

Rita Borges Neves, Fátima Barbosa, Alice Delerue Matos,  
Victor Rodrigues and José Machado

## 8 Unemployed 50+: exploring risk factors for depression in Europe

- 
- ▶ 50 plus unemployed have higher risk of depression compared to the employed
  - ▶ Unemployed most vulnerable to depression have higher financial strain and worse physical health
  - ▶ Jobless in Austria, Spain, Italy, Poland, Hungary and Czech Republic have increased risk of depression
- 

The recent economic crisis has forced companies worldwide to restructure, downsize and close down, leading to the loss of millions of jobs. More than nine per cent of the 23,000 million individuals affected by unemployment in 2011 were over 55 years old (EUROSTAT). This percentage may in fact be even larger if we take into account discouraged people who opt out of the labour market through pre-retirement and early retirement.

Job loss may threaten mental health. The unemployed often suffer from depression, anxiety, stress-related physical ailments, and some even commit suicide (Wanberg 2012). A recent meta-analysis study indicates that 34 per cent of the unemployed have mental health problems, compared with 16 per cent of those in work (Paul & Moser 2009).

These results are understandable in a Western context where a salary is the main resource for living and adulthood roles are entangled with a working identity. This makes paid work central to wellbeing. However, some people can suffer more than others if they lose their job, and therefore it can be assumed that the economic and psychosocial need for paid work varies (Nordenmark & Strandh 1999). Unemployed who have financial stability and are socially more involved could be better protected from the negative consequences of job loss. It has been shown that intimate reciprocal relationships, such as marriage and cohabitation, may be an important support and prevent depression in the event of unemployment (Paul & Moser 2009). Involvement in rewarding social activities may grant a sense of connection, and social contact has also been shown to be associated with an increased sense of wellbeing (Sirven & Debrand 2008, Wahrendorf et al. 2008).

The current context of economic crisis and population ageing together with Europe's commitment to active ageing policies that envisage the enhancement

of “opportunities for health, participation and security”, highlight the need for insights into the association of unemployment with mental health at older ages. Few studies have addressed this topic, however. Longitudinal studies show that depression is an outcome of job loss, regardless of baseline health status and sociodemographic differences, for Americans in the 50+ age group (Gallo et al. 2000; 2006). They identify the less wealthy as a group particularly susceptible to depression, among the unemployed (Gallo et al. 2000). A European study showed that the unemployed are at enhanced risk of being depressed, compared with the employed (Alavinia & Burdorf 2008). Despite the valuable information given by these studies, the potential for social involvement (emotional support and participation in social activities), and country differences, are still underexplored.

This research aims to fill these gaps by: 1) investigating the risk of depression among the older unemployed in Europe, compared with the employed, while controlling for sociodemographics, financial distress, health, and social involvement characteristics; 2) establishing a profile of the older unemployed more vulnerable to depression; 3) understanding to what extent the relationships between depression and unemployment/ employment may vary from one country to another. The most recent SHARE data, collected after the onset of the global financial crisis, will enable this analysis.

## 8.1 Analysing unemployment and depression

We restricted our sample to SHARE Wave 4 respondents aged over 50, in the labour force, either unemployed or employed/self-employed, while excluding retirees, the disabled and homemakers. Cross-sectional analyses over 1,850 unemployed and 14,992 employed people disclosed similarities and differences between these two groups regarding depression. Since the survey does not have a uniform sampling design, calibrated individual weights were used for descriptive analyses. Binary logistic regressions were performed for depression. Finally, odds ratios of depression for the unemployed/employed were calculated for each country, controlling all covariates.

### *Outcome:*

“Depression” was measured by using the EURO-D 12-item scale that includes questions about feelings of depression, pessimism, wishing death, guilt, irritability, tearfulness, fatigue, sleeping troubles, loss of interest, loss of appetite, reduction in concentration, and loss of enjoyment over the last month. The threshold we use is having four or more symptoms (also see, e. g., Dewey & Prince 2005).

*Covariates:*

“Unemployment/Employment” is a self-reported measure that distinguishes those that define themselves as unemployed, having no paid work, having been laid off or being out of work, from those who define themselves as employed or self-employed.

*Sociodemographics:* 1) “age” – calculated according to the interview date; 2) “gender”; 3) “education” – categorised as lower (no schooling, levels 0–2), medium (levels 3–4) and higher (levels 5 and 6) according to the International Standard Classification of Education –97 (ISCED).

*Health:* 1) “chronic diseases”: ever diagnosed (heart disease, stroke, hypertension, diabetes, cancer, lung disease, and general disability) less than two and two or more diseases. 2) “Limitations in mobility”: self-reported difficulty with various everyday life activities due to a health or physical problem. Difficulties that last less than three months are excluded.

*Financial distress* was based on the respondents’ assessment of how easily monthly income enables the household to make ends meet. Two groups were created, those that reported “with great difficulty” or “with some difficulty” (financial distress) and those that stated “fairly easily” or “easily” (no financial distress).

*Social involvement:* 1) “emotional support” distinguishes those who mention the spouse/partner as a person with whom they discuss important things, problems and concerns from those who receive emotional support from significant others and those that do not receive any emotional support; 2) “number of social activities” in the past twelve months, including voluntary or charity work, educational or training course, attending sports, social or other clubs, taking part in activities of a religious organisation, taking part in a political or community-related organisation, reading books, magazines or newspapers and games such as crossword puzzles, Sudoku, cards or chess; 3) “Given help to others” refers to the provision of personal care or practical household help to family members living outside the household, friends or neighbours in the past twelve months.

## 8.2 Depicting the unemployed

Within our sample eleven per cent are unemployed. As seen in Table 8.1 the average age of the total sample is 57.05 (Standard Deviation = 4.03). 45 per cent are women. The unemployed are just slightly older (mean = 57.20; SD = 3.65) than the employed counterparts (mean = 57.03; SD = 4.08). The proportion of men is higher among the unemployed (60.4 %). Compared with the employed, the unemployed have lower education levels (43.1 % against, 24.6 % of the employed), and they are more likely to suffer from financial distress (77.7 % of the unemployed but

only 33.8% of the employed). The unemployed report receiving less emotional support from the spouse (only 57% of the unemployed compared to 66% of the employed) and rely on emotional support from others (39.1% against 31.4% of the employed).

Those without a paid job were involved in fewer than two activities in the last year (mean = 1.87, SD = 1.83), fewer than the two and a half reported by the employed (mean = 2.56, SD = 1.94). The unemployed suffer more from chronic diseases than the employed (41.8% had two or more chronic conditions against 28% of the employed) and have more limitations in mobility (28.2% reported at least two activities they feel are limited by health problems, against 16.2% of the employed). Overall the unemployed perform worse than the employed in most of the parameters that measure health.

And as a matter of fact, 22 per cent of our total sample reported four or more depressive symptoms. The prevalence of depression among the unemployed was 35 per cent, whereas for the employed group it was 21 per cent. On average the unemployed report one more depressive symptom (mean=3.07; SD=2.46) than the employed (mean=2.06; SD=1.99).

**Table 8.1:** Characteristics of the sample

Variable	total sample (n=16,842)	unemployed (n=1,850)	employed (n=14,992)	p value
Age, mean (SD) years	57.05 (4.029)	57.2 (3.646)	57.03 (4.078)	<0.040
Gender: Female (%)	44.9	39.6	45.6	<0.001
Education (ISCED-97)				<0.001
Lower (%)	26.8	43.1	24.6	
Medium (%)	45.4	46.0	45.3	
High (%)	27.9	10.9	30.2	
Financial distress: Yes (%)	39.0	77.7	33.8	<0.001
Emotional support				<0.001
Emotional support from the spouse (%)	65.0	57.0	66.0	
Emotional support from other(s) (%)	31.4	39.1	30.4	
No emotional support (%)	3.6	3.8	3.6	
Number of activities, mean (SD)	2.48 (1.936)	1.87 (1.826)	2.56 (1.936)	<0.001
Given help to others: Yes (%)	32.4	24.1	33.5	<0.001
Chronic diseases >=2 (%)	29.7	41.8	28.0	<0.001
Limitations in mobility >=2 (%)	17.6	28.2	16.2	<0.001
Depressive symptoms >=4 (%)	22.3	35.3	20.6	<0.001

Source: SHARE Wave 4 release 1; weighted data

Table 8.2 shows a comparison of the depressed with the non-depressed unemployed in terms of sociodemographics, financial distress, health, emotional support and participation in social activities. Looking at both the non-depressed and depressed unemployed, we find that the typical depressed unemployed person is a woman who receives less emotional support from her spouse, relies on emotional support that she receives from others and is more prone to health problems.

**Table 8.2:** Characteristics of the unemployed

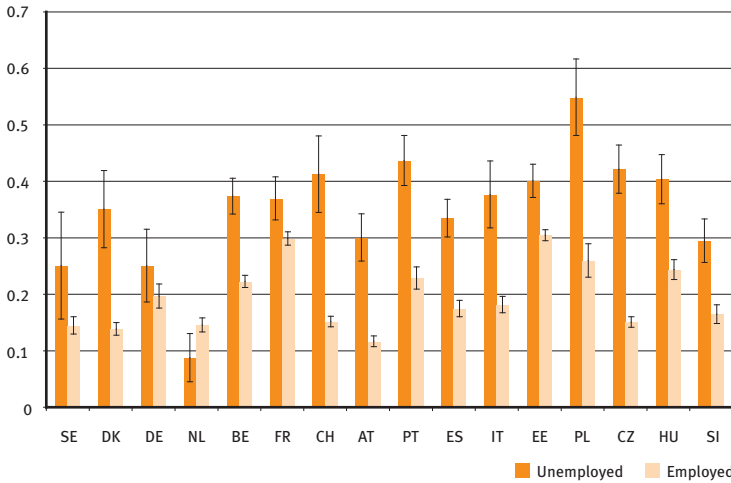
Variable	< 4 depressive symptoms (n=1,182)	≥ 4 depressive symptoms (n=668)	p value
Age, mean (SD) years	57.10 (3.638)	57.37 (3.651)	0.082
Gender: Female (%)	32.9	51.9	<0.001
Education (ISCED-97)			0.23
Lower (%)	42.4	44.4	
Medium (%)	45.7	46.5	
High (%)	11.9	9.1	
Financial distress: Yes (%)	75.2	82.3	<0.001
Emotional support			<0.001
Emotional support from the spouse (%)	63.6	44.9	
Emotional support from other(s) (%)	32.5	51.4	
No emotional support (%)	3.9	3.7	
Number of activities, mean (SD)	2.02 (1.897)	1.58 (1.650)	0.048
Given help to others: Yes (%)	23.0	26.3	0.011
Chronic diseases ≥2 (%)	36.5	51.6	<0.001
Limitations in mobility ≥2 (%)	19.5	44.2	<0.001

Notes: N=1,850

Source: SHARE Wave 4 release 1; weighted data

### 8.3 Country-to-country variation in prevalence of depression

Figure 8.1 shows the percentage of individuals with four or more depressive symptoms, by country. As seen, the prevalence of depression varies from one country to another and is significantly higher for the unemployed than the employed counterparts in Denmark, Belgium, Switzerland, Austria, Portugal, Spain, Italy, Estonia, Poland, Czech Republic, Hungary and Slovenia. The highest percentages of depressed unemployed are found in Poland (55%), Portugal (44%) and Czech Republic (42%). The differences between unemployed and employed who are depressed are most glaring in Poland and Czech Republic.



**Figure 8.1:** Four and more symptoms of depression as measured on EURO-D scale, unemployed vs. employed

Notes: N=16,842 (total), N=1,850 (unemployed), N=14,992 (employed)

Source: SHARE Wave 4 release 1; weighted data

## 8.4 Risk of depression

An assessment of the association between depression and unemployment, after controlling for all of the covariates, shows that the overall risk of depression for the unemployed is 45 per cent higher than for the employed (Odds Ratio=1.45; 95% Confidence Intervals=1.290–1.629).

Being unemployed, having health problems (having at least two limitations on daily activities and at least two chronic diseases), being a woman, suffering from financial distress, not receiving emotional support from the spouse and providing help to others go hand in hand with an increased risk of depression.

An analysis by country shows that there are no significant differences between depression risks for the unemployed, except for Austria, Spain, Italy, Poland, the Czech Republic and Hungary. The effect was particularly strong for Poland (OR=2.942; 95% CI=1.347–6.423) followed by Austria (OR=2.193; 95% CI=1.342–3.583) and Italy (OR=2.013; 95% CI=1.080–3.752).

**Table 8.3:** Results from logistic regression analyses with depression as the dependent variable

Variables	OR	95 % CI	p value
Unemployed	1.450	1.290–1.629	<0.001
Age	0.985	0.977–0.994	0.001
Gender: Female	1.949	1.795–2.116	<0.001
Education (ISCED-97)			
Low	1.043	0.934–1.164	0.457
Medium	0.945	0.860–1.038	0.237
High (a)			
Financial distress: Yes	1.680	1.544–1.827	<0.001
Emotional support			
Emotional support from the spouse (a)			
Emotional support from other(s)	1.462	1.344–1.589	<0.001
No emotional support	1.514	1.233–1.859	<0.001
Number of activities	0.945	0.924–0.967	<0.001
Given help to others: yes	1.419	1.306–1.541	<0.001
Chronic diseases >=2	1.695	1.556–1.847	<0.001
Limitations in mobility >=2	2.530	2.299–2.784	<0.001

Notes: (a) reference category; N=16,509

Source: SHARE Wave 4 release 1; unweighted data

**Table 8.4:** Results from logistic regression analyses by country with depression as the dependent variable

Country	N	OR(a)	95 % CI	p value
SE	521	2.560	0.905–7.243	0.076
DK	985	1.923	0.948–3.900	0.070
DE	373	0.799	0.332–1.921	0.616
NL	804	0.788	0.313–1.984	0.613
BE	1,644	1.118	0.796–1.570	0.521
FR	1,618	1.022	0.701–1.490	0.911
CH	1,513	1.706	0.894–3.258	0.105
AT	1,220	2.193	1.342–3.583	0.002
PT	579	1.447	0.899–2.329	0.128
ES	841	1.816	1.186–2.780	0.006
IT	744	2.013	1.080–3.752	0.028
EE	2,498	1.272	0.953–1.697	0.102
PL	231	2.942	1.347–6.423	0.007
CZ	1,582	1.929	1.246–2.987	0.003
HU	714	1.890	1.171–3.050	0.009
SI	642	1.391	0.826–2.342	0.215

Notes: (a) OR of covariate unemployment/employment; the results are adjusted for age; gender; financial distress; education; emotional support; given help to others; number of activities; chronic diseases and mobility.

Source: SHARE Wave 4 release 1; unweighted data

## 8.5 Individual and country differences in depression

The aim of this paper was to explore depression in unemployed Europeans aged over 50 compared with their employed counterparts. We have shown that depression is more prevalent in the unemployed, regardless of sociodemographic characteristics, financial distress, health problems, or emotional support and participation in social activities. This means that even after considering some of the factors that can account for depression among the jobless, there are still differences between being employed and unemployed that explain higher risk of depression among the latest. Previous studies have also found higher risk of depression among the unemployed (Gallo et al. 2000, Mckee-Ryan et al. 2005, Gallo et al. 2006, Paul & Moser 2009).

We found that the odds for being depressed is higher for younger unemployed females that live under financial distress, that have no emotional support from the husband, that helps others, and presents chronic diseases ( $\geq 2$ ) as well as limitations in mobility ( $\geq 2$ ). Gender differences have been well established in the psychiatric literature (Prince et al. 1999) and our results also show that women are more prone to depression. Being engaged in intimate and supportive social relationships is another important resource for mental health, which is consistent with previous literature (Mckee-Ryan et al. 2005). We noticed however that the support received from a spouse/partner is particularly important, more than the support received by significant others. In the scope of this paper it was not possible to explore the reasons for this difference. Future research would benefit from a better understanding regarding the impact of social networks.

Having difficulties making ends meet is reportedly associated with increased depression risk (Selenko & Batinic 2011). This holds true for the present paper as well. Financial strain can be a stressful factor and increase the risk of mental illness, but it can also be an outcome of poor mental functioning. Health related problems are also relevant while addressing depression risks among active 50 plus which is in line with previous studies (Dewey & Prince 2005).

The experience of unemployment may derive into a chain of adversity that affects economic, social and health dimensions of the lives of the jobless (Price et al. 2002). However, those in worse health and socially more vulnerable may be selected out of the labour force (Salm 2009). Reverse causality could also play a role concerning the other links we showed. Future longitudinal approaches inferring causal relationships may benefit from the insertion of social involvement variables while discriminating for the provider of emotional support and social participation.



On a country level, mental health inequalities between unemployed and employed are significant in Austria, Spain, Italy, Poland, Hungary and the Czech Republic after controlling for relevant factors on the individual level. Being jobless in these countries is associated with an increased risk of depression. Larger country samples would enable a more detailed comparative analysis. Further examination of cultural and welfare factors should be considered in future research.

## References

- Alavinia, Seyed, Burdorf, Alex (2008): “Unemployment and retirement and ill-health: a cross-sectional analysis across European countries”. In: *International Archives of Occupational and Environmental Health* 82, p. 39–45.
- Dewey, Michael, Prince, Martin (2005): “Mental health”. In: Börsch-Supan, Axel, Brugiavini, Agar, Jürges, Hendrik, Mackenbach, Johan, Siegrist, Johannes, Weber, Guglielmo (Eds.): *Health, ageing and retirement in Europe. First results from the Survey of Health, Ageing and Retirement in Europe*. Mannheim: Mannheim Research Institute for the Economics of Aging, p. 108–117.
- Gallo, William, Bradley, Elizabeth, Dubin, Joel, Falba, Tracy, Teng, Hsun-Mei, Kasl, Stanislav (2006): “The persistence of depressive symptoms in older workers who experience involuntary job loss: results from the health and retirement survey”. In: *Journal of Gerontology* 61B(4), p. 221–228.
- Gallo, William, Bradley, Elizabeth, Siegel, Michele, Kasl, Stanislav (2000): “Health effects of involuntary job loss among older workers: findings from the health and retirement survey”. In: *Journal of Gerontology* 55B(3), p. 131–140.
- Mckee-Ryan, Frances, Song, Zhaoli, Wanberg, Connie, Kinicki, Angelo (2005): “Psychological and physical well-being during unemployment: a meta-analytic study”. In: *The Journal of applied psychology* 90(1), p. 53–76.
- Nordenmark, Mikael, Strandh, Mattias (1999): “Towards a sociological understanding of mental well-being among the unemployed: the role of economic and psychosocial factors”. In: *Sociology* 33(3), p. 577–597.
- Paul, Karsten, Ingmar, Moser, Klaus (2009): “Unemployment impairs mental health: meta-analyses”. In: *Journal of Vocational Behavior* 74(3), p. 264–282.
- Price, Richard, Choi, Jin Nam, Vinokur, Amiram (2002): “Links in the chain of adversity following job loss: how financial strain and loss of personal control lead to depression, impaired functioning, and poor health”. In: *Journal of Occupational Health Psychology* 7(4), p. 302–12.
- Prince, Martin, Beekman, Aartjan, Deeg, Dorly, Fuhrer, Rebecca, Kivela, Sirkka-Liisa, Lawlor, Brian, Lobo, Antonio, et al. (1999): “Depression symptoms in late life assessed using the EURO-D scale. Effect of age, gender and marital status in 14 European centres”. In: *The British Journal of Psychiatry* 174, p. 339–345.
- Prince, Martin, Reischies, Friedel, Beekman, Aartjan, Fuhrer, Rebecca, Jonker, Catholijn, Kivela, Sirkka-Liisa, Lawlor, Brian, et al. (1999): “Development of the EURO-D Scale – A European Union initiative to compare symptoms of depression in 14 European centres”. In: *British Journal of Psychiatry* 174, p. 330–338.

- Salm, Martin (2009): “Does job loss cause ill health?”. In: *Health Economics* 18, p. 1075–1089.
- Selenko, Eva, Batinic, Bernad (2011): “Beyond debt. A moderator analysis of the relationship between perceived financial strain and mental health”. In: *Social Science & Medicine*, 73(12), p. 1725–1732.
- Sirven, Nicolas, Debrand, Thierry (2008): “Social participation and healthy ageing : an international comparison using SHARE data”. In: *Social Science & Medicine* 67, p. 2017–2026.
- Wahrendorf, Morten, Ribet, Céline, Zins, Marie, Siegrist, Johannes (2008): “Social productivity and depressive symptoms in early old age – results from the GAZEL study”. In: *Aging & Mental Health* 12(3), p. 310–316.
- Wanberg, Connie (2012): “The individual experience of unemployment”. In: *Annual Review of Psychology* 63(2): p. 1–28.