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The Impact of Transportation Support on Driving Cessation Among Community-Dwelling Older Adults

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Objectives. This study longitudinally examines the impact of transportation support on driving cessation among community-dwelling older adults residing in retirement communities.

Method. Data came from 3 waves of the Florida Retirement Study (1990–1992), a population-based cohort study. Analysis was limited to participants who drove at baseline and were reinterviewed in 1992 (N = 636). Transportation support from a spouse, family members, friends/neighbors, agencies/organizations (e.g., church), or hired assistants was included. Discrete-time multivariate hazard models were estimated to examine the impact of transportation support on driving cessation while controlling for demographic and health characteristics.

Results. Participants were more likely to stop driving if they had received at least some transportation support from friends/neighbors (Hazard Ratio = 2.49, p = .001) as compared with those with little or no support. Transportation support from organizations/agencies or hired assistants was also significantly associated with the likelihood of driving cessation, but only a small number of participants reported to have received such support. Receiving some or more transportation support from a spouse or family members did not have a statistically significant relationship with driving cessation.

Discussion. The findings suggest that available nonkin transportation support, particularly support from peer friends, plays an important role in driving cessation for older adults living in retirement communities.

Key Words: Driving—Mobility—Social integration—Social support—Transportation.

A large proportion of older Americans currently live in the suburbs, termed "Aging Suburbia" by Tremain (Rosenbloom, 1988, 2003; Tremain, 2002) as a result of suburbanizing post-World War II in the United States. This suburbanization of the aging population removes older adults from easy access to transit options (Shaheen, Allen, & Liu, 2009). Accordingly, driving private vehicles has become the primary mode of transportation among Americans aged 65 and older, accounting for 89.1% of their trips (Kostyniuk & Shope, 2003; Pucher & Renne, 2003). Very few public transit options provide the same mobility, convenience, and security that a private automobile provides (Glasgow & Blakely, 2000; Kostyniuk & Shope, 2003; Rosenbloom, 1988).

In this cultural context of automobility (Walsh, 2008), driving cessation may be a marker of the transition from the Third Age (the developmental period of personal achievement and fulfillment after retirement; Laslett, 1991) to the Fourth Age (the age of increasing frailty, dependence, and death; Adams, Roberts, & Cole, 2011; Smith, 2002). Previous studies have reported that the transition to nondriving amplifies the characteristics of the Fourth Age such as decreased out-of-home activity levels (Marottoli et al., 2000), reduced network of friends (Mezuk & Rebok, 2008), increased depressive symptoms (Fonda, Wallace, & Herzog, 2001), and increased 3-year mortality risk (Edwards, Perkins, Ross, & Reynolds, 2009).

A growing body of research has investigated risk factors for driving cessation, reporting that functional limitations (Campbell, Bush, & Hale, 1993; Edwards et al., 2008), cognitive impairment (Ackerman, Edwards, Ross, Ball, & Lunsman, 2008; Edwards et al., 2008), comorbidity (Mann, McCarthy, Wu, & Tomita, 2005; Sims, Ahmed, Sawyer, & Allman, 2007), and demographic characteristics such as older age and female gender (Carr, Flood, Steger-May, Schechtman, & Binder, 2006; Jette & Branch, 1992; Mann et al., 2005; Sims et al., 2007) are associated with greater likelihood of driving cessation. However, little is known about how transportation support influences older adults' decisions to stop driving.

Only a few studies have examined the relationship between alternative transportation and driving cessation cross-sectionally. Marottoli and colleagues (1993) reported that participants—who stopped driving during the observation period—were more likely to have alternative transportation (i.e., recent use of public transportation or rides from relatives and friends) than continuing drivers at the baseline in their longitudinal analysis. Kington, Reuben, Rogowski, and Lillard (1994) reported that older adults living in households with more adults were less likely to

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drive. Johnson (2008) found that former female drivers in rural areas were more likely to stay nondriving if having an adequate number of family members and friends providing rides to them. These findings imply that available transportation support may help older drivers decide to stop driving and maintain this decision without becoming socially isolated. Still, it is unknown if transportation support influences older adults' decisions to stop driving in a longitudinal framework, and how the impact varies by type of transportation support (i.e., different ride providers).

Modes of transportation support vary in terms of accessibility, flexibility, and reciprocity for older adults. When facing difficulties in driving, older adults are more likely to seek transportation help from their informal networks such as families or friends rather than to use public transportation because of its limited accessibility and flexibility (Adler & Rottunda, 2006; Hendrickson & Mann, 2005; Johnson, 2008; Kostyniuk & Shope, 1999; Rosenbloom, 2003). Some studies have reported that older adults prefer to get rides from friends rather than from family members (Davey, 2007; Glasgow & Blakely, 2000). Family members such as adult children may have to take time away from jobs to give a ride to their elderly parents; thus, older adults are reluctant to ask them for a ride unless it is an essential trip such as a medical appointment or shopping for food (Adler & Rottunda, 2006; Glasgow & Blakely, 2000). Despite better accessibility and flexibility, rides from peer friends raise the issue of reciprocity (Davey, 2007; Kostyniuk & Shope, 2003). Many older adults try to make some recompense such as offering gas money to their friends who give rides (Davey, 2007; Kostyniuk & Shope, 2003). Because of this feeling of being a burden to family members or friends when accepting rides from them (Davey, 2007; Kostyniuk & Shope, 2003), older couples rely mainly on rides from their spouse or partner. Kostyniuk and Shope (1999) reported that couples felt secure as long as one of them could drive.

Driving Mobility and Transportation Support in Retirement Communities

Paralleling population aging, the demand for senior housing and long-term care has increased, and retirement communities have emerged as a housing option in old age (Shippee, 2009; Streib, 2002). This demand has led a steady growth in the retirement community industry, particularly in the Sunbelt (Streib, 2002; Waldron, Gitelson, & Kelley, 2005). In 2007, more than 1.4 million Medicare recipients aged 65 and older resided in long-term care facilities, and more than 820,000 older Americans resided in community housing with access to services such as meal preparation, laundry, and cleaning services (Federal Interagency Forum on Aging, 2010). The availability of these services may reduce the needs for driving and influence driving patterns among residents of retirement communities (Persson, 1993). However, little is known about driving mobility and transportation support among older adults living in retirement communities.

Older adults who have chosen to move to independent living in retirement communities may represent a group of people who proactively prepare for the transition from the Third Age to the Fourth Age (Krout, Moen, Holmes, Oggins, & Bowen, 2002; Kahana & Kahana, 2003). When relocating to retirement communities, many older adults are likely to move into independent living with no or few services first, and then move to advanced levels of care (e.g., assisted living or nursing care) within or across retirement communities (Jenkins, Pienta, & Horgas, 2002, Lovegreen, Kahana, & Kahana 2010). In this transition, driving cessation leads to a substantial loss of the control of mobility and may represent *the onset of the Fourth Age* to older adults in independent living in retirement communities. Supporting this, Persson (1993) reported that retirement community residents felt that driving represented independence, and driving cessation contributed to reinforcing the old-age identity. Kelley-Moore, Schumacher, Kahana, and Kahana (2006) also found that driving cessation was one of the predictors for perceived disability among residents in retirement communities. These findings imply that driving cessation would reduce independence and contribute to identity as a disabled person for many older adults living in retirement communities, even though they generally have better access to amenities and services that ease their daily lives than those in traditional communities. However, there is a lack of understanding the intersection among transportation support, access to services (e.g., meal services), and driving behaviors among residents in retirement communities.

This study aimed to fill the knowledge gap about the role of transportation support in the decision to stop driving among older adults residing in retirement communities by longitudinally examining the impact of transportation support on driving cessation and how this impact varies by type of ride provider.

Method

Sample

The data for this study were obtained from the Florida Retirement Study, an ongoing panel study with extensive information about transitional experience in later life. The data were well-matched to the aim of this study because they provided information about changes in driving status, instrumental support, sociodemographic information, and health conditions. The Florida Retirement Study included 1,000 randomly selected participants—generally healthy and active older adults living in three retirement communities in Clearwater, Florida (Covinsky et al., 2001; Kahana et al., 2002). Participants lived in *independent housing*

and remained involved in educational, church, volunteer programs, and health care services in the broader area, outside their retirement communities. Eligible participants met three criteria at the baseline in 1990: (a) were at least 72 years old, (b) lived in Florida for at least 9 months of the year, and (c) were physically and cognitively healthy enough to complete a 90-min face-to-face interview (Lovegreen et al., 2010). Respondents were interviewed annually in their homes, and participants who moved from their original residences were followed to all residential destinations including nursing homes (Kahana et al., 2002; Lovegreen et al., 2010).

Participants' primary mode of transportation was driving their own vehicles. The retirement community provided bus service to local shopping centers on a fixed schedule. Taking this bus was very similar to riding on a public bus. For example, passengers needed to transfer on their own to ride the bus, and special pick-ups were prohibited. Information about use of the retirement community bus was available only at the baseline of the study; thus, it could not be included in the longitudinal analysis. Less than 10% of participants reported that they used this transportation resource. Several public bus stops were located near the retirement community. At the baseline, more than 98% of participants reported having a bus stop—run either by county or the retirement community—within three blocks of their homes.

The majority of participants were White, working or middle-class older adults who migrated mostly from the Midwest or the East Coast (Kahana et al., 2002). Participants reported that they had lived in Florida for an average of 16.7 years and in the current retirement community for an average of 10.9 years at the baseline. Major reasons to move to Florida were the benefit of the warm climate or to be near family. About 4 of 10 participants (41.3%) reported having family in Florida when they migrated. Participants had an average 13.5 years of education with diverse occupational backgrounds including skilled workers, teachers, or tradesmen. About 70% of participants had a household income between U.S.$10,000 and U.S.$34,999.

The first three waves of the Florida Retirement Study (1990, 1991, and 1992) were used for longitudinally examining the impact of transportation support on driving cessation given that the information about all the five types of transportation support was only available for these first three waves. We restricted our sample to those who were driving at the baseline and remained in the sample at Wave 3, 1992 ($N = 636$). Participants in the sample had a mean age of 78.4 at the baseline, and 61.9% were women. These older drivers were generally healthy and living independently at the baseline. Only 24 participants (3.8%) reported using meal services during the past year, 523 (82.2%) reported no difficulties with instrumental activities of daily living (IADLs), and 560 (88.1%) had no error in the Short Portable Mental Status Questionnaire (SPMSQ) at the baseline.

The Case Western Reserve University Institutional Review Board approved the study, and all participants provided informed consent.

Measures

Driving cessation.—We measured driving cessation with three items: (a) "Do you currently drive a car?" (b) "What year did you stop driving?" and (c) "Why did you stop driving?"

Transportation support.—Participants were asked how much help they had received for transportation from (a) a spouse, (b) family members, (c) friends/neighbors, (d) organizations/agencies (e.g., church), or (e) hired assistants "during the past year." The response categories were none, little, somewhat, much, and very much. We collapsed transportation support from a spouse into three categories (0 = having no spouse; 1 = having a spouse providing no/little support; 2 = having a spouse providing somewhat/much/very much support) and the other four types of transportation support into two categories each (0 = no/little support; 1 = somewhat/much/very much support).

Comorbidity.—With reference to a list of medical conditions affecting driving cited in *Physician's Guide to Assessing and Counseling Older Drivers* (Wang, Kosinski, Schwartzberg, & Shanklin, 2008), we measured comorbidity as the number of the following 16 medical conditions: (a) arthritis or rheumatism, (b) emphysema or chronic bronchitis, (c) osteoporosis, (d) heart trouble, (e) circulation problems, (f) liver disease, (g) kidney disease, (h) other urinary tract disorders (including prostate trouble), (i) cancer or leukemia, (j) anemia, (k) diagnosed with a stroke, (l) Parkinson's disease, (m) balance problems, (n) thyroid or other glandular disorder, (o) orthopedic problems, and (p) skin disorders (e.g., pressure scores, leg ulcer, or severe burns).

Cognitive impairment.—We measured cognitive impairment with the SPMSQ, consisting of a series of 10 questions such as the current address, telephone number, and counting backwards from 20 by threes (Pfeiffer, 1975). Incorrect answers were summed, creating a single measure ranging from 0 to 10 wrong answers (Kelley-Moore et al., 2006).

Functional impairment.—Functional impairment was assessed with six items of IADLs (Lawton & Brody, 1969). Respondents were asked how much trouble they had doing the following tasks since the last interview: (a) getting yourself from room to room, (b) going out of doors, (c) walking up and down stairs, (d) doing your own housework, (e) preparing your own meals, and (f) shopping for groceries. The response categories were never, occasionally, frequently,

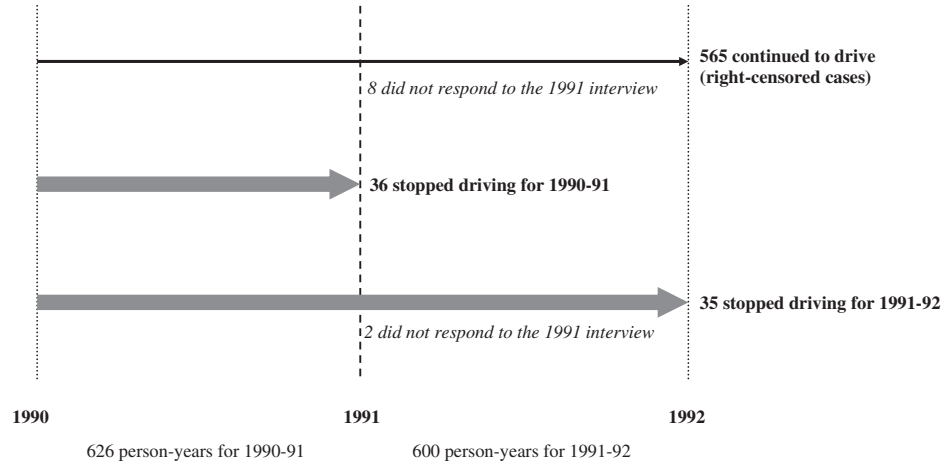

Figure 1. Building 1,226 person-years from the observational records of 636 older drivers, 1990–1992.

and always. Scores range from 6 to 24. Higher scores indicate more functional impairment.

Visual impairment.—Visual impairment was assessed with two items each on glaucoma and cataracts: (a) "Have you had glaucoma (or cataracts) in the past year?" and (b) "How severe is it?" The response categories were not at all, somewhat, severe, and very severe. We collapsed them into two categories: 0 = having no/not severe glaucoma (or cataracts); 1 = having somewhat/sever/very severe glaucoma (or cataracts).

Meal services.—We measured using meal services with one item: "Have you used the meals program (meal delivery) in the past year?" The answers consisted of yes or no.

Analytic Plan

To identify the potential predictors for driving cessation, we compared baseline characteristics between participants who continued to drive in 1992 (continuing drivers) and those who had stopped driving during 1990–1992 (former drivers), using chi-square tests for categorical variables and Student *t* tests for continuous variables.

Discrete-time multivariate hazard models were estimated to longitudinally examine the impact of transportation support on driving cessation. Major benefits of using discrete-time multivariate hazard models were to control both time-variant and invariant factors and to take account of right-censored spells (Allison, 1984). A central concept in this event history analysis is the risk set—the set of individuals who are at risk of event occurrence at each point in time (Allison, 1984). A separate observational record is created for each unit of time that each individual is known to be at risk, and these observations are referred to as "person-years" (Allison, 1984). Figure 1 illustrates how we built the set of 1,226 person-years from the observational records of 636 older drivers for the period of 1990–1992. Thirty six participants who had stopped driving during 1990–1991 contributed one person-year each. Thirty five participants who had stopped driving during 1991–1992 and 565 continuing drivers contributed two person-years each, except ten of them who did not respond to the 1991 interview. This yielded an analytic sample of 1,226 person-years. Each person-year was treated as a separate observation; thus, time-dependent covariates such as transportation support and health conditions could be updated for each observation.

Driving cessation was defined as the "event" of the discrete-time multivariate hazard models. Seventy-one of 1,226 person-years (incidence rate = 5.8%) had stopped driving during the observation period. The number of events was relatively small; thus, a careful approach to selecting control variables was needed to avoid overfitting of the model, which could produce numerically unstable estimates (Hosmer & Lemeshow, 2000). As an initial variable inclusion strategy, a series of univariate logistic regression models were estimated using the sample of 1,226 person-years to identify the predictors for driving cessation. The decision on inclusion or exclusion of each control variable in the final multivariate models was made based on the results from univariate analyses such as *p* value, confidence intervals (CI), and near perfect prediction. We estimated five separate discrete-time multivariate hazard models adjusted for demographic characteristics and health conditions in order to examine the independent impact of five different types of transportation support on driving cessation. Analyses were conducted using IBM SPSS (Version 19.0) statistical software, and the alpha level was set equal to 0.05 for all statistical analyses.

Results

Seventy-one of 636 older drivers (11.2%) had stopped driving during 1990–1992. Almost half of the 71 former drivers reported that vision or health problems were the main reasons for driving cessation. Only 5 of 71 former

Table 1. Differences in Baseline Characteristics Between Continuing Drivers and Former Drivers

Variables	All (*n* = 636)	Driving status over three waves: Continued to drive in 1992 (*n* = 565)	Driving status over three waves: Stopped driving during 1990–1992 (*n* = 71)	*p* Value
Socioeconomic characteristics				
Age, *M* (*SD*)	78.4 (4.2)	77.9 (3.9)	81.7 (4.8)	<.001
Female, *n* (%)	394 (61.9)	343 (60.7)	51 (71.8)	.069
Education, *M* (*SD*)	13.8 (2.5)	13.9 (2.5)	13.4 (2.6)	.105
Income, U.S.$, *n* (%)[a]				
<15k	125 (20.9)	102 (19.2)	23 (33.8)	.017
15k–35k	345 (57.6)	314 (59.1)	31 (45.6)	
35k+	129 (21.5)	115 (21.7)	14 (20.6)	
Using meal services, *n* (%)	24 (3.8)	13 (2.3)	11 (15.5)	<.001
Health conditions				
Comorbidity, *M* (*SD*)	1.9 (1.5)	1.8 (1.5)	2.5 (1.5)	.001
SPMSQ, *M* (*SD*)	0.16 (0.5)	0.1 (0.4)	0.4 (1.0)	.013
IADLs, *M* (*SD*)	6.5 (1.7)	6.4 (1.5)	7.5 (2.9)	.003
Having somewhat/severe/very severe glaucoma, *n* (%)	42 (6.6)	34 (6.0)	8 (11.3)	.093
Having somewhat/severe/very severe cataracts, *n* (%)	92 (14.5)	79 (14.0)	13 (18.3)	.329
Transportation support				
From a spouse				
Having no spouse, *n* (%)	313 (49.2)	268 (47.4)	45 (63.4)	.011
Having a spouse who provide no/little support, *n* (%)	156 (24.5)	148 (26.2)	8 (11.3)	
Having a spouse who provide somewhat/much/very much support, *n* (%)	167 (26.3)	149 (26.4)	18 (25.4)	
From family members				
No/little support, *n* (%)	576 (90.6)	514 (91.0)	62 (87.3)	.321
Somewhat/much/very much support, *n* (%)	60 (9.4)	51 (9.0)	9 (12.7)	
From friends/neighbors				
No/little support, *n* (%)	530 (83.3)	480 (85.0)	50 (70.4)	.002
Somewhat/much/very much support, *n* (%)	106 (16.7)	85 (15.0)	21 (29.6)	
From organizations/agencies				
No/little support, *n* (%)	632 (99.4)	563 (99.6)	69 (97.2)	.013
Somewhat/much/very much support, *n* (%)	4 (0.6)	2 (0.4)	2 (2.8)	
From hired assistants				
No/little support, *n* (%)	635 (99.8)	564 (99.8)	71 (100.0)	.723
Somewhat/much/very much support, *n* (%)	1 (0.2)	1 (0.2)	0 (0.0)	

Note. SPMSQ = Short Portable Mental Status Questionnaire; IADLs = instrumental activities of daily living.
[a]Thirty-seven participants refused to answer or reported that they did not know.

drivers (7.0%) decided to give up their car keys due to the failure of license renewal test.

Table 1 shows the differences in baseline characteristics between continuing and former drivers. Former drivers were more likely to be older and to have cognitive and physical impairments and a lower income than continuing drivers at the baseline. Participants tended to have received at least some transportation support from a spouse (26.3%), friends/neighbors (16.7%), and family members (9.4%) than from organizations/agencies (0.6%) and hired assistants (0.2%) at the baseline. Statistically significant differences between continuing and former drivers were found in receiving transportation support from friends and organizations at the baseline. Even though both groups were driving at that time point, former drivers were more likely to have received at least some transportation support from friends and organizations.

Table 2 shows the estimates of discrete-time multivariate hazard models examining the impact of transportation support on driving cessation, using the 1,226 person-years. Prior to these models, we estimated a series of univariate models. Based on the results, we included comorbidity, SPMSQ score, IADLs score, having glaucoma, and age as control variables in the multivariate models. For the preliminary check of multicollinearity, the matrix of bivariate correlations was examined among all the independent and control variables (Allison, 1999). No correlation was greater than ±.35. For the further collinearity diagnostics, the tolerance was computed for each independent and control variable, and no variable has a tolerance level of 0.82 or less (Allison, 1999; Huck, 2008). Therefore, no multicollinearity was found.

Three of five types of transportation support were found to contribute to the likelihood of driving cessation. Participants were more likely to stop driving if they had received at least some transportation support from friends (HR = 2.49, 95% CI = 1.44–4.28), organizations/agencies (HR = 6.28, 95% CI = 1.78–22.24), and hired assistants (HR = 8.04, 95% CI = 3.19–20.25) as compared with those with no/little support. Receiving at least some transportation support from a spouse or other family member had no statistically significant association with driving cessation after adjusting for age, comorbidity, SPMSQ

Table 2. Discrete-Time Multivariate Hazard Models Examining the Impact of Transportation Support on Driving Cessation, 1990–1992

	HR	95% CI
Transportation support from a spouse (ref = having no spouse)		
No/little support from a spouse	0.60	0.01–0.45
Somewhat/much/very much support from a spouse	0.88	0.47–1.65
Somewhat/much/very much transportation support from (ref = no/little support)		
Family	1.31	0.69–2.45
Friends/neighbors	2.49	1.44–4.28
Organizations/agencies	6.28	1.78–22.24
Hired assistants	8.04	3.19–20.25

Note. HR = hazard ratio; CI = confidence interval. All models were adjusted for age, comorbidity, short portable mental status questionnaire score, instrumental activities of daily living score, and having somewhat/severe/very severe glaucoma (n = 1,226).

score, IADLs score, and having glaucoma. However, participants were less likely to stop driving if they had a spouse who provided no/little transportation support (HR = 0.06, 95% CI = 0.01–0.45) as compared with those without a spouse.

The proportions (also numbers) of receiving some and more transportation support from organizations/agencies and hired assistants were low among 1,226 person-years: 1.4% and 2.4%, respectively (see Figure 2). This led to wide CI in the hazard ratios (HR) for transportation support from organizations/agencies and hired assistants. Thus, the relationship of driving cessation with transportation support from organizations and hired assistants needs to be carefully interpreted.

Discussion

We longitudinally examined the impact of transportation support on driving cessation among community-dwelling older adults residing in retirement communities. The patterns of receiving different modes of transportation support among this group were consistent with the findings of previous studies using samples of older adults in traditional communities. Older adults are more likely to rely on transportation support from their informal networks such as friends and family rather than from organizations and hired assistants (Adler & Rottunda, 2006; Kostyniuk & Shope, 1999). However, the results highlight the importance of *non-kin transportation support* in older adults' decisions to stop driving. Specifically, we found that receiving at least some transportation support from *peer friends* contributed to the likelihood of driving cessation. This may be because of different availability in transportation support by ride providers. Family might have less flexibility to increase their transportation support for older adults as compared with peer friends. Or older adults may have already received the maximum amount of transportation support from their family even before driving cessation. Thus, when older adults have unmet needs for mobility, they may seek transportation help outside of the family.

Furthermore, we found that older adults were more likely to stop driving if they had received at least some transportation support from organizations and hired assistants. There was no difference in receiving transportation support from organizations and hired assistants between continuing and former drivers at the baseline when both were driving.

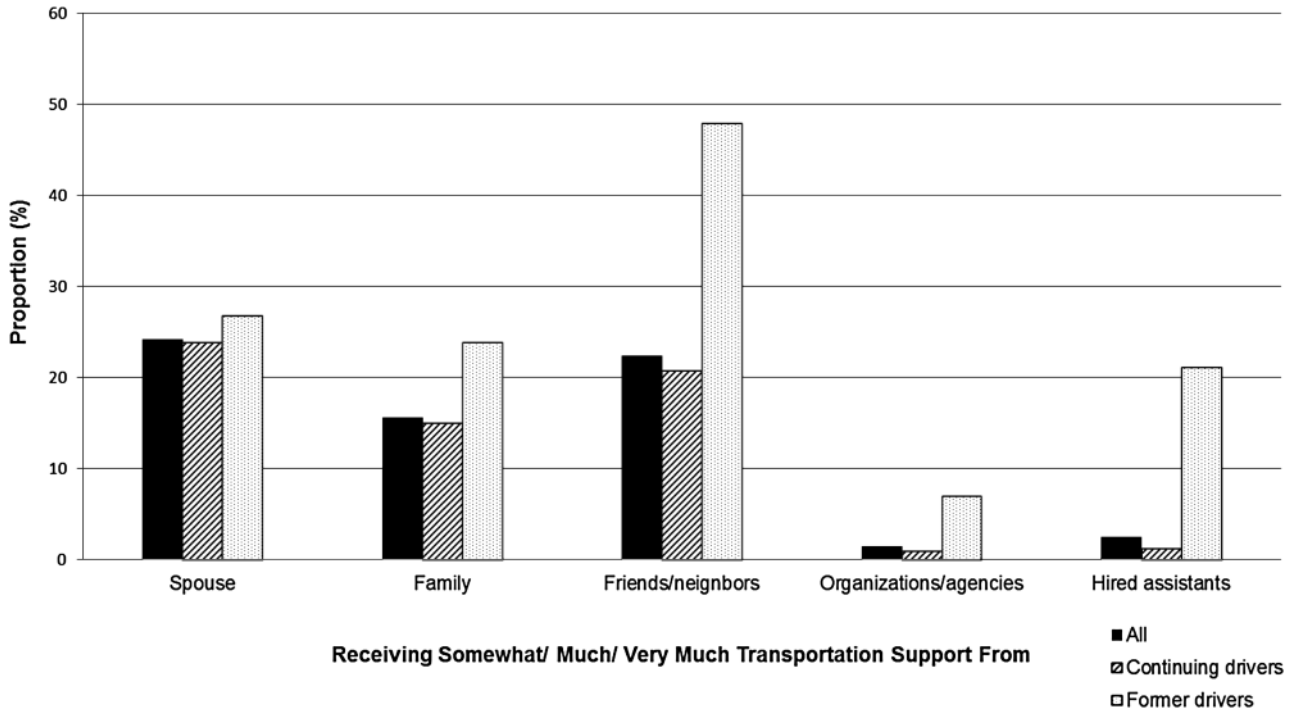

Figure 2. Proportions of receiving transportation support by driving status, 1,226 person-years.

However the number and proportion receiving some or more transportation support from organizations and hired assistants sharply increased among those who had stopped driving during the observational period (see Figure 2). This finding suggests that older adults may seek help outside of their family when they face challenges with driving mobility. However, the finding on the relationship between driving cessation and transportation support from organizations and hired assistants needs to be carefully interpreted because only a small number of older adults reported receiving such support. Further investigation is required to substantiate the impact of transportation support from organizations and hired assistants on decisions to stop driving among older drivers.

Interestingly, about three of four older drivers reported having provided transportation support to friends and family during the past year at the baseline interview. Moreover, receiving at least some transportation support from peer friends was found to be associated with the likelihood of driving cessation. These findings imply that *ridesharing* among older adults plays an important role in meeting transportation needs in later life, particularly in the context of retirement community living. Peer support for transportation was also found in the study by Johnson (2008), where some older drivers who had ceased driving in rural areas resumed driving to help their friends who were less fortunate. Godfrey, Townsend, and Denby (2004) suggested that central to a "good life" in old age is the value attached to inter-dependence, which includes being part of a community where people care about and look out for each other without being a burden on close family. The findings of this study illustrate this value.

The results suggest that predictors for driving cessation among older adults residing in retirement communities are similar to those in traditional communities. Cognitive impairment, functional impairment, higher comorbidity rate, and older age were predictors for driving cessation in this study. This is consistent with findings from previous studies using samples from traditional communities (Ackerman et al., 2008; Campbell, Bush, & Hale, 1993; Edwards et al., 2008; Sims et al., 2007). Female gender was not a statistically significant predictor for driving cessation in our prospective study. Edwards and colleagues (2008) suggested that older women drove less at the baseline, but they may not be more likely to cease driving across time. The difference between cross-sectional and longitudinal studies in terms of gender disparity in driving cessation needs to be further investigated in future research.

The findings of this study should be interpreted in light of several limitations. Transportation support and driving behaviors were measured by self-report, as were health conditions at each wave. Participants' perceptions of transportation support from others and their own health might have moderated the association between transportation support and driving cessation. We accounted for demographic and health characteristics reported as predictors for driving cessation in the previous literature, but unmeasured cofounding variables such as personality traits and coping styles may have biased our results. Moreover, the 2-year observation period was relatively short (1990–1992), and the associations found may not hold for longer time periods. The sample of this study was drawn from age-segregated communities in a small geographic region. The majority of participants had migrated from the Midwest or the East Coast to retirement communities in Florida, which means that this sample had actively coped with their aging compared with others. Thus, the findings of this study may not be generalizable to other populations such as those living in urban settings or in multi-generational communities. Finally, data for the study waves that we are reporting on were collected about 20 years ago. Lifestyle and transportation arrangement patterns of older adults and their families might have changed during those years, and care must be taken in generalizing the findings to the current cohort of older adults.

The primary strength of this study is that it longitudinally examined the impact of five modes of transportation support on driving cessation while controlling for health conditions. The findings suggest the importance of nonkin transportation support in the transition to nondriving in later life. Availability of safe, accessible, and convenient transportation options may promote road safety by helping older adults stop driving while maintaining their mobility. Policy makers need to recognize the importance of alternative transportation options for older adults with difficulties in driving and to improve community transportation resources to meet their everyday mobility needs. Health professionals working with older adults and their families should recognize varied accessibility and flexibility of different modes of transportation alternatives and arrange rides for older adults considering their individual characteristics and living environment for maximizing mobility.

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Conflict of Interest

The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center for Research Resources or the National Institutes of Health. The authors have no financial support for research, consultantships, speakers' forums, or other holdings that might be in conflict of interest with respect to this study.

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