

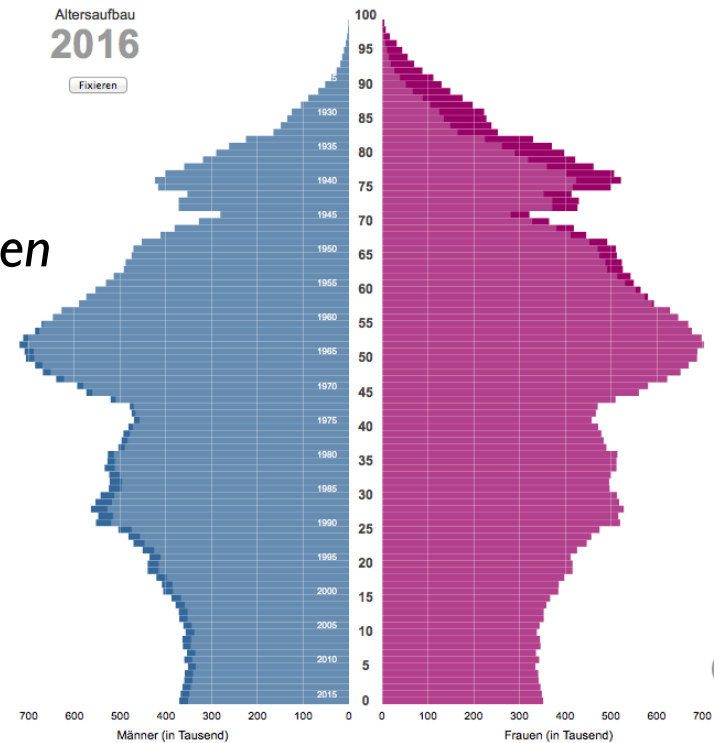
GENDER INEQUALITY IN SELF-REPORTED HEALTH AMONG THE ELDERLY IN CONTEMPORARY WELFARE COUNTRIES

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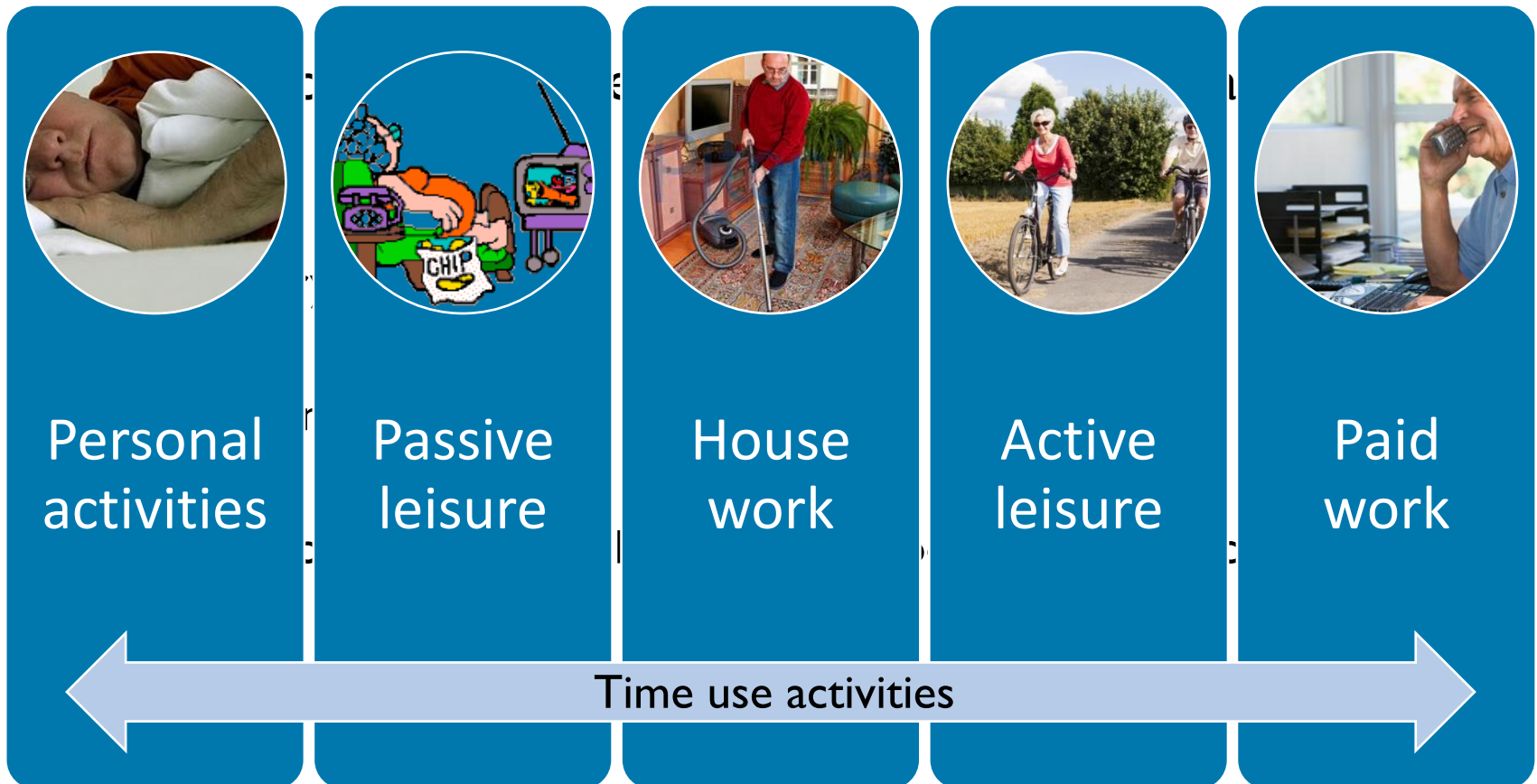
Ageing Health Equity Conference, Bremen
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- Gender-Health-Paradox
 - *Women live longer than men*
 - *Women report poorer health than men*
- Socio-economic Status (SES)
 - *Occupation*
 - *Income*
 - *Education*



⇒ **No consensus about the best indicator of socio-economic position to be used among the elderly**

- Complementary social indicators considered were social roles and activities.



Research aim and objectives

- We operationalised social roles as:
 - **Time use activities**
 - Household work, childcare, leisure, voluntary work and other activities
 - Explore social and economic determinants of health
 - Explain the gender and cross-national differences in health based on data from five welfare countries.

Method (Data)

- Data: Multinational Time-Use Survey (MTUS)/wave 5.3.
 - Data collection organised by the Centre for Time Use Research at the University of Oxford.
- Countries: Germany (2001), Italy (2002), Spain(2002), UK (2000) and USA (2003).
- Time use data: total time spent on 41 activities (primary activities).
- Diarist reports their activities throughout the 24 hours of the day/10 minute intervals.

Data (Variables)

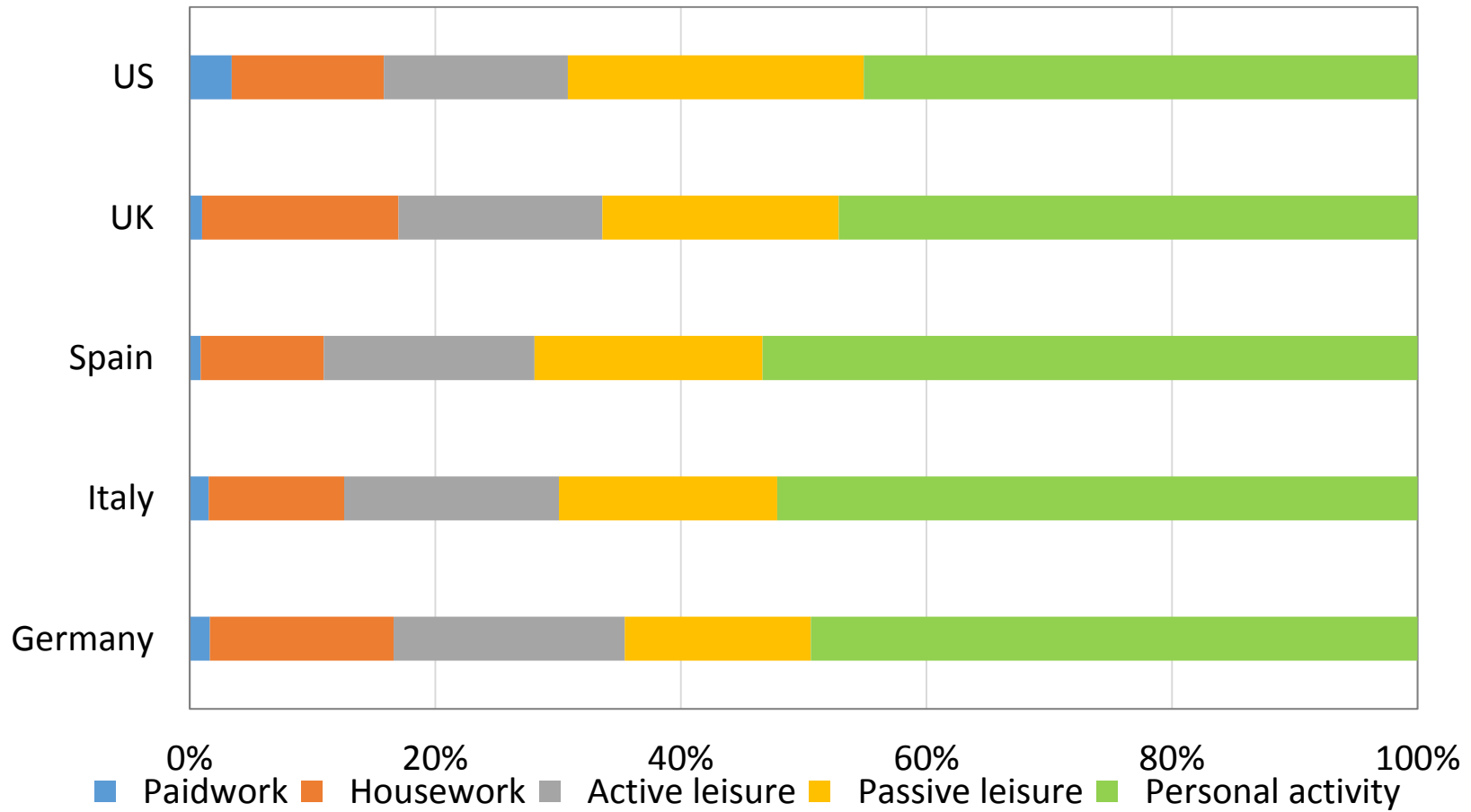
- Dependent variable: Self-reported health
 - Inclusive and accurate measure of health status
 - It is a better predictor of mortality among the elderly
- Independent variables
 - Time use variables: Paid work, housework, active leisure activities, passive leisure and personal activities.
- Control variables
 - Socio-economic position: Education & Wealth
 - Family characteristics: Household size

- Three separate analytical strategies
 - Mean time allocation to the various time allocation activities across all welfare countries.
 - Binary Logistic regression (0=good health, 1=poor health)
 - Blinder-Oaxaca decomposition method: Identify the relative contribution of the different socio-economic measures to total health inequality among the elderly
 - Endowment effect: group characteristics
 - Coefficient effect: group processes

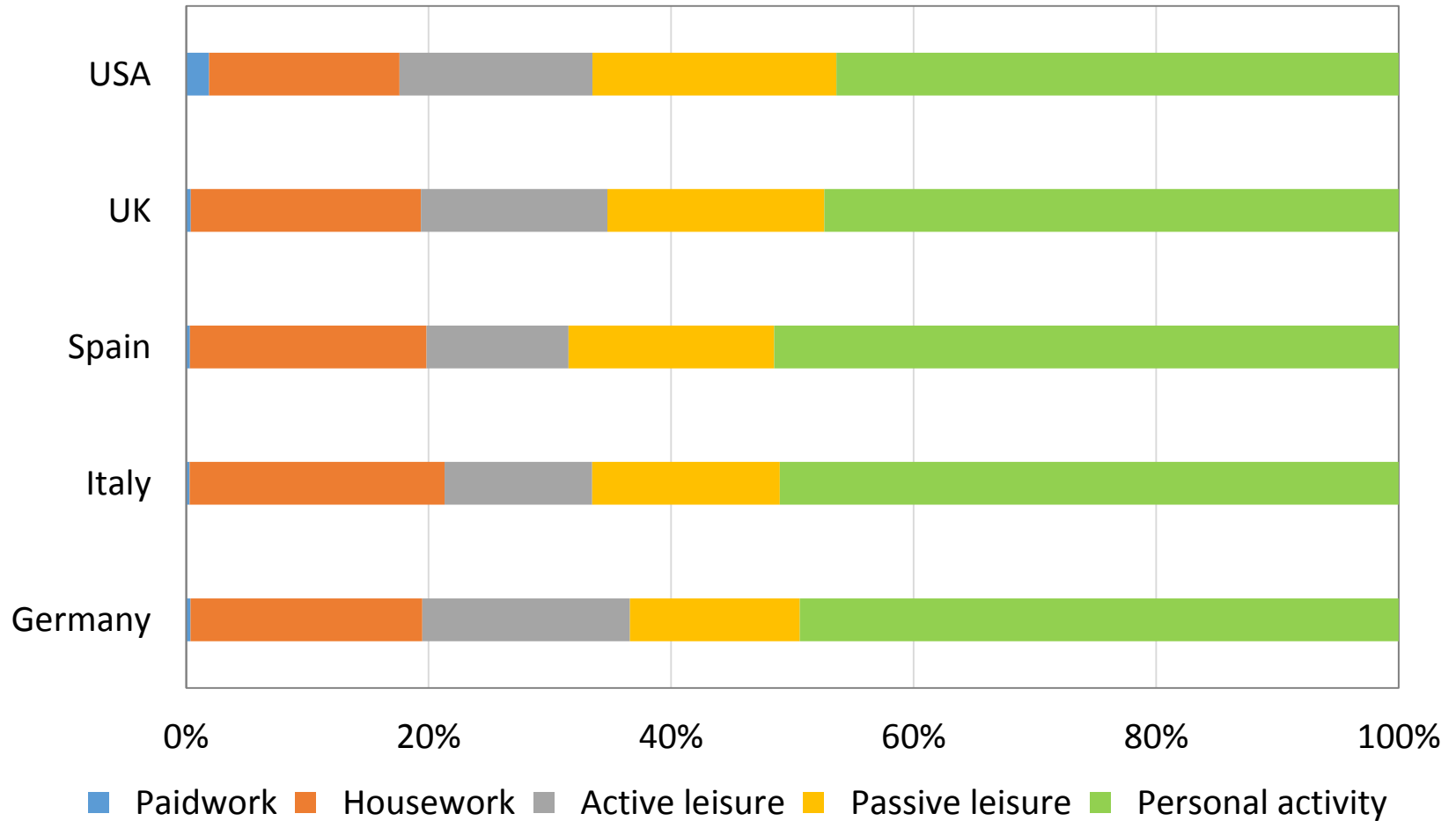
Sample Characteristics

SES	Men (13,223)	Women (18,192)
Education		
Incomplete Sec. or less	52.56%	60.71%
Secondary completed	27.64%	25.84%
Tertiary completed or above	19.80%	13.45%
Wealth		
Land tenure		
Renting	18.03%	22.86%
Owner occupier	81.97%	77.14%
Employment Status		
Not working for pay	89.82%	94.87%
Currently in paid employment	10.18%	5.13%

Results: Time Use (Men)



Results: Time Use (Women)



Multivariate Association between poor self-reported status and time use. Men & Women, 65+ years

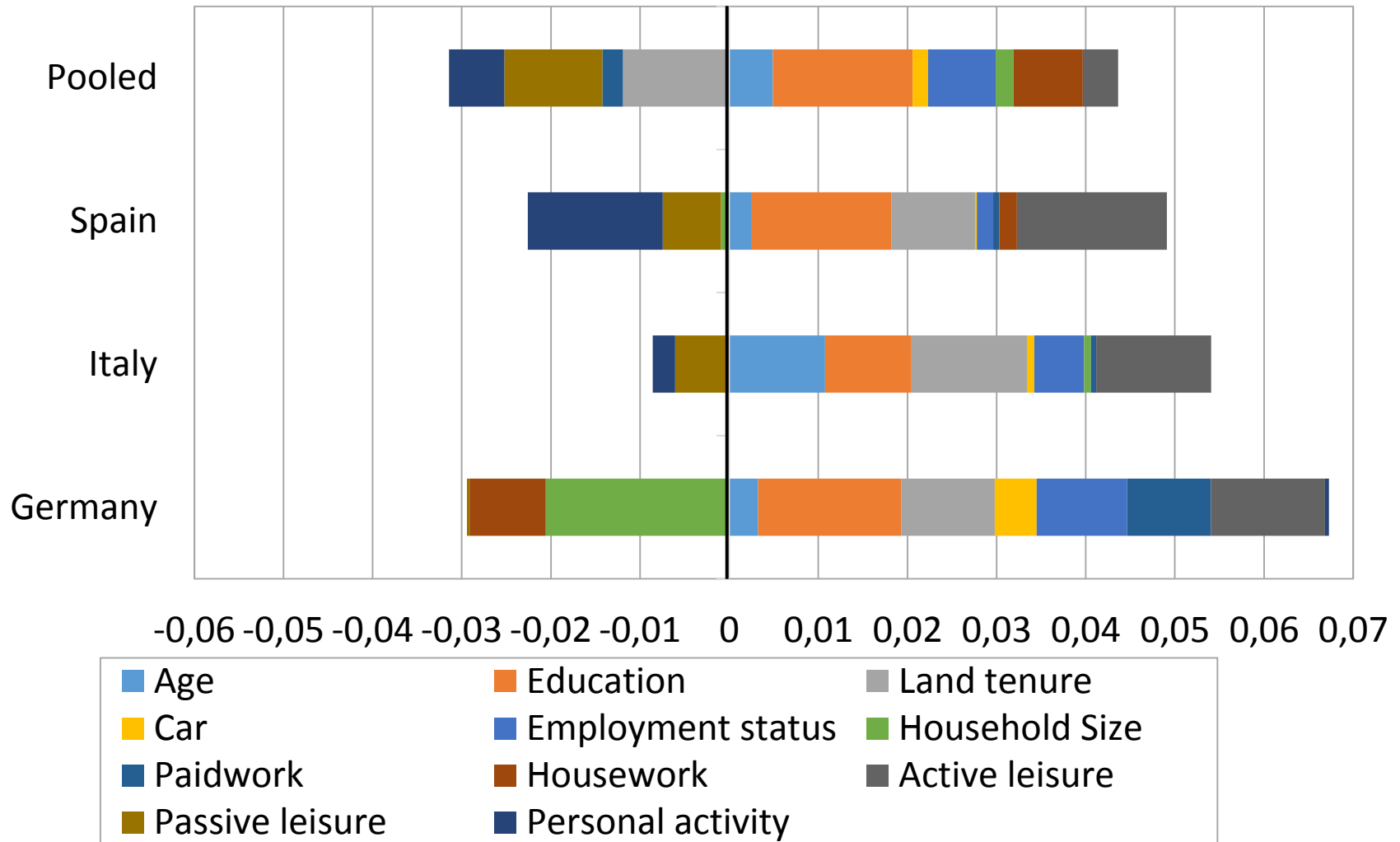
Time use (hours/day)	Men	Women
Paid work (ref. <1)		
≥1	0.86 (0.69 -1.08)	1.14 (0.86 -1.50)
House work (ref. <4)		
4-6	0.72 (0.65 - 0.80)	0.97 (0.89 - 1.05)
>6	0.64 (0.56 - 0.73)	0.94 (0.84 - 1.04)
Active leisure (ref. <2)		
2-4	0.89 (0.80 - 0.99)	0.84 (0.77 - 0.91)
>4	0.69 (0.61 - 0.77)	0.63 (0.57 - 0.70)
Passive leisure (ref. <3)		
3-5	1.15 (1.04 - 1.26)	1.16 (1.07 - 1.25)
>5	1.19 (1.06 - 1.32)	1.28 (1.15 - 1.42)
Personal activity (<10)		
10-12	1.21 (1.07 - 1.36)	1.33 (1.20 - 1.47)
>12	1.86(1.64 - 2.11)	2.22 (1.98 - 2.48)

Blinder Oaxaca decomposition

- Non-linear Decomposition of female excess in the probability of reporting poor health

Inequality contributions in terms of differences in group characteristics (by variables) & group processes	Germany		Italy		Spain		UK	USA
	Absolute (95% CI)	%	Absolute (95% CI)	%	Absolute (95% CI)	%	Absolute (95% CI)	Absolute (95% CI)
Female excess	0.140 (0.106 - 0.174)		0.096 (0.079 - 0.114)		0.089 (0.070 - 0.108)		-0.000 (-0.036 - 0.036)	-0.008 (-0.031 - 0.016)
Age	0.003 (0.001 - 0.006)	2.30%	0.011 (0.008 - 0.014)	11.10%	0.003 (0.001 - 0.004)	2.80%	0.003 (-0.001 - 0.007)	0.000 (-0.001 - 0.001)
Education	0.016 (0.005 - 0.028)	11.50%	0.010 (0.007 - 0.013)	10.10%	0.016 (0.012 - 0.019)	17.50%	0.002 (-0.004 - 0.009)	0.003 (-0.004 - 0.010)
Land tenure	0.010 (0.000 - 0.021)	7.50%	0.013 (0.009 - 0.017)	13.40%	0.009 (0.006 - 0.013)	10.50%	0.026 (0.003 - 0.049)	0.002 (-0.002 - 0.005)
Car	0.005 (0.001 - 0.009)	3.40%	0.001 (-0.001 - 0.002)	0.80%	0.000 (-0.001 - 0.001)	0.20%	0.003 (-0.001 - 0.008)	-
Employment status	0.010 (0.004 - 0.016)	7.20%	0.006 (0.002 - 0.009)	5.80%	0.002 (-0.000 - 0.004)	2.10%	0.006 (-0.002 - 0.013)	0.007 (-0.006 - 0.020)
Household Size	-0.021 (-0.031 - -0.010)	-14.70%	0.001 (-0.004 - 0.005)	0.80%	-0.001 (-0.005 - 0.003)	-1.00%	-0.024 (-0.042 - -0.007)	-0.001 (-0.003 - 0.001)
Paidwork	0.009 (0.001 - 0.017)	6.70%	0.001 (-0.006 - 0.007)	0.60%	0.001 (-0.003 - 0.004)	0.80%	0.003 (-0.002 - 0.008)	0.001 (-0.002 - 0.004)
Housework	-0.009 (-0.026 - 0.009)	-6.10%	-0.000 (-0.045 - 0.044)	-0.50%	0.002 (-0.040 - 0.044)	2.20%	-0.022 (-0.038 - 0.006)	-0.007 (-0.020 - 0.005)
Active leisure	0.013 (0.004 - 0.022)	9.10%	0.013 (-0.011 - 0.037)	13.40%	0.017 (-0.007 - 0.041)	18.80%	0.007 (-0.001 - 0.015)	-0.002 (-0.005 - 0.001)
Passive leisure	-0.000 (-0.005 - 0.004)	-0.20%	-0.006 (-0.016 - 0.005)	-5.80%	-0.007 (-0.014 - 0.001)	-7.30%	-0.007 (-0.013 - 0.001)	-0.002 (-0.007 - 0.003)
Personal activity	0.000 (-0.001 - 0.002)	0.30%	-0.003 (-0.007 - 0.002)	-2.60%	-0.015 (-0.023 - -0.007)	-17.00%	0.000 (-0.001 - 0.001)	0.002 (-0.002 - 0.006)
Contribution to that part of inequality due differences in group characteristics (Endowment effects)	0.038 (0.020 - 0.056)	27.00%	0.045 (0.035 - 0.056)	47.20%	0.026 (0.016 - 0.037)	29.70%	-0.003 (-0.019 - 0.013)	0.003 (-0.007 - 0.014)
Contribution to that part of inequality due differences in group processes (Coefficient effects)	0.102 (0.073 - 0.131)	73.00%	0.051 (0.037 - 0.065)	52.80%	0.063 (0.047 - 0.079)	70.30%	0.003 (-0.029 - 0.035)	-0.011 (-0.032 - 0.010)

Inequality contributions in terms of differences in groups characteristics: Blinder Oaxaca decomposition



- Unequal distribution of labour exist, even after retirement
 - elderly women allocate more time to housework activities
 - elderly men devote more time to active leisure, passive leisure and paid work.
- Positive associations with health:
 - paid work(**only among men**)
 - housework(**mostly negative among women in the working pop.**)
 - active leisure activities(e.g. walk and active sports)
- Negative associations with health
 - passive leisure(e.g. watching TV and listening to radio)
 - personal activities(e.g. sleep)

Discussion/Conclusion (cont)

- We found significant gender differences in health in Germany, Italy and Spain but not in the **UK** and the **US**.
- Decomposition of health gap:
 - active leisure
 - educational attainment
- This study demonstrated the need to consider social roles (**time use activities**) in the analysis of gender differences in health among the elderly

Thank you for your kind attention!

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Typology of activities

Broad categories of activity	Name of variable (harmonised)	Description
1. Paid work	AV01	Paid work
	AV02	Paid work at home
	AV03	Second job
	AV05	Travel to/ from work
2. Housework	AV06	Cooking/Washing up
	AV07	Housework
	AV08	Odd jobs
	AV09	Gardening, pets
	AV10	Shopping
	AV12	Domestic travel
3. Active leisure	AV11	Child care
	AV23	Civic duties
	AV19	Active sport
	AV21	Walks
	AV17	Leisure travel
	AV18	Excursions
	AV22	Religious activities
	AV24	Cinema, theatre
	AV26	Social club
	AV27	Pub
	AV28	Restaurant
	AV29	Visiting friends
	AV04	School/classes
	AV20	Passive/observer sports
	AV33	Study
	AV34	Reading books
	AV35	Reading papers and magazines
	AV37	Conversation
	AV38	Entertaining friends
	AV39	Knitting sewing etc.
	AV40	Other hobbies
4. Passive leisure	AV30	Listening to radio
	AV31	Television, video
	AV32	Listening to tapes etc.
	AV36	Relaxing
5. Personal activity	AV13	Dressing/toilet
	AV14	Personal Services
	AV15	Meals, snacks
	AV16	Sleep

Multivariate Association between poor self-reported status and time use. Men & Women, 65+ years (Paidwork)



	Germany	Italy	Spain	UK	USA
Men					
Paid work hours/day					
Less than 1 (ref)					
1or more	0.77 (0.42 - 1.41)	0.72 (0.45 - 1.17)	0.66 (0.42 - 1.03)*	0.70 (0.33 - 1.48)	0.63 (0.40 - 1.00)**
Women					
Paid work hours/day					
Less than 1 (ref)					
1or more	0.49 (0.22 - 1.05)*	1.48 (0.63 - 3.48)	0.95(0.48 - 1.87)	0.86 (0.33 - 2.20)	1.20 (0.76 - 1.89)

Multivariate Association between poor self-reported status and time use. Men & Women, 65+ years (Housework)



	Germany	Italy	Spain	UK	USA
Men					
House work hours/day					
Less than 4 (ref)					
4 to 6	0.92 (0.70 - 1.22)	0.72 (0.58 - 0.90)***	0.72 (0.60 - 0.88)***	0.62 (0.46 - 0.83)***	0.65 (0.49 - 0.85)***
>6	0.73 (0.50 - 1.07)	0.98 (0.71 - 1.34)	0.58 (0.44 - 0.76)***	0.46 (0.31 - 0.68)***	0.50 (0.36 - 0.69)***
Women					
House work hours/day					
Less than 4 (ref)					
4 to 6	0.85 (0.66 - 1.08)	1.02 (0.81 - 1.28)	0.69(0.59 - 0.81)***	0.85 (0.67 - 1.10)	0.69 (0.57 - 0.84)***
>6	0.93 (0.67 - 1.28)	0.75 (0.57 - 0.98)**	0.57(0.46 - 0.69)***	0.70 (0.51 - 0.96)**	0.62 (0.49 - 0.79)***

Multivariate Association between poor self-reported status and time use.
Men & Women, 65+ years
(Active leisure)

	Germany	Italy	Spain	UK	USA
Men					
Active leisure hours/day					
Less than 2 (ref)					
2 to 4	1.07 (0.76 - 1.50)	1.07 (0.84 - 1.36)	0.74 (0.61 - 0.89)***	0.59 (0.43 - 0.81)***	0.78 (0.62 - 0.99)**
>4	0.64 (0.43 - 0.94)**	0.77 (0.59 - 1.01)*	0.61(0.50 - 0.76)***	0.45 (0.31 - 0.65)***	0.47 (0.36 - 0.61)***
Women					
Active leisure hours/day					
Less than 2 (ref)					
2 to 4	0.83 (0.62 - 1.11)	0.95 (0.78 - 1.16)	0.63(0.54 - 0.73)***	0.97 (0.74 - 1.26)	0.64 (0.53 - 0.77)***
>4	0.42 (0.30 - 0.60)***	0.74 0.57 - 0.96)**	0.40(0.33 - 0.49)***	0.86 (0.62 - 1.19)	0.59 (0.48 - 0.73)***

Multivariate Association between poor self-reported status and time use. Men & Women, 65+ years
(Passive leisure)



	Germany	Italy	Spain	UK	USA
Men					
Passive leisure hours/day					
Less than 3 (ref)					
3 to 5	1.27 (0.98 - 1.65)*	1.12 (0.93 - 1.35)	1.09 (0.92 - 1.28)	1.26 (0.93 - 1.71)	1.13 (0.85 - 1.50)
>5	1.35 (0.96 - 1.90)*	1.35 (1.07 - 1.70)**	1.13 (0.93 - 1.37)	1.16 (0.82 - 1.64)	1.24 (0.92 - 1.68)
Women					
Less than 3 (ref)					
3 to 5	1.13 (0.90 - 1.42)	1.22 (1.02 - 1.46)**	0.99(0.86 - 1.14)	1.31 (1.02 - 1.70)**	1.22 (1.00 - 1.49)*
>5	1.07 (0.76 - 1.52)	1.39 (1.06 - 1.82)**	1.06(0.87 - 1.28)	2.26 (1.65 - 3.08)***	1.45 (1.17 - 1.80)***

Multivariate Association between poor self-reported status and time use. Men & Women, 65+ years (Personal Activities)

	Germany	Italy	Spain	UK	USA
Men					
Personal activity hours/day					
Less than 10 (ref)					
10 to 12	1.22 (0.84 - 1.78)	0.94 (0.70 - 1.27)	1.23 (0.91 - 1.65)	0.80 (0.60 - 1.09)	1.04 (0.83 - 1.31)
>12	1.51 (1.01 - 2.25)**	1.19 (0.87 - 1.62)	1.91 (1.42 - 2.58)***	0.99 (0.69 - 1.41)	1.68 (1.30 - 2.16)***
Women					
Less than 10 (ref)					
10 to 12	0.64 (0.46 - 0.90)**	1.00 (0.76 - 1.32)	1.07(0.85 - 1.35)	0.91 (0.69 - 1.19)	1.17 (0.97 - 1.41)
>12	0.85 (0.58 - 1.24)	1.33 (0.98 - 1.81)*	1.37(1.06 - 1.76)**	1.44 (1.04 - 1.99)**	2.05 (1.66 - 2.53)***