



## Downsizing and purchases of psychotropic drugs: a longitudinal study of stayers, changers and unemployed

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### Background

The conditions on the labour market has changed dramatically the last decades. To become more competitive, more efficient and less sensitive to a shifting economic climate companies and workplaces are striving to increase their flexibility. This can be done in several ways, but reducing the workforce through organizational downsizings has become a common strategy. This may affect the health among both displaced and remaining employees negatively. As regards to mental health, previous findings have been mixed concerning which groups are affected and studies have mainly used self-reported measures on mental health. Focus has been put on depression while less is known about how downsizing affects other mental health aspects, such as sleep problems and anxiety. Our objective was to analyze trajectories of purchases of prescribed sedatives and anxiolytics in connection to downsizing among stayers, changers and unemployed, compared to unexposed workers.

### Method

Gainfully employed Swedish residents aged 20-54 years in 2007, with a stable employment position between 2004 and 2007 were studied between 2004 and 2013 (n=2305795). In total 39,7% was considered exposed to downsizing (n=915461), employed at workplaces with staff reductions on  $\geq 18\%$  between two subsequent

years, in one of five 12-month periods (Nov 2007-Nov 2008... Nov 2011-Nov 2012). Unexposed to downsizing were randomized into five sub-cohorts, matching the periods above, and used as comparison group (n=1390334). With general estimating equation, we calculated odds of purchasing any prescribed sedatives and anxiolytics within nine 12-month periods, from four years before to four years after a downsizing. We further contrasted the odds between specific periods to assess whether there were any statistically significant changes in purchases of the prescription drugs over time and between groups.

### Results

Employees who became unemployed in connection to a downsizing event differed from stayers, changers and non-exposed regarding socio-demographic factors as well as in level and pattern of purchases across the studied period. A higher proportion were younger, had low education and previous sickness history. Their odds of purchasing sedatives and anxiolytics were higher across the whole period, but the odds increased more than among the unexposed before downsizing and then levelled off. The pattern, however, differed in those with no sickness history. Stayers increased their purchases across the entire period, especially those with no sickness

history. No significant changes were seen among those who changed to another job the year after downsizing, except for when taking previous sickness history into account. Looking at number of purchased packages enhanced previous findings. Changers with a sickness history, increased their number of purchased packages of anxiolytics considerably before the downsizing event and those without such a history increased the number of redeemed anxiolytics during the period of the event.

### Conclusions

A weak association between downsizing and purchasing prescribed sedatives and anxiolytic drugs was found among unemployed and stayers, which varied depending on sickness history. Due to the distribution of the exposure across the five periods, results are less sensitive to conditions on labour market for one specific year. However there is a risk of misclassification of the exposure. Employees may work in units where major cut downs have been made but where the workplace in total didn't reach a general staff reduction on  $\geq 18\%$ .

Figure 1

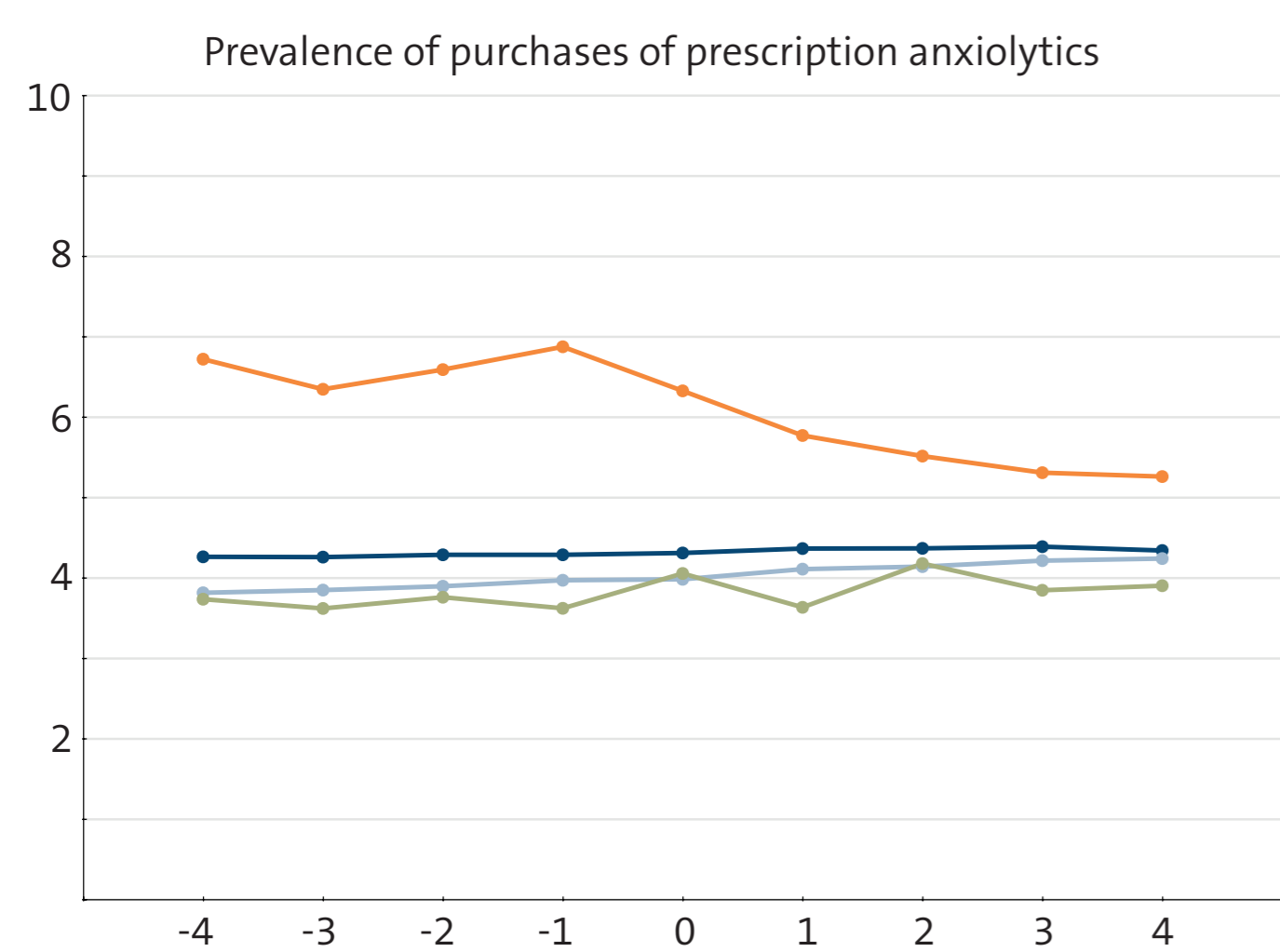


Figure 2

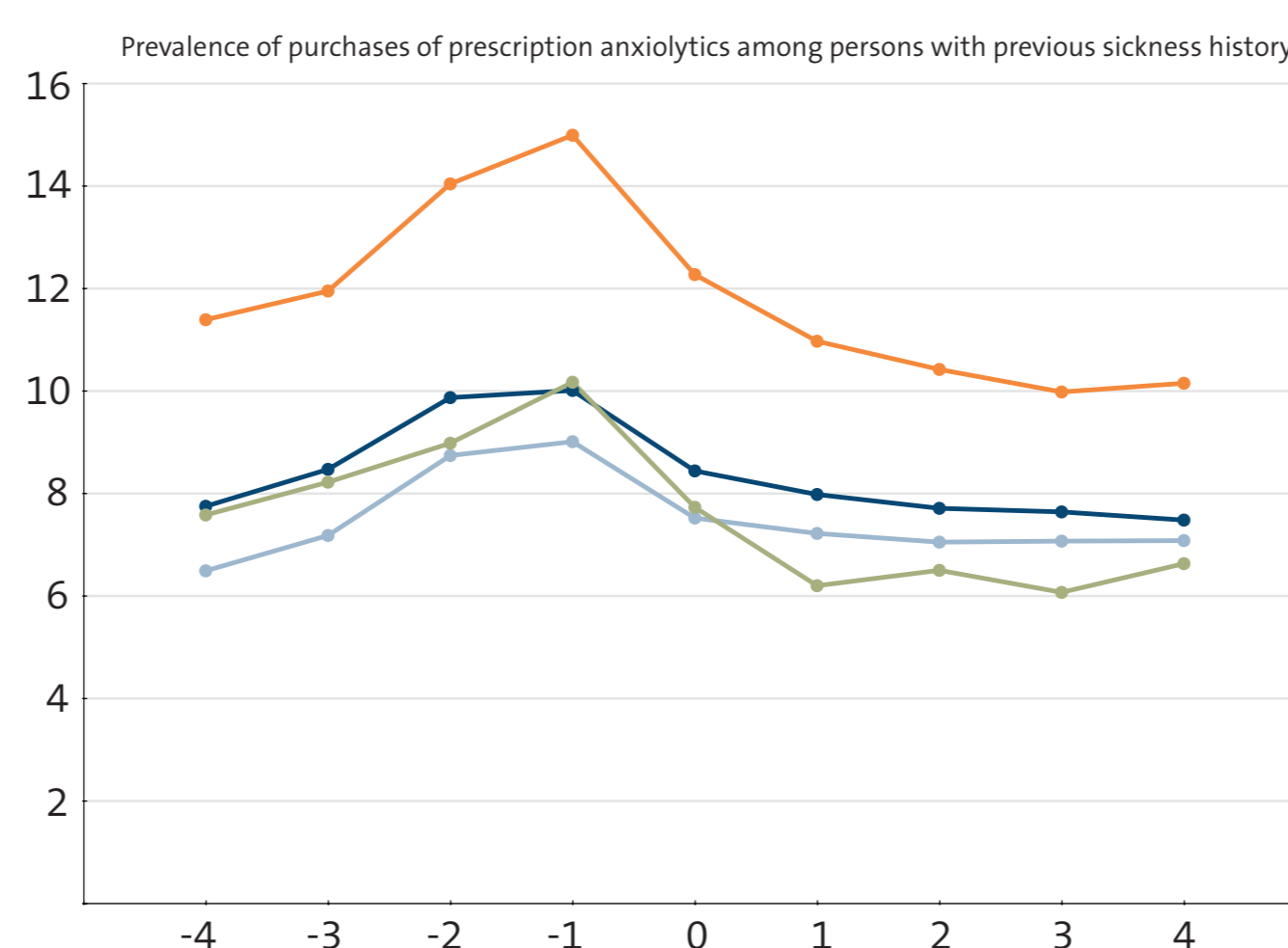


Figure 3

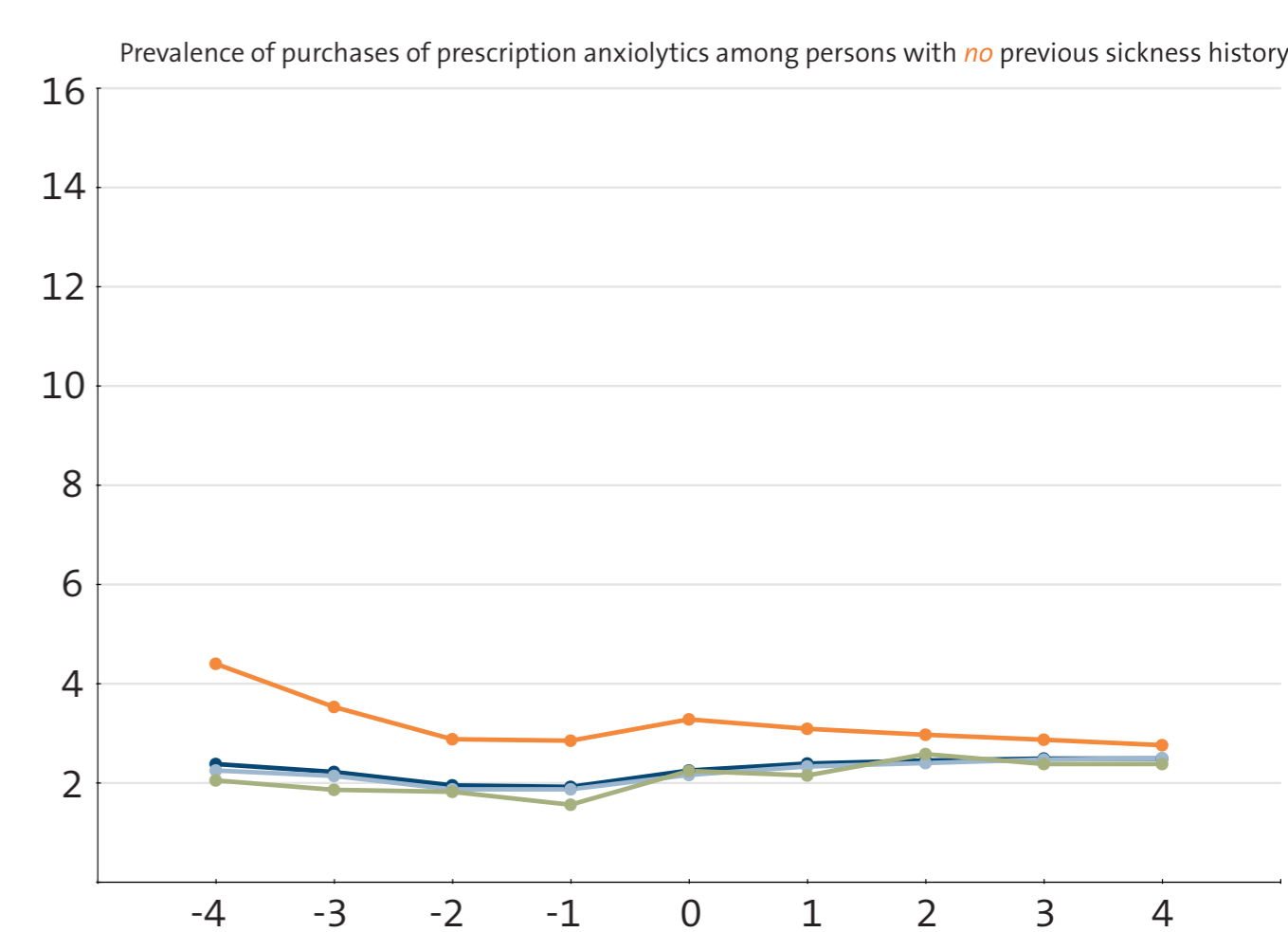


Figure 4

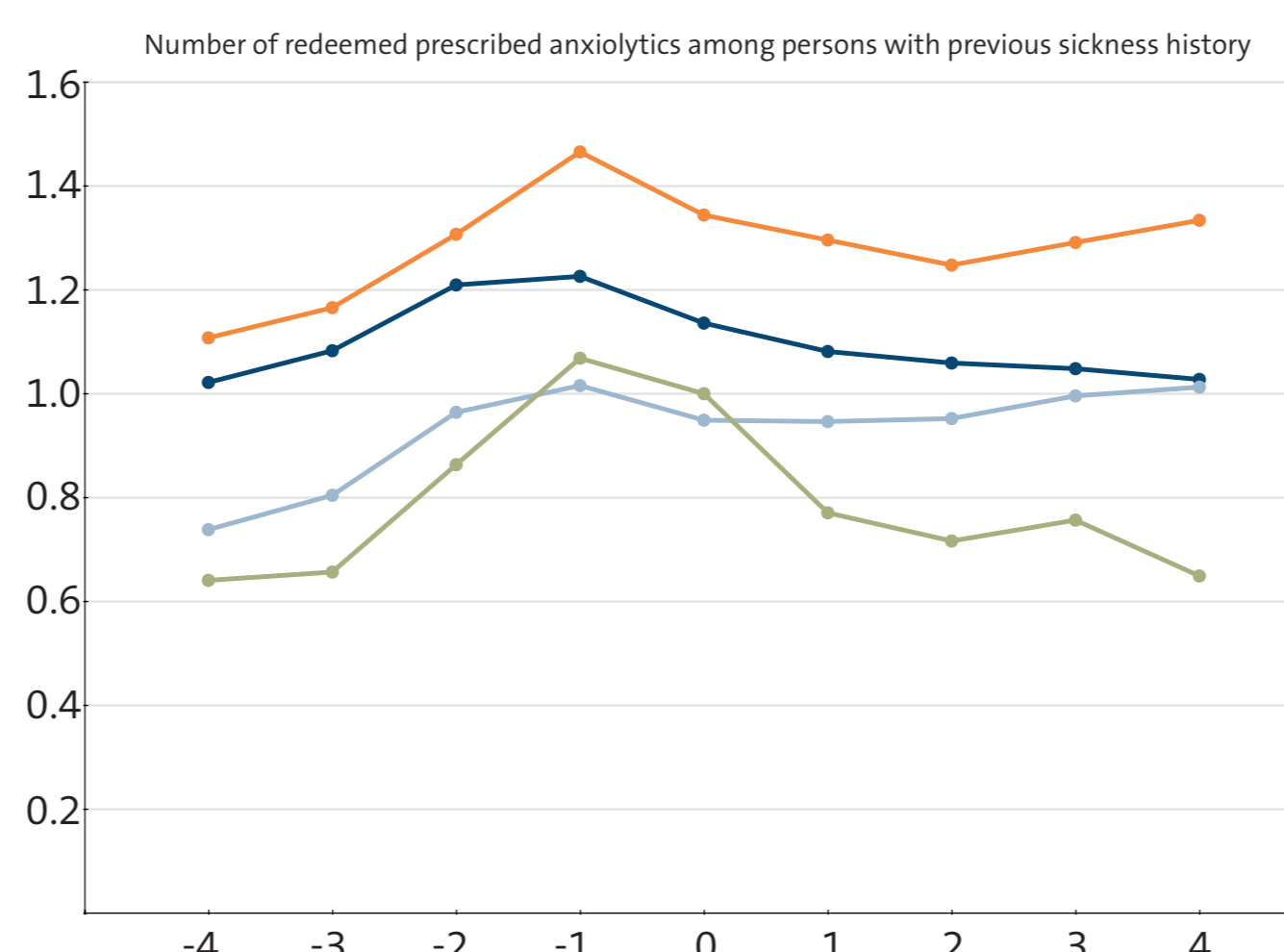
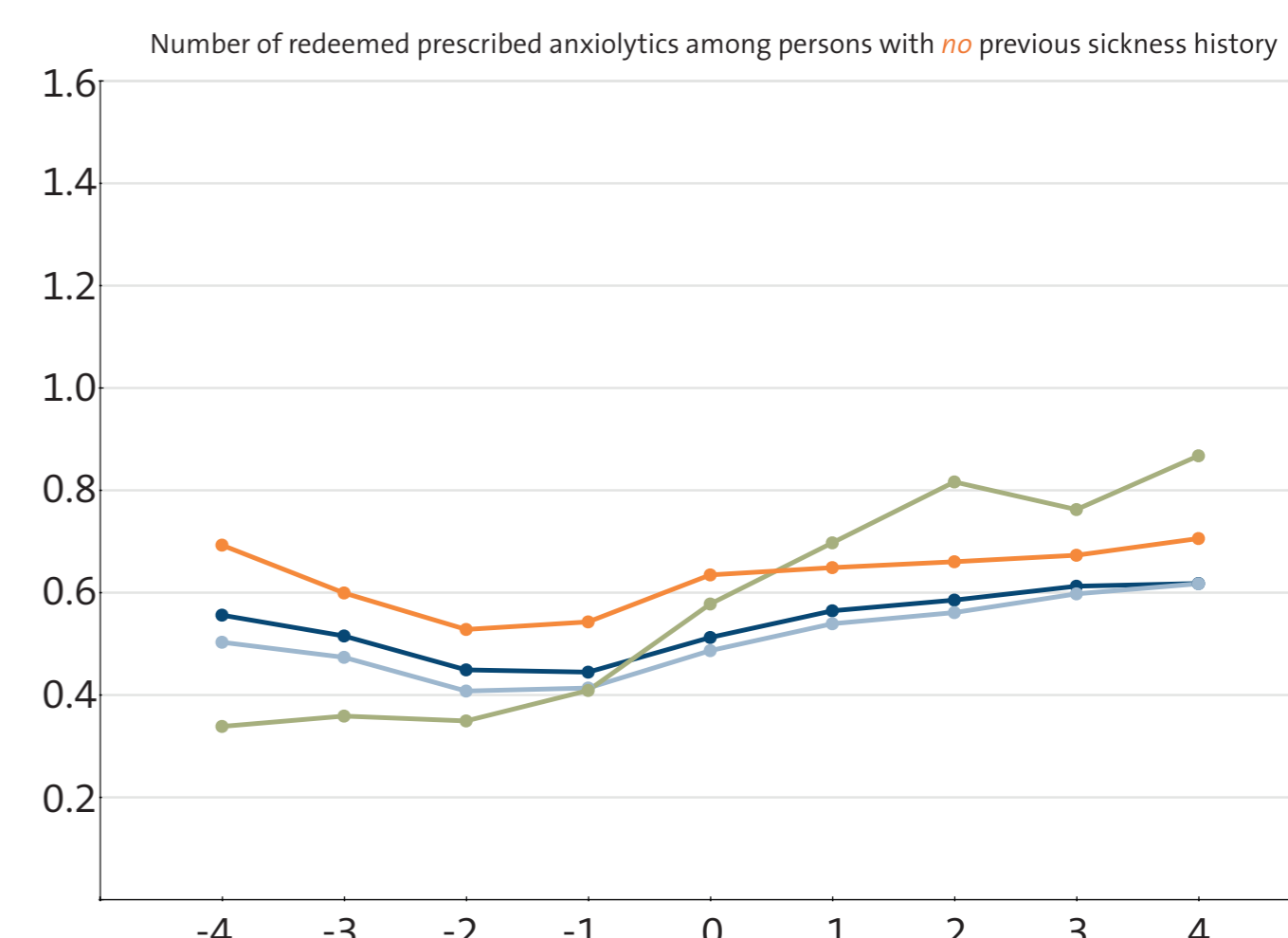


Figure 5



- Not exposed
- Stayer
- Changer
- Unemployed

### CONTACT