Does working in retirement improve subjective wellbeing? Lessons from Russia

Introduction

Retirement is a twentieth century institution, which even in advanced industrial economies was generalized only after the Second World War (Hannah 1986; Sargent et al. 2013; Scherger 2015). But before the end of the century, sociologists were already analyzing the progressive deinstitutionalization of retirement (Han and Moen 1999). Retirement is threatened by a combination of forces such as ageing populations and economic liberalization. Meanwhile, with the destandarization of the life course (Henretta 2018) norms surrounding ageing and work are becoming unsettled, and post-retirement employment is rising in countries such as the US, UK, Germany, Sweden and Russia (Scherger 2015; Platts and Glaser 2017). Foreshadowed by British sociologist Peter Townsend's problematization of the institution of retirement as an unwarranted exclusion of older individuals from the labor market that condemned them to "structural dependency" and relative poverty (Townsend 1981), the sociological literature has shifted from a focus on individuals' social adaptation to retirement conceived as a standard part of the life course (e.g., Moen, Dempster-McClain and Williams 1992), to concerns arising from anticipated longer working lives such as age discrimination in employment (e.g., Roscigno et al. 2007). Amid multiple sociological questions raised by these developments, we focus on the implications of the "21st century phenomenon" of working in retirement (Brown et al. 2010) for subjective wellbeing, using longitudinal quantitative and qualitative data from Russia where over 50 per cent of pensioners have worked after receiving their pension, with over a fifth employed in 2014 (Rosstat 2014). Understanding these influences is crucial; subjective wellbeing (hereafter SWB) is an increasingly important social

indicator (Yang 2008), and is often framed as a guide to policy changes regarding pensions, work and retirement (e.g. Horner 2014; Nikolova and Graham 2014). Recognizing that experiences of retirement and post-retirement employment are socially stratified, we pay particular attention to class and gender differences.

Whilst there is academic consensus on the health and wellbeing benefits of regular employment compared to unemployment in prime adult years (e.g. Clarke and Oswald 1994; DiTella et al 2001; Garcy and Vågerö 2013; Steele, French and Bartley 2013), the SWB implications of post-retirement employment decisions are less clear. Some studies report that retirement positively influences wellbeing and mental health (e.g. Charles 2004; Mein et al. 2003; Westerlund et al. 2010), while others conclude that voluntary retirement has a negligible influence on SWB (Bonsang and Klein 2012; Blanchflower and Oswald 2004). Research on the SWB impact of post-retirement employment — which we define as paid work while receiving an age-related pension — is relatively sparse. Earlier findings suggested SWB benefits (e.g., Maimaris, Hogan and Lock 2010), but recent studies have contradictory results, some reporting positive results (Lux and Scherger 2017), while others find that any SWB boost from post-retirement employment disappears once selection factors such as baseline socioeconomic characteristics and health are accounted for (Di Gessa et al. 2017). Despite potential differences in men and women's experiences of employment and retirement, gender has not been a prominent theme in research on post-retirement employment.

Using panel survey and longitudinal qualitative data from Russia, we employ mixed methods to analyze the impact of post-retirement employment on SWB. For the quantitative component, we use data on 4,847 individuals aged 45-70 years from 12 waves of the Russian Longitudinal Monitoring Survey (2003-2015) to estimate individual fixed-effects models for life satisfaction, according to pension receipt and work transitions, adjusting for other time varying factors. The qualitative data was gathered in five waves between 1999 and 2010.

Focusing on a subset of 38 respondents who reached pension entitlement during the research, we examine the experience and meanings of retirement and post-retirement employment to explore the mechanisms behind our quantitative findings. Using stratification and gender theories, we hypothesized that post-retirement employment would impact the SWB of individuals with high occupational status and men more positively. But we found that although the positive effect of post-retirement employment (compared to retirement) was greater in the highest occupational groups, it did not differ significantly between the highest and lowest occupational groups. Moreover, we found that post-retirement employment increased life satisfaction scores compared with retirement in both women and men even after adjustment for income changes. We explain and theorize these surprising findings with our qualitative analysis.

Russia is an interesting context in which to examine issues of work and retirement first because of the prevalence of post-retirement employment and unusual policies which, until recently, have not penalized working while drawing a pension (Gerber and Radl 2014). Until December 2015, when the law was amended, citizens were able to draw their full pension while working without financial penalty. The substantial population of working pensioners provides an excellent opportunity to analyze the impact of working in "retirement" on well-being. Second, Russia is a revealing context in which to conduct a gendered analysis of retirement and post-retirement employment. Russian women's employment has been historically and comparatively high with full-time rather than part-time female employment the norm, yet the division of domestic and caring labor remains deeply gendered with women performing the lion's share (Author et al 2018). This means that "retirement" is potentially as salient for women as for men in terms of employment loss, but still highly gendered because of differing domestic experiences and expectations. This combination exposes in an extreme form gender distinctions that pertain in many contexts. Finally, the Russian case is topical since, as has

occurred in countries such as the UK and France, the Russian government is currently attempting to raise pension ages. Some researchers have suggested that the SWB-impact of post-retirement employment is relevant in predicting the wellbeing implications of delayed pension entitlement (e.g. Maimaris, Hogan and Lock 2010). We show why such comparisons may be misleading.

We begin by examining relevant empirical studies and theory, paying particular attention to the way in which occupational class and gender moderate the impact of post-retirement employment on SWB. We then propose our hypotheses. Study 1 tests these by estimating individual fixed-effects models for life satisfaction using RLMS panel data. Study 2 uses longitudinal qualitative data to explore the mechanisms behind our quantitative findings. Our Discussion highlights the theoretical contributions facilitated by a sociological mixed methods approach.

Retirement, post-retirement employment and SWB

The deinstitutionalization of retirement has several dimensions such as government efforts to raise pension ages, pension fund crises and increased awareness of age discrimination. We focus on the growing trend of post-retirement employment that has significant implications for individual subjective wellbeing. Viewed through the lens of Townsend's theory (1981; 2006), the growth of post-retirement employment potentially offers enhanced wellbeing for pensioners previously excluded from the labor market. But it can also be viewed critically as an aspect of "neoliberalising old age" which primarily benefits the advantaged (Macnicol 2015). Below we consider the literature on post-retirement employment and SWB, highlighting how experiences of retirement are socially stratified.

SWB is an important concept in sociological analyses of ageing (George 2010), with questions regarding retirement and late-life working center stage. Despite significant research

on the impact of retirement and post-retirement employment on SWB, however, a number of questions remain. Earlier studies are plagued by problems of endogeneity and cannot exclude that SWB influences selection into retirement (Charles 2004; Neuman 2008; Horner 2014). Among studies that use methods such as instrumental variables or fixed effects models to address this issue, the results are inconsistent. Charles (2004), using three pooled surveys of US men and exploiting changes in social security and retirement regulations to create an instrumental variable, found that the direct effect of retirement on SWB was positive. Correspondingly, Westerlund et al. (2010) found that retirement reduced fatigue and depressive symptoms, while Mein et al. (2003) found it improved mental health particularly among those of higher status. Other studies, however, find that voluntary retirement has a negligible impact on SWB (Bonsang and Klein 2012; Blanchflower and Oswald 2004).

By contrast, it is well established that employment boosts SWB, while unemployment seriously depresses it (e.g. Clark and Oswald 1994; Clark et al. 2001; DiTella et al. 2001; Garcy & Vågerö 2013; Hetschko et al. 2014; Ravallion and Lokshin 2001). This reflects not only reduced income but also the loss of "identity utility" during unemployment; that is, discomfort from deviating from the social norm of employment (Hetschko et al. 2014). Notably, however, Hetschko and colleagues found that past retirement age, the SWB of formerly unemployed improved as they were no longer violating social norms by not working.

Research on the impact of post-retirement employment on SWB is more scant. Older studies have limitations. For example, all but three of the studies included in Maimaris, Hogan and Lock's meta-study (2010) were cross sectional, while two of the longitudinal studies focused on post-retirement volunteering rather than paid employment. Meanwhile, Kim and Feldman's widely-cited study (2000), which found post-retirement employment improved wellbeing, focused on the socially select category of university professors. The most recent studies have contradictory results. Using panel data from the UK and Germany, Lux and

Scherger found post-retirement employment positively impacted SWB even in the lowest occupational groups (2017), while other researchers found that positive impacts disappeared once selection factors such as baseline socioeconomic characteristics and health were accounted for (Di Gessa et al. 2017). Such studies also highlight the importance of health, marital status and socio-economic status to SWB in retirement.

Occupational status, post-retirement employment and SWB

Experiences of retirement are known to be socially stratified (e.g., Katz and Calasanti 2015; Phillipson 2015), and likewise the drivers of post-retirement work differ across social groups (Dingemans, Henkens and van Solinge 2017; Radl 2013; Scherger et al. 2012). Those with higher incomes and occupational status are more likely to be "pulled" into post-retirement employment by well-remunerated and interesting work, while those with lower post-retirement income face being "pushed" into work by financial need (Gerber and Radl 2014). Evidence suggests that more advantaged individuals have greater opportunities to work post retirement (Platts and Glaser 2017; Macnicol 2015; Dingemans, Henkens and van Solinge 2017), while involuntary employment past pension age is associated with lower income and socioeconomic status (Scherger et al 2012).

These drivers have implications for SWB, which can be captured either through a focus on occupational class at baseline or measures of financial compulsion to work post-retirement. Using the former strategy, research using panel data from the UK and Germany found mainly positive effects on SWB for post-retirement employment and no significant differences between those working in lower-class jobs and all others (Lux and Scherger 2017). By contrast, Di Gessa and colleagues found that individuals working beyond state pension age because of financial constraint had lower quality of life than those who retired at the expected age, while respondents working beyond pension age by choice reported significantly higher quality of life

European countries, found no well-being premium for involuntary late-life work (2014), although older individuals working part-time or full-time by choice had higher wellbeing than their retired counterparts (p.25). Some researchers have argued that choice rather than employment status is the key influence on the SWB of older individuals (Herzog, House and Morgan 1991). Certainly, involuntary early retirement has a negative impact on SWB (Bender 2012; Bonsang and Klein 2012), which Bender compelling quantifies noting that in his ordered probit model it would take an increase of more than \$110,000 (\$73,000) of pension income to wipe out the negative effect of being forced or partially forced to retire (p.430). Qualitative studies which ask about preferences also find that the notion of a duty to work past retirement is perceived negatively, as is involuntary retirement, while choice is valued (Vickerstaff 2007). Occupational stratification is thus likely to impact post-retirement work experiences through two mechanisms – job quality, and the degree of financial compulsion to work which will be correlated with occupational status.

Gendered age, identity, retirement and subjective wellbeing

Research on the SWB impact of post-retirement employment has not focused on gender differences. We consider gender to be potentially important because of the centrality of identity processes to sociological research on SWB in retirement (e.g. Moen et al. 1992). Identity is inevitably gendered (West and Zimmerman 1987), while employment is an important source of social identity which may be lost in retirement (Kim and Moen 2001). We argue that debates regarding identity in retirement or post-retirement employment need to be viewed through a gendered lens.

According to gender theory, men and women are constrained to "do gender" in order to assert membership of the appropriate sex category, their behavior at constant risk of "gender"

assessment" by others who hold them "accountable" (West and Zimmerman 1987: 136). Doing gender is therefore "unavoidable" (p. 137); achieving "competence" as a member of society is "hostage to its production" (p.126). Individuals are held accountable to prevailing gender schemas within their societies. These may vary cross-culturally (Author et al. 2018), and also within societies through the intersection of gender with other differences such as age, ethnicity and sexuality.

Earlier work on retirement used "role theory" as opposed to identity, and suggested that that loss of the role of employee in retirement could lead to psychological distress (Kim and Moen 2001). But research in same tradition also implied that a reduction of "role strain" after retirement could enhance SWB (Vanderwater et al. 1997). Contemporary gender theory eschews the notion of social "roles" (see Connell 1987: 47-54), but the concerns of role theory can be integrated into a gendered framework. Gender research suggests that a key means through which men are expected to "do gender" is through breadwinning, a finding pertaining not only to Russia but a wide range of societies (Author et al 2014; Thébaud 2010). Employment can also be important to women's identity, but, even when they are high earners, women experience pressure to "do gender" through housework and care (Hook 2017; Ridgeway 2011). Employment may therefore differ in salience to men and women's gender identities.

The gender schemas to which individuals are held accountable may change with age (Calasanti 2003). For example, Jennifer Utrata showed how Russian women were expected to "do gendered age," with women over 45 prescribed self-sacrificial grandmotherhood while younger women enjoyed "youth privilege" (2011). Despite such variation, however, expectations that women will "do gender" through housework and caring seem fairly constant. Gendered prescriptions for older men are less clear. Little evidence suggests men face

expectations of intensified domestic labor on retirement. It is unclear whether a retirement identity protects men from perceived breadwinning obligations post-retirement.

The gendered age schemas to which men and women are held accountable are likely to be an important influence on SWB. In addition to the "role" theories discussed above, Thoits' evidence (1983; 2011) regarding the protective function of multiple identities is relevant. She argues that the purpose and meaning obtained through social identities such as parent and worker can "guard against anxiety and existential despair" (2011, 148). She links this to the somewhat distinct theory of "mattering" to others (Rosenberg and McCullough 1981) – the idea that an individual is the object of another person's attention, is important to that person and is depended on for specific needs. Thoits' theory and predictions regarding the negative impact of post-retirement role loss (e.g. Kim and Moen 2001) suggest that retirement will negatively impact men's SWB since their gender identity is closely bound up with employment and breadwinning. Russian evidence seems to support this. For example, Michelle Parsons' anthropological analysis of Russia's mortality crisis, which entailed a dramatic fall in male life expectancy (Leon et al. 2007), focused on men feeling (un)needed. She argued that "men's sense of neededness centered on being able to adequately provide" (2014:11), while women, regardless of their income, were "always" needed within the family (pp. 11; 116-8; 172-3). Other researchers have made similar observations, emphasizing the wellbeing risk associated with men's marginality within the household (Author et al 2004).

By contrast, Thoits' theory (1983; 2011) would suggest that the gendered age schema prescribing continued caring and household labor for older women might have a positive impact on their SWB. In doing gendered age appropriately retired Russian women might be expected to gain a sense of purpose and meaning, as well, potentially, of "mattering," all of which should be positive in terms of SWB. Given employed women's notorious "second shift" (Hochschild 1989), known in Russia as their "dual burden" (Lapidus 1978), the role strain

perspective (Vanderwater et al. 1997) would suggest that retirement should boost women's SWB by eliminating work-family conflict. There are thus reasons to expect women's SWB should benefit more than men's from transitioning to retirement rather than post-retirement employment.

Another strand of literature, developed by Anderson and colleagues (2012; 2015), demonstrates the importance to SWB of social status in face-to-face groups (what they refer to as socio-metric status as distinct from socio-economic status), with higher social status predicting higher SWB. According to Anderson et al.'s review of the literature (2015), the dimensions of social status include respect and admiration (e.g. Blau 1964); the receipt of voluntary deference (e.g. Goldhamer and Shils 1939) and perceived instrumental social value (Blau 1964; Goldhamer and Shils 1939; Leary et al. 2014). Gender status beliefs (Ridgeway 2011) endow men with a status premium, but within the household such status may depend on their successful performance of masculinity in the form of breadwinning. Meanwhile, whether women's domestic "neededness" commands respect is unclear. Townsend argued that in retirement women's household labor created a "system of interdependence, occupation, mutual respect and loyalty" (1981: 13), though later literature has emphasized the invisibility of women's domestic contribution (e.g. Author et al. 2013). Men have higher status in Russia's labor market (Gerber and Mayorova 2006), so the arena in which women can expect to find greater respect is unclear.

Hypotheses

As shown above, the impact of post-retirement employment on SWB remains unclear, as does the influence of occupational class and gender on this relationship. We derive the following hypotheses from the literature.

Despite mixed findings regarding the SWB impact of retirement versus post-retirement employment, given the robust positive relationship between employment and SWB pre-retirement we propose:

Hypothesis 1: Individuals transitioning to post-retirement employment will experience greater SWB improvements than those transitioning to retirement, independent of income changes.

We expect occupational status to moderate the impact of post-retirement employment on SWB. Occupational status is closely connected with choice, with those in higher-status professions more likely to be "pulled" into post-retirement employment by interesting work, and those in lower-status professions more likely to be pushed into lower-quality jobs by financial need. We therefore propose:

Hypothesis 2: The benefits of post-retirement employment (relative to retirement) will be greater for those with higher occupational status.

Adding gender to this picture foregrounds the identity issues involved in postretirement employment decisions. For men the question is whether the benefit of increased
leisure in retirement outweighs the potential challenge to masculine identity involved in
withdrawing from employment and, potentially, losing the status of family breadwinner. Does
a "retirement identity" protect men from breadwinning expectations, or does breadwinning
remain a salient dimension of masculinity? And, if the importance of breadwinning wanes, how
do men retain their status and demonstrate their "neededness" within the household? By
contrast, retired women are certainly "needed" for domestic and caring labor, and this may

protect their wellbeing (Thoits 1983; 2011). Role strain reduction in retirement may also boost women's SWB. Whether women are more likely to secure respect in the household or workplace is unclear. Questions remain, but overall it seems men are more likely to benefit from continued employment, and women from retirement. We therefore propose:

Hypothesis 3: The benefits of post-retirement employment (relative to retirement) will be greater for men than women.

Correspondingly, we hypothesize that breadwinning, as a central dimension of masculine identity, will be more important for men. Therefore, although we anticipate that individual income will impact the SWB of men and women, we expect it to be more salient for men. We therefore propose:

Hypothesis 4: Changes in individual income will have a greater impact on men's SWB than on women's SWB.

Setting

Russia is a revealing research setting, but contextualization is required to facilitate comparisons. State socialist countries followed the capitalist world in institutionalizing retirement (Townsend 1981) with the Soviet pension system created in the 1950s and 60s celebrated as a triumph of socialism (Smith 2015). At age 60 for men or 55 for women those who had worked for 25 years were entitled to a "labor pension" of full benefits, amounting to 50-85% of average recent salary. In addition, early pensions, allowing retirement at age 50 or less, were offered for work deemed hazardous or requiring residence in harsh climatic

conditions. Those not qualifying for a labor pension were entitled to a "social pension" providing significantly reduced benefits.

For comparison, Russia's retirement ages should be viewed in the context of life expectancy and morbidity trends. Life expectancy in Soviet Russia lagged behind Western European countries, largely related to high rates of cardiovascular disease (Shkolnikov et al. 2004). In the post-Soviet years, mortality, especially of working-age Russian men, increased dramatically, associated with excessive alcohol use (Leon et al. 2007; Zaridze et al. 2014). Mortality decreased after 2006 with the introduction of restrictions on vodka sales (Shkolnikov et al. 2013), and has improved thereafter. Nevertheless, life expectancy is still one of the lowest in Europe – in 2016 66.5 for men, 77.1 for women (Rosstat 2017a: 84) – and rates of non-fatal and disabling chronic disease, particularly heart disease, are much higher than in Western countries (Townsend et al. 2015). This may result in an increased care burden and rates of retirement due to ill health. Therefore, although the pensioners in our samples may appear young by the standards of Western Europe and the US, this difference is attenuated when viewed in the context of life expectancy and morbidity in Russia.

Although in the 1990s increasing post-pension employment in Russia was related to hardship, the average pension rose by an estimated three times in real terms (11 times in nominal terms) between 2001 and 2014 (Lyashok, Nazarov and Oreshkin 2016). Between 2002-2007 the average pension was close to the subsistence minimum, but since 2008 has overtaken it, reaching 160% of the subsistence minimum in 2017 (Rosstat 2018). A greater proportion of employees and children are poor than non-working pensioners (Rosstat 2017b). Moreover, differentiation of pensions is modest compared with wage inequality (Solov'ev 2016). Absent financial penalty, however, incentives for post-retirement employment remained strong until 2015 when pension indexation was restricted to non-working pensioners. This

change does not impact our findings as our qualitative data runs until 2010 and our quantitative

to 2015.

The cultural significance of work also requires contextualization. Our pensioner

respondents lived most of their lives in the Soviet Union in which work was glorified and the

"labor collective" – workplace – was the center of social life through which the state provided

social and leisure facilities from kindergartens to vacations (Author 1999). Given that

independent organizations were outlawed in the Soviet era, the third sector was virtually non-

existent until 1991. Thus, work and household were the foci of Soviet social life, and largely

remained so for our respondents. In our qualitative data the only widely-mentioned sphere of

activity outside employment and the household was the dacha – an (often very modest) country

house and garden to which a significant proportion of respondents had access.

Methodology: Study One

Data Source

We used individual-level longitudinal data from the Russian Longitudinal Monitoring Survey

(RLMS), a household panel study which started in the early 1990s. Using multi-stage

probability sampling, at the start of the second wave of the study in 1994 approximately 4,000

households were selected and interviewed, and within each household all willing adults (aged

16+) completed questionnaires collecting detailed information on socio-demographics,

employment and income, and health and wellbeing. Interviews were conducted on an almost

annual basis; in this study we use data from waves 12-24 (2003-2015), to correspond

approximately to the period covered by the qualitative interviews. Design and sampling details

are available on the RLMS website (http://www.cpc.unc.edu/projects/rlms-hse).

We restricted the sample to those aged 45-70 years (or those becoming 45 during waves 12-24), the age group when retirement is most likely to occur, as well as to those with relevant data on retirement, work and wellbeing from at least two waves. We also selected those "at risk" of becoming working pensioners, i.e. those who at baseline wave were in paid work and reported not receiving a pension. This resulted in a sample of 2,414 men and 2,433 women, with the average participant contribution of 5.8 observations.

Variables

The dependent variable was life satisfaction, a commonly used measure of SWB in mid and later life (Kim and Moen 2002; Pinquart and Schindler 2007), which is highly correlated with other measures of happiness and recent changes in life circumstances (Kahneman and Krueger 2006). Life satisfaction was measured with the question "To what extent are you satisfied with your life in general at the present time?", with responses on a 5 point scale: fully satisfied, rather satisfied, both yes and no, less than satisfied, and not at all satisfied (response scale reversed so that higher SWB had a higher score).

Our main independent variable was self-reported transitions in pension receipt and paid work status. Every wave respondents were asked their current activity status and were classed as working if they responded yes to "currently working," "on paid leave" or "on unpaid leave," no otherwise. Respondents were classed as retired if they reported receiving a pension for old age, retirement, or for years of service. Those receiving pensions for disability, loss of provider or social security were not classified as retired. Because at baseline, all participants were working with no pension, the time-varying indicator was divided into four categories: not working, but receiving a pension; working, but receiving, working, with no pension

(i.e. no state change) and not working and not receiving a pension (unemployed or economically inactive).

We included other time-varying covariates likely to influence associations between work/pension status and SWB. We adjusted for age at the time of interview in 3 groups: 45-49 years, 50-54 years and 55-70 years, as there is an observed negative relationship between age and SWB in post-Soviet countries (Steptoe, Deaton and Stone 2015). We included dummy indicators for interview year to adjust for potential contextual factors jointly affecting work, pension and wellbeing. As health and family transitions are also strongly associated with SWB (Dolan, Peasgood and White 2008), we also included a dummy indicator of whether individuals were married or cohabiting and a time-varying indicator for self-rated health (on a five point scale) (Bauer, Cords, Sellung, & Sousa-Poza, 2015; Bonsang & Klein, 2012). To capture economic changes we included a time-varying measure of individual income, constructed by within-wave quintiles of self-reported total individual income within the last 30 days. We thought it important to control for household income in addition to individual income because income pooling at the household level may diminish the impact of individual income changes, and household-level income will capture, to some extent, activities of other household members. We constructed within-wave quintiles of total household income (equivalized according to household structure and size), where household income was self-reported by the household respondent. To test Hypothesis 2 we included interactions between pension/work status and individual self-reported occupational class at baseline. Occupational class was measured using the International Standard Classification of Occupations (ISCO) 2008, and condensed into three categories: high (levels 1-3 - managers, professional and technicians, medium (ISCO 2008 levels 4-7, clerical support workers, services and sales workers, skilled agricultural, forestry and fishery workers, craft and related trades workers), and low (ISCO

2008 levels 8-9 and 0: plant, machine operators and assemblers, elementary occupations, armed forces occupations).

Analytical Approach

To test our four hypotheses about the relationship between retirement, work and SWB we used individual fixed-effect models (Wooldridge, 2015). This assesses within-individual change, thereby controlling for all observed and unobserved factors that do not vary within individual observations over time. This is an important consideration since work and retirement decisions and SWB may be influenced by unobserved factors such as personality or underlying health conditions. For example, working pensioners are likely positively selected on health and wellbeing grounds; by considering changes within individuals rather than between them we reduce the chance that we incorrectly attribute positive SWB changes to working/pension transitions that might relate to unobserved heterogeneity. We modelled changes in the dependent variable life satisfaction using linear fixed effects regression (appropriate given the residuals were approximately normally distributed). More formally, the model could be expressed:

$$y_{it} - \overline{y}_i = \beta'(\chi_{it} - \overline{\chi}_i) + u_{it} - \overline{u}_i$$

where y_{it} is life satisfaction score for individual i at time t where t=1, 2,..., T; and the y_i is the individual mean of the dependent variable. β is a vector of time-varying independent variables (χ), including pension/work status at time t, and $\overline{\chi}_i$ is the individual mean of these variables. Because the fixed-effects transformation rests on the assumption that unobserved individual-specific components are constant over time, time-demeaning the data on y and y discards the unobserved heterogeneity, which might potentially be correlated with the

observables. This way, the models should rule out the possibility of within-panel endogeneity i.e. individuals with higher life satisfaction self-selecting into particular retirement and work transitions.

We calculated robust standard errors to account for the clustered survey design. In model 1 we included time-varying indicators of pension/work status, age, self-rated general health, wave fixed effects, and marital status. In model 2 we added a time-varying indicator of individual and household income. In model 3 we tested whether the relationship between work and retirement transitions was conditional on occupational status (H2) by adding an interaction terms for occupational class at baseline and pension/work status. Hypotheses 3-4 regarding gender differences were assessed in a similar fashion, by adding interaction terms for gender and pension/work status and gender and individual income quintile.

We ran a series of robustness checks. First, before starting the analysis, we tested the appropriateness of a fixed effects estimator compared with random effects using the Hausman specification test, which tests the null hypothesis that individual effects are uncorrelated with other regressors in the models. The results suggested that random effects models would provide biased estimates (P<0.001), so we used the fixed effect estimator. As a sensitivity analysis we conducted the analysis using a binary dependent variable for life satisfaction (supplementary table), and the pattern of effects and associations confirm the same pattern as the linear models.

Results from panel regression

Sample description

Table 1 shows baseline characteristics of the analysis sample and one-wave probabilities of changes in life satisfaction, pension/work status, marital status and income. Women were more likely to be 'fully' or 'rather' satisfied with their lives than men; they were also generally younger. Men reported better health than women. Around one third of women were unmarried

compared with 9% of men (this corresponds with mortality differences, the majority of unmarried women being widows). Men were more likely to belong to the highest income quintile than women, despite being more likely to have medium or low-skilled occupations. Around 50% of women worked in professional occupations. Between 20-30% of individuals changed their life satisfaction score between waves. The least common work/pension transition was to become a pension recipient without work. Women were twice as likely as men to transition to employed pensioner status, but men were more likely than women to lose their employment and have no pension.

Fixed effect model results

Table 2 shows changes in life satisfaction scores from fixed effect linear regression models as a function of work and pension transitions, income, occupation and gender interactions. The baseline model (model 1) shows effects of work/pension changes before controlling for income changes. Introducing income controls (models 2) reduces the SWB benefit of continued working although the same pattern of effects remains, and the coefficients for income quintiles change show the expected pattern: that those who enter higher income quintiles significantly improve their SWB. Becoming unemployed with no pension is associated with significantly negative SWB changes compared to becoming a non-working pensioner, independent of income changes. Note, however, the decrease in the coefficient size across models 1-2, indicating that individual income and to a lesser extent household income changes explain a substantial part of the SWB boost from continued working (previous literature and theory would suggest these are important mediators). Nevertheless, some extra-economic effect remains. Model 2 also shows that working pensioners have better SWB than non-working pensioners, independent of income changes. Transitioning to working pensioner status was associated with a 0.12 point increase in life satisfaction score, compared with changes among

non-working pensioners (P<0.001). The effect of working post-retirement on SWB could be seen as small. But it reflects the limited variation in life satisfaction within individuals in these age ranges. To contextualize, the size of the effect of continued working (0.25 in model 1) is much larger than the decrease in SWB associated with widowhood or divorce (-0.18) (full covariate results on request). Thus, work and pension changes have a considerable influence on SWB.

In model 3, to test our second hypothesis, we introduce an interaction between work and pension status and occupational class at baseline. The interaction term is statistically significant, and shows that the SWB benefit of continued working is strongest in the highest occupational classes (managers, professionals and technicians). By contrast, those in medium occupational classes experienced significantly smaller SWB increases from working either with a pension or not. The SWB of employed pensioners in the lowest occupational groups is not significantly below those in the highest occupational categories, however. By contrast, the SWB of workers without a pension was significantly lower than those in the highest occupational categories. We explore possible reasons for this in our qualitative analysis. We found no evidence that occupation/work status associations varied by gender (i.e. men and women in higher occupational groups benefit equally from continued work).

We introduce further interaction terms to test hypotheses 3 and 4 in model 4. We interact pension/work status with gender, which is not statistically significant, indicating that the positive SWB effect of continued work, either with or without pension receipt, does not vary substantially between men and women. Therefore our third hypothesis – that the effect of work/transitions will vary by gender – is unsupported. There is a statistically significant interaction between gender and changes in individual income, however, suggesting that income improvements are associated with larger SWB boosts in men than women. This supports our

fourth hypothesis that income has a greater influence on men's than women's SWB. We explore potential mechanisms behind these relationships in our qualitative section.

Robustness checks

We tested multiple model specifications. Life satisfaction would ideally be treated an ordinal variable, but there is no agreed way to fit a fixed effect regression to ordinal data. We dichotomized the dependent variable into those with the two most positive categories of life satisfaction vs. the rest and fitted binary fixed effects model (see supplementary material S1). Although this means a non-equivalent sample to that in Table 2, as those with no change between binary states are not included, the results look broadly similar. We experimented with various age specifications, and tried including age squared, but this added nothing substantial to the model fit. Across the time period, there have been secular fluctuations in the macroeconomic situation in Russia (for example, GDP per capita fell sharply during the 2008 financial crisis); despite this, standards of living, life expectancy and life satisfaction levels at an aggregate level have improved over time. Although we include fixed effect dummy indicators for wave (calendar year) which likely account for these contextual changes, it is possible that the SWB impact of work/pension changes is not consistent over time. When we fitted models on shorter panel series (2003-2007, 2008-2011 and 2012-15) we found the same pattern of effects over time, only continued work past pension age was associated with bigger gains in SWB in the later time period (results available on request).

Longitudinal Qualitative study: Methods

We now interrogate the underlying mechanisms for our quantitative findings using longitudinal qualitative data drawn from research examining gender differences in adaptation to Russia's

transformed labor market. In order to analyze "adaptation," we sampled from four groups facing labor market transitions when the research began in 1999: (a) employees of economically struggling organizations (in Moscow), (b) new graduates from a university and technical training institutes (in Ul'yanovsk), (c) the registered unemployed (in Samara), and (d) state social assistance recipients (in Syktyvkar). The regions were chosen on the basis of the expertise of the Russian research teams. The original sample comprised 120 men and 120 women, spread equally among the different groups. Four semistructured deep interviews were carried out with each respondent at six monthly intervals between 1999 and 2001 (Time 1 [T1]—Time 4 [T4]). The research was resumed in 2010 (Time 5 [T5]), when 126 members of the original sample (59 men and 67 women) were found and interviewed. Interviews and transcripts were in Russian. Attrition occurred for a variety of reasons, from change of address to death.

For this article we used a subsample of 38 – 13 men, 25 women – comprising respondents who attained their pension during the research period, and were present in the sample for at least 3 waves. In practice, only 4 of our subsample were not included at T5, and all of these remained in the research until T4. The under-representation of men in our subsample reflects the gender-age structure of the Russian population which, because of significantly higher male mortality, is biased towards women in older age groups; the 2002 census figures showed that there were 1370 women for every 1000 men in the 50–69 age group (Rosstat 2017a: 80). Nevertheless, our data has a more severe gender discrepancy than the national average likely because male mortality trends are exacerbated in the more vulnerable groups included in our sample (Tomkins, *et al.* 2007).

The mean age of respondents at their final interview was 62 with a range 46 to 75 (50-71 for women; 46-75 for men). Our pensioners are relatively young, reflecting low retirement ages in Russia as well as the provision of "privileged" (early) pensions for those employed in

adverse working or geographical conditions. The number of such respondents in our study is boosted by the fact that part of our sample is drawn from Syktyvkar, a city in the Russian far north, whose residents are entitled to early pensions due to the extreme climate. For example, the youngest respondent was a pilot from Syktyvkar, entitled to an early pension on the basis of adverse working and climatic conditions.

Table 3 shows over three-quarters of respondents remained employed after receiving their pension, somewhat higher than the national rate of 52 per cent of pensioners employed for at least a year post-pension (Rosstat 2014). Many respondents remained at the same establishment. Only one employed respondent retired immediately on receiving his pension, though 6 unemployed respondents did not return to work post-pension. Pension receipt and retirement are thus decoupled in our data, with immediate retirement of pensioners a rarity amid a variety of pensioner trajectories.

The education and occupational status of our respondents in their last job before pension receipt is shown in Table 3. Professional/managerial men with higher education are over-represented in our data and men working in unskilled occupations at the time of pension receipt are absent. This partly reflects the lower life expectancy of less-educated Russian men in lower-status occupations, but also the initial composition of our sample: two of the failing organizations in Moscow were scientific institutes, while engineers and accountants were the two most numerous professional groups among the registered unemployed in Samara at the time we drew our sample. (For more details regarding sampling, see Author, 2006). Women respondents were more evenly spread through the social and educational hierarchy. In terms of the regional groups, 34% of included respondents were from Moscow, 26% from Samara and 40% from Syktyvkar. Unsurprisingly, no respondents from new graduate Ul'yanovsk sample met the pension criterion.

Finally, our sample was ethnically quite homogeneous, with 79% of those disclosing an ethnicity self-defining as Russian. The other significant ethnic group in our sample was Komi, an indigenous people of northeastern Russia. They comprised 16% of those stating their ethnicity, all of them from Syktyvkar, which is located in the Komi Republic. The Komi have their own language, but those in our sample spoke Russian and were assimilated into Russian urban life. This group does, however, suffer labor market discrimination.

When referring to respondents, we use a three-number code: the first indicates the respondent's city (1=Moscow, 3=Samara, 4=Syktyvkar), the second is the respondent's number, and the third indicates the wave of research. Pseudonyms are used when respondents are named in case histories.

To understand the meanings of work and retirement we first mapped respondents' employment trajectories (see Table 3) to develop a longitudinal qualitative profile of each respondent. We then coded thematically using both inductive and a priori codes derived from existing theory, focusing on respondents' accounts of pension receipt, employment, unpaid labor, as well as recreation and hobbies. We moved iteratively between respondent profiles, coding, and theory to understand the mechanisms behind the relationships between subjective well-being, pension receipt, work and "retirement" found in our quantitative analysis. For example, our initial coding revealed that experiences of employment and "retirement" were deeply gendered. We returned to the literature to help us understand the relationships we found in our quantitative analysis, and refined our understanding of the data and theory in relation to each other.

Retirement, Post-retirement Employment and SWB: Exploring mechanisms

We use our qualitative findings to illuminate the mechanisms we found in our quantitative analysis, enabling us to contextualize and refine our theoretical contribution. Our first hypothesis was that individuals transitioning to post-retirement employment would have higher SWB than individuals transitioning to retirement, independent of income changes. We expected these benefits to be greater in the highest occupational groups and among men (Hypotheses 2 and 3). Hypothesis 1 was supported, Hypothesis 2 was partially supported and Hypothesis 3 was not supported. Hypothesis 4 regarding the greater salience of income changes to men was supported. We focus our qualitative discussion on the mechanisms behind the findings in relation to hypotheses 2–4, as these also serve to illuminate the reasons why, across occupational groups and regardless of gender, transitioning to post-retirement employment is more beneficial to SWB than transitioning to retirement.

Occupational differences in experiences of post-pension employment: Pensions as a decommodifying "cushion"

Our quantitative findings showed that although those in higher occupational statuses benefitted more from post-pension employment, the results were surprisingly non-linear. We found no statistically significant difference between the SWB of the highest and lowest classes. Our qualitative data enables us to explain this, showing how pension receipt can protect the SWB of individuals in the lowest occupational groups.

Our analysis confirmed that professionals within higher occupational groups were often "pulled" into post-retirement employment by interesting work. In our data, professionals usually remained in the same job on receiving their pension. Driven by intrinsic motivation, they were keen to continue working. For example, echoing the findings of Kim and Feldman (2000), academics in our data were unanimously positive about post-pension employment.

Indeed, two male academics (1-16 and 1-27) saw the notion of retirement as so irrelevant that they neglected even to mention that they had attained their pensions during the research period until prompted by the interviewer. The women were equally committed. Veronika, a 65 year old biochemist, for example, noted of the pensioners with whom she worked, "we all work on enthusiasm. Not for money" (1-15-5).

But differences between individuals in high and low occupational statuses were attenuated by pensions, which acted as a form of "decommodification" (Esping-Andersen 1990), limiting the degree to which respondents from lower-status occupations were "pushed" into taking employment at any cost. The "cushion" of their pension often allowed respondents to switch into work which was "comfortable" in terms of work regime and other factors such as proximity, enabling them to prioritize wellbeing over pay. The decommodifying action of pensions in reducing economic compulsion is encapsulated by Liza, a lone mother living with her disabled grown son, who was supplementing her pension by working as a cleaner in a gym. She was relaxed about regular wage delays at her workplace during summer months, her comments underlining her sense of security: "well, it's not important in principle. I get through it without worry because I'm a pensioner; my back's covered" (3-10-5). Even pensioners from higher occupational categories were willing to opt for "comfortable work" when they were unable to find work in their specialism. For example, at T3 Galya, an unemployed engineer with higher education, was planning to take a lowly job in retirement, "I'm waiting for a vacancy at the Museum of Art; it pays 300 roubles [a month, less than \$11 at the time of the interview] and you mix with people. Although it's not much it's a good addition to a pension." Although Galya did not secure this job, at T5 she declared herself fully satisfied with a seasonal job as a cleaner at a summer camp which provided a similar combination of low pay and sociability as well as on-site accommodation.

Building on this, our qualitative analysis confirmed that manual jobs were more physically demanding for older individuals, but also revealed how respondents could use their pensions to protect their health. Yuri, for example, left his factory job in retirement because "my health couldn't stand it" choosing a less taxing and remunerative position as a security guard (3-60-5). Oksana, a 55 year old hospital clerk, similarly reported that manual work had taken its toll: "I've cleaned floors everywhere. But now I can't…. All my joints ache, my arms, I can't wring out a cloth" (4-57-5). But, like Yuri, Oksana used her pension to avoid the work that ailed her. She had habitually supplemented her income with cleaning jobs, but her pension allowed her to cease this additional employment. Such strategies were widespread.

Not all respondents were able to adopt them, however. This applied particularly to women and some men acting as main or sole breadwinner in their households or extended family. Women pensioners in this position frequently expressed exhaustion with their work, particularly because it was often combined with caring responsibilities. For example, Lyuba, a 54 year old shop assistant from Samara, was supporting her unemployed husband, disabled grown son, her teenage daughter and the latter's baby. As she put it, "It's hard for me to work, because I have a dacha, a grandchild, my mother's in the countryside – overall, I run around like a hamster on a wheel. It's hard. I never get a moment's rest" (3-53-5). As will be seen, some male breadwinning pensioners also felt pressurized. The extent of decommodification thus varies depending on pension levels and household income per head.

Our qualitative analysis reveals the mechanisms behind the relationships found in model 3. For intrinsic motivated individuals in higher occupational categories able to retain their positions post-pension, employment can be highly rewarding. Lower-status occupations are often less stimulating and more physically demanding. But our qualitative analysis showed how pensions can act as a form of decommodification, allowing pensioners to prioritize their health and SWB when selecting employment. We suggest this is why the difference in the SWB

of employed pensioners in the highest and lowest occupational categories is less than anticipated and does not reach statistical significance. Depending on household structure and pension level, pensions may not always provide a sufficient "cushion," but for many respondents in our data they provided a sense of security captured in Liza's phrase "my back's covered."

Gender differences in experiences of retirement: Unneeded versus unthanked

We expected transitioning to post-retirement employment, as compared with retirement, to be more beneficial for men's SWB than women's (Hypothesis 3). Model 4, however, revealed no gender difference in the SWB-benefit of transitioning to post-retirement employment as compared with retirement. Our qualitative results illuminate these findings, but suggest that, even though the relationships tend in the same direction for men and women, the mechanisms behind them are different. We begin by comparing men and women's experiences of retirement, before contrasting their experiences of post-retirement employment.

Our data suggest that, as anticipated, men face no obligation to "do gendered age" through performing domestic or caring labor in retirement. The unmarried men in our data reported no regular caring or household duties for extended family members or friends, in contrast to women who, even when they were never-married and child-free, often provided regular help to others, in particular eldercare. The married men were likewise unencumbered. There are only two examples in our data of men performing caring or domestic labor on a regular basis. Alexei, a retired engineer, spent a significant amount of time caring for his grandson, and appeared thoroughly to enjoy it. Meanwhile, Stanislav, a retired pilot who was unable to supplement his pension by working after an alcohol-related accident, was unusually trying to define a new form of "neededness" within the household by performing domestic

labor. His wife, however, was skeptical about this project, and made barbed comments about breadwinning underlining her perspective on men's responsibilities.

While the absence of domestic obligations potentially gives retired men more opportunity for leisure, Thoits' (1982; 2011) and Parsons' (2014) arguments suggest it restricts their ability to secure purpose and meaning outside employment. Our analysis lends support to this perspective. As will be seen below, most men perceived their chief responsibility within the household to be breadwinning. This left them vulnerable to feeling "unneeded," when they were no longer employed, as is dramatically illustrated by the reflections of Nikolai, a 69 year old retired divorcee who, in a similar tone to Parsons' respondents, lamented: "Even the ambulance doesn't come for the likes of me. I live alone ... Nobody needs me ... who needs us? Nobody. We're redundant..." Indeed, Alexei, the retired engineer discussed above, was our only male respondent who reported feeling contented in retirement. Respondents such as Stanislav (4-02) and Dima (4-51) had developed serious drink problems in retirement, with Dima, a 62 year old retired divorcee, spending most of his time drinking with male companions. Thus, men's "freedom" from obligations in retirement may come at the cost of increased risk of social isolation, feeling "unneeded" and alcoholism.

By contrast, pension-age women in our data were certainly "needed." Corresponding with extant literature, for women "doing gendered age" entailed presumed responsibility for household labor and care (Utrata 2011). Thoits' arguments (1982; 2011) imply that the purpose and meaning derived from such labor should boost SWB. This mechanism was evident in our findings. Grandmothers, for example, often gave positive reports of their caring labors, seeing their grandchildren as an important source of meaning, and a few retired women also expressed satisfaction with gendered domestic labor. Aleksandra, for example, reported with a tone of pride, "I do the house, cook, feed my men [her husband and son]" (3-08-5). Notably, however, Aleksandra had managed to avoid more onerous forms of unpaid work, such as eldercare.

When asked by her grandfather to care for him – he wanted her to spend every day and some nights with him – she refused after consulting with her family. Their reasoning highlighted her "neededness:" "I consulted here [at home]; they said to me 'well, no! Overall we need you to stay alive!' [laughs]." In giving Aleksandra permission to refuse a fate perceived as entailing death-by-overwork, her husband and son also recognized the value of her labor in their service. Such recognition, however, is often absent.

Indeed, doing gendered age can often be debilitating and "thankless." Motivated by a strong sense of gendered obligation, respondents often felt unable to take Aleksandra's step of refusing unpaid caring and domestic labor. This sense of duty is illustrated by the comments of Tanya, a 59 year old retired fitter, who had withdrawn from employment to care for family members:

I've got a grandson, an elderly mother, and my husband has problems with his health. *If I lived alone I'd work* [emphasis added].... But everything depends on me. I do the washing and cleaning. And cook.... My mother lives with me. She's elderly – 85 years old. She can hardly see. She can't use her legs. And I have to look after them all. They are my close family and I have to help them all (1-43-5).

While women can derive meaning from such labor, it can also be depleting. Galya, for example, had a period of "retirement" looking after her sick husband and co-resident mother-in-law before resuming employment. She characterized caring in wholly negative terms, portraying her eventual return to employment as liberating: "Practically two years were again wasted. Only after their deaths we breathed a sigh of relief and the house was quiet. Then I went to work at a shop" (3-21-5). Although Galya's outspokenness was likely conditioned by her

strained relations with her husband, her negative experience of eldercare is widely shared. Valentina, for example, spent 5 years caring for her mother, to whom she was close, between T4 and T5. Her description of the experience was similarly stark: "I didn't live. Five years practically I lived for her" (4-23-5).

Caring for grandchildren is generally more positively perceived, but can also be onerous. As Nadia, a retired pensioner, explained:

I don't work. My task is [to take care of] housework, my husband, to feed grandpa. Now for all those years my [grand]children have really needed me ... and I meet them from school practically every day.... They [her daughters] say "you probably don't feel that you're on your pension." And I say, "Well, yes, for me it's as if I'm at work" (3-04-5).

Nadia was responsible for collecting her three granddaughters (from two daughters) from their schools, a trip taking several hours and involving four bus rides. Unsurprisingly, she reported being exhausted and "wound up" when she finally reached home (sometimes as late as ten in the evening). Since such labor is perceived as a gendered age obligation it is often undervalued (Utrata 2011; Author et al. 2013). Nadia appeared to feel this when she observed:

[My daughter] posed this jokey question — she could really come out with things: "Mum, as well as school we're going to take her [Nadia's granddaughter] to gymnastics; yes, we're going to give you a job!" That is, even if I hadn't agreed, they would have had to ask someone else. Well, there's no question of it! ... [Although] I know that now some people hire [others] to pick

up their children, sometimes pensioners, sometimes not very old women. (3-4-

5)

While seemingly refusing to "question" her duty, Nadia's mention of paid care arrangements implicitly does so, highlighting the lack of recompense for her labor. Such non-recognition stems from the way women's domestic and caring labor is rendered invisible by its taken-forgrantedness, and has important implications in terms of SWB.

Although we found evidence that women's unpaid labor could provide a sense of meaning and gendered accomplishment, the protective impact on wellbeing implied by Thoits (1982; 2011) and Parsons (2014) was often undermined by the onerous and unrecognized character of women's perceived obligations. Rosenberg and McCullough's concept of mattering (1981) suggests that it is important that the meaning of a contribution is perceived by others, and not simply experienced internally. Thoits deftly collapses this distinction by conceiving of identities or roles as relational (2011, 148). This is theoretically warranted within tradition of social "roles" that she cites originating with Durkheim ([1897] 2002), and within later conceptions of identity such as "doing gender" in which accountability to others is key. But our analysis suggests that forging an identity or role in relation to others is not the same as "mattering" or being recognized. When women do gendered age it is a relational activity, but one that is frequently only attended to in the breach – that is, sanctioned when it is not performed – rather than positively recognized (Author et al. 2013) as required by the idea of "mattering." Such invisibility, combined with the potentially burdensome character of women's "neededness" in retirement, means that it cannot be seen as an unambiguous benefit.

Our qualitative findings regarding men corresponded with our expectation that retirement could be challenging for men who risked feeling "unneeded." Our analysis suggested women had ample purpose and meaning in retirement, but the wellbeing benefit was often undermined by the onerous and invisible character of women's unpaid labor. We suggest

that this is why transitioning to retirement as opposed to post-retirement employment is no more positive for women than for men. We now examine the other side of this – gendered experiences of post-retirement employment – beginning with women.

"Not just a grandmother sitting on the bench:" Women pensioners' experiences of employment

In contrast to their accounts of retirement which were decidedly mixed, women's evaluations of post-pension employment were largely positive. Notably, their accounts of what they gained from employment focused on social recognition. Income, though obviously significant, particularly for respondents who were chief breadwinners, featured less prominently in women's spontaneous comments about employment. As will be seen, this was in marked contrast to male respondents.

Post-retirement employment was sometimes experienced as burdensome by women, but was far more frequently seen as a source of satisfaction. Both women and men appreciated being occupied. As Valentina, a 54 year old post-pension regional government administrator, memorably put it, "I am like a cart horse with a compulsion to plough" (4-23-5). A more gender-specific theme frequently mentioned by women pensioners, but rarely by men, was the social recognition provided by employment. This is illustrated by the following quotation from Svetlana (1-22), a 71 year old biochemist working at the scientific institute where she had made her career. She noted the social pressure to retire, observing that "to work until age 80 is not quite right," but rather more persuasively spoke about what working for 16 years after receiving her pension had given her:

The thing is I know this specialism, this work, and I like working. And I feel that I am a qualified professional in this area and for that reason I am valued.... I see that I am needed, necessary. I see that I make a contribution, and at the same time I understand that other people value the professional way I do my

work. It's also pleasant, when you know that you're valued, you're trusted and you feel your significance. [...] And, on top of that, I think that I somehow feel better at work. I feel my significance, usefulness, and I consider that it is valued not only at my work, but also in my family. Look, my son, he respects and values me because I still work, that I am still of some use. Not just a grandmother sitting on the bench.

Svetlana is a highly-qualified professional, but a similarly appreciative perspective was shared by respondents in lower-status jobs. For example, Lilia, a hospital orderly, although unhappy with her pay, painted a glowing picture of the benefits of employment: "I still like work. To this day, everyone respects me. I like everything [about work]; I like everything... I really like the collective, such great girls, all the midwives and doctors" (4-41-5).

Analyzing these perspectives, it is clear that these women experience work as status-enhancing. Using the categories identified by Anderson and colleagues (2012; 2015), both respondents reported receiving "respect" at work, while Svetlana also noted experiencing perceived instrumental social value: "I feel my significance, usefulness." Svetlana's observations suggest that this can have an impact beyond the workplace, increasing the status of employed women pensioners within their families and households: "My son, he respects and values me because I still work, that I am still of some use." Her reflections also make it clear that such status-enhancement should be viewed relative to what women pensioners could otherwise expect. Were she not employed, Svetlana would be relegated to the status of a "grandmother on the bench," an image familiar to anyone with knowledge of Russia. Weather permitting, benches in the courtyards of Soviet apartment blocks were, and still are, sites of communal sociability for pensioners, particularly women. The "grandmothers on the bench" are perceived as informal sentries who, while usually grudgingly deferred to, are also resented

and ridiculed. The image of the "grandmother on the bench" is thus a gendered age category, which denigrates older women, portraying them as useless busybodies. The workplace therefore appears to offer a forum in which women pensioners can raise their status, potentially receiving respect and recognition of their usefulness from others.

Another dimension of this that emerged from interviews was the way in which employment brought women "into society," providing social interaction and visibility. Again, this was noted even by respondents working in low-status occupations. Zhenya, for example, broke down in tears as she spoke of being forced at T5 to withdraw from her post-retirement job as a janitor because of the onset of Parkinsons. Throughout the research she had enjoyed the sociability of work, noting at T2 that it was a reason "to put lipstick on." She had worked for nearly ten years after receiving her pension between T4 and T5 citing the main reason as:

Social interaction ... At home I went round in a dressing gown, an apron and worn-out slippers, but there [at work] ... I had to pull myself up. That is, shoes, a dress, put myself in order ... I like interaction with people. While you're working you're somehow in touch with lots of events, important and unimportant. (3-17-5).

As Zhenya's discussion of lipstick and dresses indicates, visibility and social recognition are closely connected, with conformity to gendered standards of respectability providing grounds for respect even for those in low-status professions. This link can likewise be seen in the reflections of Veronika, who had a higher-status (though low-paid) career as an academic journal editor. Veronika was "dreaming of getting my teeth done" for her 65th birthday. She was ashamed of attending work "without teeth" and "even wanted to leave work because of that." Her longed-for dental visit would allow Veronika to work "as long as it's possible" (1-15-5). Although such concerns regarding appearance are clearly gendered, by "pulling up" and "putting in order" their bodily display women from across the occupational hierarchy lay claim

to "respectability" – asserting a right to be respected and recognized – which is not seen as available to the toothless woman confined to the household in her "worn-out slippers."

Although we found some evidence of the role strain we anticipated (see quotation from Lyuba above), in our data this was outweighed by the status-enhancing properties of employment for women. We suggest that this explains why, contrary to Hypothesis 3, transitioning to post-retirement employment rather than retirement is equally beneficial for the SWB of women as of men, independent of income changes. Employment brings women "into society" where they can receive respect and be appreciated for their instrumental social value, avoiding the denigrated ranks of the "grandmothers on the bench." We see such forms of social recognition as status enhancing. Following the arguments of Anderson and colleagues (2012; 2015), we propose that this is a non-economic mechanism through which employment can positively impact the SWB of women pensioners. Paid employment thus contrasts with women's caring and domestic labor which, while it can provide purpose and meaning, is not a reliable source of social recognition or status enhancement.

"I am just a source of money:" The salience of breadwinning to men's SWB

We argued above that retirement carried risks to men's wellbeing. By contrast, corresponding to Hypothesis 1, male respondents perceived post-retirement employment as beneficial to wellbeing. In accordance with Hypothesis 4, we found that income changes were more salient for men than for women; our coding revealed income as a central preoccupation of male pensioners whether they were employed or retired, married or not. Our analysis also suggested answers to our questions regarding the persistence of the male breadwinner schema post-retirement.

As anticipated in Hypothesis 1, we found that post-retirement employment provided men with a sense of purpose. As explored below, this was closely connected with perceived breadwinning obligations, but, like women, men appreciated the activity of working. As Pavel, a 61 year old tool maker, put it, "I guess I'm a workaholic. I feel worse when I sit around" (1-63-5). Sergei, a 61 year old former academic chemist, who at T5 was working as a watchman in a car showroom, expressed a similar idea even more forcefully: "Despite my age and certain health problems, I will work for as long as I can. As soon as I stop working I will die. That is certain" (1-31-5). Although extreme, this sentiment is symptomatic of the difficulty many men experience in finding alternative sources of meaning. We do not exclude that men, like women, benefit from the social recognition provided by employment but this did not emerge from our coding. Social recognition for men may be connected to breadwinning.

The reflections of married men in our qualitative data suggest that "pensioner" status does not exempt Russian men perceived breadwinning obligations, while income levels appeared to be important to men's identity in retirement even when they did not have dependents. The salience of breadwinning is illustrated by the case of Sergei, the above-quoted former academic chemist, who during the late 1990s had turned to photography to supplement his income. This gradually became his main occupation, but before T5 he lost his position and experienced a short period as an "unemployed" pensioner. Though past 60, Sergei ruled out retirement:

Well, my wife was working, I was sitting at home. For four months I was in a state of shock, to put it mildly. I phoned Alexei... He said "you know here it's cheap work, just loose change, but still it's some kind of work, still you do something, understand?" I, as a man, I can't do nothing. That's how I'm made... (1-31-5)

The pressure to perform as a breadwinner was an important driver of Sergei's compulsion to work. To supplement the "loose change" he earned in a photographic agency, he also found a better-paid job as a security guard at a car showroom. Though dismayed by what he called the low "intellectual level" of his coworkers, Sergei did not regret taking the job: "All the same, I had to bring home some money." Indeed, despite his misgivings regarding his new colleagues he had no plans to leave: "here they pay me ... and I am satisfied" (1-31-5).

Volodya, a 46 year old former Aeroflot pilot who was supplementing his pension by working a grueling schedule as a commercial pilot, felt a similar need to provide for his family who had high expectations of support:

Basically I provide for the family. Now my wife basically comes to me for money.... My children need money. Recently I sent them, together with my wife, to Egypt. And when my son got back he also asked for a new computer. I also need to help my daughter financially while she's doing postgraduate study. (4-35-5)

Volodya reported being so tired by his unpredictable and intensive flying schedule that he lacked sufficient energy to travel to Egypt with his family – he used his vacation time to rest at home. Volodya is a "young" pensioner, but nonetheless his case illustrates that official status as a pensioner (and in Volodya's case "veteran of labor") does little to protect men from perceived breadwinning obligations.

This argument is supported by the experience of retired married men in our data which suggests retirement is perceived as legitimate only when a man's pension is deemed sufficient for family needs. For example, Alexei, the aforementioned 59 year old retired engineer, had a

large pension which was approximately equal to his wife's wages and pension combined. While working he had been a successful breadwinner, and his income in retirement was sufficient to allow him and his wife to live comfortably. He did not report any marital tension and seemed relaxed about being a co-breadwinner in retirement. By contrast, Stanislav, the 49 year old retired pilot, who had a relatively small pension, faced criticism from his employed wife Valentina who held him accountable to the male breadwinner schema, pointedly reminiscing in the presence of the interviewer about Stanislav's years as a well-paid pilot when they could afford luxuries such as holidays. This again suggests that the formal Rubicon of pensioner status has little impact on men's perceived obligations as breadwinners (a finding that may reflect the decoupling of pension receipt and retirement).

Divorced, widowed or single men without dependent children did not face pressure to provide, but nonetheless their financial status seemed important to their identity. This was most starkly expressed by Nikolai, the above-mentioned retired divorcee, who saw the financial value of his apartment as his only source of social worth. As he lamented: "While I'm alive I'm not going to transfer ownership [of my apartment] to anyone... If ... I go to a care home they'll take payment from the [sale of the] apartment. But without an apartment nobody needs me." Nikolai was reduced to defining his identity in terms of his financial status because he saw no other basis for achieving social recognition: "nobody needs me." Overall, therefore, money seemed to be integral to masculine self-definition. For example, Volodya, the pensioner pilot discussed above, starkly expressed the centrality of income to his position in the family, claiming, "I am just a source of money; I provide" (4-35-5). Like Nikolai, he seemed to have trouble perceiving that he had any worth beyond his economic value. The mechanism behind Hypothesis 4 is thus the tight link between masculinity, breadwinning and men's financial status.

Discussion

We found that individuals transitioning to post-retirement employment had higher SWB than individuals transitioning to retirement, independent of income changes. Increased income accounted for a significant portion of this wellbeing boost, but employment also had a non-economic benefit. The gains to SWB through post-retirement employment were larger in the highest occupational groups, but there was no statistically significant difference between the gains to the lowest and highest groups, a finding that echoes the results of Lux and Scherger using UK and German data (2017). Our qualitative analysis suggested that this stemmed from the decommodifying impact of pensions, which allow individuals of lower occupational status to select into less demanding work to protect their health and wellbeing. The SWB of both men and women pensioners was higher when they continued to work rather than retired. Our analysis therefore broadly supports the structural dependency perspective, in particular Townsend's critique of excluding older individuals from the labor market as a condition of pension receipt (1981). Allowing pensioners to work in Russia (until 2015 without financial penalty) has been good for their income levels and SWB.

Our findings suggest it is important to be attentive to occupational differences at baseline when analyzing the impact of post-retirement employment, which may be closely correlated with the extent of economic compulsion to work. In the Russian context, however, pensions – which are far more equal than incomes – have a decommodifying effect which attenuates occupational differences in economic need among pensioners. The extent to which this effect translates into other contexts will depend on pension systems, and the degree to which occupational status hierarchies are reproduced in pension entitlements. Even in the Russian case, the extent of decommodification depends on pension levels, household structure and income per head. Nonetheless, overall pensions attenuated occupational status differences

at baseline, reducing differences in the SWB impact of post-retirement employment. Likewise, Yang (2008) found that SWB differences between Blacks and Whites in a US sample were reduced in older age in part through access to social welfare benefits such as Medicare and Medicaid.

Our quantitative findings showed that post-retirement employment boosted SWB in men and women compared to retirement. Our qualitative analysis suggested that while "doing gendered age" through domestic and caring labor may provide retired women with purpose and meaning it does not necessarily garner social recognition, thus doing little to raise women's status in face-to-face groups. By contrast, women pensioners reported receiving "respect" and other forms of social recognition in paid employment. This applied even to those working in low-status professions such as hospital orderly and janitor. Therefore, applying the theory of Anderson and colleagues (2012; 2015), employed women pensioners are more likely to experience positive SWB impacts from perceived status in face-to-face groups than retired women. Correspondingly, the images of women pensioners outside work – the drudge in "worn-out slippers" and the "grandmother on the bench" – contrast with the portrayal of older working women "pulled up" to respectability. We have argued that the social roles tradition (Thoits 1982; 2011) conflates (internal) meaning and "mattering" to others. We propose that these boost SWB through separate mechanisms, with "mattering" or social recognition impacting SWB via the status mechanism identified by Anderson and colleagues (2012; 2015). In the case of retired Russian women's unpaid labor, these mechanisms tend in different directions, with the benefits of meaning undermined by invisibility. Although our findings may partly reflect the post-Soviet context in which paid labor was glorified, domestic and caring labor is almost universally undervalued and still disproportionately performed by women (Folbre 2012). This argument may therefore be relevant in contexts beyond Russia.

Employed male pensioners likewise had higher SWB than those who retired. In our qualitative data only one male pensioner managed to achieve a satisfying post-retirement life – as an active grandparent. This seemed contingent on his relatively high pension. Attaining pension age in Russia does not appear to exempt Russian men from their perceived gendered obligations as breadwinners, so most male pensioners in our data felt a strong pressure to provide. Successful breadwinning brings status and privileges (Author et al. 2018), though correspondingly economic difficulties for men are associated with a threat to masculine identity. The SWB impact of income changes in men is thus magnified compared to women. This is captured in the intensity with which men spoke of their relationship to breadwinning and employment in the qualitative data: "I am just a source of money," "As soon as I stop working I will die." Russian male mortality trends suggest some basis for such bleak perceptions. Whether men's perceived breadwinning obligations and marginality in the household extend past retirement elsewhere is a question with important implications for men's wellbeing.

To turn to limitations, the quantitative analysis is restricted to assessing the immediate impact of retirement and pension changes. Levels of attrition in the RLMS panel mean that assessing the impact over a longer time frame would entail using a smaller and less representative sample. Nevertheless, longer term impacts would be worth exploring with different data as this would enable greater attention to life course patterns of occupation and wellbeing. As is common to all fixed effect designs, we cannot definitively exclude reverse causality (Gunasekara et al. 2014). Here, some joint modelling might be appropriate (such as multi-state event history modelling) but this is beyond the current analytical scope of this paper. A limitation of the qualitative data was the higher attrition rate of pension-age men, though this was somewhat mitigated by the fact that the quantitative results for men extended but did not contradict the extant literature.

Although our findings regarding the SWB impact of post-retirement employment were largely positive, the "neoliberalizing old age" perspective (Macnicol 2015) cannot be dismissed. Our evidence shows pension receipt and retirement have become decoupled in Russia. Although viewed through the lens of Townsend's structured dependency theory (1981) this is positive for wellbeing, it also facilitates arguments for pension reform on the grounds that individuals are capable of working longer. Indeed, this argument was made by the Russian government in the first draft of its law raising pension ages (Pravitel'stvo Rossiiskoi Federatsii 2018). Russian pension ages are low by international standards, but still the planned rises would leave only eighteen month's difference between male retirement age and life expectancy. **Protestors** carried long!" have banners claiming "We won't live that (https://www.bbc.co.uk/news/world-europe-44992376).

Our findings on the positive SWB impact of post-retirement work might appear to imply that raising retirement ages in Russia will not damage wellbeing. But they also show why post-retirement employment cannot be equated with delayed pension entitlement. Pensions serve to attenuate occupational differences among older individuals through decommodification that allows those in lower-status professions to prioritise their health and wellbeing by trading pay for "comfort." Without the cushion of a pension, the SWB impact of late-life working is likely to differ significantly between the highest and lowest occupational groups who typically have the most physically-challenging employment, as indeed is the case in our data. In addition, the stress experienced by older breadwinners — and older men unable to uphold the male breadwinner schema — will be exacerbated. Conversely, caring and domestic labor is likely to be increasingly commodified as women are compelled to work longer.

Deinstitutionalization of retirement is a crucial issue across ageing societies. Our study demonstrates the benefits of a sociological mixed methods approach to research in this domain attentive to issues of stratification and gender identity. Our fixed effects models allowed us to

produce a robust analysis of the implications of post-retirement employment for SWB, which were broadly positive. Our qualitative analysis enabled us to explain why occupational differences at baseline had less impact on the SWB implications of post-retirement employment than anticipated, and to develop a theorized understanding of gender-specific mechanisms that has been absent from earlier studies. Our arguments have theoretical relevance beyond Russia, and provide a basis for future empirical studies which can explore generalizability.

References

Author 1999

Author 2006

Author et al. 2004

Author et al. 2013

Author et al. 2014

Author et al. 2018

Anderson, C., Kraus, M.W., Galinsky, A.D. and Keltner, D., 2012. The local-ladder effect: Social status and subjective well-being. *Psychological science*, 23(7), pp.764-771.

Anderson, C., Hildreth, J.A.D. and Howland, L., 2015. Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin*, *141*(3), p.574.

Bauer, Jan Michael, Dario Cords, Rachelle Sellung, and Alfonso Sousa-Poza. 2015. Effects of different life events on life satisfaction in the Russian Longitudinal Monitoring Survey. *Economics Letters* 129: 91-94.

Bender, K.A., 2012. An analysis of well-being in retirement: The role of pensions, health, and 'voluntariness' of retirement. *Journal of Socio-economics*, 41(4), pp. 424-433.

- Blanchflower, D.G. and Oswald, A.J., 2004. Well-being over time in Britain and the USA. *Journal of public economics*, 88(7-8): 1359-1386.
- Blau, P. M. 1964. Exchange and power in social life. New York, NY: Wiley.
- Bonsang, E. and Klein, T.J., 2012. Retirement and subjective well-being. *Journal of Economic Behavior & Organization*, 83(3), pp.311-329.
- Brown, M., Aumann, K., Pitt-Catsouphes, M., Galinsky, E. and Bond, J.T., 2010. Working in retirement: A 21st century phenomenon. *Families and Work Institute, New York, NY*
- Calasanti, T., 2003. Theorizing age relations. *The need for theory: Critical approaches to social gerontology*, pp.199-218.
- Charles, K. K. 2004. Is retirement depressing?: Labor force inactivity and psychological well being in later life. *Research in Labor Economics*, 23, 269–299.
- Clark A, Oswald A 1994. Unhappiness and unemployment. Econ J 104(424):648–659.
- Clark, A.E. 2003. 'Unemployment as a social norm: psychological evidence from panel data', Journal of Labor Economics, vol. 21(2), pp. 323–51.
- Clark A, Georgellis Y, Sanfey P 2001. Scarring: the psychological impact of past unemployment. Economica 68 (270):221–241.
- Connell, R. 1987. *Gender and Power: Society, the Person and Sexual Politics*, Cambridge: Polity Press.
- Di Gessa, G. *et al.* (2017) Is being in paid work beyond state pension age beneficial for health? Evidence from England using a life-course approach. *J. Epidemiol. Community Health* **71**, 431–438.
- Di Gessa, Giorgio, Laurie Corna, Debora Price, Karen Glaser 2018. The decision to work after state pension age and how it affects quality of life: evidence from a 6-year English panel study, *Age and Ageing*, 47(3): 450–457.

- DiTella R, MacCulloch RJ, Oswald A 2001. Preferences over inflation and unemployment: evidence from surveys of happiness. *American Economic Review* 91(1):335–341.
- Dingemans, E., Henkens, K. and van Solinge, H., 2017. Working retirees in Europe: individual and societal determinants. *Work, employment and society*, *31*(6), pp.972-991.
- Dolan, P., Peasgood, T., & White, M. 2008. Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1): 94-122.
- Durkheim, E. [1897] 2002 Suicide Abingdon: Routledge.
- Esping-Andersen, G., 1990. The three worlds of welfare capitalism. John Wiley & Sons.
- Folbre, N., 2012. Should women care less? Intrinsic motivation and gender inequality. *British Journal of Industrial Relations*, *50*(4), pp.597-619.
- Garcy, A. M. & Vågerö, D. 2013. Unemployment and suicide during and after a deep recession: a longitudinal study of 3.4 million Swedish men and women. *Am. J. Public Health* 103: 1031–8.
- Gerber, T.P. and Radl, J., 2014. Pushed, pulled, or blocked? The elderly and the labor market in Post-Soviet Russia. *Social science research*, 45: 152-169.
- Gerber, T.P. and Mayorova, O., 2006. Dynamic gender differences in a post-socialist labor market: Russia, 1991–1997. *Social Forces*, 84(4): 2047-2075.
- George, L.K. 2010. Still happy after all these years: research frontiers on subjective well-being in later life. *Journal of Gerontology: Social Sciences*, 65B(3), 331–339.
- Goldhamer, H., & Shils, E. A. 1939. Types of power and status. *American Journal of Sociology*, 45, 171–182.
- Gunasekara, Fiona Imlach, Ken Richardson, Kristie Carter, Tony Blakely 2014. Fixed effects analysis of repeated measures data, *International Journal of Epidemiology*, 43(1): 264–269.

- Han, S.K., & Moen, P. 1999. Clocking out: Temporal patterning of retirement, *American Journal of Sociology*, 105,191-236.
- Hannah, L. 1986. *Inventing retirement: the development of occupational pensions in Britain*.

 Cambridge: CUP.
- Henretta, John C. 2018. The life-course perspective on work and retirement. In *Lives in Time* and *Place and Invitation to the Life Course*, Routledge: 85-105.
- Herzog, A., House, J.S. and Morgan, J.N., 1991. Relation of work and retirement to health and well-being in older age. *Psychology and aging*, 6(2), p.202.
- Hetschko, C., Knabe, A. and Schöb, R., 2014. Changing identity: Retiring from unemployment. *The Economic Journal*, 124 (575), pp.149-166.
- Hook, J.L., 2017. Women's Housework: New Tests of Time and Money. *Journal of Marriage* and Family, 79(1): 179–198.
- Horner, E.M., 2014. Subjective well-being and retirement: analysis and policy recommendations. *Journal of Happiness Studies*, 15(1), pp.125-144.
- Hoschschild, A. with Machung, A. 1989. The Second Shift: Working Parents and the Revolution at Home, London: Piatkus.
- Kahneman, Daniel, and Alan B. Krueger. (2006) Developments in the measurement of subjective well-being. *Journal of Economic perspectives* 20(1): 3-24.
- Katz, S. & Calasanti, T. 2015. Critical Perspectives on Successful Aging: Does It "Appeal More Than It Illuminates"? *Gerontologist*; 55 (1): 26-33.
- Kim, S. and Feldman, D.C., 2000. Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. *Academy of management Journal*, 43(6), pp.1195-1210.
- Kim, J.E. and Moen, P., 2001. Is retirement good or bad for subjective well-being?. *Current directions in psychological science*, 10(3): 83-86.

- Lapidus, G. 1978. Women in Soviet Society: Equality Development and Social Change
 Berkeley: University of California Press.
- Leary, M. R., Jongman-Sereno, K. P., & Diebels, K. J. 2014. The pursuit of status: A self-presentational perspective on the quest for social value. In J. T. Cheng, J. L. Tracy, & C. Anderson (Eds.), The psychology of social status New York, NY: Springer: 159-178.
- Leon, D.A., Saburova, L., Tomkins, S., Andreev, E., Kiryanov, N., McKee, M. and Shkolnikov, V.M., 2007. Hazardous alcohol drinking and premature mortality in Russia: a population based case-control study. *The Lancet*, *369*(9578), pp.2001-2009.
- Lux, T. and Scherger, S., 2017. By the sweat of their brow? The effects of starting work again after pension age on life satisfaction in Germany and the United Kingdom. *Ageing & Society*, 37, 2: 295-324.
- Lyashok, V., Nazarov V., and Oreshkin, M. 2016. Faktory rosta razmera pensii v sovremennoi Rossii, *Finansovyi Zhurnal*, 29(1): 7–22.
- Macnicol, J., 2015. Neoliberalising old age. Cambridge University Press.
- Maimaris, W., Hogan, H. and Lock, K., 2010. The impact of working beyond traditional retirement ages on mental health: implications for public health and welfare policy. *Public Health Reviews*, 32(2)
- Mein, G., Martikainen, P., Hemingway, H., Stansfeld, S. and Marmot, M., 2003. Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology & Community Health*, 57(1): 46-49.
- Moen, Phyllis, Dempster-McClain, Donna, and Williams, Robin M. Jr. 1992. "Successful Aging: A Life-Course Perspective on Women's Multiple Roles and Health," *American Journal of Sociology* 97(6): 1612-1638.

- Neuman, K., 2008. Quit your job and get healthier? The effect of retirement on health. *Journal of Labor Research*, 29(2), pp.177-201.
- Nikolova, M. and Graham, C., 2014. Employment, late-life work, retirement, and well-being in Europe and the United States. IZA Journal of European Labor Studies, 3(1)
- Parsons, M., 2014. *Dying unneeded: the cultural context of the Russian mortality crisis*.

 Vanderbilt University Press.
- Phillipson, C., 2015. The political economy of longevity: developing new forms of solidarity for later life. *The Sociological Quarterly*, 56(1): 80-100.
- Pinquart, Martin, and Ines Schindler. 2007. Changes of life satisfaction in the transition to retirement: a latent-class approach. *Psychology and aging* 22(3): 442.
- Pinquart, M. and Sörensen, S., 2001. Gender differences in self-concept and psychological well-being in old age: A meta-analysis. *The Journals of Gerontology Series B:**Psychological sciences and social sciences, 56(4): P195-P213
- Platts, L.G. and Glaser, K., 2017. Predictors of returns to work following retirement: A prospective analysis of Germany, Russia and the United Kingdom.
- Pravitel'stvo Rossiiskoi Federatsii 2018. O vnesenii proekta federal'nogo zakona "O vnesenii izmenenii v otdel'nye zakonodatel'nye akty Rossiiskoi Federatsii po voprosam naznecheniya v vyplaty pensii" Moscow, available at:

 http://asozd2c.duma.gov.ru/addwork/scans.nsf/ID/9EBB053146D494C6432582AE00

 4831ED/\$FILE/489161-7_16062018_489161-7.PDF?OpenElement
- Radl, J., 2013. Labour market exit and social stratification in Western Europe: The effects of social class and gender on the timing of retirement. *European Sociological Review*, 29(3): 654-668.
- Ravallion M, Lokshin M 2001. Identifying welfare effects from subjective questions. Economica 68(271): 335–357.

- Ridgeway, C. 2011. Framed by Gender: How Gender Inequality Persists in the Modern World
 Oxford, New York: Oxford University Press.
- Rosenberg, M. and McCullough, B.C., 1981. Mattering: Inferred significance and mental health among adolescents. *Research in community & mental health*.
- Roscigno, Vincent J., Mong, Sherry, Byron, Reginald, Tester, Griff 2007. Age Discrimination, Social Closure and Employment. *Social Forces*, 86(1): 313-334.
- Rosstat 2014. Prodolzhitel'nost' trudogo stazha postle naznacheniya i vidu naznachennoi pensii v Rossiiskoi Federatsii v 2014 godu, available at http://www.gks.ru/free_doc/new_site/population/generation/tab-st-tr_st.htm
- Rosstat 2017a Russia in Figures, Moscow: Rosstat.
- Rosstat 2017b. Raspredelenie obshchei chislennosti maloimushchego naseleniye po osnovnym gruppam available at http://www.gks.ru/bgd/regl/b17_44/Main.htm
- Rosstat 2018. Osnovnye pokazateli pensionnogo obespecheniya v Rossiiskoi federatstii, available at http://www.gks.ru/wps/wcm/connect/rosstat main/rosstat/ru/statistics/population/gene ration/#
- Sargent, L. et al. 2013. 'Reinventing retirement: New pathways, new arrangements, new meanings,' *Human Relations*, 66: 3: 3–21.
- Scherger, S., 2015. Paid work beyond pension age—Causes, contexts, consequences. In *Paid Work Beyond Pension Age* (pp. 1-27). Palgrave Macmillan, London.
- Scherger, S., Hagemann, S., Hokema, A. and Lux, T., 2012. *Between privilege and burden:*Work past retirement age in Germany and the UK (No. 04/2012). ZeS-Arbeitspapier.
- Shkolnikov, V. M., Andreev, E. M., Leon, D. A., McKee, M., Meslé, F., & Vallin, J. 2004.

 Mortality reversal in Russia: the story so far. *Hygiea Internationalis*, 4(1), 29-80.

- Shkolnikov, Vladimir M., Evgeny M. Andreev, Martin McKee, and David A. Leon 2013.

 "Components and possible determinants of the decrease in Russian mortality in 20042010." *Demographic research* 28: 917-950.
- Solov'ev, A. K. 2016. Aktual'nyi analiz urovnya zhini pensionerov v Rossii, *Problemy rynochnoi ekonomiki*, 4: 4-17.
- Smith, M. B., 2015. The withering away of the danger society: The pensions reforms of 1956 and 1964 in the Soviet Union. *Social Science History*, **39**(1), pp. 129-148.
- Steele, F., French, R. & Bartley, M. 2013. Adjusting for Selection Bias in Longitudinal Analyses Using Simultaneous Equations Modeling. *Epidemiology* **24**, 703–711.
- Steptoe, A., Deaton, A., & Stone, A. A. 2015. Subjective wellbeing, health, and ageing. *The Lancet*, 385(9968): 640-648.
- Thébaud, S. 2010. Masculinity, Breadwinning and Bargaining: Understanding men's housework in the cultural context of paid work, *Gender & Society*, 24: 330-354.
- Thoits, P.A., 1983. Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American sociological review*, pp.174-187.
- Thoits, P.A., 2011. Mechanisms linking social ties and support to physical and mental health. *Journal of health and social behavior*, 52(2): 145-161.
- Townsend, P., 1981. The structured dependency of the elderly: a creation of social policy in the twentieth century. *Ageing and Society*, 1(01), pp.5-28.
- Townsend, P., 2006. Policies for the aged in the 21st century: more 'structured dependency' or the realisation of human rights?. *Ageing and society*, 26(02): 161-179.
- Townsend, Nick, Nichols, Melanie, Scarborough, Peter and Mike Rayner 2015.

 Cardiovascular disease in Europe epidemiological update 2015, *European Heart Journal*, Volume 36, Issue 40, 21: 2696–2705.

- Utrata, J. 2011. Youth privilege: Doing age and gender in Russia's single-mother families.

 Gender & Society, 25(5): 616-641.
- Vickerstaff, S. 2007. What do older workers want? Gradual retirement? *Social & Public Policy Review*
- Vanderwater, E.A., Ostrove, J.M. & Stewart A.J. 1997 "Predicting women's well-being in midlife: The importance of personality development and social role involvements."

 Journal of Personality and Social Psychology, 72: 1147-1160.
- West, C. and Zimmerman, D. 1987. Doing gender. Gender & Society, 1: 125-151.
- Westerlund et al. 2010. Effect of retirement on major chronic conditions and fatigue: French GAZEL occupational cohort study. *Bmj*, *341*, p.c6149.
- Wooldridge, Jeffrey M. 2015. Introductory econometrics: A modern approach. Nelson Education
- Yang, Y., 2008. Social inequalities in happiness in the United States, 1972 to 2004: An ageperiod-cohort analysis. *American Sociological Review*, 73(2); 204-226.
- Zaridze, D., Lewington, S., Boroda, A., Scélo, G., Karpov, R., Lazarev, A., ... & Sherliker, P. 2014. Alcohol and mortality in Russia: prospective observational study of 151 000 adults. *The Lancet*, 383(9927), 1465-1473.

Table 1: Distribution of the analysis sample according to socio-demographic characteristics, and one-wave

transition probabilities for time-varying characteristics				
Baseline Characteristics	Men N (%)	Women N (%)		
Life satisfaction				
Not at all satisfied	177(7.3)	235(9.7)		
Less than satisfied	575(23.8)	748(30.7)		
Both yes and no	581(24.1)	565(23.2)		
Rather satisfied	894(37)	755(31)		
Fully satisfied	187(7.8)	130(5.3)		
Age	49.3 (4.5)	47.8 (3.3)		
45-49 years	1413(58.5)	1708(70.2)		
50-54 years	611(25.3)	679(27.9)		
55-70 years	390(16.2)	46(1.9)		
Self-reported health				
Very good/good	731(30.3)	486(20.0)		
Average	1525(63.2)	1711(70.3)		
Bad / very bad	158(6.6)	236(9.7)		
Marital Status				
Married/partnered	2211(91.6)	1663(68.4)		
Unpartnered	203(8.4)	770(31.7)		
Individual income quintile				
1 (lowest)	256(10.6)	304(12.5)		
2	260(10.8)	419(17.2)		
3	359(14.9)	515(21.2)		
4	635(26.3)	663(27.3)		
5 (highest)	904(37.5)	532(21.9)		
Household income quintile				
1 (lowest)	375(15.5)	441(18.1)		
2	402(16.7)	412(16.9)		
3	493(20.4)	525(21.6)		
4	546(22.6)	514(21.1)		
5	598(24.8)	541(22.2)		
Occupational level ¹				
High	650(26.9)	1209(49.7)		
Medium	947(39.3)	825(33.9)		
Low	816(33.8)	399(16.4)		
TOTAL N	2414	2433		
Levels of change between baseline and t+1				
Life satisfaction increased 1+point	400 (16.9)	485 (20.3)		
Life satisfaction decreased 1+point	475 (20.1)	438 (18.3)		
Became non-working pensioner ²	27 (1.4)	44 (1.8)		
Became working pensioner ²	95 (4.0)	196 (8.0)		
Became unemployed with no pension ²	187 (7.9)	125 (5.2)		
Change marital status	71 (2.9)	128 (5.3)		
Move into higher individual income quintile	337 (14.2)	397 (16.6)		
Move into lower individual income quintile	379 (16.0)	403 (16.9)		

 $[\]frac{\text{Move into lower individual income quintile}}{\text{^{1}}\text{High} = ISCO 2008 levels 1-3 managers, professionals, technicians, medium} = ISCO 2008 levels 4-7, clerical support}$ workers, services and sales workers, skilled agricultural, forestry and fishery workers, craft and related trades workers, low= ISCO 2008 levels 8-9 and 0: plant, machine operators and assemblers, elementary occupations, armed forces occupations. ² At baseline all panel members were in work and not receiving a pension.

Table 2: Linear fixed-effect models of work and retirement transitions on life satisfaction scores for men and women aged 45-70 years, RLMS data waves 12-24

MEN AND WOMEN 45-70 YEARS Pension/working (ref: pension, not working) Model 1 β(SE) Model 2 β(SE) Model 3 β(SE) Model 4 β(SE) Pension/working (ref: pension, working) 0.26(0.03)*** 0.12(0.02)*** 0.22(0.04)*** 0.22(0.07)** No pension, working 0.15(0.03)*** 0.08(0.03)* 0.18(0.04)*** 0.22(0.06)** No pension, not working -0.25(0.04)*** -0.23(0.04)*** -0.16(0.06)** -0.23(0.09)* Individual income quintile (ref: 1-lowest) 0.08(0.03)** 0.08(0.03)** 0.10(0.04)** 3 0.12(0.03)*** 0.12(0.03)*** 0.12(0.03)*** 0.13(0.04)** 4 0.18(0.03)*** 0.18(0.03)*** 0.24(0.04)***
working) Pension, working No pension, working No pension, not working Individual income quintile (ref: 1-lowest) $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
Pension, working $0.26(0.03)^{***}$ $0.12(0.02)^{***}$ $0.22(0.04)^{***}$ $0.22(0.07)^{**}$ No pension, working $0.15(0.03)^{***}$ $0.08(0.03)^{**}$ $0.18(0.04)^{***}$ $0.22(0.06)^{**}$ No pension, not working $0.25(0.04)^{***}$ $0.23(0.04)^{***}$ $0.16(0.06)^{**}$ $0.23(0.09)^{**}$ Individual income quintile (ref: 1-lowest) $0.08(0.03)^{**}$ $0.08(0.03)^{**}$ $0.08(0.03)^{**}$ $0.10(0.04)^{**}$ $0.12(0.03)^{***}$ $0.12(0.03)^{***}$ $0.12(0.03)^{***}$
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No pension, not working Individual income quintile (ref: 1-lowest) 2 0.08(0.03)** 0.12(0.03)*** 0.10(0.06)** 0.10(0.09)* 0.10(0.04)** 0.12(0.03)*** 0.12(0.03)*** 0.13(0.04)**
Individual income quintile (ref: 1- lowest) 2
lowest) 2 0.08(0.03)** 0.08(0.03)** 0.10(0.04)** 3 0.12(0.03)*** 0.12(0.03)***
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$0.12(0.03)^{***}$ $0.12(0.03)^{***}$ $0.13(0.04)^{**}$
0.18(0.03)*** 0.18(0.03)*** 0.24(0.04)***
$0.28(0.03)^{***}$ $0.28(0.03)^{***}$ $0.35(0.05)^{***}$
Household income quintile (ref: 1-
lowest)
$0.05(0.02)^*$ $0.05(0.02)^*$ $0.05(0.02)^*$
$0.11(0.02)^{***}$ $0.11(0.02)^{***}$ $0.11(0.02)^{***}$
$0.16(0.02)^{***}$ $0.16(0.02)^{***}$ $0.15(0.02)^{***}$
$0.23(0.02)^{***}$ $0.23(0.03)^{***}$ $0.23(0.03)^{***}$
Interaction with occupational class
Pension, working*medium -0.16(0.07)* -0.17(0.07)*
No pension, working *medium $-0.15(0.06)$ * $-0.16(0.06)$ *
No pension, not working*medium -0.07(0.07) -0.05(0.08)
Pension, working*low -0.13(0.08) -0.14(0.08)
No pension, working *low -0.17(0.07)* -0.19(0.07)*
No pension, not working*low -0.16(0.08)* -0.12(0.08)
Interactions with gender
Pension/working*gender
Pension, working*female 0.02(0.06)
No pension, working*female -0.04(0.06)
No pension, no work* female 0.14(0.08)
Income quintile*gender
2*female -0.05(0.05)
3*female -0.04(0.06)
4*female -0.11(0.04)*
5*female -0.16(0.06)*
N observations/groups 29,037 / 4847 29,037 / 4847 29,037 / 4847 29,037 / 4847

N observations/groups 29,037 / 4847 29,037 / 4847 29,037 / 4847 29,037 / 4847

All models are linear fixed effect models. All models adjusted for: age, wave fixed-effects, marital status, self-reported health status. *P<0.05 **P<0.005 ***P<0.001.

Table 3: Characteristics of the Qualitative Sample

	Men	Women	Total
Education			
Secondary	3 (23%)	4 (16%)	7 (18%)
Vocational	4 (31%)	13 (52%)	17 (45%)
Higher	6 (46%)	8 (32%)	14 (37%)
Total	13 (100%)	25 (100%)	38 (100%)
Last occupation before pension			
Professional/Managerial	6 (46%)	7 (28%)	13 (34%)
Upper routine non-manual	2 (15%)	6 (24%)	8 (21%)
Lower routine non-manual	2 (15%)	3 (12%)	5 (13%)
Technicians/Nurses	-	1 (4%)	1 (3%)
Skilled manual	3 (23%)	1 (4%)	4 (11%)
Semi/Unskilled manual	-	7 (28%)	7 (18%)
Total	13 (100%)	25 (100%)	38 (100%)
Post-pension employment trajectory			
Employment→ working pensioner	8 (61%)	16 (64%)	24 (63%)
Employment \rightarrow working pensioner \rightarrow non-working pensioner	-	4 (16%)	4 (10%)
Employment → multiple transitions between working and non- working pensioner	1 (8%)	1 (4%)	2 (5%)
Employment → non-working pensioner	1 (8%)	-	1 (3%)
Unemployment → non-working pensioner	3 (23%)	3 (12%)	6 (16%)
Unemployment → multiple transitions between working and non-working pensioner	-	1 (4%)	1 (3%)
Total	13 (100%)	25 (100%)	38 (100%)

Supplementary Tables

Table S1: Binary fixed-effect models for odds of reporting being 'rather' or 'fully satisfied' with life, men and women aged 45-70 years, RLMS data waves 12-24

MEN AND WOMEN 45-70 YEARS	Model 1 β(SE)	Model 2 β(SE)	Model 3 β(SE)	Model 4 β(SE)
Pension/working (ref: pension, not working)			1	1
Pension, working	1.83(1.57-2.14)***	1.34(1.13-1.59)**	1.72(1.33-2.21)***	1.73(1.21-2.47)**
No pension, working	1.37(1.17-1.62)***	1.17(0.99-1.39)*	1.54(1.20-1.97)**	1.70(1.23-2.35)**
No pension, not working	0.58(0.48-0.71)***	0.60(0.49-0.73)***	0.83(0.59-1.17)	0.74(0.48-1.13)
Individual income quintile (ref: 1- lowest)	,	,	,	,
2		1.18(1.02-1.36)*	1.18(1.02-1.36)*	1.28(1.03-1.58)*
3		1.25(1.07-1.46)**	1.25(1.07-1.46)**	1.38(1.11-1.72)**
4		1.50(1.27-1.77)***	1.50(1.27-1.77)***	1.79(1.43-2.25)***
5		1.79(1.49-2.14)***	1.77(1.48-2.13)***	2.19(1.72-2.79)***
Household income quintile (ref: 1- lowest)				
2		1.09(0.96-1.24)	1.09(0.96-1.24)	1.08(0.95-1.23)
3		1.25(1.10-1.43)**	1.25(1.10-1.43)*	1.24(1.09-1.42)**
4		1.41(1.22-1.62)***	1.41(1.22-1.62)***	1.39(1.21-1.61)***
5		1.77(1.51-2.08)***	1.76(1.50-2.07)***	1.75(1.49-2.05)***
Interaction with occupational class		,	,	,
Pension, working*medium			0.65(0.46-0.91)*	0.64(0.45-0.90)*
No pension, working *medium			0.68(0.50-0.92)*	0.65(0.48-0.89)**
No pension, not working*medium			0.70(0.44-1.09)	0.71(0.45-1.12)
Pension, working*low			0.74(0.50-1.10)	0.72(0.48-1.07)
No pension, working *low			0.64(0.46-0.88)**	0.60(0.43-0.84)**
No pension, not working*low			0.51(0.31-0.82)**	0.56(0.34-0.92)*
Interactions with gender			,	,
Pension/working*gender				
Pension, working*female				1.05(0.74-1.49)
No pension, working*female				0.90(0.67-1.22)
No pension, no work* female				1.31(0.87-1.97)
Income quintile*gender				,
2*female				0.85(0.64-1.14)
3*female				0.82(0.61-1.11)
4*female				0.69(0.51-0.95)*
5*female				0.64(0.45-0.89)**
	20,711 / 2,968	20,711 / 2,968	20,711 / 2,968	20,711 / 2,968

All models are binary fixed effect models. All models adjusted for: age, wave fixed-effects, marital status, self-reported health status. *P<0.05 **P<0.005 ***P<0.001