EXTENDED ABSTRACT [WORK IN PROCESS]

RETIREMENT AND LEISURE – A LONGITUDINAL STUDY USING SWEDISH DATA

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INTRODUCTION

The country in focus in this study is Sweden which has one of oldest populations in the Western countries (Kinsella & Philips, 2005) and among healthiest individuals in old age. In almost all Western countries the increase in life expectancy, along with increased active life expectancy, has resulted in a significant increase in the average number of active years expected to live in retirement (Kohli et al. 1991; Gendell, 1998; Laditka & Wolf, 1998; Berleen, 2003; Kinsella & He, 2008). Not only have older individuals' life become longer and healthier during the 20th century but, in addition, individuals have become more active in leisure activities during their latter part of life (Parker; 1983; Agahi & Parker, 2005). The increased engagement in leisure activities in old age has mostly been explained by the positive outcomes in psychological and physical health (Iwasaki & Smale, 1998; Silverstein & Parker, 2002; Menec, 2003).

Old age retirement has become an increasingly complex process (Ekerdt et al., 2000) and retirement is not a straightforward transition from labor force but many factors influence the withdrawal. What can motivate the employee to retire may be the activities he or she imagines to engage in on retirement (Havighust, 1961; Hendricks & Cutler, 1990; Henkens, 1999; Fly et al. 1981; Bosse & Ekerdt; 1981; Parker, 1983; Myers, 1984; Beehr & Nielson, 1995; Gustman & Steinmeier, 2002). Engaging in leisure activities are in general important for individuals and thus may also be a large part of life after withdrawal from the labor force (Hersch, 1990). The withdrawal from labor force generates more free time, and older workers most likely need to find some kind of substitute for paid work to engage in when retired (Mobily et al. 1991; Henkens, 1999; Rosenkoetter et al. 2001). The prospected retiree may imagine what kind of activities to pursue following an exit from labor force (Palmore 1971; Watts, 1987). The motivation to retire may be weaker if the employee has difficulties in finding some kind of activity to fill the additional free time (Henkens, 1999). Research has shown contradictory results; some studies have found that retirement increases involvement in leisure activities (Iwasaki & Smale, 1998; Jake et al. 2006) and some studies did not find any changes in (social and physical) activities with retirement (Rosenkotter et al., 2001). Other findings on postretirement expectations of leisure activities indicate that retirees do not follow the imagined activities before retirement (Parker, 1983; Beehr & Nielson, 1995). A possible explanation is that the activities imagined might not be suitable activities in retirement (Iwasaki & Smale, 1998; Jake et al. 2006). Not all individuals have the possibility to experience retirement leisure due to individual or structural constraints (Atchley, 1971). But also, if retirees should have activities to select from then they need to be exposed to them and become involved in them before retirement (Rosenkoetter et al. 2001). Findings from numerous research on leisure in retirement emphasize that lifestyle developed in middle age is largely maintained (Atchley, 1971, Bosse & Ekerdt, 1981, Richardson & Kilty, 1991).

This study aims to examine whether engagement in various leisure activities before retirement influence the engagement in activities after retirement. The hypothesis here is: *The level of engagement in leisure activities before retirement associates with the level of engagement in leisure activities after retirement.* To answer the hypothesis I explore several different activity domains measured before and after retirement transition. The activity domains include; social-cultural activities, nature activities, social relations, sports, hobbies, opinion activities, and rhythmic activities.

Some studies have brought in leisure activities in relation to the retirement transition (Beehr & Nielson, 1995; Iwasaki & Samle, 1998; Rosenkoetter et al., 2001; Strain et al., 2002; Lee, 2005; Fast & Frederick, 1998; Jake et al. 2006). Although the majority of literature on labor force exits focuses on labor market structures and attachments; economic and family characteristics; health; or attitudes towards paid work and retirement (Henkens, 1999; Beehr et al. 2000 Szinovacz et al., 2001; Pienta & Hayward, 2002; Ho & Raymo, 2009). Taking an approach where leisure activities are in focus in the retirement transition is important for a deeper understanding of how preretirement life influences retirement transition (Atchely, 1976). It is important for governments, institutions, and other organizations to have as profound information of the retirement process as possible to be able to

allocate resources. Especially since the old age pension system today is flexible to the extent that it allows for individual planning. It is also important for governments to know how retirees spend their time to be able to support their activities (Kraus, 1984). Engaging in leisure activities can be seen from a dichotomous view point; individuals either are inactive in leisure activities and thus isolated from the society, or they are active and thus part of the social world (Kaplan, 1975). When individuals retire they do not necessary have disabilities or other dysfunctions that unable them to work or be active in other ways. Instead healthy and energetic retirees may contribute to the labor force by participating in projects or part-time jobs, or engage in social activities. By participating in such activities, retirees can continue to use their knowledge, feel valuable, increase life quality and contribute to the society. Also, since engaging in activities in old age has a positive effect on health problems (Silverstein & Parker, 2002), being active in old age decreases the costs for elderly medical care, social services and long-term care

The data used here is the longitudinal survey data Swedish Level of Living Survey (SLLS). The original sample in SLLS is a national representation of the Swedish population (www.sofi.su.se). The unique characteristic of the present study lay in its opportunity to explore retirement in relation to activities using Swedish longitudinal survey data where both men and women are proportionally included. This study contributes to the field of research by exploring what happens with the engagement in leisure activities over time by comparing reported engagement in leisure activities the years before retirement and years after retirement. Further, Sweden is an exceptional country to study due to its historically high proportion of men and women's participation in the labor market and high proportion of men and women receiving pension benefits. The Swedish pension system has since its establishment in 1913 covered both men and women. What is also unique for this study is that the data covers a period with two different pensions systems.

DATA AND METHODS

The data used in this study is a sample drawn from three waves from the longitudinal Swedish Level of Living Survey (SLLS); 1981, 1991 and 2000[1] (www.sofi.su.se). The selected sample contains information on 699 retired individuals, whereof 337 are men and 362 are women. The individuals are born between 1917 and 1940 and retired during 1980 to 2000. Before 1976 the mandatory retirement age in Sweden was 67 but in 1976 it was lowered to 65. After the pension reform in 1999, the mandatory retirement age was replaced by a flexible retirement age from age of 61 with no upper age limit (Palme & Svensson, 2004).

In this study there is totally 16 items on activities. The activities are as follow; fishing, hunting, gardening, going to cinema, going to theatre, eating out at restaurants, dancing, reading books, having hobbies, exercising and sports, music (e.g. playing instrument or singing in a choir), study circle, visiting relatives and friends, be visited by relatives and friends, being politically active and being active in church activities. These activities are of various characteristics and cover several different activity domains. Some of the activities are more specified and some are more of an 'umbrella concept' for various activities. Respondents were supposed to answer at what frequency they engaged in each activity by answering *no, never* (coded here as 0) *yes, sometimes* (coded here as 1) or *yes, often* (coded here as 2). Factor analysis was used to identify structures of activities to be able to create indexes on which both the outcome variables and main independent variables are based on. On the basis of the results from the factor analysis, I found evidence for six underlying factors, or so-called activity domains (see Table 1).

[1] I intend to add to the analysis wave 2010 when it will be first available during 2013.

TABLE 1. FACTOR STRUCTURE OF ACTIVITIES – BASED ON THE ROTATED FACTOR MATRIX

Factor 1 Social-cultural activities	Factor 2 Fishing & hunting	Factor 3 Social relationships	Factor 4 Opinion activities	Factor 5 Rhythmic activities	Factor 6 Sports & other activities
Cinema	Fishing	Visiting friends/relatives	Study circle	Music	Gardening
Theatre	Hunting	Friends/relatives visiting	Church activity	Dancing	Hobbies
Restaurants			Political activity		Sports
Reading books					

Using the activities within each activity domain I summarized the activities and created six index variables ranging from 0 to 8, 0 to 6 and 0 to 4 depending on how many activities were summarized in each activity domain. Thereafter the index variables were categorized into three categories; *never, sometimes* and *often*.

I use multinomial logistic regression and estimate six models for each activity domain. In all models, health, demographic and labor characteristics of the individuals are included.

PRELIMINARY RESULTS FROM THE MULITINOMINAL LOGISTIC REGRESSION

In Table 7 below the relative risk ratios (rrr) for the effects of each activity domain engaged in before retirement on the engagement in the same activity domains when retired are presented (control variables excluded from presentation). When interpreting the relative risk ratios (rrr) for the effect of each activity domain before retirement on the activity domains after retirement, the baseline category is at all times the middle category *sometimes,* i.e. individuals sometimes engage in the activity domain when retired.

TABEL 2. EFFECTS OF ACTIVITY DOMAINS BEFORE RETIREMENT ON ACTIVITY DOMAINS AFTER RETIREMENT. MULTINOMINAL LOGISTIC REGRESSION, RELATIVE RISK RATIOS. BASELINE CATEGORY *SOMETIMES.* N=699.

		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
		Social-cultural activities after retirement		Fishing & hunting after retirement		Social relationships after retirement		Sports & other activities after retirement		Rhythmic activities after retirement		Sports & other activities after retirement	
		Never	**Often**	**Never**	**Often**	**Never**	**Often**	**Never**	**Often**	**Never**	**Often**	**Never**	**Often**
Factor 1 Social-cultural activities before retirement	Never	6,77 ***	1,06										
	Sometimes [1]	1	1										
	Often	0,43 +	2,98 ***										
Factor 2 Fishing & hunting before retirement	Never			2,05 **	0,29 **								
	Sometimes [1]			1	1								
	Often			0,36 **	4,71 **								
Factor 3 Social relationships before retirement	Never					12,20 ***	1,17						
	Sometimes [1]					1	1						
	Often					0,77	1,92 ***						
Factor 4 Opinion activities before retirement	Never							1,22	0,83				
	Sometimes [1]							1	1				
	Often							1,52	1,21				
Factor 5 Rhythmic activities before retirement	Never									5,81 ***	3,25 *		
	Sometimes [1]									1	1,00		
	Often									0,75	5,78 *		
Factor 6 Sports & other activities before retirement	Never											5,23 ***	0,79
	Sometimes [1]											1	1
	Often											1,24	1,72 **

Significance levels + = <0.1;* = <0.05; ** = <0.01; *** = <0.001

[1] Reference category.
Models controlled for: gender, birth year, age of retirement, children, last employment before retirement, place of residence, civil status, psychological well-being and movability

The preliminary results from the first multinomial logistics model presented in Table 2 above indicate that for individuals to engage in social-cultural activities after retirement they must engage often in the activities before retirement (rrr=2.98) otherwise they are more likely to never engage or to decrease the engagement after retirement (rrr=6.77 and rrr=0.43). In Model 2 *Fishing and hunting after retirement* is the outcome. Is in the previous model, the results indicate that fishing and hunting are not activities individuals engage in when retired if they are not exposed to them before retirement. The results show that individuals who never engage in those activities more likely to never to engage in fishing and hunting after retirement (rrr=2.05) and also it is those individuals who are much less likely to initiate engagement in them often when retired (rrr=0.29). Instead, individuals who engage sometimes in fishing and hunting before retirement increase their engagement after retirement. Similar results are found for individuals who often engage in fishing and hunting before retirement; these individuals are less likely to end their engagement when retired (rrr=0.36). Instead they continue to have high engagement after retirement (rrr=4.71).

In Model 3 I test whether *Social relationships before retirement* can help to explain *Social relationships after retirement*. The results indicate that they do. Individuals who never meet with relatives and friends before retirement are more likely to continue the same pattern after retirement than for individuals who meet relatives and friends occasionally to decrease their engagement (rrr=12.20). The effect of *often* engagement in social relationships before retirement was not significant in this model. A reason for that is probably that only a few individuals actually decreased their social relationships after retirement that much. However, individuals who often engaged in social relationships before retirement are more likely to continue the same pattern after retirement (rrr=1.92). The effects of *Opinion activities before retirement* was not significant in any of the categories and the lack of significant results suggest that *Opinion activities before retirement* may not be important for engaging in *Opinion activities after retirement*.

Continuing to Model 5, the results from Model 5 are somewhat contradictory. On one hand individuals who never engage in rhythmic activities before retirement continue the same pattern of engagement after retirement (rrr=5.81), but on the other hand those individuals are more likely to increase their engagement compared to individuals who sometimes engaged in rhythmic activities before retirement (rrr=3.25). This suggest that this activity domain before is not the predominant factor that influence rhythmic activities after retirement. Regarding the effect of engagement in *Sports and other activities* (hobbies and gardening) before retirement on engagement in *Sports and other activities after retirements*, presented in Model 6, the results indicate that individuals who never engaged in sports and other activities before retirement do not initiate engagement in these activities when retired (rrr=5.23). Similarly it can be concluded that individuals who frequently engaged in sports and other activities continued to engage frequently after retirement (rrr=1.72).

Summarizing, the patterns in this study indicate that engaging often in activities before retirement in almost all activity domains is significantly associated with continuing the same pattern of engagement when retired. The same pattern is to be found for never engaging in any of the activity domains. The preliminary results follow previous research on maintaining activity levels from middle age into old age (e.g. Atchley, 1971; Rosenkoetter et al. 2001). Constrains in engaging in activities before retirement can be numerous, although the preliminary results in this study suggest that an important constrain on activities at retirement is whether the individuals were engaged in leisure activities before retirement.

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