

The role of mental health related healthcare use on work participation among unemployed

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Background

- Mental health problems are more common in the unemployed than the employed ¹
- Unemployment can worsen mental health, which can lead to job loss, and further hinder re-employment²
- Evidence on (mental) healthcare use by the unemployed is mixed: studies show that unemployed use more³, less⁴, or similar levels⁵ healthcare services than the employed
- The use of healthcare services seems to vary between different groups of unemployed⁶
- Less is known how (mental) healthcare use among unemployed are associated with work participation – and how this varies by different background factors⁸

Research questions

1. How having a health care visit due to mental disorders affects work participation three years after unemployment?
2. How does this differ between different population groups, unemployment and healthcare characteristics?

Data & population

- Finnish register data (Statistics Finland, Social Insurance Institution of Finland, Finnish Institute for Health and Welfare)
- Based on a 90 % random sample of individuals living in Finland at the end of 2010
- Analytical sample consists of 30-59 years old individuals who had at least 7 unemployment days in 2016 (N= 329,655)
- Out- and in-patient healthcare visits due to mental disorders* were measured in 2016
- Employment months were measured in 2017-2019

* Diagnosis F00-F99, excl. F70-F99 (i.e. intellectual disability, developmental conditions and disorders with an onset in childhood)

Variables

Sociodemographic characteristics

- Sex
- Age
- Education
- Family structure
- Immigration background

Unemployment characteristics

- Length of unemployment in 2016
- Length of unemployment 2 and 10 years before
- Type of service received at the unemployment office
- Participation in active labour market programme (ALMP)
- Location of unemployment office

Healthcare characteristics

- Comorbidity (healthcare visits due to something else than mental disorders)
- Healthcare visits due to mental disorders in 2014-2015

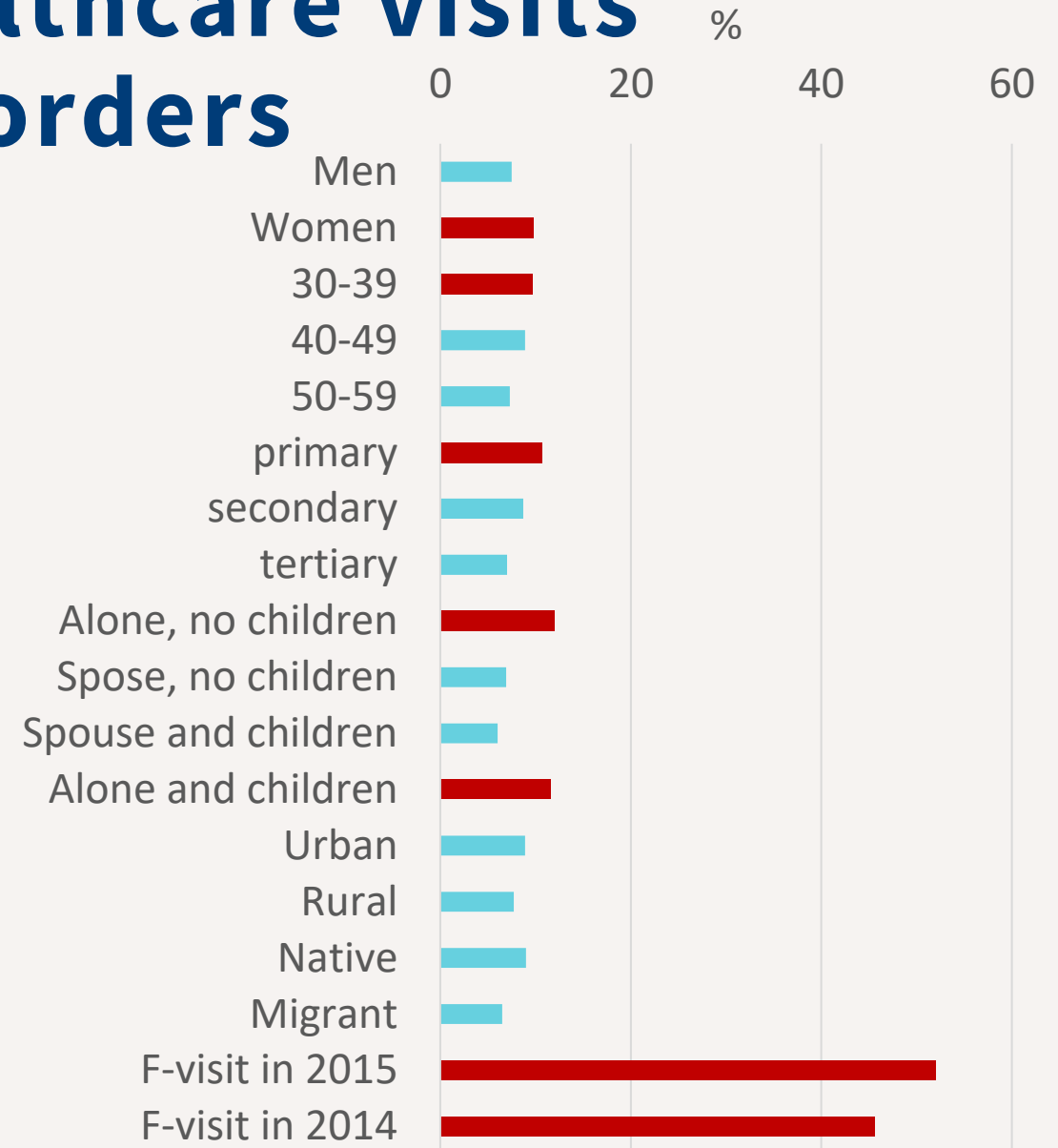
All variables measured in 2016 if not otherwise mentioned

Analytical strategy

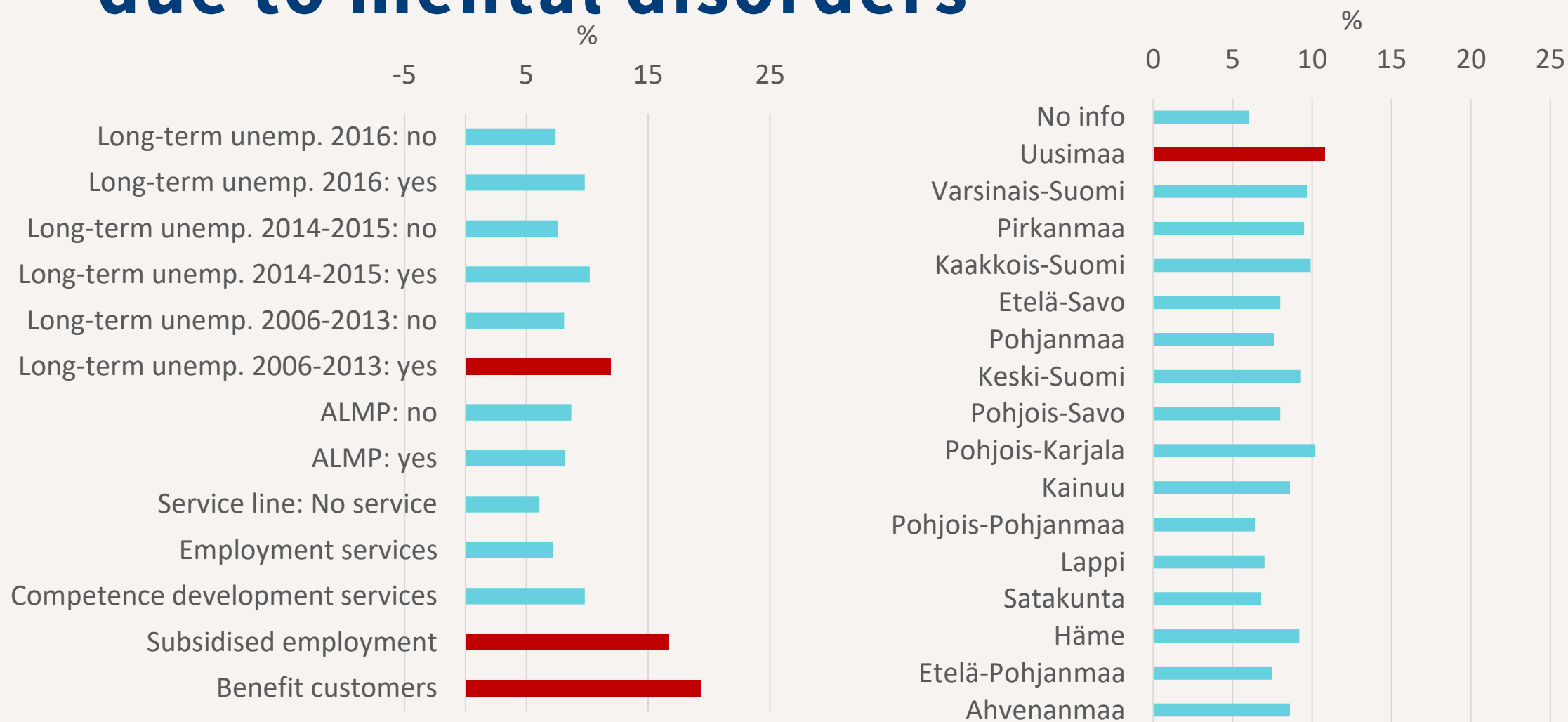
- Stepwise linear regression
- Outcome: employment months in 2017-2019
- M0: only healthcare visits due to mental health disorders
- M1: Sociodemographic characteristics
- M2: Unemployment characteristics
- M3: Healthcare characteristics
- M4: Adjustment for all

Prevalence of healthcare visits due to mental disorders

- On average 8,7 % had a healthcare visit due to mental health disorder
- Sociodemographic and healthcare characteristics →

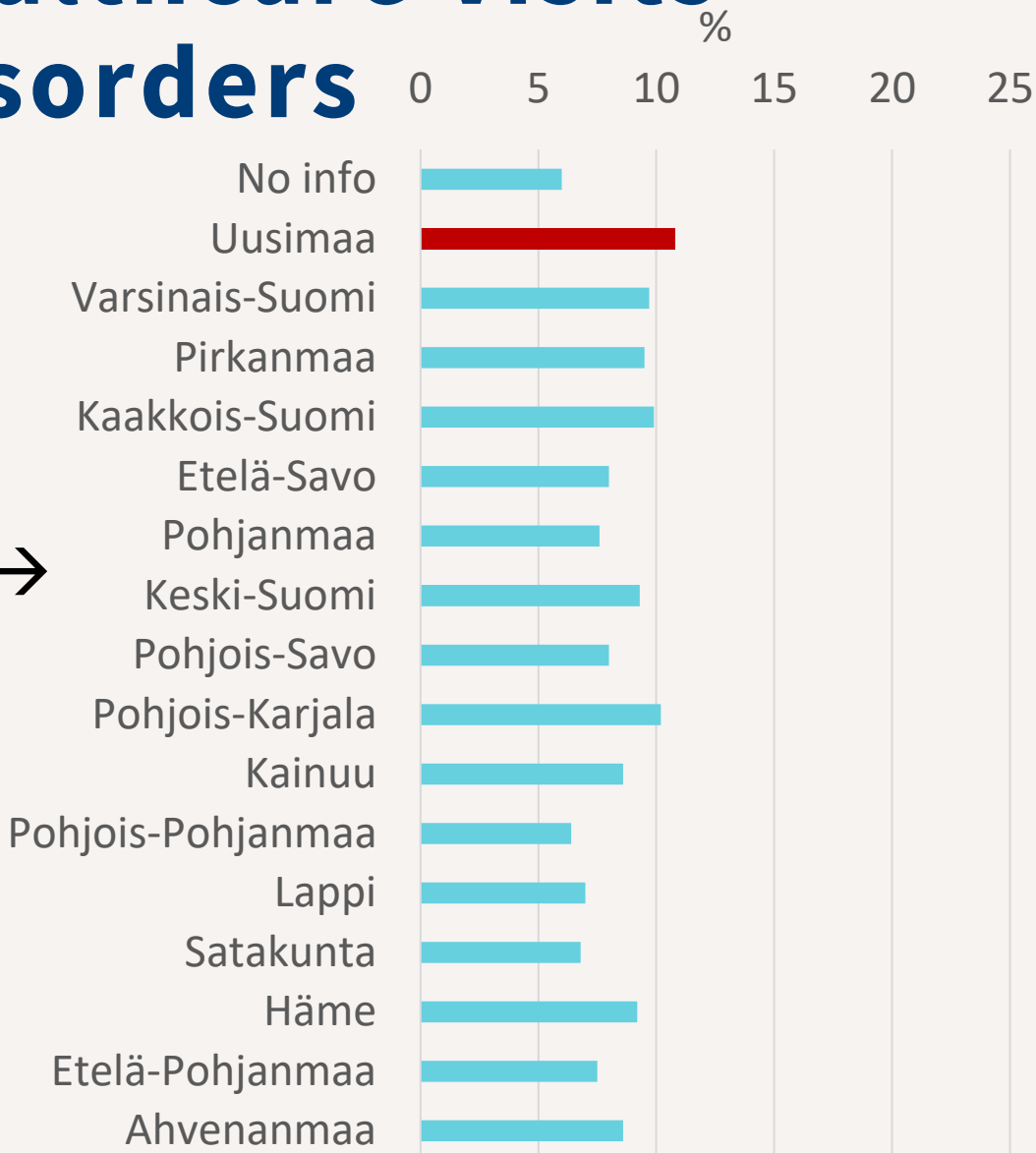


Prevalence of healthcare visits due to mental disorders

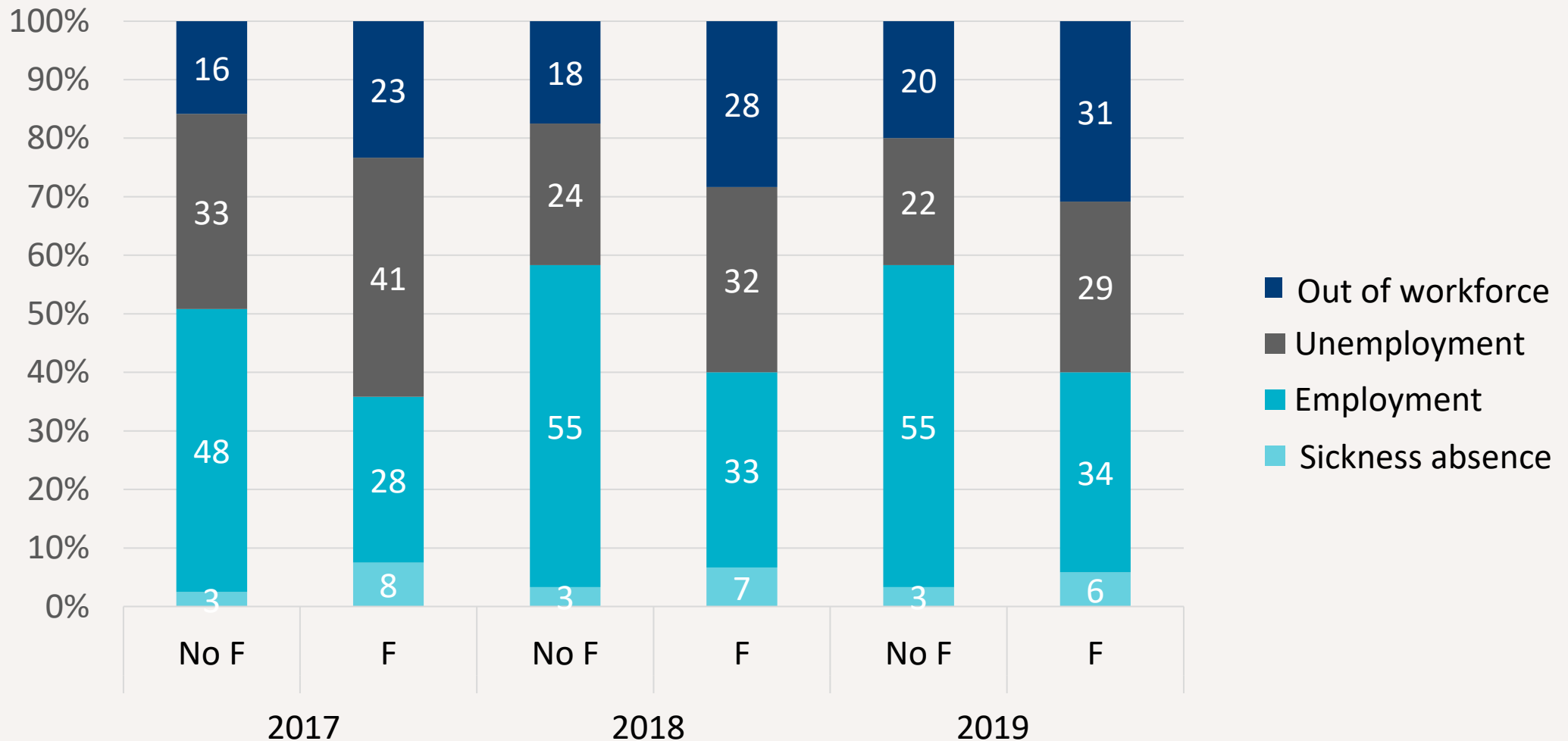


Prevalence of healthcare visits due to mental disorders

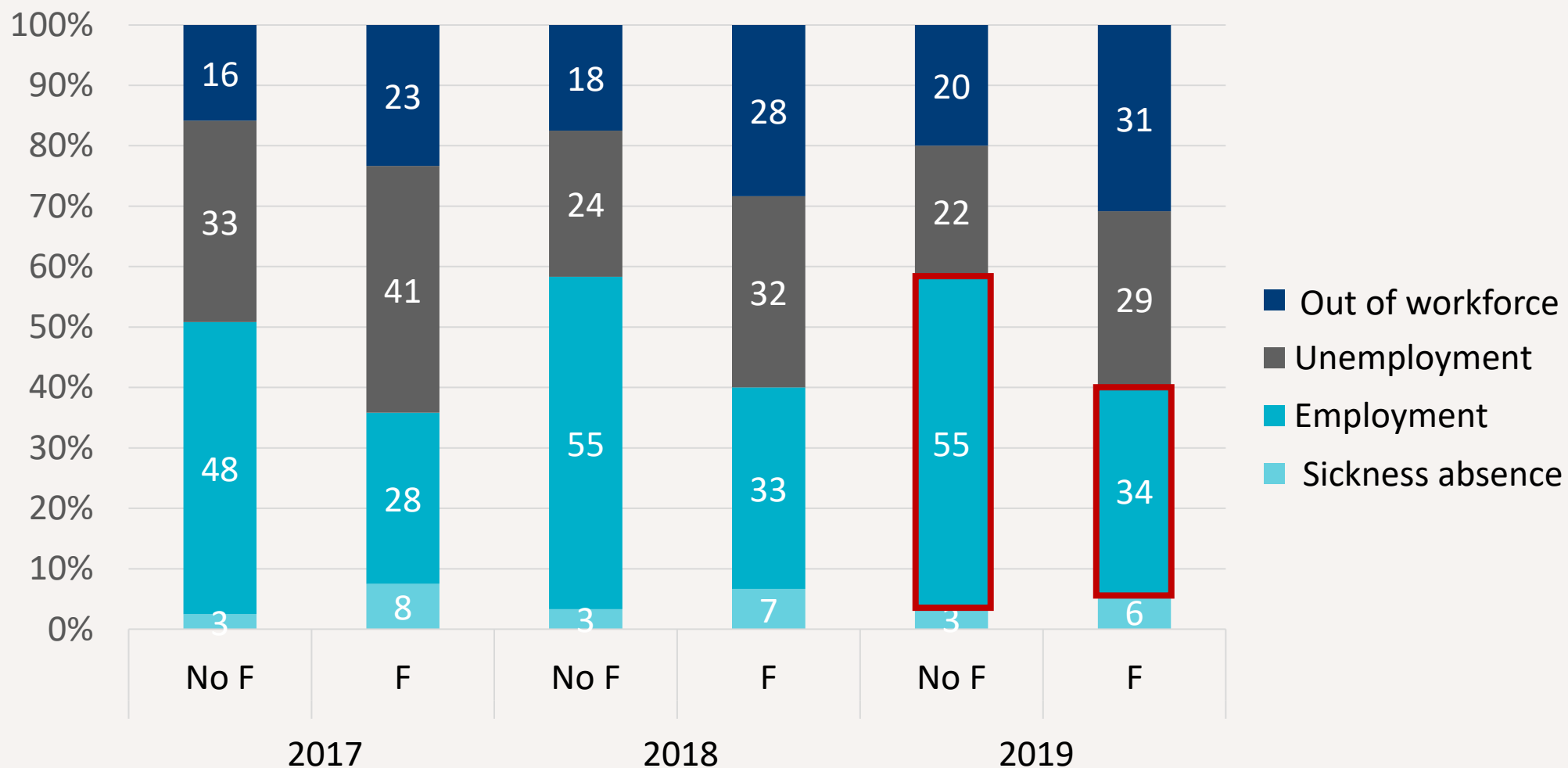
Unemployment characteristics →



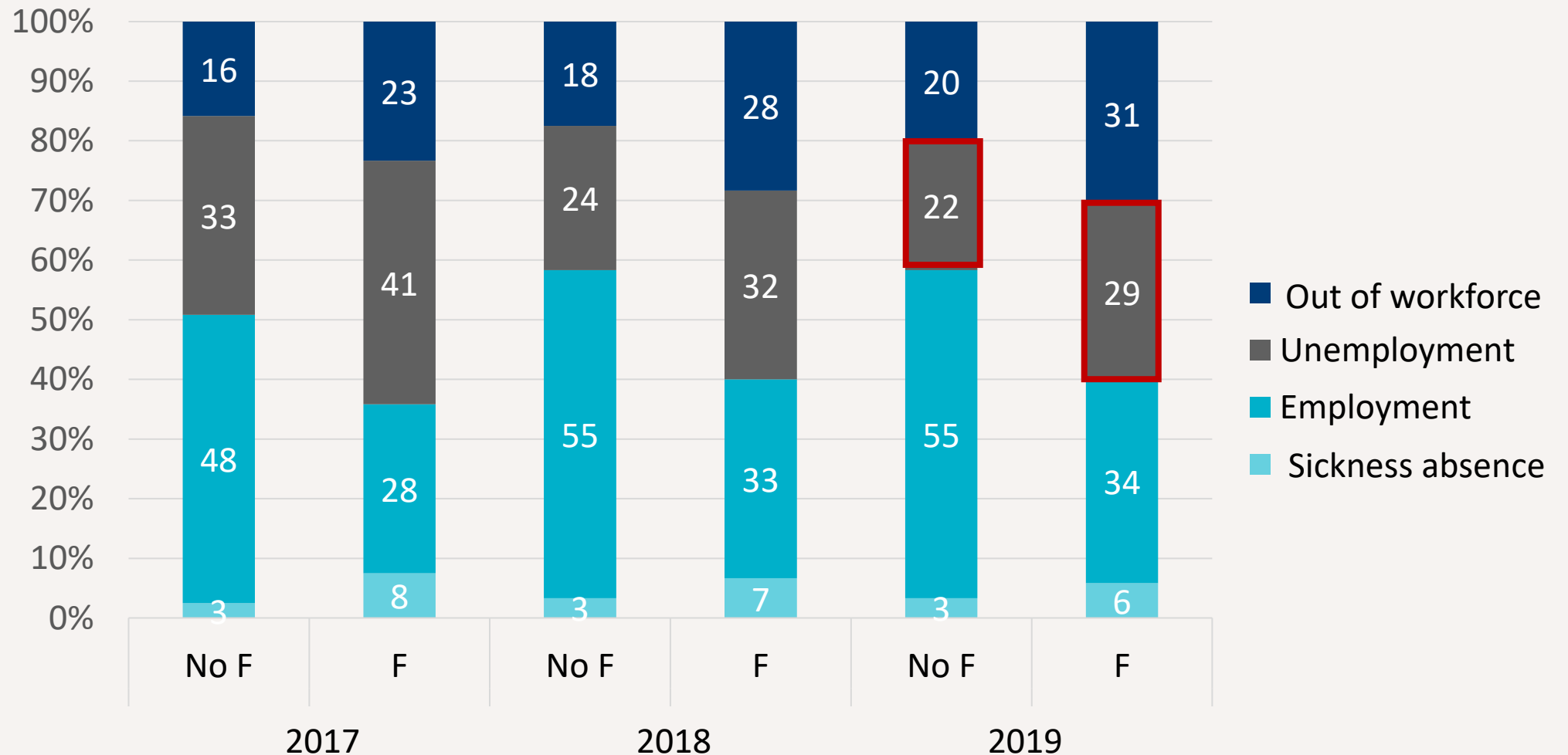
Proportion of time spent at different labour market states in 2017-2019



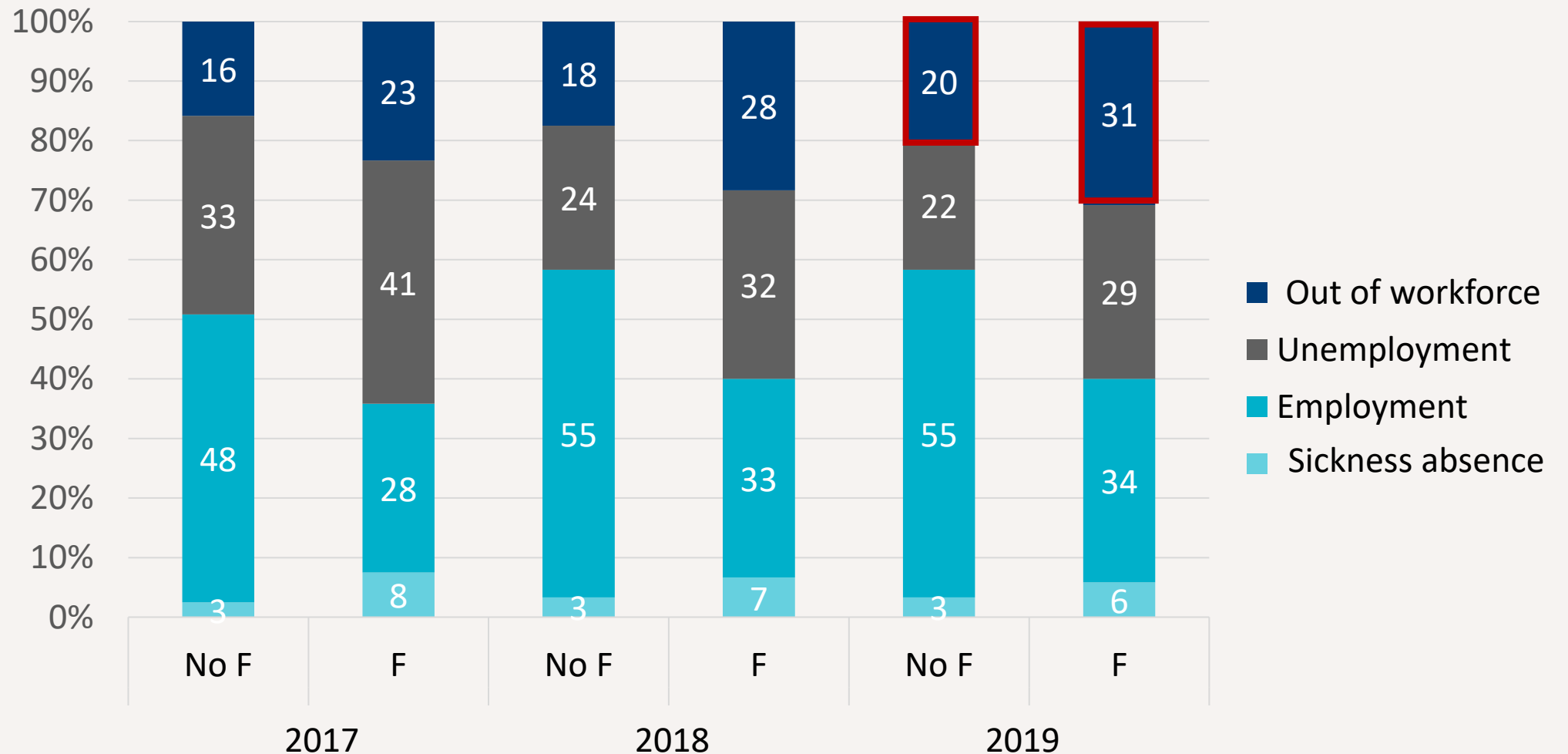
Proportion of time spent at different labour market states in 2017-2019



Proportion of time spent at different labour market states in 2017-2019



Proportion of time spent at different labour market states in 2017-2019



The association between mental health related healthcare use and employment in 2017-2019

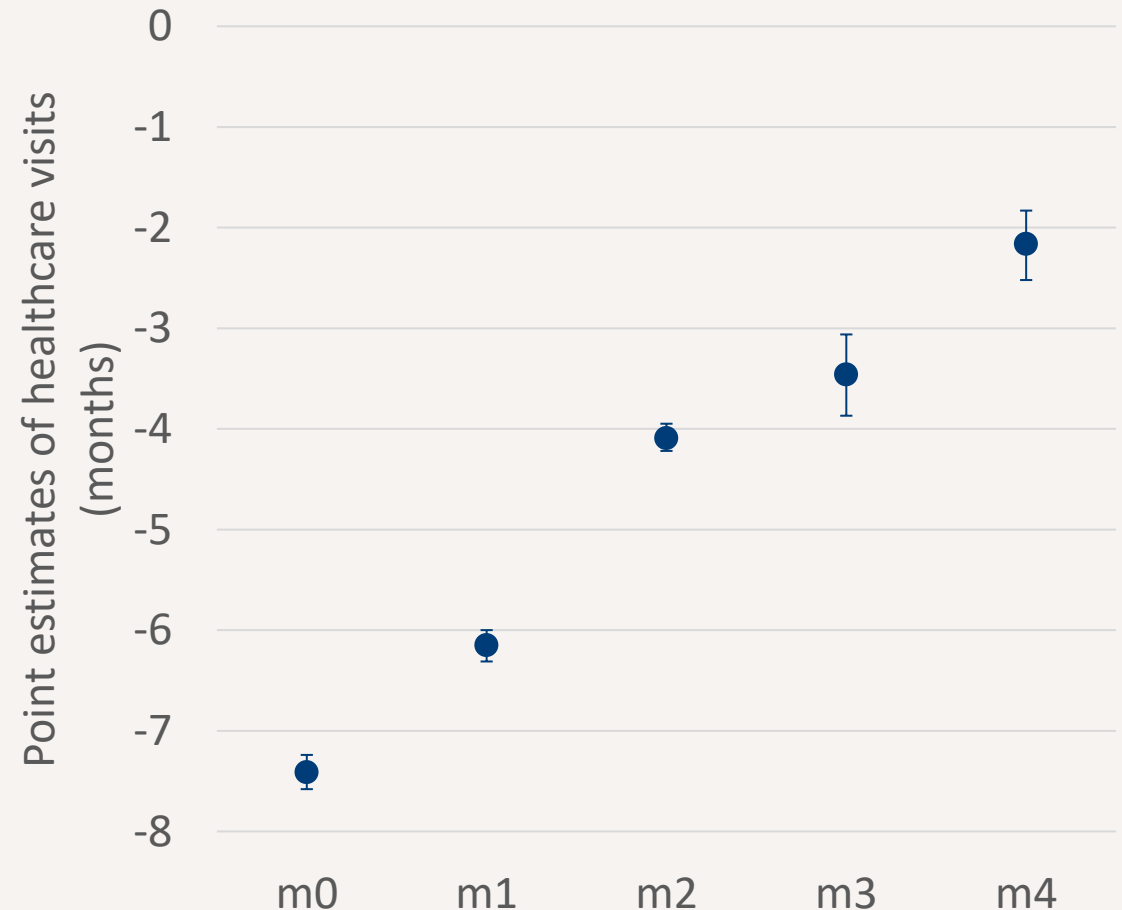
M0: Only healthcare visits due to mental-health

M1: Sociodemographic characteristics

M2: Unemployment characteristics

M3: Healthcare characteristics

M4: Adjustment for all



Conclusion

- We found clear differences in healthcare use due to mental disorders especially by unemployment characteristics
- Healthcare use due to mental disorders was linked to 3-7 employment months less three years after unemployment, depending on adjustments
- The link between healthcare visits and employment was mostly reduced by unemployment and healthcare characteristics, but not entirely explained

Next

- There was an interaction between unemployment characteristics and previous healthcare visits due to mental disorders → needs more investigation
- Study the association by sex, age group and service line
- Fixed-effects regression to control for time-invariant factors?
- Diagnosis-specific visit (f.em. depression)
- Separate analysis for short-term and long-term employment outcomes (sustainable employment)

Thank you!

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Without recent mental health –related healthcare visits

	M0	M1	M2	M3	M4
Without prior visits	-7.08***	-5.87***	-4.14***	-3.83***	-2.60***
With prior visits	-7.41***	-6.15***	-4.09***	-3.46***	-2.16***

M0: Only healthcare visits due to mental health

M1: Sociodemographics characteristics

M2: Unemployment characteristics

M3: Healthcare characteristics

M4: Adjustment for all

The association between mental health related healthcare use and employment months by gender

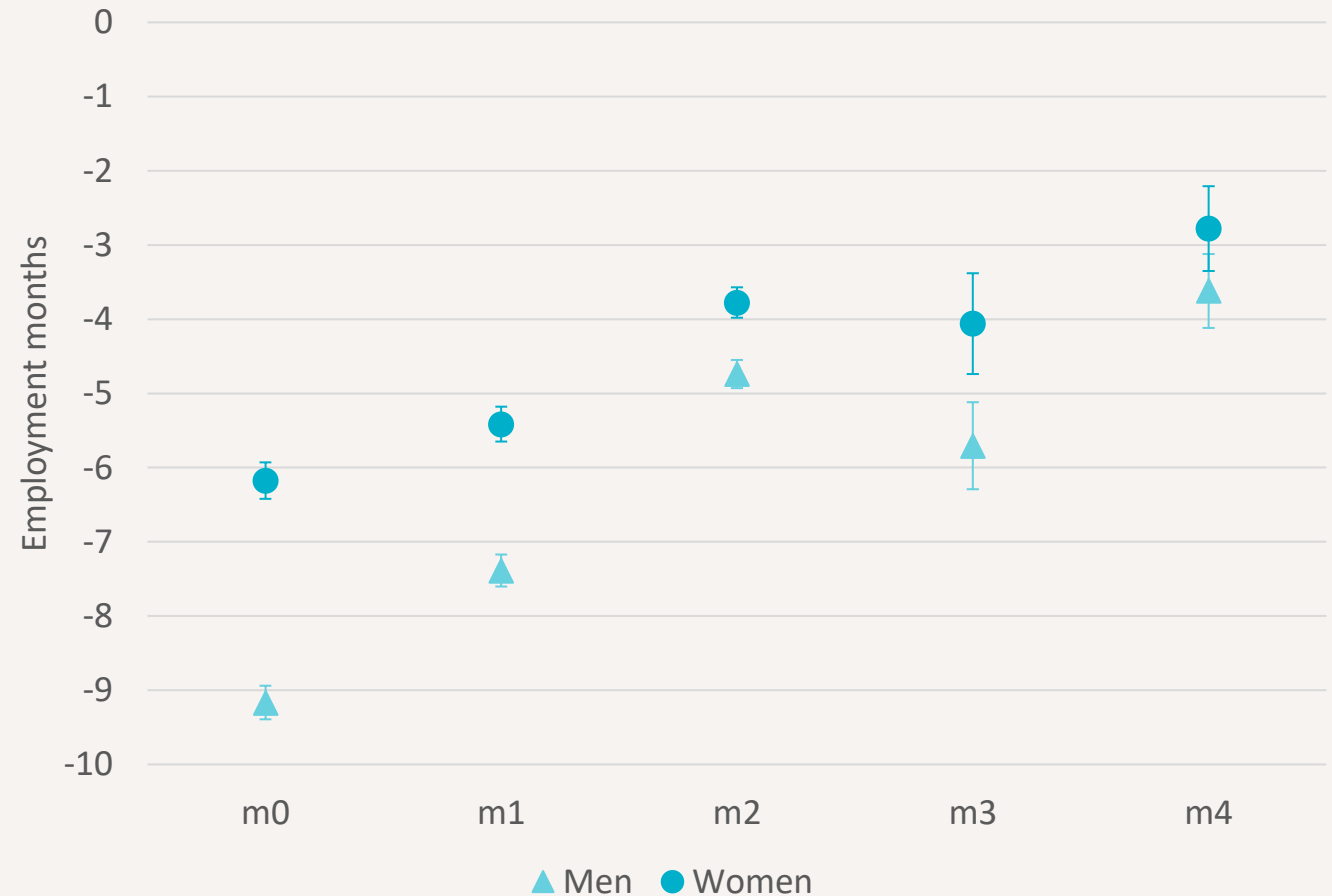
M0: Only healthcare visit due to mental disorders

M1: Sociodemographics characteristics

M2: Unemployment characteristics

M3: Healthcare characteristics

M4: Adjustment for all



Employment months in 2017-2019 (1/2)

	Unadjusted	Fully adjusted
Women (ref. Men)	-1.51***	-2.10***
40-49 (ref. 30-39)	-0.75***	0.35***
50-59	-3.68***	-1.51***
Secondary (ref. Primary)	4.98***	2.28***
Tertiary	7.92***	3.46***
Spouse, no children (ref. Alone, no children)	4.89***	1.81***
Spouse and children	6.45***	2.66***
Alone with children	2.22***	0.82***
Rural (ref. Urban)	1.45***	-1.35***
Migrant (ref. No)	-3.47***	-2.24***
Comorbidity (ref. No)	-3.66***	-1.87***
Healthcare visits in 2015	-3.02***	-1.62***
Healthcare visits in 2014	-2.86***	-1.20***

Employment months in 2017-2019

(2/2)

	Un- adjusted	Fully adjusted
Length of unemployment in 2016	-0.03***	-0.03***
Length of unemployment in 2014-2015	-0.01***	-0.01***
Length of unemployment in 2006-2013	0.00***	-0.00***
ALMP participation (ref. No)	0.06	0.08
Service line: No service	3.31***	2.93***
Employment services	4.31***	3.54***
Competence development services	-1.08***	-0.80***
Subsidised employment	-6.28***	-5.76***
Benefit customers	-2.44***	-2.09***
No info	2.40***	1.68***

Unemployment office location (ref. Uusimaa)

	Un- adjusted	Fully adjusted
Varsinais-Suomi	0.96***	0.58***
Pirkanmaa	1.07***	0.48***
Kaakkois-Suomi	0.93***	0.47***
Etelä-Savo	1.28***	0.62***
Pohjanmaa	1.34***	0.60***
Keski-Suomi	1.25***	0.48***
Pohjois-Savo	0.99***	0.24***
Pohjois-Karjala	1.51***	0.64*
Kainuu	0.71***	-0.23**
Pohjois-Pohjanmaa	1.74***	0.96***
Lappi	1.57***	0.92***
Satakunta	0.47***	0.03
Häme	1.46***	0.59***
Etelä-Pohjanmaa	-0.48	-0.17
Ahvenanmaa	3.47	2.90
Missing	-1.94***	-1.31***