

Depression and Disability Associated with Worse Cognitive Functioning in Sexual and Gender Minority Older Adults

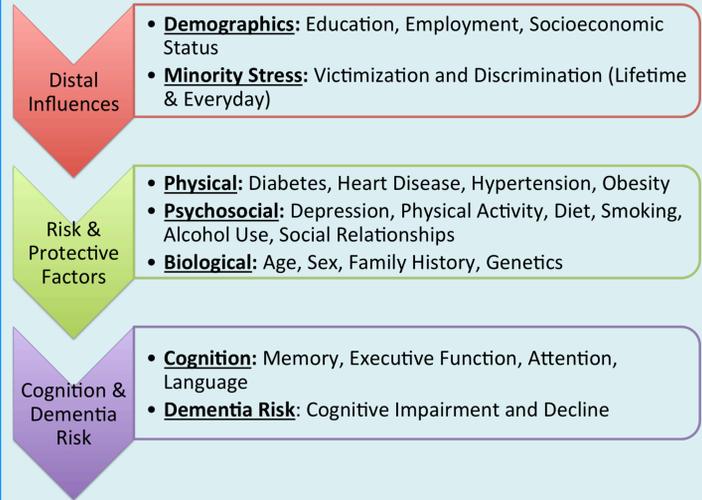
Jason D. Flatt^{1,2}, Julene K. Johnson^{1,2}, Stephen E. Karpiak^{3,4}, Liz Seidel³, Britta Larson⁵, & Mark Brenna-Ing^{3,4}

¹Institute for Health & Aging, & ²Center for Aging in Diverse Populations, University of California, San Francisco, ³ACRIA Center on HIV & Aging, ⁴College of Nursing, New York University, & ⁵Center on Halsted

Background

- By 2030, there will be nearly 6 million sexual and gender minority (SGM) older adults (aged 60 and older) in the U.S. who identify as lesbian, gay, bisexual, and transgender.
- SGM older adults experience greater health disparities compared to their heterosexual peers.
- Many of these health disparities are considered modifiable risk factors for dementia (diabetes, depression, heart disease, hypertension, smoking, and social isolation).
- Little is known about the cognitive health of SGM older adults and associated health and social factors.

Conceptual Model



Objectives

- To examine the relationship between modifiable risk factors for dementia and subjective cognitive functioning in SGM older adults.
- To identify additional health and social factors associated with subjective cognitive functioning.

Study Overview & Methods

- In 2010-2011, a community-based sample of SGM older adults was recruited from the Center on Halsted, a comprehensive LGBT community center in the Midwest.
- Cross-sectional study: SGM adults aged 50 and older (N=210) completed a self-administered survey.
- Multivariable regression was used to examine the associations between modifiable risk factors for dementia, other health and social factors, and self-reported cognitive functioning.

Subjective Cognitive Functioning

- Assessed via a previously validated, 4-item cognitive measure from the Medical Outcomes Study HIV Health Survey (Wu, Revicki, Jacobson, & Malitz, 1997).
- Questions asked about difficulty with reasoning and problem solving, memory problems, trouble with attention, and difficulty with doing activities involving concentration and thinking over the past month.
- Cognitive functioning was rated from 0–100, with higher scores suggesting better cognitive function.

Health and Social Factors

- Modifiable risk factors for dementia:** self-reported chronic conditions (diabetes, heart disease, hypertension, and smoking), and depression (10-item Center for Epidemiological Studies Depression Scale).
- Other health and social factors:** HIV status, disability (ADLs and IADLs), self-rated health, living alone, social network size, social support, and experiencing discrimination from health providers.

Table 1. Participant Characteristics

Characteristics (N=210)	N (%)
Demographics	
Age, mean (SD)	59.6 (8.0)
Gender, Female	50 (60.3)
Transgender	11 (5.2)
Gay/Lesbian	163 (80.3)
Bisexual	27 (13.3)
Black	65 (34.2)
> High School	163 (79.9)
Income Inadequate	125 (61.2)
Modifiable Risk Factors	
Diabetes	32 (15.4)
Depression (CES-D ≥ 10)	75 (35.7)
Heart disease	27 (13.0)
Hypertension	39 (18.8)
Current Smoking	53 (25.7)
Other Health and Social Factors	
HIV	71 (33.8)
Disability, mean (SD)	1.8 (4.1)
Poor self-rated health	46 (24.0)
Live alone	119 (63.0)
Social network size, mean (SD)	10.61 (7.4)
Social support, mean (SD)	4.13 (3.4)
Discrimination from health providers	22 (10.5)

Cognitive Impairment by Age Group

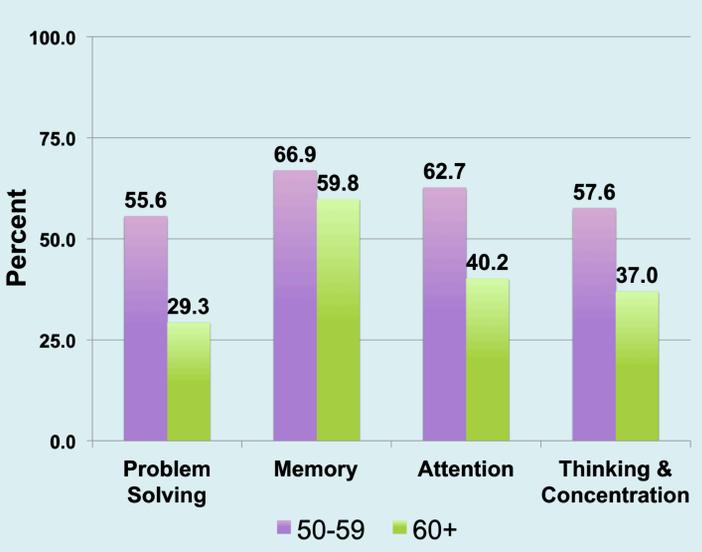


Table 2. Associations with Subjective Cognitive Functioning

Characteristics	Cognitive Functioning	P-Value
Demographics		
Age	r = 0.3	< .001
Gender, Female	78.0 (19.4)	.07
Transgender	75.9 (14.6)	.02
Gay/Lesbian	83.8 (17.5)	
Bisexual	73.8 (24.8)	
Black	73.8 (21.3)	<.001
> High School	83.7 (17.6)	.03
Income Inadequate	78.7 (18.7)	.002
Modifiable Risk Factors		
Diabetes	77.0 (21.6)	.17
Depression (CES-D ≥ 10)	72.6 (20.7)	<.001
Heart disease	80.4 (20.1)	.69
Hypertension	79.5 (16.9)	.39
Current Smoking	76.1 (19.3)	.008
Other Health and Social Factors		
HIV	76.0 (21.9)	.003
Disability	r = -0.2	.008
Poor self-rated health	76.7 (17.7)	.03
Live alone	81.2 (18.9)	.29
Social network size	r = 0.02	.79
Social support	r = -0.1	.17
Discrimination from health providers	77.7	.17

Table 3. Multivariable Model

Characteristic	β	95% CI	P-Value
Age	.17	0.1, 0.7	.02
Gender, Female	-.14	-10.9, -0.2	.04
Gay/Lesbian	.02	-5.6, 7.2	.80
Black	-.22	-14.5, -2.4	.006
>High School	-.06	-9.1, 3.4	.37
Income Inadequate	.07	-2.4, 7.5	.31
Depression	-.21	-13.1, -2.7	.003
Disability	-.14	-1.2, -0.1	.04

Note: β = Standardized coefficient; R² = .27

Discussion

- SGM older adults aged 50-59 reported worse cognitive functioning than those aged 60 and older.
- Black SGM older adults also reported worse cognitive functioning compared to their white peers.
- Depression and disability were associated with reporting worse cognitive functioning, which has been found in previous studies on subjective memory.
- Subjective cognitive impairment is associated with future cognitive decline and risk of dementia (Rabin et al., 2015).
- Depression and disability may be important areas to consider for screening SGM older adults at risk for cognitive impairment and dementia.
- Limitations: results are cross-sectional and based on self-reported cognitive functioning.

Health Implications

- These results provide insight into the potential correlates of cognitive functioning in SGM older adults.
- There is a need for longitudinal studies with objective assessments of cognition in SGM older adults.
- Future research is needed to better understand cognitive functioning and dementia risk in diverse, aging SGM populations.

Acknowledgements:
Funding for this study was obtained from a grant from Human Resources Services Administration to the Center on Halsted, Chicago, IL, who commissioned the work with AIDS Community Research Initiative of America. Dr. Flatt was supported by the UCSF Center for Aging in Diverse Populations (P30AG015272) and UCSF Pepper Center (P30AG044281). The content is solely the responsibility of the authors and does not necessarily represent the official views of the Human Resources Services Administration or National Institutes of Health.