

## Does Taking Part in Social Activities Prevent the Disablement Process? A discussion

Paper by: Nicolas Sirven & Florence Jusot Discussant: Audrey Kim, PhD student University of Toronto

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Context

- •Aging populations in Europe
- •Impact is in how healthily these people can age
  - •Limit / prevent disability

Social Capital measured by voluntary social participation
Particularly effective in improving health in seniors

#### Limited Literature

- •Lack of social participation = disability?
- Lack of cohort data



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Needs more clarity about gaps in the literature



### The Question

# What is the impact of previous social participation on current functional limitation?



Data

#### •Survey of Health, Ageing, and Retirement in Europe (SHARE)

- •3 waves + 1 retrospective wave (2004-2011)
- •Balanced, individual panel data
- •Cross-national
- •Health, socioeconomic status, social/family relationships

### •Sample

•Respondents 50+ years old (n > 80,000)



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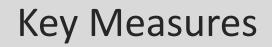
Great depth to the questionnaire, high n

•Sample

•Respondents 50+ years old (n > 80,000)

**??# non-respondents?** 

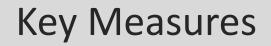




#### •# functional limitations in:

- •ADL (Activities of Daily Living) = bathing, dressing, toilet, etc.
- •IADL (Instrumental Activities of Daily Living) = laundry, transportation, shopping, etc.



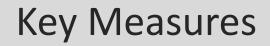


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- Great functional measures
- Inclusion of both can provide interesting insights
- Barthel Index?

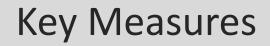




#### •Social Capital (binary)

- •Participation in social activities in last 12 months
- •Includes religious, political, community activities
- •Sports club participation is considered as separate variable





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- •Participation in social activities in last 12 months
- •Includes religious, political, community activities
- •Sports club participation is considered as separate variable
- Good idea to separate out sports club participation
- Binary nature of variable may miss out on a huge part of the story
- Consideration of separating out different types of participation?



### **Other Measures**

- •Multimorbidity: 2+ more chronic diseases
- •Fried index of frailty
- Income adequacy
- •Loss of partner in past 2 years
- •Caregiver status
- •Occupational status



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- Better explanation of certain variables
- Other considerations
  - Diagnosis of illness in past year
  - Smoking/alcohol



### Methods

• Poisson regression for panel data

$$y_{it} = \exp(Z_{it-1}\rho + X_{it}\beta + c_i) + u_{it}$$

- Built in dynamic structure via lagged values
  - Lagged ADL, IADL, social participation, sport participation

$$c_i = \Psi + \overline{X}_i \xi + \xi_0 y_{io} + \alpha_i$$

- Initial conditions problem via retrospective wave results
- Allow correlation between unobservable and explanatory



**Methods** 

- Appropriate use of poisson regression
- Dynamic structure is needed

#### **Unsure of:**

- Suspect some multi-collinearity between lagged ADL and IADL
- Retrospective wave to satisfy initial conditions?
- Endogeneity between social activities and ADL/IADL
- Woolridge paper



Dep var is N. of limitations :	IADL	ADL
Lagged covariates		
ADLt-1	0.031	0.110***
IADLt-1	0.113***	-0.076*
Social activities	-0.269***	-0.121
Sport club, etc.	0.071	0.017



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- No standard errors
- Would have liked to see comparison of models
- More consideration on why certain results may have occurred Missing out on a great story! Policy implications!



Contemporaneous covariates		
Multimorbidity	0.309***	0.536***
Frailty	0.380***	0.485***
Make-ends-meet	0.015	0.030
Without partner $\leq 2$ years	-0.148	-0.348
Social activities	-0.207**	-0.198
Sport club, etc.	0.000	-0.065
Caregiver	0.000	0.118
Occupational status		
At work	0.027	0.020
Not at work	ref.	ref.
7054		



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101		

• Explanation of controls completely missing from paper



#### Initial conditions Health problems in adult life

0.069 0.285\*\*\*

- How long ago were these issues? Nature of these issues?
- Binary value does not tell much



### Conclusion

- •Methods made sense and added to the literature
- •Results were interesting and consistent between the two scales

However,

- May benefit from conceptual framework for other variables
- Consider endogeneity and multi-collinearity
- Would have liked to see policy-relevant interpretations
- Could explore comparison with other models , scales

### Thank you

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