The individual and contextual determinants of paid and unpaid post-retirement work in Germany

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1. Background and research questions

The demographic ageing process in Germany shapes the discussion on the relation between work and retirement and its consequences regarding economic growth and the welfare for future generations.[1] The baby boomers, born between the 1950s and 1960s, are heading toward retirement. In the following decade, the vast majority of this group will withdraw from work leaving a large gap on the labour markets.[2] Thus, the increasing number of transitions from work to retirement will be a societal phenomenon with tremendous dimension.

However, the nature of retirement has changed to some extent in the recent past. The traditional way of working life with a clear frontier between work and retirement becomes less important. Instead, other forms of working careers are gaining importance.[3] Beside the frequent occurrence of preretirement (typically associated with substantial episodes of unemployment), a rising trend of working past 65 years (the normal retirement age in most developed countries) can be observed.[4] In recent years, a growing body of literature deals with post-retirement work – also discussed as "bridge employment" – in Germany.[5] Looking at this phenomenon today and understanding the underlying mechanisms might give academics

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1   E.g. Leibritz, W.; Roeger, W. (2008): The effects of aging on labor markets and economic growth. In: Hamm, I.; Seitz, H.; Werding, M. (Eds.): Demographic change in Germany: The economic and fiscal consequences. Berlin/New York: Springer: 35–63.

2   E.g. Micheel, F.; Roloff, J.; Wickenheiser, I. (2010): The impact of socioeconomic characteristics on older employees' willingness to continue working in retirement age. In: Comparative Population Studies – Zeitschrift für Bevölkerungswissenschaft 35,4: 869–902.

3   Dietz, M.; Walwei, U. (2011): Germany – No country for old workers? In: Zeitschrift für ArbeitsmarktForschung 44,4: 363–376.

4   Deller, J.; Pundt, L. (2014): Flexible transitions from work to retirement in Germany. In: Alcover, C.-M. et al. (Eds.): Bridge employment. A research handbook. Routledge Studies in Human Resource Development. Hoboken: Taylor and Francis: 167–192.

5   E.g. Hofäcker, D.; Naumann, E. (2015): The emerging trend of work beyond retirement age in Germany. In: Zeitschrift für Gerontologie und Geriatrie,48: 473–479; Fasbender, U. et al. (2015): The meaning of work for post-retirement employment decisions. In: Work, Aging and Retirement, online first [doi:10.1093/workar/wav015]; Hokema, A.; Scherger, S. (2015): Working pensioners in Germany and the UK: Quantitative and qualitative evidence on gender, marital status, and the reasons for working. In: Journal of Population Ageing, online first [doi:10.1007/s12062-015-9131-1].

and politicians valuable hints for designing the future of work. This applies to lengthening working life particularly at the end of the working career, for example, by part-time or occasional employment after official retirement.

Furthermore, unpaid work like volunteering in retirement is an attractive option for retirees compensating the loss of the worker role. Volunteering as a subset of informal productive activities is discussed as a promising potential for tackling the economic consequences of demographic change.[6]

In the light of the changing nature of retirement with a substantial amount of activities in older adulthood (in particular, bridge employment and volunteer work), this study investigates the prediction of paid *and* unpaid post-retirement work in Germany.

2. Conceptual framework

In order to explain this complex phenomenon related to post-retirement engagement, image theory is used as a theoretical framework.[7] Different types of individual images describe how people make important decisions with major impacts on their lives. The trajectory image is "the preferred course of action or future outcome, goals and events that one thinks is appropriate and wants to achieve" (Griffin & Hesketh, 2008, p. 102).[8] In this study, we use the intention of workers to work in retirement as the trajectory image. According to Griffin & Hesketh (2008), the actual engagement in retirement (post-retirement work) is conceptualised as the retrospectively preferred goal chosen by retirees. Due to the usage of cross-sectional data, the retiree group serves as a "control group" for cross validation purposes examining similarities and differences in predicting paid and unpaid post-retirement work.

The self-image consists of personal beliefs, values or morals that guide the individual through the decision making process. In the current study, generativity and job related self-efficacy are two components of this concept. Within projected image, future events and states are anticipated by the individual – in this case the anticipated satisfaction with financial re-

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6   E.g. Bass, S. A. (2011): From retirement to "productive aging" and back to work again. In: Carr, D. C.; Komp, K. (Eds.): Gerontology in the era of the third age. Implications and next steps. New York: Springer: 169–188; Warburton, J.; Paynter, J.; Petriwskyj, A. (2007): Volunteering as a productive aging activity: Incentives and barriers to volunteering by Australian seniors. In: Journal of Applied Gerontology 26,4: 333–354; Hank, K. (2011): Societal determinants of productive aging: A multilevel analysis across 11 European countries. In: European Sociological Review 27,4: 526–541.

7   Mitchell, T. R.; Rediker, K. J.; Beach, L. R. (1986): Image theory and its implications for policy and and strategic decision making. In: Sims, H. P.; Gioia, D. A. (Eds.): The thinking organization. Dynamics of organizational social cognition. San Francisco: Jossey-Bass: 293–316; Beach, L. R.; Mitchell, T. R. (1987): Image theory: Principles, goals, and plans in decision making. In: Acta Psychologica 66,3: 201–220 .

8   Griffin, B.; Hesketh, B. (2008): Post-retirement work: The individual determinants of paid and volunteer work. In: Journal of Occupational and Organizational Psychology 81,1: 101–121.

sources in retirement of current workers. The action image includes plans to achieve the chosen goal considering retirement planning activities related to paid and unpaid engagement in retirement.

3. Data source and method

For empirical analyses, data were taken from the representative survey "Transitions and Old Age Potentials – TOP" with 5,002 people aged 55 to 70 years. Both intentions to work in retirement in a sample of older workers (N=1,068) and actual work in retirement in a sample of pensioners (N=1,442) were examined. In line with Griffin & Hesketh (2008), the outcome variable – trajectory image – consists of four types of work (no work as reference group, paid work, unpaid work, paid and unpaid work). Independent variables were categorised by theoretical criteria as: self-image (image of current pre-retirement work), projected image (financial concerns in retirement), action image (retirement planning), and demographics (gender, education, income). Multinomial regression analyses were applied for both workers and retirees.

4. Results

In both samples, education plays a crucial role related to paid and unpaid work vs. no work indicating a positive education gradient (workers sample: OR = 0.40, 95%-CI: 0.24-0.68, ref. cat. = high level of education; retirees sample: OR = 0.57, 95%-CI: 0.38-0.84, respectively). A similar trend can be observed with respect to health (workers sample: OR = 0.55, 95%-CI: 0.31-0.97, ref. cat. = good/very good health; retirees sample: OR = 0.45, 95%-CI: 0.26-0.80, respectively). Compared to female retirees men are more prone to paid (and unpaid) work vs. no work (paid vs. no work: OR = 0.41, 95%-CI: 0.26-0.65, ref. cat. = men, paid and unpaid work: OR = 0.50, 95%-CI: 0.34-0.73, respectively). The concept of self-image shows statistically significant results only in the sample of retirees (generativity: unpaid work vs. no work; job related self-efficacy: paid work vs. no work). The action image (consisting plans toward paid and unpaid activities in retirement) seems to play a major role in predicting paid and unpaid post-retirement work. Planning activities and intentions/actual behaviour show positive associations at a statistically significant level (see, Tables 1 & 2).

5. Discussion

The current study showed that there are more differences than similarities in prediction post-retirement work when differentiating by the stage of retirement process (pre-retirement vs.

retirement). The underlying assumption that the intention to work in retirement is a strong predictor for subsequent behaviour (see, Griffin & Hesketh, 2008, p. 102) is called into question. Future research should carve out the mechanisms and relevant factors behind the intention-doing gap related to post-retirement work.

Interestingly, financial concerns do not play a major role in explaining paid post-retirement work. According to Hofäcker & Naumann (2015), the reasons for post-retirement work possibly differ by socio economic status (SES): individuals with lower SES work after retirement to avoid poverty in old age, whereas individuals with high SES are rather driven by personal needs. These results emphasise the fact that the social structure of older adulthood is characterised by a high variability.

Multivariate analyses reveal that planning of paid and unpaid activities in retirement ("action image") is a reliable predictor regarding post-retirement work (both intentions and actual behaviour). In conclusion, encouraging older adults in proactive retirement planning seems a promising starting point in dealing with the demographic ageing process in Germany.

Table 1: Multinomial regression results, dependent variable: paid and unpaid work (workers, N=1,068)

Variable	Unpaid work vs. no work			Paid work vs. no work			Unpaid and paid work vs. no work		
	OR	95%-CI	p-value	OR	95%-CI	p-value	OR	95%-CI	p-value
Gender (ref. men)	1.24	0.79-1.96	0.350	1.07	0.58-2.00	0.822	0.89	0.56-1.39	0.597
Education (ref. high)	0.60	0.36-1.01	0.053	0.44	0.22-0.88	0.020	0.40	0.24-0.68	0.001
Income (ref. Q5): Q1	1.42	0.67-3.02	0.361	0.80	0.29-2.19	0.657	2.51	1.16-5.36	0.017
Q2	2.10	0.94-4.67	0.069	0.99	0.34-2.86	0.988	3.81	1.70-8.51	0.001
Q3	1.11	0.54-2.28	0.778	0.55	0.21-1.48	0.238	1.48	0.72-3.08	0.290
Q4	1.55	0.74-3.23	0.243	1.07	0.42-2.75	0.888	1.52	0.72-3.24	0.275
Health (ref. good/very good)	0.80	0.46-1.38	0.420	0.45	0.19-1.10	0.079	0.55	0.31-0.97	0.039
Expected retirement age (ref. 70+): 60-64	0.64	0.05-8.10	0.728	0.13	0.01-1.65	0.115	1.61	0.09-30.10	0.748
65-69	0.67	0.05-8.30	0.751	0.28	0.02-3.30	0.309	2.95	0.16-53.98	0.466
Generativity	1.38	0.98-1.95	0.069	0.81	0.51-1.27	0.353	1.23	0.87-1.74	0.234
Self-efficacy	0.99	0.65-1.49	0.950	1.53	0.84-2.76	0.0163	0.94	0.63-1.43	0.786
Changes at work	1.14	0.79-1.63	0.484	0.99	0.60-1.65	0.976	1.16	0.80-1.67	0.431
Opportunity to post-retirement work (ref. yes)	1.69	1.08-2.64	0.023	0.80	0.43-1.48	0.467	0.68	0.43-1.07	0.092
Expected financial situation in retirement (ref. good/very good)	0.61	0.36-1.01	0.056	1.02	0.51-2.03	0.961	0.87	0.53-1.44	0.582
Retirement planning (paid work)	1.47	0.97-2.21	0.067	3.21	1.94-5.32	0.000	2.15	1.43-3.22	0.000
Retirement planning (unpaid work) (ref. plan)	0.20	0.11-0.37	0.000	1.13	0.48-2.66	0.774	0.25	0.14-0.44	0.000

Notes: "ref.": reference category, "OR": odds ratio, "CI": confidence interval; –2LL: 2,236.474; χ^2 (df): 247.564 (48); p<0.001; Pseudo R^2 (Nagelkerke): 0.229.
Source: Transitions and Old Age Potentials – TOP 2013, unweightet data, own calculations.

Table 2: Multinomial regression results, dependent variable: paid and unpaid work (retirees, N=1,442)

Variable	Unpaid work vs. no work			Paid work vs. no work			Unpaid and paid work vs. no work		
	OR	95%-CI	p-value	OR	95%-CI	p-value	OR	95%-CI	p-value
Gender (ref. men)	0.87	0.66-1.14	0.308	0.41	0.26-0.65	0.000	0.50	0.34-0.73	0.000
Education (ref. high)	0.71	0.53-0.95	0.020	0.74	0.50-1.18	0.204	0.57	0.38-0.84	0.005
Income (ref. Q5): Q1	1.13	0.71-1.80	0.600	1.04	0.47-2.30	0.931	1.44	0.76-2.73	0.262
Q2	1.14	0.75-1.73	0.541	1.33	0.66-2.69	0.432	1.11	0.61-2.01	0.743
Q3	0.97	0.64-1.48	0.901	1.44	0.72-2.89	0.302	1.27	0.72-2.24	0.400
Q4	1.20	0.79-1.81	0.395	1.61	0.81-3.22	0.177	1.44	0.82-2.52	0.200
Health (ref. good/very good)	0.58	0.40-0.83	0.003	0.60	0.32-1.10	0.097	0.45	0.26-0.80	0.006
Actual retirement age (ref. 65+): <60	1.23	0.81-1.88	0.330	0.51	0.24-1.07	0.075	0.88	0.50-1.55	0.657
60-64	1.25	0.91-1.72	0.176	0.70	0.44-1.13	0.144	0.72	0.48-1.09	0.123
Generativity	1.50	1.18-1.90	0.001	0.74	0.51-1.07	0.110	1.20	0.86-1.69	0.285
Self-efficacy	1.12	0.84-1.49	0.430	2.68	1.56-4.60	0.000	1.44	0.95-2.20	0.089
Changes at work	1.15	0.91-1.46	0.235	0.81	0.57-1.16	0.250	1.09	0.78-1.54	0.602
Opportunity to post-retirement work (ref. yes)	1.11	0.85-1.47	0.439	0.67	0.43-1.03	0.069	0.68	0.47-0.98	0.038
Financial satisfaction (ref. good/very good)	1.07	0.70-1.65	0.745	2.03	1.09-3.80	0.027	0.91	0.49-1.68	0.762
Retirement planning (paid work)	0.78	0.62-0.97	0.026	2.61	1.93-3.53	0.000	1.99	1.53-2.58	0.000
Retirement planning (unpaid work) (ref. plan)	0.21	0.15-0.28	0.000	1.31	0.76-2.25	0.333	0.33	0.22-0.49	0.000

Notes: "ref.": reference category, "OR": odds ratio, "CI": confidence interval; –2LL: 3,099.004; χ^2 (df): 431.999 (48); p<0.001; Pseudo R^2 (Nagelkerke): 0.278.
Source: Transitions and Old Age Potentials – TOP 2013, unweightet data, own calculations.