-2.60, 0.11]	.07	208	-0.90 [-2.26, 0.46]	.19
Self-rated health	3.45 (1.14)	3.09 (1.03)	234	-0.31 [-0.60, -0.01]	.04	211	-0.17 [-0.48, 0.14]	.28
<b>Men</b>								
Psychological distress	13.70 (4.44)	17.51 (7.25)	486	2.82 [1.64, 1.97]	<.001	452	2.17 [0.97, 3.38]	<.001
Positive mental health	27.75 (4.83)	26.16 (5.23)	501	-0.83 [-1.79, 0.13]	.09	468	-0.15 [-1.10, 0.81]	.76
Self-rated health	3.60 (0.95)	3.22 (1.13)	504	-0.26 [-0.46, -0.06]	.01	470	-0.19 [-0.39, -0.01]	.07

*Note.* Results are from linear regressions conducted separately for each outcome variable. All analyses controlled for recent discrimination.

<sup>a</sup> Not adjusted for sociodemographic variables.

<sup>b</sup> Adjusted for the following sociodemographic variables: age, residential location, education, employment status, income, country of birth, and relationship status.