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PERSPECTIVE

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Social capital, health, and elderly driver status

Stephen T. Isbel[a]* and Helen L. Berry[a,b]

[a]*Occupational Therapy, Faculty of Health, University of Canberra, Australia; and* [b]*Faculty of Health, University of Canberra, Australia, and ANU Climate Change Institute, The Australian National University*

Driving a car enables many people to engage in meaningful activities that, in turn, help develop and maintain personal social capital. Social capital, a combination of community participation and social cohesion, is important in maintaining well-being. This paper argues that social capital can provide a framework for investigating the general role of transportation and driving a car specifically to access activities that contribute to connectedness and well-being among older people. This paper proposes theoretically plausible and empirically testable hypotheses about the relationship between driver status, social capital, and well-being. A longitudinal study may provide a new way of understanding, and thus of addressing, the well-being challenges that occur when older people experience restrictions to, or loss of, their driver's license.

INTRODUCTION

This paper explores the proposition that older drivers at risk of losing their licenses are at consequent risk of losing social capital. Social capital is a combination of two concepts: community participation and social cohesion. Generally speaking, the more frequent and satisfying people's participation, the greater their social cohesion [1].

Participation, or "what people do," [2] can include informal social activities such as contact with friends and neighbors [3], civic engagement, such as belonging to choirs and sports clubs, volunteering [4], and political engagement, including political protest or activism [5].

Social cohesion, or "what people feel," [3] includes factors such as social trust, a sense of belonging, cooperation, and the norms of pro-social behavior and reciprocity. It has been proposed that participation and cohesion are causally related, with the former influencing the latter [1].

"Personal social capital," social capital conceptualized and measured at the individual level [6], has been empirically linked to health, especially to mental health and well-being [1].

Overall, people living in communities with high levels of social capital experience, on average, more positive social [7], economic [8], and health [9] outcomes, including for mental health [10].

Thus, events that could reduce levels of individuals' community participation are potential risk factors for reduced social cohesion and, ultimately, for the well-being of older people and their communities.

Various measures of community participation, networks, and social cohesion have been proposed for use in general population samples, and could conveniently be adapted for use with older drivers.

Contributions to growing and maintaining social capital are socio-demographically patterned, with older adults tending to contribute more than other age groups [11], thus making an important investment in community welfare. Adverse life events that constrain participation, such as the loss of a driver's license, can therefore diminish the quality of life of older adults, (by reducing their personal sense of cohesion) and also have ramifications for their communities.

It therefore makes sense, when preparing for "life after driving," to consider individual as well as community-level interventions [12].

At some point, most of us will be deemed partially or fully unfit to drive. In Australia, physicians, general practitioners,occupational therapists, optometrists, and psychologists assess fitness to drive using agreed-upon guidelines [13].

*To whom all correspondence should be addressed: Stephen T. Isbel, assistant professor, Department of Occupational Therapy, Faculty of Health, University of Canberra, Australia. Email: Stephen.Isbel@canberra.edu.au.

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They notify the relevant state or territory licensing authority of all drivers who do not meet those medical standards, which then decide whether to cancel or place conditions (such as geographical restrictions) on the licence.

Many older drivers, defined in this study as age 65 and older, decide for themselves to stop driving as their physical and cognitive capacities decline [14]; in these cases, their driver's licences simply expire.

Governments, organizations, researchers, and health professionals have investigated many of the social and health challenges associated with ceasing driving [15] and have developed ways to help overcome these challenges. Problem-solving-based programs that focus on improving self-efficacy, and planning for and addressing the negative effects of ceasing driving, are recommended [16].

An example is the UQDRIVE program [17], which uses an educational design that focuses on problem-solving and self-efficacy for older people who have already stopped driving and for those who are planning to stop [18]. It uses a two-phased approach, composed of an awareness-raising component and, for those who stop driving, an intensive group support component.

Participants in this program have reported it useful in finding alternative means of transportation, thinking about ceasing driving, and sharing experiences with peers [18].

In a randomized controlled trial of UQDRIVE, short-term improvement in some aspects of community mobility (episodes away from home and the use of public transportation) were reported, but the longer-term efficacy of this intervention was not [19].

Due to the implications for the health and well-being of the individual and, possibly indirectly, their communities, it is important to understand how driving may affect social capital and well-being among older adults.

We argue that the concept of social capital, as an "upstream" mediating construct, can be a useful lead indicator of the effects of ceasing driving. Since it offers a theoretical framework, it can also help direct interventions at the individual and community levels.

Policymakers and health professionals could therefore consider using social capital as a framework for thinking about how to enable older people to maintain engagement in civic and social activities.

Health professionals are well-placed to take the lead in raising awareness about the need to manage older adults' transition out of driving, particularly with respect to its implications for participating in the community.

To do this effectively, a valid evidence base describing the precursors to, experience of, and implications of loss of licence for quality of life in aging is required.

This paper aims to provide initial hypotheses about the links between aging, driving, social capital, and well-being, which may form a basis for empirical testing.

SOCIAL CAPITAL AND OLDER DRIVERS

We use a model of social capital, adapted from Berry and Welsh [1], in which community participation is causally associated with personal social cohesion, which, in turn, influences well-being.

Longitudinal fixed effects regression modeling using two panels of Australian annual cohort data (2005-07 and 2009-11) has shown that, controlling for a very wide range of socio-demographic factors, greater community participation in one year contributes significantly to improved well-being the following year, net of initial well-being status. This lends empirical support to the proposition in this model that community participation promotes well-being [20].

For example, in Australia, a 10 percent increase in informal social connectedness (i.e., keeping in touch with friends, extended family and neighbors) would result in an estimated 85,000 people attaining average levels of well-being.

The insight that this model proposed is the concept that engaging in the informal, civic, and political life of the community produces feelings of trust, belonging, and reciprocity that, in turn, are beneficial for health. In other words, it is the thoughts and feelings that arise from activities undertaken with others (versus alone) that help us remain happy and well.

In our adapted model we propose that the loss of a driver's licence results in a direct loss of community participation, but also has an indirect effect on personal social cohesion and well-being (Figure 1).

This new model allows for an examination of how ceasing driving affects participation (i.e. what people do), personal social cohesion (what people feel), and then, ultimately, overall well-being.

Furthermore, some older people who stop driving do not report poor mental health and life satisfaction. The new model, if empirically tested, may offer some reasons for this, therefore potentially providing valuable new knowledge regarding the protective factors ameliorating the usually negative health consequences of ceasing driving.

Driving a motor vehicle can be important in enabling participation in social and civic activities and can, therefore, be conceptualized as a mechanism for creating and maintaining social capital.

Compared to current older drivers, those no longer driving have been shown to less likely engage in informal, civic, and social activities, such as volunteering and visiting family [21].

Social capital theory proposes that the more people connect with their community, the better their health and well-being; thus it follows that any reported decline in mental health after ceasing driving may be, at least in part, due to loss of social capital from the loss of opportunity to participate.

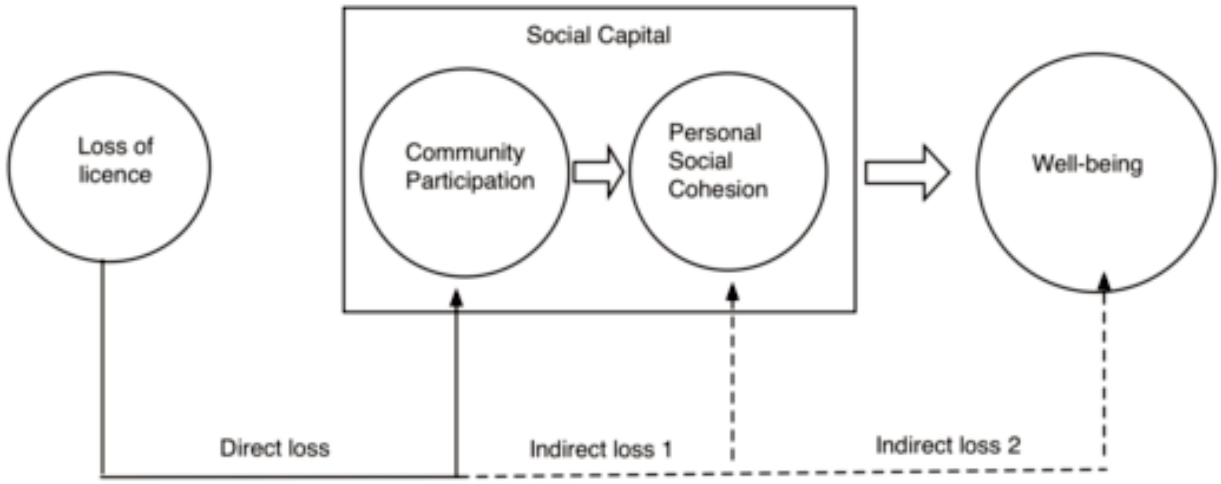

Figure 1: A proposed model describing the effects on loss of license, social capital, and well-being.

NEED FOR A STUDY INVESTIGATING THE RELATIONSHIP BETWEEN SOCIAL CAPITAL AND DRIVING IN OLDER PEOPLE

To produce evidence about the links between aging, driving, social capital, and well-being requires longitudinal study designs that track samples of older drivers over a number of years during which the driving status of some study participants changes.

Such studies would also enable the description of the "before and after" characteristics of older people who do and do not maintain meaningful engagement in social and civic life after stopping driving. Such information goes beyond the findings of evaluations of existing interventions by placing them in a theoretical framework.

This can: (i) permit prediction *a priori* which interventions are most likely to be effective and would, therefore, be suitable for trial or funding; (ii) identify key criteria for designing an efficacious intervention and for evaluating interventions; and (iii) provide a way of identifying those older people who may be at risk of poor health outcomes following ceasing driving.

We hypothesize that social capital will decline as older people restrict or stop driving and that, in the absence of targeted services for these older drivers, their health and well-being will consequently decline.

Because individuals vary in their personal circumstances, including where they live and the extent of their social and financial support, we further propose that loss of social capital and declines in well-being will be moderated by pre-existing social capital and access to acceptable alternatives to driving.

To ensure that any effects of driving status are appropriately estimated with respect to social capital and well-being, it is of course essential to collect data on a wide range of potentially confounding factors (i.e. socio-economic and demographic characteristics, prior health and well-being, neighborhood characteristics, and cultural background).

A longitudinal study of how driver status, social capital, and well-being change over time could help build predictive models of the types of older people who are at risk of declining social capital due to driving restrictions. Such additional information could help shape and improve policy and add needed new knowledge to existing programs aimed at ameliorating the negative health consequences commonly associated with an end to driving.

Furthermore, this type of study could identify the characteristics of those older people who remain socially connected despite a change in driving status. This knowledge would be useful in identifying naturally occurring (and, therefore, feasible and realistic) behaviors that policy and programs could seek to promote.

There have been studies reporting the effect of ceasing driving on mental health, life satisfaction, and well-being [22,23,24]. While these have touched on aspects of social capital, none has systematically investigated whether or how driving may be linked to different aspects of personal social capital among older adults.

Longitudinal studies, such as the one described above, are an essential next step in explicitly linking a change in driving status with consequent changes in social capital and well-being. This may have important practical implications for policies related to healthy aging at an individual and community level, and to the improvement of existing health and social services.

CONCLUSIONS

To continue to engage in meaningful and health-promoting activities, older people need to be able to access resources and activities in their community. While the

Internet offers some opportunities, older people can only fully participate in their communities if they can get to where the activities take place.

This paper proposes the use of a social capital model to conceptualize how driving a motor vehicle is important in engaging in social and civic activities and, consequently, a stepping stone to well-being, and how, therefore, steps are needed to provide other means of participation when people lose their driver's licenses.

A longitudinal study testing the hypothesis that social capital, driving, and well-being are linked may provide valuable information to health and social services when engaging with older drivers who are at risk of becoming socially isolated due to a change in driving status.

We also offer policymakers and health professionals a new model linking the concepts of social capital and occupation to driving to assist with tailoring effective interventions to address the negative consequences of ceasing driving.

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