CCHE CCES
Canadian Centre for Health Economics
Centre canadien en économie de la santé

Does Taking Part in Social Activities Prevent the Disablement Process?

A discussion

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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

Context

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- **Limited Literature**
  - Lack of social participation = disability?
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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

??# non-respondents?

Key Measures

- **# functional limitations in:**
  - **ADL** (Activities of Daily Living) = bathing, dressing, toilet, etc.
  - **IADL** (Instrumental Activities of Daily Living) = laundry, transportation, shopping, etc.

Key Measures

- **# functional limitations in:**
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- Great functional measures
- Inclusion of both can provide interesting insights
- Barthel Index?

Key Measures

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  - Sports club participation is considered as separate variable

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- 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

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

  - 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

Results

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!

Results

Contemporaneous covariates		
Multimorbidity	0.309***	0.536***
Frailty	0.380***	0.485***
Make-ends-meet	0.015	0.030
Without partner ≤ 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.

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- Explanation of controls completely missing from paper

Results

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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