

Alcohol Use, Age, and Self-Rated Mental and Physical Health in a Community Sample of Lesbian and Bisexual Women

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Abstract

Purpose: Given that self-perceptions of mental and physical health are important predictors of health outcomes and well-being, particularly among older adults, this study focuses on associations among age, alcohol consumption, and indicators of both self-rated mental health and self-rated physical health in a sample of sexual minority women (SMW).

Methods: This study uses a community sample of SMW to examine the associations among age, drinking, and self-rated mental and physical health.

Results: Heavy drinking among older adult SMW (55+) was less prevalent than among young SMW, ages 18–25 and ages 26–39, but similar to rates reported among SMW ages 40–54. In addition, older SMW reported significantly higher levels of self-rated mental health, compared with SMW in the other age groups, but we found no significant associations between age and self-rated physical health. Across all age groups, moderate drinkers reported better self-rated physical health than alcohol abstainers.

Conclusions: Overall, these results suggest that, among SMW, drinking does not decline as sharply with age as it does for heterosexual women in the general population. Given the current and projected increases in the aging population and the risks that heavy drinking presents for morbidity and mortality, interventions aimed at older SMW are needed.

Keywords: aging, bisexual women, lesbian women, mental health, physical health, substance use/abuse

Introduction

IN 2012, WOMEN REPRESENTED 56.4% of the U.S. general population aged 65 and older¹; the number of women in this age group is projected to increase steadily until 2030. Importantly, increasing numbers of women are consuming alcohol later in life,² and older adults have the highest risk of alcohol-related mortality.³ These considerations amplify the need to understand relationships between drinking and health among older women.

Research on sexual minority women's (SMW; e.g., lesbian, bisexual) aging, health, and drinking behavior is important for several reasons. In general, compared with heterosexual women, SMW are less likely to abstain from drinking alcohol and more likely to report alcohol-related problems and to seek

alcohol treatment.⁴⁻⁷ Moreover, relative to heterosexual women, SMW are at higher risk of mood and anxiety disorders,⁸ as well as alcohol use and other substance use disorders,⁹ potentially burdening them unduly as older adults. Minority stress is the prevailing theoretical explanation for the disproportionately high rates of hazardous drinking among SMW.^{10,11} The stress of having a stigmatized and marginalized identity is theorized to lead to poorer physical and mental health outcomes, as well as to maladaptive health behaviors. Minority stress may compound the normal effects of aging and put older SMW at higher risk of poorer health outcomes than heterosexual women. Despite alcohol-related disparities between heterosexual and SMW that might extend into older adulthood, with remarkably few exceptions,¹²⁻¹⁴ little attention has been given to age-related drinking patterns among SMW.

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Drinking and aging

A sizable proportion of older adult women in the general population consume alcohol regularly, into their 60s and beyond.^{15–18} Heterosexual women typically show a robust age-related decline in alcohol use, whereas lesbian women evince smaller and slower declines.¹⁹ Thus, older age may be less protective against heavier alcohol consumption among SMW than among heterosexual women.²⁰ Moderate alcohol consumption levels have been associated with lower rates of mortality and morbidity among both middle-aged and older men and women in the United States.^{18,21} However, because SMW are more likely than heterosexual women to drink, and may continue to drink and drink more heavily as they age, they may be at heightened risk of poor mental and physical health in older adulthood.

Aging and health among SMW

Research on the mental and physical health of older SMW is sparse, and results are mixed. Among adults living in California, compared with their heterosexual counterparts, older SMW ages 50–70 reported equivalent risk of heart disease, hypertension, and diabetes, but higher levels of psychological distress.²² Notably, these findings may not be generalizable given that the sample was at the younger end of the older adult age range and differed demographically from women in the general population.²² Reviews of the extant literature, however, also support an equivalent risk of hypertension and diabetes among lesbian, bisexual, and heterosexual women.^{23,24} In contrast, population-based studies have shown higher rates of obesity among SMW, ages 50 and older, compared with heterosexual women.^{23–25} Although older SMW consistently report poorer self-rated mental health and heightened physical disability relative to their heterosexual counterparts,^{26,27} results of studies are equivocal in regard to sexual identity differences in self-rated physical health among older adult women living in the United States.^{22,25}

There is also little research on associations between aging and drinking among SMW. A recent study of U.S. adults found lower rates of high-risk drinking at older ages among women in a sample of adult sexual minorities ages 50–98.¹⁴ A community-based study of predominantly lesbian women recruited in Chicago compared drinking levels across wider age ranges of SMW and found significantly lower past-year rates of heavy episodic drinking and intoxication among SMW ages 51 and older, compared with SMW ages 18–30, yet equivalent odds of being classified as a past-year heavy drinker (>1 oz ethanol/day).¹⁹ It remains unknown as to how varying levels of alcohol consumption are associated with perceptions of physical and mental health,^{18,28} and whether those associations differ by age, particularly among SMW.

Current study

Self-perceptions of health are important contributors to the well-being of older adults,²⁹ and a large proportion of older adults expect deterioration in physical and mental health as they grow older.³⁰ Such negative self-perceptions have been shown to have a detrimental impact on self-rated mental and physical health,³¹ even after adjusting for objective health indicators.³² Given that self-perceptions of mental and physical health are important predictors of health outcomes and well-being, particularly among older adults,²⁹

this study focuses on associations among age, alcohol consumption, and indicators of both self-rated mental health and self-rated physical health in a sample of SMW. Specifically, we compared alcohol consumption levels among older (55+) and younger age groups (18–25, 26–39, and 40–54) of SMW, and the associations between levels of drinking and self-rated mental and physical health.

Consistent with the Minority Stress Theory,^{10,11} which posits that SMW's higher rates of hazardous drinking stem from stress due to their marginalized status, we hypothesized that normative age-related declines in drinking reported by women in the general population would be smaller, or absent, among SMW. Associations between moderate drinking and mental health have been somewhat mixed in the general literature,³³ and there is little evidence on which to base a hypothesis about self-rated mental health among moderate-drinking SMW. On the one hand, many older SMW have experienced a lifetime of living with chronic stress related to their minority status, which could logically contribute to poorer overall mental health. On the other hand, research has found that adverse experiences ostensibly foster subsequent adaptability and resilience, with resulting advantages for mental health and well-being.³⁴ Research in the general population has shown that moderate drinkers are more sociable and less likely to be depressed than abstainers.³⁵ Based on these general findings and the aforementioned considerations, we examined the exploratory hypothesis that older SMW who were moderate drinkers may have better self-rated mental health than older SMW who abstained from alcohol. Finally, because heterosexual and SMW do not differ biologically, we expected that moderate drinking would provide similar physiological protective effects for physical health. As such, we hypothesized that, similar to findings for women in the general population, older moderate-drinking SMW would report better self-rated physical health than older SMW abstainers.

Methods

Data source

To test our hypotheses, we used data from the Chicago Health and Life Experiences of Women (CHLEW) study. The CHLEW was designed to replicate and extend the National Study of Health and Life Experiences of Women (NSHLEW), a 20-year longitudinal study of alcohol use among women in the general U.S. population.^{36,37} To date, CHLEW researchers have collected three waves of data from women recruited in the greater Chicago metropolitan area.^{19,38} The CHLEW includes a broad range of questions about drinking and drinking-related problems, mental and physical health, and life experiences. The current study was approved by the Institutional Review Board at the Principal Investigator's (PI's; T.L.H.) academic institutions (University of Illinois at Chicago and Columbia University).

Sample

In 2000–2001, 447 women (ages 18 or older) who identified as lesbian were recruited from Chicago and the surrounding suburbs by using social network and snowball sampling methods. Eligible women who gave written consent were interviewed at baseline. The wave 2 survey was conducted in 2004–2005 with 384 women (response rate = 86%), and the wave 3 survey was conducted in 2010–2012

with 353 women (response rate = 79%). In wave 3, a supplemental sample of younger women (ages 18–25), Black and Hispanic women, and bisexual women ($N=373$) was recruited by using a modified version of respondent-driven sampling.³⁹ This study used wave 3 data only, which included 353 participants from the original 2000–2001 cohort and 373 from the supplemental 2010–2012 sample ($N=726$).

Measures

Age. Participants were grouped into four age categories: 18–25, 26–39, 40–54, and 55 and older. Research on age differences in drinking has tended to use census-based age groupings (e.g., 45–64 years, 65 and older).⁴⁰ However, because only 5% of SMW ($n=36$) in the CHLEW sample were older than age 65, we used age 55 as our cutoff for older age. Sensitivity analyses compared outcomes for SMW who were ages 55–64 and those 65 and older and found no significant differences.

Drinking levels. Drinking levels were constructed from reports of wine, liquor, and beer consumption during the past 30 days, converted to ounces of ethanol per day. We used two separate definitions of alcohol-consumption levels: NSHLEW levels^{36,37} and current National Institute on Alcohol Abuse and Alcoholism (NIAAA) levels.⁴¹ NSHLEW is the parent study of the CHLEW, and its drinking level measures have been used for more than 20 years. Our use of this variable supports comparisons across the NSHLEW and CHLEW studies. In the NSHLEW (as in most drinking surveys in the 1980s and 1990s), drinking levels were defined as: light (<0.22 oz ethanol [absolute alcohol]/day; 1–3 standard drinks per week), moderate (0.22–0.99 oz ethanol/day; 4–13 drinks/week), and heavy (1 oz or more/day; 14 or more drinks/week). Drinking levels using current NIAAA guidelines are: light (1–3 drinks per week), moderate (4–7 drinks/week and no more than 3 drinks/day), and heavy drinking (>7 drinks/week or >3 drinks/day).

Self-rated mental health and physical health. Participants were asked how, in general, their mental or emotional health had been during the past year. A separate, parallel question asked about their self-rated physical health during the same time frame. Participants rated their mental and physical health, respectively, on a scale ranging from 1 (very poor) to 6 (excellent). Examinations of quantile normal plots (i.e., Q-Q plots) suggested that the frequency distributions of both outcome variables were relatively normal (mental health: $M=4.01$; standard deviation (SD) = 1.17; Skew: -0.26; Kurtosis: -0.06; physical health: $M=4.16$; $SD=1.15$; Skew: -0.15; Kurtosis: -0.51).

Data analysis

Chi-square tests were used to examine whether demographic category distributions were independent of the age group categories. Univariate analyses examined the distributions of self-rated mental and physical health, respectively, by age groups and drinking levels. In multivariate analysis of covariance (ANCOVA) models (a type of general linear model), estimates were adjusted for the influence of demographic characteristics on self-rated mental and physical health. Covariates included race/ethnicity, education level, relationship status, employment status, and income. All analyses used SPSS version 23 (IBM Corp., Armonk, NY) statistical

software. A categorical age group variable, drinking-level variable, and the interaction between the two were entered simultaneously into separate ANCOVA models (with covariates) to predict associations with self-rated physical and mental health, respectively. Significant effects in ANCOVA models were followed with planned contrasts to test hypotheses regarding mental and physical health outcomes among age groups based on drinking levels. Sensitivity analyses (available on request), utilizing nominal regression, suggested that relevant violations of analysis of variance (ANOVA)-based model assumptions did not alter the primary findings and interpretations of this study.

Results

Sample

Table 1 summarizes sample demographics by age group. Chi-square tests of independence showed that relationships between age groups and demographic characteristics were non-randomly distributed in every case. Follow-up comparisons suggested that SMW in differing age groups had unique constellations of demographic features. In comparisons with other age groups, older SMW (ages 55+; the subgroup of primary interest) were more likely to: identify as lesbian (than bisexual), be White, have higher levels of education and income (75,000 or higher), and be unemployed but not seeking employment.

Associations between age and drinking levels

As shown in Table 2, SMW ages 55 or older were significantly less likely to be heavy drinkers (10.3%) than SMW ages 18–25 (24.6%) and 26–39 (19.4%), but did not differ from those who were 40–54 (14.4%). SMW ages 55+ (24.6%) and 40–54 (20.3%) were significantly less likely to be moderate drinkers than those ages 18–25 (34.5%) and 26–39 (32.3%). Rates of light drinking were higher among SMW ages 55+ (32.5%) and 40–54 (35.1%), compared with those ages 25 and younger (27.5%); SMW ages 26–39 (31.5%) were not statistically different compared with any other age group. SMW ages 55 and older (32.5%) and 40–54 (30.2%) were significantly more likely to be abstainers than those ages 26–39 (16.8%) and ages 18–25 (13.4%). We found no significant difference in rates of abstinence between SMW who were 40–54 and those 55 years or older.

Associations between age and self-rated mental health

We used general linear modeling to examine unadjusted (results not shown in tables) and adjusted (Table 3) associations among age, drinking levels, and self-rated past-year mental health. Unadjusted analyses showed that self-rated mental health was distinct among age groups, $F(3, 706) = 3.665$, $P < 0.05$. Planned contrasts showed that women ages 55 and older reported significantly better self-rated mental health in the past year than any other age group (Table 4). When key covariates were added to the model, self-rated mental health remained statistically different by age group, $F(3, 643) = 2.940$, $P < 0.05$. Planned contrasts, in adjusted models, again showed that the oldest age group reported significantly better past-year mental health than any other age group (55+ vs. 40–54: $Est. = -0.42$, standard error (SE) = 0.15, $P = 0.006$; 55+ vs. 26–39: $Est. = -0.50$, $SE = 0.16$, $P = 0.001$; 55+ vs. 25 and younger: $Est. = -0.47$, $SE = 0.18$, $P = 0.01$). There was no significant association between drinking level and self-

TABLE 1. DEMOGRAPHICS BY AGE GROUP

Variable	Total (N = 726)		18–25		26–39		40–54		55+		P
	n	%	n	%	n	%	n	%	n	%	
Age											
18–25	142	19.6	—	—	—	—	—	—	—	—	—
26–39	232	32.0	—	—	—	—	—	—	—	—	—
40–54	225	31.0	—	—	—	—	—	—	—	—	—
55+	127	17.5	—	—	—	—	—	—	—	—	—
Sexual identity											<0.001
Lesbian	517	74.1	89	62.7	145	66.5	174	81.7	109	87.2	
Bisexual	181	25.9	53	37.3	73	33.5	39	18.3	16	12.8	
Race/ethnicity											<0.001
White	271	37.3	54	38.0	75	32.3	66	29.3	76	59.8	
African American	260	35.8	44	31.0	79	34.1	95	42.2	42	33.1	
Hispanic	168	23.1	43	30.3	65	28.0	54	24.0	6	4.7	
Other	27	3.7	1	0.7	13	5.6	10	4.4	3	2.4	
Relationship status											<0.001
In a committed relationship/cohabiting	289	38.6	34	23.9	105	44.2	95	39.6	55	44.0	
In a committed relationship/not cohabiting	157	22.3	47	33.1	46	19.8	47	23.1	17	12.8	
Single	276	39.1	61	43.0	80	35.9	81	37.3	54	43.2	
Education											<0.001
Less than high school	57	7.9	18	12.7	11	4.8	23	10.2	5	3.9	
High school	90	12.4	25	17.6	24	10.4	24	10.7	17	13.4	
Some college	229	31.6	68	47.9	67	29.1	71	31.6	23	18.1	
College graduate	153	21.1	20	14.1	67	29.1	39	17.3	27	21.3	
Graduate school	195	26.9	11	7.7	61	26.5	68	30.2	55	43.3	
Income											<0.001
Less than 20,000	222	32.0	72	58.1	57	25.1	62	28.1	31	25.4	
20,000–39,000	130	18.7	23	18.5	56	24.7	30	13.6	21	17.2	
40,000–74,999	170	24.5	21	16.9	59	26.0	60	27.1	30	24.6	
75,000 or more	172	24.8	8	6.5	55	24.2	69	31.2	40	32.8	
Employment											<0.001
Full time	366	50.6	49	34.5	145	62.8	128	56.9	44	34.9	
Part time	127	17.5	40	28.2	35	15.2	38	16.9	14	11.1	
Unemployed-looking	118	16.3	39	27.5	36	15.6	33	14.7	10	7.9	
Unemployed-not looking	113	15.6	14	9.9	15	6.5	26	11.6	58	46.0	

Due to missing data not all columns sum to the total sample size of 726.

rated mental health. Adjusted and unadjusted interactions in ANOVA models between drinking levels and age cohort in predicting self-rated mental health were not significant.

Associations between age and self-rated physical health

We found no significant effect of age cohort on self-rated physical health. However, the association between drinking

levels and self-rated physical health in unadjusted analyses was significant, $F(3, 706) = 3.815$, $P = 0.01$. According to pairwise contrasts, moderate drinkers reported significantly better physical health than abstainers and light drinkers in unadjusted models (see Table 4; moderate vs. abstainers: $Est. = 0.38$, $SE = 0.13$, $P = 0.003$; moderate vs. light: $Est. = 0.28$, $SE = 0.12$, $P = 0.017$). Comparisons revealed no significant differences in self-rated physical health between

TABLE 2. DRINKING LEVELS BY AGE COHORT AMONG SEXUAL MINORITY WOMEN IN THE CHICAGO HEALTH AND LIFE EXPERIENCES OF WOMEN SAMPLE

	18–25		26–39		40–54		55+		Total	
	n	%	n	%	n	%	n	%	n	%
CHLEW drinking levels (past 30 days)										
Abstainers	19	13.4 ^{1,b}	39	16.8 ^{1,b}	67	30.2 ^{1,a}	41	32.5 ^{1,a}	166	23.0
Light	39	27.5 ^{2,b}	73	31.5 ^{2,a,b}	78	35.1 ^{1,a}	41	32.5 ^{2,a}	231	32.0
Moderate	49	34.5 ^{2,3,b}	75	32.3 ^{2,b}	45	20.3 ^{1,a}	31	24.6 ^{2,3,a}	200	27.7
Heavy	35	24.6 ^{3,4,b}	45	19.4 ^{2,b}	32	14.4 ^{1,a}	13	10.3 ^{3,4,a}	125	17.3

Rows with differing numerical superscripts indicate significant differences in the distribution of drinker types within each age cohort. Columns with differing alphabetical superscripts indicate significant differences in the distribution of age cohorts for a particular type of drinker.

CHLEW, Chicago Health and Life Experiences of Women.

TABLE 3. ANALYSIS OF COVARIANCE MODEL RESULTS OF SELF-RATED MENTAL AND PHYSICAL HEALTH BY AGE COHORT AND DRINKING LEVEL

	<i>Self-rated mental health</i>					<i>Self-rated physical health</i>				
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Covariates										
Race/ethnicity	3.773	2	1.886	1.447	0.236	16.808	2	8.404	6.914	0.001
Education level	6.153	4	1.538	1.180	0.318	11.246	4	2.812	2.313	0.056
Relationship status	5.191	3	1.730	1.327	0.264	12.630	3	4.210	3.464	0.016
Employment status	2.377	3	0.792	0.608	0.610	9.837	3	3.279	2.698	0.045
Income	5.612	3	1.871	1.435	0.231	8.964	3	2.988	2.458	0.062
Main effects										
Age cohort	15.142	3	5.047	3.873	0.009	5.987	3	1.996	1.642	0.178
Drinking level	1.601	3	0.534	0.409	0.746	4.647	3	1.549	1.274	0.282
Interaction										
Age cohort × drinking level	21.531	9	2.392	1.836	0.059	12.612	9	1.401	1.153	0.323

SS, Sum of Squares; MS, Mean Square.

abstainers and light (abstainers vs. light: $Est. = -0.10$, $SE = 0.13$, $P = 0.42$) or heavy (abstainers vs. heavy: $Est. = -0.15$, $SE = 0.15$, $P = 0.32$) drinkers. Adjusting for covariates, the association between drinking levels and self-rated physical health was no longer significant. The interaction between age and drinking levels in relation to self-rated physical health was non-significant in both unadjusted and adjusted analyses.

Stratified associations between age and self-rated mental and physical health

We stratified models to examine age differences in self-rated mental and physical health among moderate and heavy drinkers (results not shown in tables) and among older SMW (age 55+). We found an unadjusted effect, suggesting that self-rated mental health differed by age group, $F(3, 317) = 2.663$, $P < 0.05$, but there was no significant interaction between age and drinking level. Adjusting for covariates, age differences in self-rated mental health were attenuated among moderate and heavy drinkers, $F(3, 290) = 2.413$, $P = 0.067$. Although the interaction between drinking

level and age was still not significant, $F(3, 290) = 2.463$, $P = 0.063$, post-hoc comparisons suggested that older (55+) heavy drinkers reported better mental health than their younger, heavy-drinking counterparts. Among moderate and heavy drinkers, there was no association between age and physical health in either adjusted or unadjusted analyses.

Among older SMW, we found no unadjusted or adjusted effects of drinking level on self-rated mental health. There was an unadjusted effect of drinking level on self-rated physical health $F(3, 126) = 2.825$, $P < 0.05$; moderate drinkers reported significantly better physical health compared with abstainers. Adjusting for covariates, this main effect of drinking level was attenuated, $F(3, 126) = 2.331$, $P = 0.078$, but the pairwise comparison between moderate drinkers and abstainers remained significant.

Supplemental analyses

We ran additional analyses to examine whether using the current NIAAA guidelines for women's drinking risk levels⁴¹ changed the associations among age, drinking levels,

TABLE 4. OBSERVED MEANS AND STANDARD DEVIATIONS OF SELF-RATED MENTAL AND PHYSICAL HEALTH BY AGE AND DRINKING LEVEL

	<i>18–25</i>		<i>26–39</i>		<i>40–54</i>		<i>55+</i>		<i>Total</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self-rated mental health										
Abstainers	3.47	1.02	4.08	1.24	4.10	1.25	4.17 ^a	1.36	4.04 ^a	1.26
Light	4.00	1.17	3.73	0.93	4.17	1.23	4.50 ^a	1.11	4.06 ^a	1.14
Moderate	4.02	1.01	4.00	1.01	3.98	1.36	4.06 ^a	1.29	4.01 ^a	1.13
Heavy	3.66 ¹	1.08	3.98 ¹	0.99	3.72 ¹	1.14	4.77 ^{2,a}	1.01	3.90 ^a	1.10
Total	3.85 ¹	1.09	3.92 ¹	1.03	4.05 ¹	1.25	4.31 ²	1.24	4.01	1.16
Self-rated physical health										
Abstainers	4.05	1.35	4.15	1.16	4.12	1.17	3.70 ^a	1.32	4.02 ^a	1.23
Light	4.46	1.07	4.15	1.13	4.00	1.29	3.83 ^a	1.32	4.10 ^a	1.22
Moderate	4.29	1.02	4.48	1.06	4.27	1.19	4.52 ^b	1.18	4.39 ^b	1.10
Heavy	4.20 ¹	0.76	4.13 ¹	0.89	3.91 ¹	1.03	4.38 ^{1,a,b}	1.19	4.12 ^{a,b}	0.93
Total	4.28 ¹	1.03	4.25 ¹	1.07	4.08 ¹	1.20	4.02 ¹	1.81	4.16	1.15

Columns with differing numerical superscripts indicate significant differences in self-ratings of mental or physical health outcomes across age groups (Referent: 55+). Rows with differing alphabetical superscripts indicate significant differences in self-rated mental or physical health outcomes across drinker types (Referent: Abstainers).

SD, standard deviation.

and self-rated health. Using NIAAA's categories "never drink alcohol," "low risk," "increased risk," and "high risk"⁴¹ we found no associations with either self-rated mental health or physical health.

Discussion

We found few differences in drinking levels among SMW based on age. Older SMW (55+) were less likely than SMW in the two younger age groups to be heavy drinkers and more likely than SMW in the two younger age groups to be abstainers. However, in support of our first hypothesis, unlike studies of drinking among women in the general population, we did not see marked age-related declines in drinking.

Consistent with research in the general population,⁴² we found that the oldest women in the study rated their mental health most positively. One possible reason for the higher levels of self-rated mental health among older SMW may be related to "crisis competence."^{43,44} The crisis competence theory suggests that among those who successfully navigate sexual minority-related stressors in early life, skills may develop that support successful navigation of aging.^{45,46} Thus, it is possible that the higher self-rated mental health among older SMW in our sample may be a result of resilience developed over time.

Among women in our sample, self-rated mental health was generally not associated with drinking levels. One exception to this was that among heavy drinkers, older SMW reported better self-rated mental health than did their younger counterparts. By contrast, Fredriksen-Goldsen et al. showed that older lesbian, gay, and bisexual (LGB) adults, particularly those 80 years or older, reported lower physical quality of life than younger LGB adults.²⁷ Moreover, previous research has also demonstrated that older SMW self-report "fair" or "poor" physical health and higher levels of physical disability more often than their heterosexual counterparts.²² Our finding of no association between age group and self-rated physical health may have been influenced by demographic factors other than age. Indeed, in our highly diverse sample, there were significant associations between race/ethnicity and self-rated physical health and between relationship status and self-rated physical health, indicating that these factors may play a larger role in perceptions of physical health among SMW than chronological age itself. Prior research suggests that a minority race/ethnicity is associated with poorer physical health among older LGBT (lesbian, gay, bisexual, and transgender) adults.⁴⁷ Multiply marginalized identities may increase overall risk of poor physical health, particularly when coupled with a lack of financial and social resources. Future research should investigate racial/ethnic differences in the associations among aging, alcohol use, and health outcomes among SMW.

We found that SMW who were moderate drinkers reported more positive perceptions of physical health than light drinkers or abstainers, although this association was not significant in adjusted models. We also found no differences in self-rated physical health between heavy and light or heavy and moderate drinkers, even among older (55+) SMW. These findings are consistent with previous research in the general population.^{18,42} Together, extant findings and our own results suggest that moderate alcohol consumption among women may not be detrimental to self-rated physical and

mental health. Aside from subjective health effects, previous research has also shown that moderate alcohol consumption may be differentially protective among middle-aged and older adults in the United States,^{48,49} whereas abstinence may be associated with poorer health and increased mortality.^{18,49}

Notably, slightly more than 10% of older SMW in the study were considered heavy drinkers. Although the rate of heavy drinking was significantly lower in this age group than in the 18–25 group, it is more than double the rate of heavy drinking among older women in the general population.⁵⁰ Given that heavy drinking is associated with elevated rates of morbidity and mortality,⁵⁰ this disparity is of concern. Our finding that rates of heavy drinking in SMW are less likely to attenuate with age may be partially attributable to lower adherence to traditional heteronormative gender roles, such as marriage and parenting, which are associated with less drinking among women in the general population.^{5,19} Until 2015, in most states in the United States, same-sex couples could not legally marry, thereby limiting options for formalization and legal recognition of relationships. However, marriage and, in some studies, cohabitation have been associated with lower drinking levels in heterosexual couples⁵¹ and in cohabiting and committed relationships among SMW.⁵² Lack of legal recognition of same-sex relationships also limits financial and psychological benefits, which may increase stress and hazardous drinking.⁵² Future research should examine age-related changes in drinking among SMW that may be associated with changes in marriage laws.

The Minority Stress Theory^{10,11} posits that stress from marginalized identities has substantial negative effects on physical and mental health outcomes, and stress has been found to partially account for the higher rates of heavy and hazardous drinking among SMW overall. Smaller age-related declines in drinking among SMW^{5,19,53} may be related to the disproportionate accumulation of stress across the lifespan.¹⁹ However, given our finding that older SMW perceived themselves to be more mentally/emotionally healthy than younger SMW, future research is needed to better understand factors that contribute to this smaller age-related decline in drinking. In particular, qualitative research may provide a fuller understanding of the motivations associated with drinking among older SMW. Such research could also improve understanding of the risks and benefits associated with drinking among older SMW.

Limitations

This study was among the first to examine, across age groups, the association between level of alcohol consumption and subjective mental and physical health among lesbian and bisexual women. However, several limitations may affect the generalizability of our findings. First, we were unable to directly compare findings from SMW with those from heterosexual women, although we framed our results in relation to findings from women in the general population. Second, most studies of older adults use an age cutoff of 65 and older, but given the relatively small number of women older than age 65 in the CHLEW study, we used age 55 and older to define older SMW. In support of this decision, we compared outcomes between SMW ages 55–64 and those ages 65 and

older and found no significant differences. Third, the older women in our sample were predominantly White, highly educated, and had higher incomes, which may limit the generalizability to SMW more broadly. Fourth, mental and physical health were subjectively assessed. Nevertheless, prior literature suggests that subjective perceptions of health are often more predictive of health-related outcomes than are objective health indicators.³² Finally, because these findings were based on cross-sectional data, we were unable to address directionality of the association between abstinence and self-rated health. For example, rather than assuming that abstinence leads to poorer physical health, abstainers may have stopped drinking alcohol due to medical conditions or to medication contraindications.^{3,42} Prospective, longitudinal studies are needed to more thoroughly test our hypotheses. Despite these limitations, the current findings provide insight into the relationships between alcohol consumption and self-rated health among SMW of varying ages.

Conclusion

By 2030, ~3 million people ages 65 and older in the United States are expected to identify as sexual minorities,⁵⁴ suggesting a critical need to understand factors supporting healthy aging in this population. Our finding that SMW's drinking does not decline sharply with age raises concerns about risk of alcohol-related morbidity and mortality, despite the concomitant improved self-rated mental health and lack of age-related decline in self-rated physical health. Given our rapidly aging population, if the baby boomer generation carries its heavier drinking patterns into older age, we may see higher levels of drinking among women overall than have been seen historically, perhaps resulting in smaller disparities between older SMW and heterosexual women. However, our findings suggest a strong need for intervention among older heavy-drinking SMW; although they may perceive their health relatively positively, their drinking behaviors may have negative, unforeseen implications for morbidity and mortality. Thus, interventions should target the underlying reasons for the maintenance of heavier drinking patterns into older adulthood. Further, LGBT-affirmative alcohol interventions should address the potential long-term impacts of stigma and marginalization and the possibly lower levels of social support among SMW, particularly in older adulthood.

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Disclaimer

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Author Disclosure Statement

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