Labor market affiliation after deployment: Danish soldiers fare well, but face increased risk of long-term sickness absence when returning from Afghanistan

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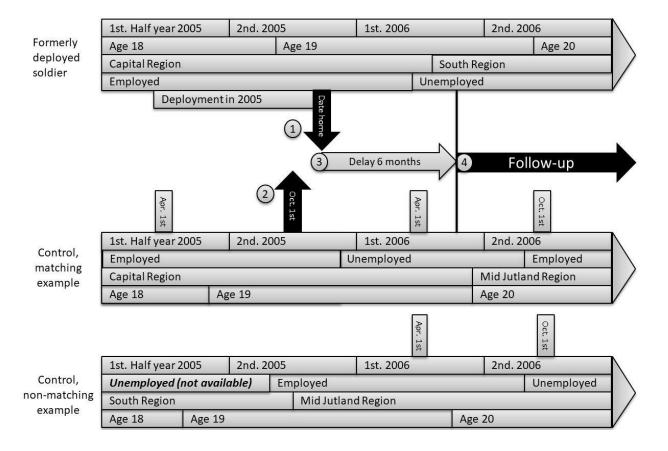
Matching procedure

As the matching variables could change continuously throughout the selection period 2002–2012, controls could potentially match multiple FDS at different times. Therefore, we restricted the sampling of matching values of controls to the first half-year (April 1st) and second (October 1st) wherein they had had a period of at least 6 months of continuous work, ending at most three months before the date. FDS values were sampled the day after homecoming and matched with first or second half-year controls. This procedure ensured that both FDS and controls had been employed for at least six months in the half-year up until they were matched. FDS were assigned controls (1:10) by matching on calendar half-year, region, education, and age. The assigned controls were then assigned a fictitious homecoming date and possibly a second deployment date corresponding to the dates of their FDS match; the control was then removed from further matching with other FDS.

Figure A1 illustrates the matching procedure for a soldier with a match or non-match: The match resembled the soldier during the half-year of homecoming.

Figure A1. Matching example with values and matching procedure for male Danish formerly

deployed soldiers and matched controls: FDS, matching control, and non-matching control.



The figure shows examples of a soldier's demographic and employment values before and during deployment, together with a matching and a non-matching example of controls, and the process of matching: 1) Matching values of FDS were sampled the day after homecoming. 2) Matching values of controls were sampled bi-annually in the first half-year on April 1st and second half-year on October 1st throughout the matching period 2002–2012, in half-years prior to which they had worked a minimum of 6 months. Working periods could continue or terminate in the half-year of the match. 3) When FDS values matched controls values in a half-year, the controls were removed from further matching. Soldiers continued until 10 matches were found or no possible matches remained. 4) FDS and controls were both followed from the date 6 months after the FDS homecoming, for 4½ years, if not otherwise censored.

Labor market state proportions

Table A1 provides an overview of the labor state proportions of FDS and controls at select times, for each of the three main labor market states, and a fourth state indicating other relevant states (e.g., emigrated or pursuing education).

Table A1. State proportions of male Danish formerly deployed soldiers and matched controls who were included in the model, across the follow-up period.

Time since homecoming/match date

Labor market state	6	1 year	2	3	4	5
	months		years	years	years	years
Formerly deployed soldiers						
Employed	80.8%	79.2%	76.3%	74.6%	72.9%	72.8%
Unemployed	6.2%	3.5%	3.3%	3.1%	3.9%	4.1%
LTSA	2.0%	2.0%	1.8%	2.2%	2.0%	2.2%
Other	11.0%	15.3%	18.6%	20.1%	21.2%	20.8%
Control population						
Employed	80.3%	70.8%	63.5%	61.5%	62.4%	64.1%
Unemployed	4.2%	5.5%	6.9%	7.7%	8.5%	8.7%
LTSA	0.9%	1.1%	1.3%	1.4%	1.3%	1.3%
Other	14.5%	22.6%	28.4%	29.4%	27.8%	25.9%

LTSA = Long Term Sickness Absence

Figure A2 and A3 show the proportion of FDS and controls in the model in each of the three main labor market states, since inclusion. The 'other' state includes emigration and education, and the small perturbations that can be discerned in the relationship between work and other states are primarily the result of the biannual uptake at educational institutions. As soldiers' deployments in the period were of 6 months' duration, the soldier and control population would predominately be included in accordance with these homecoming dates, resulting in the bi-annual increases of persons starting education.

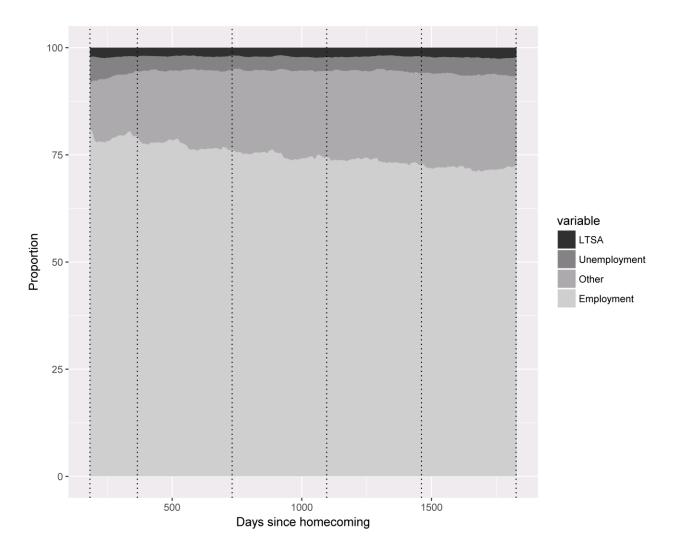


Figure A2. Danish formerly deployed soldiers' proportions in labor market states from 6 months to 5 years after homecoming. LTSA = Long-term sickness absence. The dashed lines indicate 6 months, and 1, 2, 3, 4, and 5 years after homecoming.

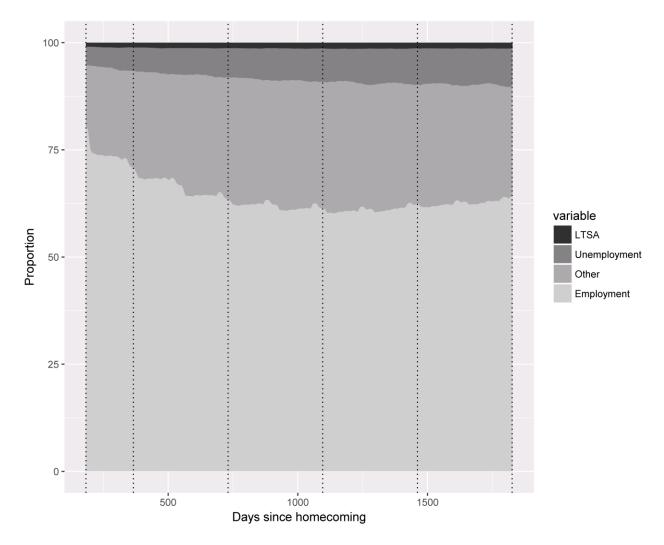


Figure A3. Matched male Danish non-deployed population controls' labor market proportions from 6 months to 5 years after the matching date ('homecoming') of formerly deployed Danish soldiers.

LTSA = Long-term sickness absence. The dashed lines indicate 6 months, and 1, 2, 3, 4, and 5 years after homecoming.