



Published in final edited form as:

Clin Gerontol. 2023 ; 46(1): 47–52. doi:10.1080/07317115.2020.1854409.

Evaluation of race as a predictor of fear of falling in Black older adults

Selena E. Washington, PhD, MSPH^a, Makenna Snyder, MS^b, Yi-Ling Hu, PhD^c, Susan L. Stark, PhD^b

^aDepartment of Occupational Science and Occupational Therapy, Saint Louis University Health Sciences Center, Saint Louis, MO, USA

^bProgram in Occupational Therapy, Washington University in Saint Louis School of Medicine, Saint Louis, MO, USA

^cInstitute of Gerontology, Wayne State University Eugene Applebaum College of Pharmacy and Health Sciences, Detroit, MI, USA

Abstract

Objective: Determine whether race predicts fear of falling (FOF) in older adults with a history of previous fall(s) while controlling for mobility performance, activity of daily living (ADL) independence, age, gender, and education.

Methods: We examined predictors of FOF among community-dwelling older adults using data from two longitudinal randomized controlled trials that implemented fall prevention programs for community-dwelling older adults.

Results: Two hundred fifty-nine participants were included in the analysis; 145 reported low FOF, while 59 reported high FOF. After controlling for mobility performance, ADL independence, and sociodemographic factors, Black older adults were more likely to report FOF (OR = 2.17) compared to White older adults. Overall, older adults with lower mobility performance/functioning scores were more likely to have FOF (OR = 0.08).

Conclusions: Older adults (aged ≥ 65 years) who are at higher risk, based on a prior history of fall(s), are more susceptible to developing FOF, as evidenced by the older adults within this study, due to limited mobility performance and functioning.

Clinical Implications: Black older adults may be at greater risk of FOF than their White counterparts based on previous fall history and level of functional mobility. Incorporating measures of objective performance-based function along with measures of psychological factors are viable methods to identify and address FOF within Black older adult populations.

Keywords

Fear of falling; race; older adults; fall risk

Introduction

One in four older adults (aged 65 years) in the United States experiences a fall each year (Centers for Disease Control and Prevention [CDC], 2018), and falls are the most common cause of fatal injury and nonfatal hospital admissions for older adults (Burns, Stevens, & Lee, 2016). The risk of falling is associated with multiple factors including: sociodemographic factors such as age and gender; psychological diagnoses such as depression; medical factors such as Parkinson's disease, comorbidity, medication use, self-perceived health status, fear of falling, physical mobility, and recurrent falls; and environmental factors such as living conditions and indoor versus outdoor environments (Silvia et al., 2010; Sun, Huang, Varadhan, & Agrawal, 2016). Recent evidence utilizing the National Health and Aging Trends Study [NHATS] (2019) population data has concluded that Black older adults are less likely to fall compared to White older adults (Nicklett & Taylor, 2014; Singh, Belanger, & Thomas, 2018; Sun et al., 2016). However, what is unknown is whether race predicts fear of falling (FOF) within the older adult population at greater risk for falls, where FOF is "a lasting concern about falling that leads to an individual avoiding activities that he/she remains capable of performing" (Tinetti & Powell, 1993).

FOF, or low efficacy or self-confidence in avoiding falls during daily activities (Tinetti & Powell, 1993), is a common concern reported by adults 65 years of age and older (Fletcher & Hirdes, 2004; Friedman, Munoz, West, Rubin, & Fried, 2002). FOF is a leading risk factor for falls (Boyd & Stevens, 2009; Friedman et al., 2002) and often is used as a proxy for fall risk (Visschedijk, Caljouw, Bakkers, van Balen, & Achterberg, 2015). FOF is associated with activity avoidance, decreased physical mobility (balance and gait), decreased functional ability, and fall incidents (Denkinger, Lukas, Nikolaus, & Hauer, 2015; Tinetti, Richman, & Powell, 1990). FOF is often described as a downstream consequence of a previous fall, as older adults with a previous fall incident have a greater subsequent FOF (Schoene et al., 2019). FOF is likely more complex; it is multifactorial and multidimensional (Boyd & Stevens, 2009; Lavedán et al., 2018). FOF risk factors include age (65 years and older), gender (women), impaired physical mobility, and decreased instrumental activity of daily living (IADL) and/or activity of daily living (ADL) independence (Denkinger et al., 2015; Scheffer, Schuurmans, Van Dijk, Van Der Hooft, & De Rooij, 2008).

Currently there is limited evidence on the relationship between race and an individual's FOF (Denkinger et al., 2015; Kressig et al., 2001; Scheffer et al., 2008). A recent study found that higher rates of FOF in community-dwelling Black older adults were associated with lower education levels, health status, and daily functioning ability (Kumar et al., 2014). Similarly, the Wilson et al. (2005) study identified that higher rates of FOF among community-dwelling middle-aged to older adult Black men (aged 49–65 years) were associated with higher rates of activity restriction; however, this study could not explain this phenomenon through the history of prior falls or low falls efficacy measures.

Singh et al. (2018) used the NHATS database to examine the association between race and FOF among community-dwelling older adult populations. Contrary to the aforementioned studies, they reported that Black older adults were 13% less likely to report FOF than non-Hispanic White older adults and concluded that lower FOF in Black older adults could

explain lower fall rates among the Black older adult population (Singh et al., 2018). The NHATS sample used included older adults who had no previous history of falls and were at a lower risk for falls. This important first step in understanding the relationship between FOF and race did not include those who had fallen within the past 12 months. It is possible but unknown whether this finding would be sustained in a sample of older adults with a previous fall history.

This study contributes to the existing literature and addresses whether race predicts FOF in older adults with a previous fall history while controlling for mobility performance, ADL independence, and sociodemographic factors. Through the use of evidence-based measures, we identified and analyzed the predictors of FOF among this population of community-dwelling older adults.

Methods

We examined predictors of FOF among community-dwelling older adults using the baseline data from two randomized controlled trials (RCTs) of fall prevention interventions for community-dwelling older adults, located within the Midwest region of the US: The Effectiveness of a Fall Prevention Program Study (Stark, Keglovits, & Somerville, 2016) and the Home Hazard Removal Program, or HARP, study (Stark et al., 2017). The inclusion criterion for these trials was a history of one or more falls within the preceding 12 months. We hypothesized that Black older adults would experience similar or greater FOF rates to White or other race older adults within high-risk fall populations after adjustment for sociodemographic variables and functional status. This study was approved by the Washington University School of Medicine Institutional Review Board, and all participants provided informed consent prior to participation.

Participants, procedures, and measures

Both studies included participants who were aged 65 years and older, reported at least one fall within the past 12 months, were worried about falling, and reported difficulty with one or more ADL or IADL at the baseline of data collection. Both studies excluded participants if they lived in an institutionalized setting, had a cognitive impairment as indicated by a Short Blessed Score >10 (Katzman et al., 1983), or reported a history of chronic alcohol abuse. Participants were recruited through the local Area Agencies on Aging and Barnes Jewish Emergency Department. Study participants all completed a series of standardized assessments at baseline and were included in this analysis if they had completed assessments.

Outcomes

FOF was measured in both RCT studies, first through the utilization of the Tinetti Falls Efficacy Scale (Tinetti et al., 1990), a reliable and valid tool that assesses FOF and its perceived impact on physical performance and ADLs. A score greater than 70 indicates that a person has an FOF, and a score greater than 80 indicates that a person has a risk of falling (Tinetti et al., 1990). Second, FOF was measured through the Short Falls Efficacy Scale-International (Short FES-I; Kempen et al., 2007). The Short FES-I assesses concern

about falling (Yardley et al., 2005). Scores are summed, with scores of 7–8 indicating low concern, 9–13 indicating moderate concern, and 14–28 indicating high concern. We harmonized the data by transforming the FOF measure to a dichotomous variable to indicate whether or not the individual was afraid of falling, using published cutoffs for the Tinetti FES or Short FES-I score (Tinetti FES scores >70; Short FES-I scores >18).

Covariates

To control for other potential risk factors for FOF, we measured known covariates such as gender, education level, ADL independence, and mobility performance. Education level was measured by years of education, and ADL independence was measured using the Older Americans Resources and Services Functional Assessment, or the OARS (Fillenbaum, 2013). Sum scores below 10 indicate excellent functioning, whereas scores above 18 indicate impairment in many dimensions. Mobility performance was measured using the Tinetti Performance Oriented Mobility Assessment (POMA; Tinetti et al., 1990). The Tinetti POMA is designed to measure balance and gait mobility in older adults (Tinetti et al., 1990). Sum scores from 25–28 are considered a low fall risk, 19–24 are a medium fall risk, and less than 19 are a high fall risk. All assessments were administered by an occupational therapist.

Data analysis

The data were checked for underlying assumptions, and statistical analyses were performed using IBM SPSS version 21.0 (IBM Corporation, 2012). Descriptive statistics were used to describe participants' demographics by race. Two older adults in our sample self-identified as White and other race; therefore, we named the reference group "White and other race." A multiple logistic regression analysis was conducted to evaluate whether race predicted FOF, while controlling for covariates. To meet the assumption of the model, education level was not included in the model to avoid multicollinearity. Unadjusted odds ratios (ORs) for fall risk among Black older adults compared to White and other race older adults were calculated. The ORs were similar to those adjusted for age, gender (male as the reference group), and other variables.

Results

Two hundred fifty-nine participants completed baseline assessments and were included in the analysis. The mean age of the sample was 75.7 ± 7.4 years, and the majority was female (78.9%), had a mean of 13 ± 3.3 years of education, had ADL impairments indicated by OARS, and had medium fall risk identified by POMA (Table 1). Nearly one-third of the Black older adults (31.45%) had FOF, but only 14.8% of White older adults reported FOF.

Table 2 presents the unadjusted logistic regression model; race is noted as a significant factor to predict FOF. Black respondents were twice as likely to report FOF (OR = 2.17, 95% CI = 1.14, 4.15) as White respondents (OR = 0.51, 95% CI = 0.22, 1.19). The only covariate that predicted FOF was mobility performance measured by POMA; older adults with lower scores were more likely to have FOF (OR = 0.08, 95% CI = 0.03, 0.98).

Discussion

In a group of high-fall-risk, community-dwelling older adults, Black older adults were 2.17 times more likely to have FOF than White older adults. This study confirms our hypothesis that Black older adults would experience similar or greater FOF rates to White or other race older adults within high-fall-risk populations, after adjustment for sociodemographic variables and functional status. This study's outcomes demonstrate that FOF is an important component to address in fall prevention for all older adults at risk for falls, but perhaps especially for Black older adults who are at greater risk due to limited mobility, higher rates of disability, and underreporting of fall incidents (Sairafian et al., 2019). Recognizing that higher-fall-risk groups with limited mobility functioning, as identified among the older adults within this study, who are more susceptible to developing FOF is critical for the development and recommendation of fall prevention programming. Fall prevention programs often intervene by attempting to improve confidence in one's ability to overcome falls. Successful fall prevention programs like Matter of Balance approach building self-efficacy related to falling by empowering participants with practical tools and facilitating perceived beliefs that one has control over the risk of falls (National Council on Aging [NCOA], 2019; Tennstedt et al., 1998). Falls self-efficacy is a modifiable factor that can be used to guide interventions for community-dwelling older adults at risk for falls ([NCOA], 2019; Tinetti et al., 1990).

Based on our findings, performance-based measures like the Tinetti FES, FES-I, and other self-efficacy scales with comprehensive, multi-item measures demonstrate excellent reliability and adequate validity in community populations and are vital to assess risk factors that contribute to falls (Scheffer et al., 2008; Yardley et al., 2005). Previous studies have concluded that FOF, as indicated by higher scores on the FES-I, and fear-related activity restriction are positively correlated in Black middle-aged and older adult populations (Andresen et al., 2006; Wilson et al., 2005). Future studies examining FOF should incorporate high-quality measures of functional performance of abilities such as gait, balance, and ADL independence, along with balance confidence and activity avoidance for high-fall-risk older adult populations. Also, psychological cognitive behavioral assessment and intervention (i.e., cognitive behavioral therapy) to understand how fear of falling may contribute to increased anxiety, social isolation, depression, and other negative consequences is warranted. An interdisciplinary approach to assessment and intervention regarding the functional and psychological aspects of FOF as documented in this study and the literature is a potential and viable clinical approach among this population (Cappleman & Thiamwong, 2020; Greenberg, Sullivan-Marx, Sommers, Chittams, & Cacchione, 2016; Robinson & Wetherell, 2018; Thiamwong et al., 2020).

While this study contributes to the understanding of FOF, mobility performance and functioning, and race, there were a few limitations. First, this study did not account for the association between FOF and falls within racial groups over time intervals (NHATS, 2019). Second, interacting factors such as prescription medications and environmental conditions were not accounted for within the sample population. Finally, the sample population is not a national representative sample of Black and White older adults. Despite these limitations, this study examined the risk factors of FOF in Black older adults with a fall history, detailing

significant findings of higher rates of FOF associated with limited mobility performance and functioning.

Conclusion

Recent studies have suggested that social, environmental, and psychological support could play a role in suppressing FOF in Black older adults (Nicklett & Taylor, 2014; Nicklett, Taylor, Rostant, Johnson, & Evans, 2017). Recent literature has illuminated that Black older adult populations have significantly higher rates and levels of disability and has documented social determinants of health disparities in comparison to White older adult populations (Dong, Freedman, Sánchez, & Mendes de Leon, 2019; Nicklett & Taylor, 2014; Sun et al., 2016). Our study adds to the existing literature by noting that high levels of disability, as observed in limited mobility performance and function, were directly correlated to higher levels of FOF. Future studies should examine whether FOF intervention could mediate or moderate the relationship between race and FOF. Incorporating objective and performance-based measures of abilities along with psychological measures and intervention are viable methods to identify and address FOF within high-fall-risk older adult populations and to strengthen the proposed model (Payette, Belanger, Léveillé, & Grenier, 2016).

Funding

This work was supported by the U.S. Department of Housing and Urban Development [MOHHU0024,MOLHH0196-09], National Institute of Aging, [1R01AG057680-01A1].

References

- Andresen EM, Wolinsky FD, Miller JP, Wilson -M-MG, Malmstrom TK, & Miller DK (2006). Cross-sectional and longitudinal risk factors for falls, fear of falling, and falls efficacy in a cohort of middle-aged African Americans. *The Gerontologist*, 46(2), 249–257. doi:10.1093/geront/46.2.249 [PubMed: 16581889]
- Boyd R, & Stevens JA (2009). Falls and fear of falling: Burden, beliefs and behaviours. *Age and Ageing*, 38(4), 423–428. doi: 10.1093/ageing/afp053 [PubMed: 19420144]
- Burns ER, Stevens JA, & Lee R (2016). The direct costs of fatal and non-fatal falls among older adults —United States. *Journal of Safety Research*, 58, 99–103. doi:10.1016/j.jsr.2016.05.001 [PubMed: 27620939]
- Cappleman AS, & Thiamwong L (2020). Fear of falling assessment and interventions in community-dwelling older adults: A mixed methods case-series. *Clinical Gerontologist*, 43(4), 471–482. doi:10.1080/07317115.2019.1701169 [PubMed: 31805830]
- Centers for Disease Control and Prevention [CDC]. (2018). Older adult falls. Retrieved from <http://www.cdc.gov/features/falls-older-adults/index.html>
- Denkinger MD, Lukas A, Nikolaus T, & Hauer K (2015). Factors associated with fear of falling and associated activity restriction in community-dwelling older adults: A systematic review. *The American Journal of Geriatric Psychiatry*, 23(1), 72–86. doi:10.1016/j.jagp.2014.03.002 [PubMed: 24745560]
- Dong L, Freedman VA, Sánchez BN, & Mendes de Leon CF (2019). Racial and ethnic differences in disability transitions among older adults in the United States. *The Journals of Gerontology: Series A*, 74(3), 406–411. doi:10.1093/gerona/gly052
- Fillenbaum GG (2013). *Multidimensional functional assessment of older adults: The duke older americans resources and services procedures*. New York, NY: Psychology Press.
- Fletcher PC, & Hirdes JP (2004). Restriction in activity associated with fear of falling among community-based seniors using home care services. *Age and Ageing*, 33(3), 273–279. doi: 10.1093/ageing/afh077 [PubMed: 15082433]

- Friedman SM, Munoz B, West SK, Rubin GS, & Fried LP (2002). Falls and fear of falling: Which comes first? A longitudinal prediction model suggests strategies for primary and secondary prevention. *Journal of the American Geriatrics Society*, 50(8), 1329–1335. doi:10.1046/j.1532-5415.2002.50352.x [PubMed: 12164987]
- Greenberg SA, Sullivan-Marx E, Sommers MLS, Chittams J, & Cacchione PZ (2016). Measuring fear of falling among high-risk, urban, community-dwelling older adults. *Geriatric Nursing (New York, N.Y.)*, 37(6), 489–495. doi:10.1016/j.gerinurse.2016.08.018 [PubMed: 27720210]
- IBM Corporation. (2012). IBM SPSS statistics for windows [21.0]. Armonk, NY: IBM Corp.
- Katzman R, Brown T, Fuld P, Peck A, Schechter R, & Schimmel H (1983). Validation of a short Orientation-Memory-Concentration Test of cognitive impairment. *The American Journal of Psychiatry*, 140(6), 734–739. doi:10.1176/ajp.140.6.734 [PubMed: 6846631]
- Kempen GI, Yardley L, Van Haastregt JC, Zijlstra GR, Beyer N, Hauer K, & Todd C (2007). The short FES-I: A shortened version of the falls efficacy scale-international to assess fear of falling. *Age and Ageing*, 37(1), 45–50. doi: 10.1093/ageing/afm157 [PubMed: 18032400]
- Kressig RW, Wolf SL, Sattin RW, O’Grady M, Greenspan A, Curns A, & Kutner M (2001). Associations of demographic, functional, and behavioral characteristics with activity-related fear of falling among older adults transitioning to frailty. *Journal of the American Geriatrics Society*, 49(11), 1456–1462. doi:10.1046/j.1532-5415.2001.4911237.x [PubMed: 11890583]
- Kumar A, Carpenter H, Morris R, Iliffe S, & Kendrick D (2014). Which factors are associated with fear of falling in community-dwelling older people?. *Age and Ageing*, 43(1), 76–84 doi:10.1093/ageing/aft154 [PubMed: 24100619]
- Lavedán A, Viladrosa M, Jürschik P, Botigué T, Nuín C, Masot O, & Lavedán R (2018). Fear of falling in community-dwelling older adults: A cause of falls, a consequence, or both?. *PLoS One*, 13(3). doi:10.1371/journal.pone.0194967
- National Council on Aging [NCOA]. (2019). Evidence-based falls prevention programs. Retrieved from <https://www.ncoa.org/healthy-aging/falls-prevention/falls-prevention-programs-for-older-adults-2/>
- National Health and Aging Trends Study [NHATS]. (2019). Retrieved from www.nhats.org
- Nicklett EJ, & Taylor RJ (2014). Racial/Ethnic predictors of falls among older adults: The health and retirement study. *Journal of Aging and Health*, 26(6), 1060–1075. doi:10.1177/0898264314541698 [PubMed: 25005171]
- Nicklett EJ, Taylor RJ, Rostant O, Johnson KE, & Evans L (2017). Biopsychosocial predictors of fall events among older African Americans. *Research on Aging*, 39(4), 501–525. doi:10.1177/0164027516651974 [PubMed: 28285579]
- Payette MC, Belanger C, Léveillé V, & Grenier S (2016). Fall-related psychological concerns and anxiety among community-dwelling older adults: Systematic review and meta-analysis. *PLoS One*, 11(4), e0152848. doi:10.1371/journal.pone.0152848 [PubMed: 27043139]
- Robinson JB, & Wetherell JL (2018). An interdisciplinary intervention for fear of falling: Lessons learned from two case studies. *Clinical Gerontologist*, 41(4), 366–373. doi:10.1080/07317115.2017.1325423 [PubMed: 28548888]
- Sairafian K, Towe CW, Crandall M, Brown LR, Haut ER, & Ho VP (2019). Sociodemographic patterns of outpatient falls: Do minority patients fall less frequently?. *Journal of Surgical Research*, 243, 332–339. doi:10.1093/age-ing/afl084 [PubMed: 31255933]
- Scheffer AC, Schuurmans MJ, Van Dijk N, Van Der Hooft T, & De Rooij SE (2008). Fear of falling: Measurement strategy, prevalence, risk factors and consequences among older persons. *Age and Ageing*, 37(1), 19–24. doi:10.1093/ageing/afm169 [PubMed: 18194967]
- Schoene D, Heller C, Aung YN, Sieber CC, Kemmler W, & Freiberger E (2019). A systematic review on the influence of fear of falling on quality of life in older people: Is there a role for falls?. *Clinical Interventions in Aging*, 14, 701–719. doi:10.2147/CIA.S197857 [PubMed: 31190764]
- Silvia D, Ersilia L, Francesca B, Roberto F, Carlo La V, & Eva N (2010). Risk factors for falls in community-dwelling older people: “A systematic review and meta-analysis. *Epidemiology*, 21(5), 658. doi:10.1097/EDE.0b013e3181e89905 [PubMed: 20585256]

- Singh T, Bélanger E, & Thomas K (2018). Is fear of falling the missing link to explain racial disparities in fall risk? Data from the National Health and Aging Trends Study. *Clinical Gerontologist*, 1–6. doi:10.1080/07317115.2018.1468377 [PubMed: 29220626]
- Stark S, Keglovits M, & Somerville E (2016). A randomized controlled feasibility trial of tailored home modifications to improve activities of daily living. *American Journal of Occupational Therapy*, 70, 7011520290p7011520291–7011520290p7011520291. doi:10.5014/ajot.2018.021774
- Stark S, Somerville E, Keglovits M, Conte J, Li M, Hu YL, & Yan Y (2017). Protocol for the home hazards removal program (HARP) study: A pragmatic, randomized clinical trial and implementation study. *BMC Geriatrics*, 17 (1), 90. doi:10.1186/s12877-017-0478-4 [PubMed: 28427336]
- Sun DQ, Huang J, Varadhan R, & Agrawal Y (2016). Race and fall risk: Data from the National Health and Aging Trends Study (NHATS). *Age and Ageing*, 45(1), 120–127. doi: 10.1093/ageing/afv173 [PubMed: 26764401]
- Tennstedt S, Howland J, Lachman M, Peterson E, Kasten L, & Jette A (1998). A randomized, controlled trial of a group intervention to reduce fear of falling and associated activity restriction in older adults. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 53(6), P384–P392. doi:10.1093/geronb/53b.6.p384 [PubMed: 9826971]
- Thiamwong L, Huang HJ, Ng BP, Yan X, Sole ML, Stout JR, & Talbert S (2020). Shifting maladaptive fall risk appraisal in older adults through an in-home physio-feedback and exercise program (PEER): A pilot study. *Clinical Gerontologist*, 43(4), 378–390. doi:10.1080/07317115.2019.1692120 [PubMed: 31713464]
- Tinetti ME, & Powell L (1993). Fear of falling and low self-efficacy: A case of dependence in elderly persons. *Journal of Gerontology*, 48, 35–38. doi:10.1093/geronj/48.special_issue.35
- Tinetti ME, Richman D, & Powell L (1990). Falls efficacy as a measure of fear of falling. *Journal of Gerontology*, 45(6), P239–P243. doi:10.1093/geronj/45.6.P239 [PubMed: 2229948]
- Visschedijk JHM, Caljouw MAA, Bakkers E, van Balen R, & Achterberg WP (2015). Longitudinal follow-up study on fear of falling during and after rehabilitation in skilled nursing facilities. *BMC Geriatrics*, 15(1), 161. doi:10.1186/s12877-015-0158-1 [PubMed: 26637334]
- Wilson -M-MG, Miller DK, Andresen EM, Malmstrom TK, Miller JP, Wolinsky FD, & Morley JE (2005). Fear of falling and related activity restriction among middle-aged African Americans. *Journals of Gerontology Series A: Biological Sciences & Medical Sciences*, 60(3), 355–360. doi:10.1093/gerona/60.3.355 [PubMed: 15860474]
- Yardley L, Beyer N, Hauer K, Kempen G, Piot-Ziegler C, & Todd C (2005). Development and initial validation of the Falls Efficacy Scale-International (FES-I). *Age and Ageing*, 34(6), 614–619. doi:10.1093/ageing/afi196 [PubMed: 16267188]

Clinical implications

- Clinicians should be responsive to a potentially higher FOF in Black older adults who have experienced a fall and demonstrate limited functional mobility.
- Black older adults may be at greater risk of FOF than their White counterparts based on previous fall history and level of functional mobility.
- Incorporating measures of objective performance-based function along with measures of psychological factors are viable methods to identify and address FOF within Black older adult populations.

Table 1.

Demographics by group: race, gender, age, education level, ADL independence, and mobility performance.

	Total (n = 259)	Black (n = 124)	White or other* (n = 135)
	Mean (SD)	Mean (SD)	Mean (SD)
Age (years)	75.7 (7.4)	75.19 (7.6)	76.2 (7.2)
Education (years)	13.5 (3.3)	12.9 (3.1)	14.1 (3.4)
POMA	19.3 (5.7)	18.6 (5.4)	19.9 (5.9)
OARS	21.97 (4.2)	20.8 (4.2)	23.1 (3.7)
Number of falls	1.9 (5.0)	1.6 (4.3)	2.1 (5.5)
	N (%)	N (%)	N (%)
FOF	59 (22.8)	39 (31.5)	20 (14.8)
Female	204 (78.8)	100 (80.6)	104 (77.0)

* Three participants who did not identify as Black or White were included in the “White or other” racial group.

FOF = fear of falling, POMA = Performance-Oriented Mobility Assessment, OARS = Older Americans Resources and Services questionnaire.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2.

Unadjusted odds ratios for fear of falling among older adults who were at risk of falls logistic regression model (n = 259).

Variable	B	p	OR	95% CI
Constant	1.2	0.54	3.33	–
Black	0.78	0.02	2.17	1.14–4.15
Female	0.77	0.08	2.16	0.92–5.05
Age	–0.01	0.57	0.99	0.95–1.03
POMA	–0.08	0.01	0.93	0.87–0.98
OARS	–0.05	0.2	0.95	0.87–1.03

CI = confidence interval, OR = odds ratio, POMA = Performance-Oriented Mobility Assessment, OARS = Older Americans Resources and Services questionnaire.