Title

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Journal

Stigma and Health, 7(1)

ISSN

2376-6972

Authors

Brown, Andre L
Matthews, Derrick D
Meanley, Steven
et al.

Publication Date

2022-02-01

DOI

10.1037/sah0000327

Peer reviewed

HHS Public Access

Author manuscript

Stigma Health. Author manuscript; available in PMC 2023 February 01.

Published in final edited form as:

Stigma Health. 2022 February ; 7(1): 113–121. doi:10.1037/sah0000327.

The Effect of Discrimination and Resilience on Depressive Symptoms among Middle-Aged and Older Men who have Sex with Men

Andre L. Brown, PhD, MPH[1,*], **Derrick D. Matthews, PhD, MPH**[2], **Steven Meanley, PhD, MPH**[3], **Mark Brennan-Ing, PhD**[4], **Sabina Haberlen, PhD, MS**[5], **Gypsyamber D'Souza, PhD, MS**[5], **Deanna Ware, MPH**[6], **James Egan, PhD, MPH**[1], **Steve Shoptaw, PhD**[7], **Linda A. Teplin, PhD**[8], **Mackey Friedman, PhD, MPH**[9], **Michael Plankey, PhD, MS**[6]

[1]Department of Behavioral and Community Health Sciences, University of Pittsburgh

[2]Department of Health Behavior, University of North Carolina at Chapel Hill

[3]School of Nursing, University of Pennsylvania

[4]Roosevelt House Public Policy Institute at Hunter College, City University of New York

[5]Department of Epidemiology, Johns Hopkins University

[6]Department of Epidemiology, Georgetown University

[7]Department of Family Medicine, University of California Los Angeles

[8]Department of Psychiatry and Behavioral Sciences, Northwestern University

[9]Department of Infectious Diseases and Microbiology, University of Pittsburgh

Abstract

This study investigated if homophobic and racist discrimination increased depressive symptoms among 960 middle-aged and older men who have sex with men (MSM) and how resilience moderated these relationships. We used five waves of longitudinal data from the *Healthy Aging* sub-study of the *Multicenter AIDS Cohort Study (MACS)*. We used linear regression analyses to model depressive symptoms as a function of discrimination. We used linear mixed analyses to model changes in mean resilience scores across visits. We used linear regression analyses to model depressive symptoms as a function of changes in resilience and to test the moderation effects of resilience on the relationship between discrimination and depressive symptoms. The models accounted for repeated measures of resilience. Men who experienced external and internal homophobia had greater depressive symptoms (β: 2.08; 95% Confidence Interval: 0.65, 3.51; β: 1.60; 95% Confidence Interval: 0.76, 2.44). Men experienced significant changes in mean resilience levels across visits ($F = 2.84$, $p = 0.02$). Men with a greater positive change in resilience had lower depressive symptoms (β: −0.95; 95% Confidence Interval: −1.47, −0.43). Men with higher average resilience levels had lower depressive symptoms (β: −5.08; 95% Confidence Interval: −5.68, −4.49). Men's resilience did not moderate the relationship between homophobia

[*]**Corresponding Author**: 6124 Public Health | 130 De Soto Street | Pittsburgh, PA 15261, abrown7@pitt.edu | Phone: 412-624-9157 | Fax: 412-648-5975.

and depressive symptoms. Significant associations of external and internal homophobia with greater depressive symptoms present targets for future research and interventions among middle-aged and older MSM. Significant associations of average and positive changes in resilience with lower depressive symptoms provide aims for future research and interventions with this population.

Keywords

Discrimination; Depression; Resilience; Aging; Men who have Sex with Men

Introduction

Middle-aged and Older Men who have Sex with Men have Disproportionate Risks for and Rates of Depression

Depression is a mental health disorder that impairs the physical and mental health of millions of Americans annually (NIMH, 2017). Depression rates are highest among 18-25 year olds, but persists as individuals age (NIMH, 2017). The prevalence of social isolation and chronic illnesses, like HIV, cardiovascular disease, and cancer, tend to increase with age, often co-occur with depression, and may exacerbate depressive symptoms among older adults (NIA, 2017, 2019; Schnittker, 2005). Depressive symptoms can also worsen social isolation and chronic illnesses and make these conditions more difficult to manage (NIA, 2017). Middle-aged and older men who have sex with men (MSM) have higher rates of social isolation and chronic illnesses when compared to their heterosexual counterpart. These higher rates may explain the disparities in depression experienced by middle-aged and older MSM (Cochran et al., 2003; Fredriksen-Goldsen et al., 2013A; Fredriksen-Goldsen et al., 2017; Haas et al., 2010). Given these disparities, it is imperative to investigate the social contexts that shape depressive symptoms in this population. Illuminating these factors will inform future research and interventions intended to improve depression outcomes for these men.

Racist and Heterosexist Discrimination may Drive Depression Disparities in Middle-Aged and Older MSM

Racist and homophobic discrimination (i.e., racism and homophobia) are risk factors for depressive symptoms among MSM (Batchelder et al., 2017; Frye et al., 2015; Graham et al., 2011; Mays & Cochran, 2001; Meyer, 1995, 2013). Moreover, for older lesbian, gay, and bisexual adults like middle-aged and older MSM, homophobic discrimination during one's lifetime is associated with having significant depressive symptoms (Fredriksen-Goldsen et al., 2013B). The Minority Stress Theory suggests the mechanisms by which these relationships exist. The theory posits that heteronormative, homophobic, racist, and patriarchal social structures devalue the social identities of sexual and racial minorities. This devaluation exerts repeated social stigmatization on these populations and produces acute and chronic stress (McConnell et al., 2018; Meyer, 1995; Robinson-Wood & Weber, 2016). In turn, chronic stress can facilitate the development of depressive symptoms (Frye et al., 2015; Graham et al., 2011; Holman, 2018; Mays & Cochran, 2001; Meyer, 2013).

Experiences of Discrimination may Contribute to Developing Psychological Resilience in Middle-Aged and Older MSM

The American Psychological Association defines psychological resilience (henceforth referred to as "resilience") as, "the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress" (APA, 2012). Not all middle-aged and older MSM who experience discrimination will experience stress and poor health outcomes like depression that the Minority Stress Theory literature describes (McConnell et al., 2018; Meyer, 1995; Robinson-Wood & Weber, 2016). For some, discrimination and other adverse life experiences are minority stressors that may actually build their crisis management abilities and resilience levels (Colpitts & Gahagan, 2016; Kimmel, 1978). Theoretical models of stress and coping suggest that some middle-aged and older MSM may experience stressors like homophobia or racism and elect to use adaptive strategies (i.e., those that increase mental functioning) to cope with discrimination (Wethington et al., 2008). Adaptive coping can include strategies like emotional regulation aimed at changing the way of thinking or feeling about a stressful situation (Wethington et al., 2008). For example, some middle-aged and older MSM could perceive discrimination not as a threat to their health and safety, but as an opportunity to overcome a challenge and build resilience. Additionally, middle-aged and older MSM came of age when there were limited protections against homophobia, racism, and other minority stressors (Emlet et al., 2017). These limited protections likely facilitated further development of resilience among these men. The ability of middle-aged and older MSM to exercise resilience in the face of adversities, like homophobia and racism, may aid them in mitigating their disproportionate risk for depressive symptoms (APA, 2012).

Resilience may Buffer the Negative Effect of Racism and Homophobia on Depressive Symptoms among Middle-Aged and Older MSM

Resilience may emerge as a by-product of racism and homophobia. It may also serve to protect the health of middle-aged and older MSM against the harmful effects of discrimination, such as depressive symptoms. Multiple studies, including those with older MSM in their sample, found associations between higher resilience and lower depressive symptoms (Masten & Wright, 2009; Ong et al., 2009; Resnick et al., 2011; Jeste et al., 2013; N. Halkitis et al., 2015; Emlet et al., 2017; Batista & Pereira, 2020). Other studies have examined whether resilience moderates the relationship between depressive symptoms and stressors like conversion therapy exposure and childhood sexual abuse (Meanley et al., 2020; Wingo et al., 2010). However, these studies did not include middle-aged and older MSM, occurred in non-US settings, and/or had null findings. Therefore, more data is needed to clarify the moderating effect of resilience on the relationship between discrimination and depression in this population.

Resilience Levels and Effects may Vary over Time

While resilience may buffer against the effect of discrimination on depressive symptoms, it is not a static characteristic (Ong et al., 2009). Resilience can change over time in response to internal and external life events, including discrimination and other minority stressors (Emlet et al., 2017). These events can facilitate variations in middle-aged and older MSM's

ability to exhibit resilience to cope with discrimination (Resnick et al., 2011). However, we currently lack information about the ways in which changes in resilience affect depressive symptoms in middle-aged and older MSM. Given potential variations in resilience over time, it is important to understand not only how resilience levels influence depressive symptoms among middle-aged and older MSM, but also how changes in resilience levels affect this mental health outcome. Our paper seeks to add to the literature on discrimination, resilience, and depressive symptoms among middle-aged and older MSM by addressing the following research questions:

1. How does discrimination (i.e., racism and homophobia) affect current depressive symptoms among middle-aged and older MSM?
2. Does resilience change over time among middle-aged and older MSM?
3. How do changes in resilience over time influence current depressive symptoms among middle-aged and older MSM?
4. How does resilience affect the relationship between discrimination and depressive symptoms among middle-aged and older MSM?

We will use our study results to fill current gaps in the literature about how resilience changes over time, how those changes affect depression outcomes, and the relationships between discrimination, resilience, and depressive symptoms in this vulnerable and understudied segment of the US population. We will also use our study results to make recommendations for future research and interventions to reduce depressive symptoms in middle-aged and older MSM.

Methods

Participants

Data for this paper came from five waves of clinical visits for the MACS. The MACS collected data semi-annually between April 2016 and March 2019. *Healthy Aging* is a sub-study of the MACS. The MACS is a longitudinal cohort study of HIV infection among MSM in Baltimore, Maryland/Washington DC; Chicago, Illinois; Los Angeles, California; and Pittsburgh, Pennsylvania. Over 6,000 men have enrolled in the MACS. At each visit, participants completed HIV testing, biometric screenings, and a psychosocial health survey. Further details about the MACS and its methods are available elsewhere (Detels et al., 1992; Dudley et al., 1995; Kaslow et al., 1987). Participants were eligible for this current study if they were at least 40 years old as of April 1, 2016; completed at least two consecutive *Healthy Aging* study visits during the previous year-and-a-half; and reported having sex with another man since enrolling in the MACS. The Institutional Review Board at the University of Pittsburgh approved this study.

Measures

Resilience—We measured resilience using the 14-item Global Resilience Scale (RS-14) ($\alpha = 0.96$) (Wagnild, 2009). The scale measures resilience on a 7-point Likert scale (strongly disagree to strongly agree) using items such as, ‘I usually manage one way or another’. Each point on the Likert scale was assigned a value from 1 (strongly disagree) to 7 (strongly

agree) and averaged to create a global resilience score (Aiena et al., 2015). We created the change in resilience variable using the difference between the participants' RS-14 scores at their first and last visits during the study period.

Depressive Symptoms—We measured depressive symptoms using the Center for Epidemiological Studies-Depression scale (CESD) (Radloff, 1977). The CESD is a 20-item scale that assesses how often over the past week the respondents have experienced depressive symptoms. Response options ranged from "Rarely or None of the Time" to "Most or Almost All the Time" and were assigned a score from 0 to 3 ($\alpha = 0.81$) (Radloff, 1977). We standardized and averaged the scores across the items to account for missing responses to the CESD scale. Similar to previous studies, we treated CESD as a continuous variable (Breslau, 1985; St. John et al., 2013).

Discrimination—We asked respondents if they had experienced any of the following incidents in the last 12 months because of their race and/or sexual orientation: being verbally assaulted; being threatened with physical violence; having an object thrown at them; being punched, kicked, or beaten; or being threatened with a knife, gun, or other weapon (Mays & Cochran, 2001). Respondents had the choice of selecting the option, "None of the above happened to me in the past 12 months". We categorized those who selected this option as not experiencing racial and/or sexual discrimination. We categorized those who did not select this option as experiencing racial and/or sexual discrimination.

Covariates—To minimize potential confounding effects, our models included covariates previously associated with depression. These covariates were demographics like age (in years), annual income, education, and employment status; religiosity & spirituality (Multidimensional Measurement of Religiousness/Spirituality for Else in Health Research); and internalized homophobia (10-item Internalized Homophobia Scale; $\alpha = 0.91$) (Fetzer, 2003; Herek et al., 1998; Jones-Webb & Snowden, 1993). We originally included HIV status, another factor previously associated with depression among MSM, in our models (Ciesla & Roberts, 2001). However, it was not a significant predictor of depressive symptoms ($p>.40$) and was not central to our research questions, so we excluded it from our analyses to increase our sample size by including cases that would have been excluded from our analyses because they lacked HIV-status data.

Data Analyses

We used SAS version 9.4 to conduct all analyses. We conducted an analysis of missing data to identify any discernable patterns. We did not detect any patterns, which is consistent with data being missing at random. For research questions 1, 3 and 4, we standardized the variables and conducted linear regression analyses to model depressive symptoms scores as a function of change in resilience scores and experiences with discrimination, respectively. For research question 4, we also entered into the model the interaction terms for discrimination by resilience to test for a moderating effect.

In the models for research questions 1, 3 and 4, we adjusted for age, race, religiosity, spirituality, income, education, employment status, internalized homophobia, and average

resilience score. We created an average RS-14 resilience score for participants by averaging their RS-14 scores from each visit completed during the study period. We created this variable to account for the differences in the number of visits each participant completed. We used average resilience scores in the analyses to account for the different variations of changes in resilience across study visits (e.g., not treating someone whose resilience score changed from 1 to 2 the same as someone whose score rose from 3 to 7). To account for missing responses to the RS-14 scale items, we used the averages of the participants' responses to the scale items instead of the sums.

For research question 2, we used a linear mixed approach. We modeled changes in resilience scores across visits. In this model, we adjusted for age, race, income, education, and repeated measures of resilience within participants.

Results

The average age of the sample was 61.4 years (Minimum = 40.8, Maximum = 93.8, SD = 8.6). The majority of the participants were white, had at least a four-year college degree, and earned $40,000+ per year. The median CESD score was 7.0 (IQR =13) and the median RS-14 score was 5.9 (IQR = 1.5). The analytic sample size was 960 (n = x_1, x_2, x_3, x_4, x_5 at each of the five waves of data, respectively). Table 1 contains descriptive statistics about the sample at the first visit.

Homophobia, not Racism Influenced Depressive Symptoms

The results of multivariable analyses showed that experiencing homophobia was positively associated with depressive symptoms in the sample (β: 2.08; 95% Confidence Interval: 0.65, 3.51). Racism was not significantly associated with depressive symptoms.

Resilience Changed Across Visits

There were statistically significant differences in mean resilience levels across study visits (F = 2.84, p = 0.02). There was an overall declining trend in the mean resilience levels across the visits (Figure 1).

Higher Resilience was Associated with Lower Depressive Symptoms

A greater positive change in resilience levels across visits was associated with lower depressive symptoms scores, independent of the respondents' average resilience scores (β: −0.95; 95% Confidence Interval: −1.47, −0.43). Additionally, higher average resilience levels across visits were associated with lower depressive symptoms (β: −5.08; 95% Confidence Interval: −5.68, −4.49) (Table 2). Resilience did not moderate the relationship between external or internal homophobia and depressive symptoms.

Age, Income, Race, and Internalized Homophobia Impact Depressive Symptoms

While not the primary variables of interest for this study, several covariates exhibited a significant association with depressive symptoms. Increasing age (β: −0.15; 95% Confidence Interval: −0.23, −0.07), income (β: −0.47; 95% Confidence Interval: −0.73, −0.21), and American Indian/Alaskan Native race (β: −16.19; 95% Confidence Interval:

−28.51, −3.86) were correlated with lower depressive symptoms. Increasing internalized homophobia was associated with greater depressive symptoms (β: 1.60; 95% Confidence Interval: 0.76, 2.44).

Discussion

The major findings from our study among middle-aged and older MSM include:

1. Men who experienced external and internal homophobia had greater depressive symptoms.
2. The men experienced significant variations in mean resilience levels across visits.
3. Men's greater positive change in resilience across visits was associated with lower depressive symptoms.
4. Men's higher average resilience was associated with lower depressive symptoms.

Implications for Mental Health Promotion among Middle-Aged and Older MSM

Our findings that experiencing homophobia and increasing levels of internalized homophobia were associated with increasing depressive symptoms have significant implications for mental health promotion among middle-aged and older MSM. Previous studies affirm the link between external and internal homophobia and poorer mental health outcomes, like depression (Frye et al., 2015; Graham et al., 2011; Mays & Cochran, 2001; Meyer, 2013; Newcomb & Mustanski, 2010). Middle-aged and older MSM have experienced decades of homophobia. This chronic exposure may make them particularly prone to the deleterious effects of discrimination on one's mental health (Fredriksen-Goldsen et al., 2013; Meyer, 1995; Morrow, 2001; Woody, 2014). These deleterious effects can include internalizing negative beliefs about one's sexual orientation and self (Eguchi, 2006).

Mental health promotion activities to improve depressive symptoms among middle-aged and older MSM should prevent their exposure to discrimination by reducing homophobic attitudes, beliefs, and behaviors in individuals, institutions, and communities (Cahill et al., 2013; Frye et al., 2017). Such activities could include efforts to facilitate sexual majority individuals meeting, getting to know, and empathizing with middle-aged and older MSM. A meta-analysis and other data showed that these activities reduce homophobic discrimination (Smith, et al., 2009; Chaudoir et al., 2017). Mental health promotion activities to improve depressive symptoms among middle-aged and older MSM could also include media campaigns like "Acceptance Journeys" and "My Son is My Life" which have shown promise for reducing homophobia by promoting family and community acceptance and affirmation of gay men and same-sex relationships (Cahill et al., 2013; Hull et al., 2017).

Mental health promotion activities should also endeavor to minimize internalized homophobia in middle-aged and older MSM. Given the well-established correlation between internalized homophobia and depression, efforts to minimize their internalization of homophobic attitudes and beliefs may greatly reduce depressive symptoms in middle-aged

and older MSM (Newcomb & Mustanski, 2010; Yolaç & Meriç, 2020). Such efforts could include individual and group psychotherapy to treat internalized homophobia (Kashubeck-West et al., 2008; Heilman, 2018). Preventing homophobia in its enacted and internalized forms has significant implications for mental health promotion for middle-aged and older MSM and can result in decreases in their depressive symptoms and disparities (Kashubeck-West et al., 2008; Cahill et al., 2013; Frye et al., 2017).

The changes in resilience across visits that we observed in our study also have implications for mental health promotion for middle-aged and older MSM. Our findings are similar to those from previous studies that show changes in resilience over time (Masten & Wright, 2009; Ong et al., 2009; Resnick et al., 2011). The changes in resilience across the visits in our study, while statistically significant, were slight. However, our findings, combined with those of previous studies, provide evidence that resilience levels can fluctuate. This fluctuation suggests that resilience-based mental health promotion efforts for middle-aged and older MSM should implement activities to help them sustain optimal resilience over time. Cognitive Behavioral Therapy, an evidence-based mental health treatment that intervenes on the relationships between cognitions, emotions, and behaviors, is an example of an activity that may help middle-aged and older MSM sustain optimal resilience over time (Turner et al., 2018; Robinson et al., 2019).

Resilience-based mental health promotion efforts for middle-aged and older MSM should also strive to increase their ability to cope with adversarial life events, like experiencing homophobia (WHO, 2017). For example, existing data suggests that efforts to build, strengthen, and expand social support systems to vent about and problem solve life's adversities; increasing self and family acceptance and affirmation of sexual orientation; and expanding connectedness to LGBT and other communities are effective strategies for increasing middle-aged and older MSM's stress-coping resources and skills (Erickson-Schroth & Glaeser, 2017). Enhancing middle-aged and older MSM's stress-coping skills will aid them in building and sustaining their resilience over time. In turn, increased and sustained resilience can mitigate depressive symptoms among these men (Emlet et al., 2017; Jeste et al., 2013; Masten & Wright, 2009; Ong et al., 2009).

Our findings that both greater positive change in resilience score across visits and higher average resilience levels were associated with lower depressive symptoms scores also have significant implications for mental health promotion among middle-aged and older MSM. Other works support our finding of an association between higher resilience and fewer symptoms of depression and other mental illnesses (Emlet et al., 2017; Jeste et al., 2013; Masten & Wright, 2009; N. Halkitis et al., 2015; Ong et al., 2009; Resnick et al., 2011). Our results suggest that mental health promotion activities among middle-aged and older MSM should institute strategies to increase their resilience such as building, strengthening, and expanding their social support systems; increasing family and community affirmation of sexual orientation; and expanding community engagement and connectedness through activities like volunteering (MacLeod et al., 2016; Erickson-Schroth & Glaeser, 2017; Emlet et al., 2020). Doing so can provide the men with effective coping mechanisms to contend with minority stressors and reduce depressive symptoms.

Finally, our finding that increasing income was associated with lower depressive symptoms has significant implications for mental health promotion among middle-aged and older MSM. There is an established link between lower income levels and depressive symptoms. Therefore, instituting efforts to increase income levels among middle-aged and older MSM may alleviate their economic distress and in turn lower their depressive symptoms (Pakula, et al., 2016; Sareen, et al., 2011).

Limitations

The reader should consider our study results in light of the following limitations. The results are not generalizable to all middle-aged and older MSM. The data collected is subject to recall bias. In recalling the discrimination that they experienced in the past 12 months, participants may not have accurately remembered each instance. This recall bias could have resulted in an over- or under-counting of discriminatory experiences that led us to hyperbolize or minimize the extent to which middle-aged and older MSM experience discrimination in our analyses. Additionally, because of the longitudinal nature of the data, there may be other factors, like naturally occurring conditions, which may confound our findings on the relationships between discrimination, resilience, and depressive symptoms, and limit our ability to make empirical assertions about these relationships in this population. Despite these limitations, our study results have significant implications for intervention activities and future research on depressive symptoms among middle-aged and older MSM.

Implications of Study Results for Future Research

Our findings linked homophobia to increasing depressive symptoms, illuminated changes in resilience overtime, and correlated increasing resilience with decreasing depressive symptoms among middle-aged and older MSM. These findings provide the following paths forward for developing mental health promotion activities to reduce depressive symptoms in this population.

Investigate effective strategies for reducing middle-aged and older MSM's experiences of homophobia.—Our findings provide support for the Minority Stress Theory. The Minority Stress Theory asserts that exposure to homophobia and other social stressors can result in increased internalized homophobia, depressive symptoms, and poor health outcomes for sexual minorities (McConnell et al., 2018; Meyer, 1995; Meyer, 2003; Robinson-Wood & Weber, 2016). These relationships reinforce the need to develop research and interventions aimed at reducing experiences of internal, interpersonal, and institutional homophobia and discrimination for this population.

Investigate the mechanisms by which middle-aged and older MSM develop resilience.—Our findings also lay the groundwork for future research to expand knowledge about discrimination, resilience, and depressive symptoms in this population. Future research should seek to understand how and why middle-aged and older MSM develop resilience. Determining the most effective strategies for building resilience among middle-aged and older MSM may help to reduce their depression risks, rates, and disparities (Handlovsky et al., 2018).

Investigate the mechanisms causing changes in resilience among middle-aged and older MSM.—We were unable to assess what caused the changes in resilience levels or how far these levels might decline. However, our results lay the groundwork for future research to determine the factors that influence declines and other changes in resilience levels over time among men in this population. Conducting this line of scientific inquiry may inform interventions to increase or sustain resilience, leverage resilience to mitigate minority stressors, and in turn minimize middle-aged and older MSM's risks for and rates of depressive symptoms.

Investigate the impact of sociodemographic factors on depressive symptoms among middle-aged and older MSM.—Our results on the significant relationship between age, income, and American Indian/Alaskan Native race suggests that on-going research is needed to determine how sociodemographic factors impact depressive symptoms among middle-aged in older MSM. Investigating factors that are associated with increasing age, such as greater contentment with life, may yield information to leverage in interventions to lower depressive symptoms. Similarly, exploring strategies for increasing income among middle-aged and older MSM can yield strategies for reducing depressive symptoms in these men. Finally, future research should continue investigating how race affects depression outcomes. For example, researchers may advance mental health promotion efforts for middle-aged and older MSM by determining if there are American Indian/Alaskan Native cultural practices that reduce depressive symptoms and if these practices are translatable to MSM of other races and cultures.

Conclusion

The purpose of this study was to investigate the relationship between discrimination, resilience, and depressive symptoms among middle-aged and older MSM. We found a significant relationship between external and internal homophobia and greater depressive symptoms. We also found a significant effect of American Indian/Alaskan Native race and higher resilience, age, and income on lowering depressive symptoms. The disproportionate burden of depression on middle-aged and older MSM requires intervention on the social contexts that drive depressive symptoms, including experiences of discrimination. It also requires interventions that leverage protective factors, such as resilience, to aid them in mitigating the negative effects of discrimination on their mental health. Creating social environments free of homophobia can greatly enhance mental health promotion efforts to reduce depression risks, rates, and disparities in this vulnerable population. Helping middle-aged and older MSM "bounce back" and exhibit resilience in the face of discrimination and other minority stressors can also enhance efforts to improve depression outcomes among men in this population.

Acknowledgements

The contents of this paper are solely the responsibility of the authors and do not represent the official views of the National Institutes of Health (NIH). MWCCS (Principal Investigators): Atlanta CRS (Ighovwerha Ofotokun, Anandi Sheth, and Gina Wingood), U01-HL146241; Baltimore CRS (Todd Brown and Joseph Margolick), U01-HL146201; Bronx CRS (Kathryn Anastos and Anjali Sharma), U01-HL146204; Brooklyn CRS (Deborah Gustafson and Tracey Wilson), U01-HL146202; Data Analysis and Coordination Center (Gypsyamber D'Souza, Stephen Gange and Elizabeth Golub), U01-HL146193; Chicago-Cook County CRS (Mardge Cohen

and Audrey French), U01-HL146245; Chicago-Northwestern CRS (Steven Wolinsky), U01-HL146240; Connie Wofsy Women's HIV Study, Northern California CRS (Bradley Aouizerat, Phyllis Tien, and Jennifer Price), U01-HL146242; Los Angeles CRS (Roger Detels), U01-HL146333; Los Angeles CHIPTS (Steve Shoptaw), P30-MH058107; Metropolitan Washington CRS (Seble Kassaye and Daniel Merenstein), U01-HL146205; Miami CRS (Maria Alcaide, Margaret Fischl, and Deborah Jones), U01-HL146203; Pittsburgh CRS (Jeremy Martinson and Charles Rinaldo), U01-HL146208; UAB-MS CRS (Mirjam-Colette Kempf, Jodie Dionne-Odom, and Deborah Konkle-Parker), U01-HL146192; UNC CRS (Adaora Adimora), U01-HL146194. The MWCCS is funded primarily by the National Heart, Lung, and Blood Institute (NHLBI), with additional co-funding from the Eunice Kennedy Shriver National ——— Institute Of Child Health & Human Development (NICHD), National Institute On Aging (NIA), National Institute Of Dental & Craniofacial Research (NIDCR), National Institute Of Allergy And Infectious Diseases (NIAID), National Institute Of Neurological Disorders And Stroke (NINDS), National Institute Of Mental Health (NIMH), National Institute On Drug Abuse (NIDA), National Institute Of Nursing Research (NINR), National Cancer Institute (NCI), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute on Deafness and Other Communication Disorders (NIDCD), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute on Minority Health and Health Disparities (NIMHD), and in coordination and alignment with the research priorities of the National Institutes of Health, Office of AIDS Research (OAR). MWCCS data collection is also supported by UL1-TR000004 (UCSF CTSA), P30-AI-050409 (Atlanta CFAR), P30-AI-050410 (UNC CFAR), and P30-AI-027767 (UAB CFAR). The authors are indebted to the participants of the Multicenter AIDS Cohort Study [MACS] Healthy Aging Study.

The authors thank the staff at the four sites for implementation support John Welty, Montserrat Tarrago, and Katherine McGowan for data support of this study.

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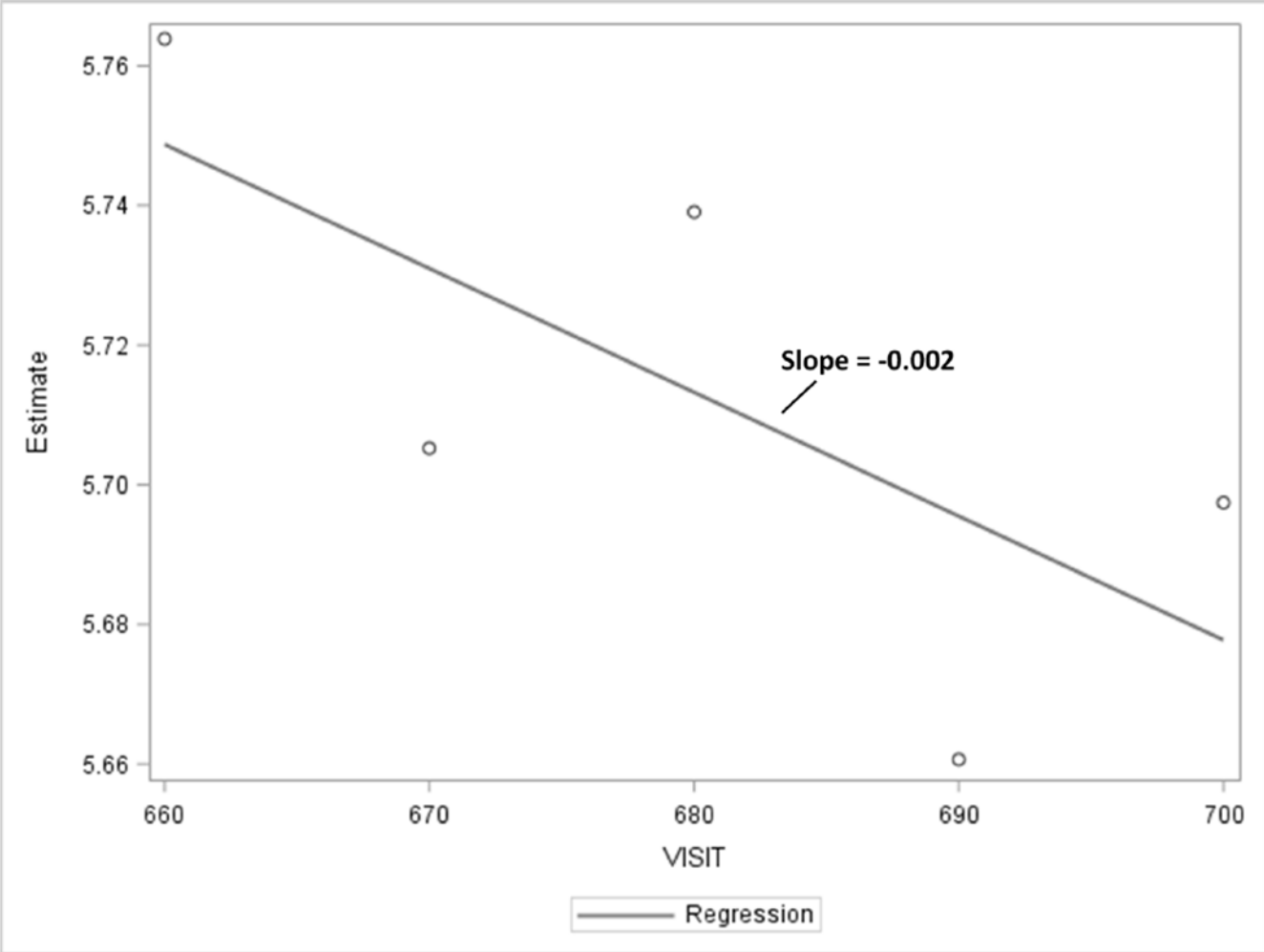

Figure 1:
Trends in Resilience Scores across Visits for Middle-Aged and Older MSM

Table 1:

Demographic Characteristics of the Sample (n = 960)

Variable	Median or Percentage (rounded)
Age	61.4 years (Minimum = 40.8) (Maximum = 93.8) (SD = 8.6)
Race	
White, non-Hispanic	68.7%
White, Hispanic	5.3%
Black, non-Hispanic	20.6%
Black, Hispanic	0.9%
American Indian or Alaskan Native	0.3%
Asian or Pacific Islander	0.8%
Other	0.9%
Other Hispanic	2.5%
Highest Education Level	
8th grade or less	0.7%
9, 10, or 11th grade	2.8%
12th grade	11.0%
At least one year college but no degree	24.6%
Four years college / got degree	25.8%
Some graduate work	10.9%
Post-graduate degree	24.1%
Income	
Less than $10,000	10.3%
10,000-19,999	12.4%
20,000-29,999	10.5%
30,000-39,999	8.8%
40,000-49,999	8.5%
50,000-59,999	8.2%
60,000-99,999	18.3%
100,000-149,999	10.3%
150,000 or more	7.0%
Do not wish to answer	5.8%
HIV Status	
Living with HIV	44.4%
Living without HIV	55.6%
CESD	7.0 (IQR =13)
Resilience Level	5.9 (IQR = 1.5)

SD = Standard Deviation IQR = Interquartile Range

Table 2:

Multivariable Analyses of the Association between Resilience and Depressive Symptoms (N = 960)

Variable	β (95% Confidence Interval)
Change in resilience	*−0.95 (−1.47, −0.43)* **
Average resilience	*−5.08 (−5.68, −4.49)* ***
Age	−0.17 (−0.25, −0.09)***
Income	*−0.46 (−0.72, −0.20)* **
Education level	0.34 (−0.09, 0.77)
Employment status	−0.82 (−2.19, 0.55)
Religiosity	0.05 (−0.57, 0.66)
Spirituality	0.38 (−0.24, 0.99)
Internalized homophobia	*1.71 (0.87, 2.55)****
Race	
White, non-Hispanic	*−2.15 (−5.79, 1.49)*
White, Hispanic	*−1.06 (−5.20, 3.08)*
Black, non-Hispanic	*−3.29 (−6.96, 0.39)*
Black, Hispanic	*−3.66 (−10.24, 2.92)*
American Indian or Alaskan Native	*−15.55 (−27.89, −3.21)* **
Asian or Pacific Islander	*−5.14 (−12.37, 2.10)*
Other	*0.49 (−6.09, 7.05)*

* p = < 0.05

** p = <0.01

*** p = <0.0001

Table 3:

Multivariable Analyses of the Association between Homophobic and Racist Discrimination, Resilience, and Depressive Symptoms (N = 960)

Variable	β (95% Confidence Interval)
Homophobic discrimination	*2.08 (0.65, 3.51)***
Racist discrimination	*−0.40 (−1.69, 0.90)*
Change in resilience	*−0.97 (−1.49, −0.45)* **
Average resilience	*−5.08 (−5.67, −4.49)* ***
Age	−0.15 (−0.23, −0.07)***
Income	*−0.47 (−0.73, −0.21)* **
Education level	0.37 (−0.06, 0.80)
Employment status	−0.67 (−2.03, 0.70)
Religiosity	0.03 (−0.58, 0.65)
Spirituality	0.37 (−0.25, 0.98)
Internalized homophobia	*1.60 (0.76, 2.44)****
Race	
White, non-Hispanic	*−2.10 (−5.73, 1.52)*
White, Hispanic	*−1.02 (−5.14, 3.11)*
Black, non-Hispanic	*−3.41 (−7.08, 0.25)*
Black, Hispanic	*−3.96 (−10.53, 2.60)*
American Indian or Alaskan Native	*−16.19 (−28.51, −3.86)* **
Asian or Pacific Islander	*−5.54 (−12.75, 1.68)*
Other	*0.82 (−5.73, 7.38)*

* p = < 0.05

** p = <0.01

*** p = <0.0001