# RTW expectations as predictor of RTW in Danish absentees

**Pernille Pedersen**, **Thomas Lund, Louise Lindholdt, Ellen A. Nohr**,

**Chris Jensen**, **Hans Jørgen Søgaard, Merete Labriola**

DEFACTUM, Social & Health Services and Labour Market,

Central Denmark Region, Aarhus, Denmark

# Introduction

- Sickness absence causes have different impact on the individuals' chance of return to work (RTW)

- The RTW process after sickness absence is complex and evolving as it covers a series of events, transitions and phases of employment status

# Aim

- The aim of this study was to investigate differences in RTW and employment trajectories in individuals on sick leave for mental health reasons and individuals with other health-related reasons for sick leave.

All new cases of sickness absence exceeding 4 weeks
(n=4,541)

↓

Completed the questionnaire
(n=2,788)

↓

Excluded due to missing information (n=300)
Not registered as being on sick leave in the DREAM database
(n=452)

↓

**Included in the study
(n=2,036)**

# Outcome measures

- Employment status during the 51 weeks following the questionnaire - recorded weekly

- 1) Time-to-event analysis
  - Receiving social benefits: Yes / No

- 2) Sequence analysis
  - 1) sickness absence, 2) working, 3) unemployment, 4) temporary support, and 5) permanent support

# Sequence analysis



**Sygefravær**
**Ledighed**
**Arbejde**
**Midlertidig forsørgelse**
Permanent forsørgelse
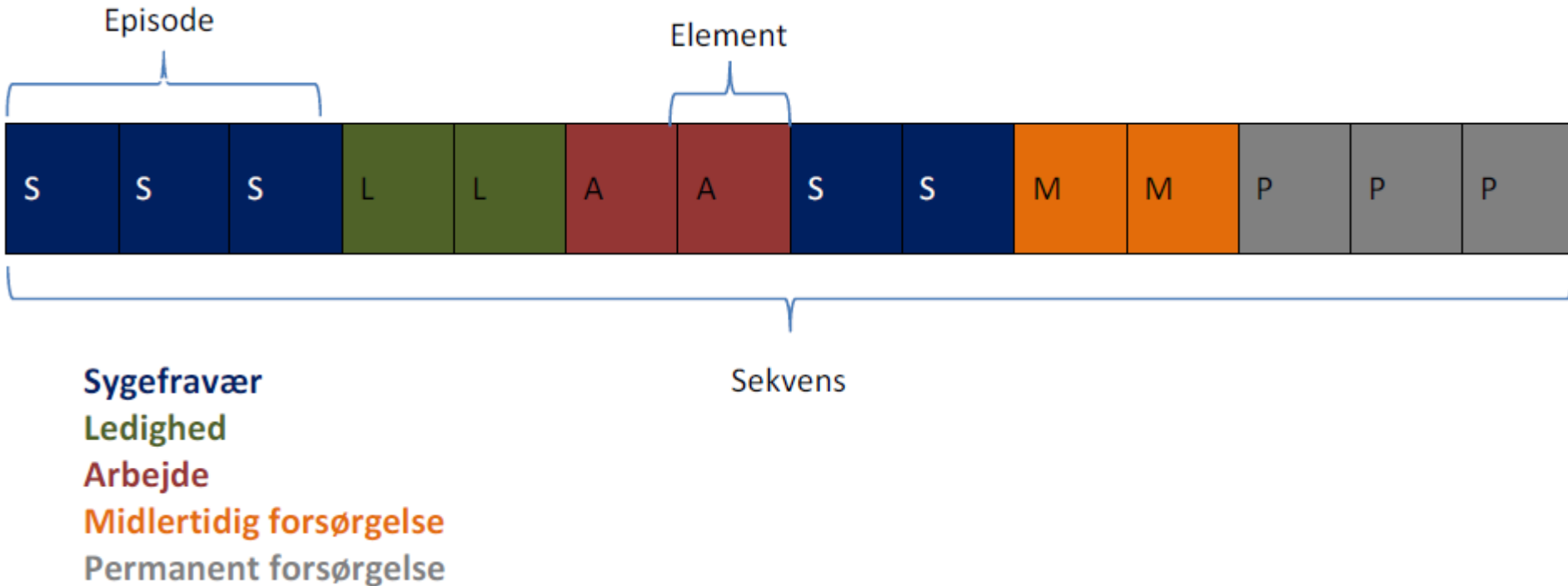
# Exposure variables

- Self-reported reason for sickness absence
  - Mental health reasons (anxiety, depression, burn out etc.)
  - Other health reasons (musculoskeletal disorders, cancer, or chronic pain)

# Results

**Table 2** Baseline characteristics of the study population

| Variable | Mental health reasons (n=725) n/mean %/sd | | Other health reasons (n=1,311) n/mean %/sd | | *P*-value* |
|---|---|---|---|---|---|
| **Gender** (female) | 481 | 66.3 | 679 | 51.8 | <0.001 |
| **Age** (years) | 42.3 | 10.6 | 45.7 | 11.2 | <0.001 |
| **Highest level of education** | | | | | |
| Primary school/Secondary school | 182 | 25.1 | 405 | 30.9 | |
| Tertiary education <3 years | 307 | 42.3 | 617 | 47.1 | <0.001 |
| Tertiary education >3 years | 236 | 32.6 | 289 | 22.0 | |
| **Employment** | | | | | |
| Supported jobs /early age pension | 24 | 3.3 | 37 | 2.8 | |
| Student | 43 | 5.9 | 36 | 2.8 | |
| Unemployed | 105 | 14.5 | 130 | 9.9 | |
| Unskilled worker (e.g. cleaning) | 100 | 13.8 | 263 | 20.1 | |
| Skilled worker (e.g. artisan) | 93 | 12.8 | 293 | 22.4 | <0.001 |
| White collar worker (e.g. nurse) | 320 | 44.1 | 427 | 32.6 | |
| Self-employed | 40 | 5.5 | 125 | 9.5 | |
| **Recovery expectations** | | | | | |
| 0-30% | 87 | 12.0 | 90 | 6.9 | |
| 40-60% | 160 | 22.1 | 151 | 11.5 | |
| 70-90% | 180 | 24.8 | 211 | 16.1 | <0.001 |
| 100% | 298 | 41.1 | 859 | 65.5 | |

*P-values* indicate tests of differences between exposure groups by *Chi2 test* or *t*-test

# Time-to-event analysis

**Table 3** Change of having returned to work in individuals on sick leave due to mental health or other health reasons at 1 year follow-up

| Reason for sickness absence | CIP% (95% CI) | Crude analysis * RR (95% CI) | Adj. model 1 RR (95% CI) | Adj. model 2 RR (95% CI) | Adj. model 3 RR (95% CI) |
|---|---|---|---|---|---|
| Other health reasons n = 1,311 | 67 (65;70) | 1 (ref) | 1 (ref) | 1 (ref) | 1 (ref) |
| Mental health reason n = 725 | 56 (52;59) | 0.87 (0.80;0.93) | 0.89 (0.82;0.96) | 0.92 (0.85;0.99) | 1.01 (0.95;1.08) |

RR: Relative risk. CI: confidence interval, CIP (Cumulative Incidence Proportion) shows the percentages of individuals having returned to work, *: Adjusted for effect of the psychoeducation intervention, Adj. model 1: Adjusted for effect of intervention, gender, and age, Adj. model 2: Adjusted as in model 1 and also for education and employment, Adj. model 3: Adjusted as in model 2 and also for RTW expectations.

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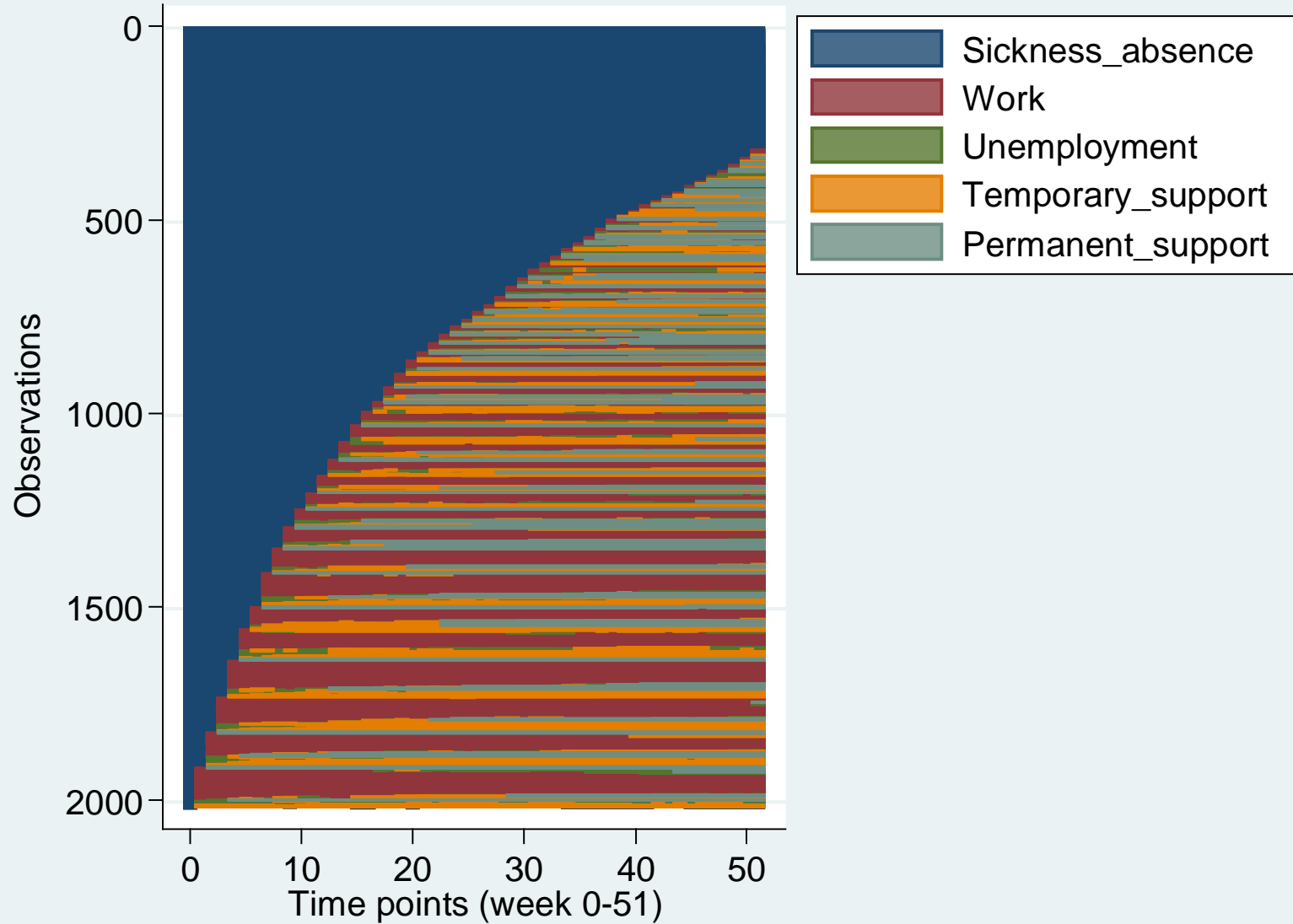
# Sequence analysis

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**Fig 1** Weekly share of status by exposure groups
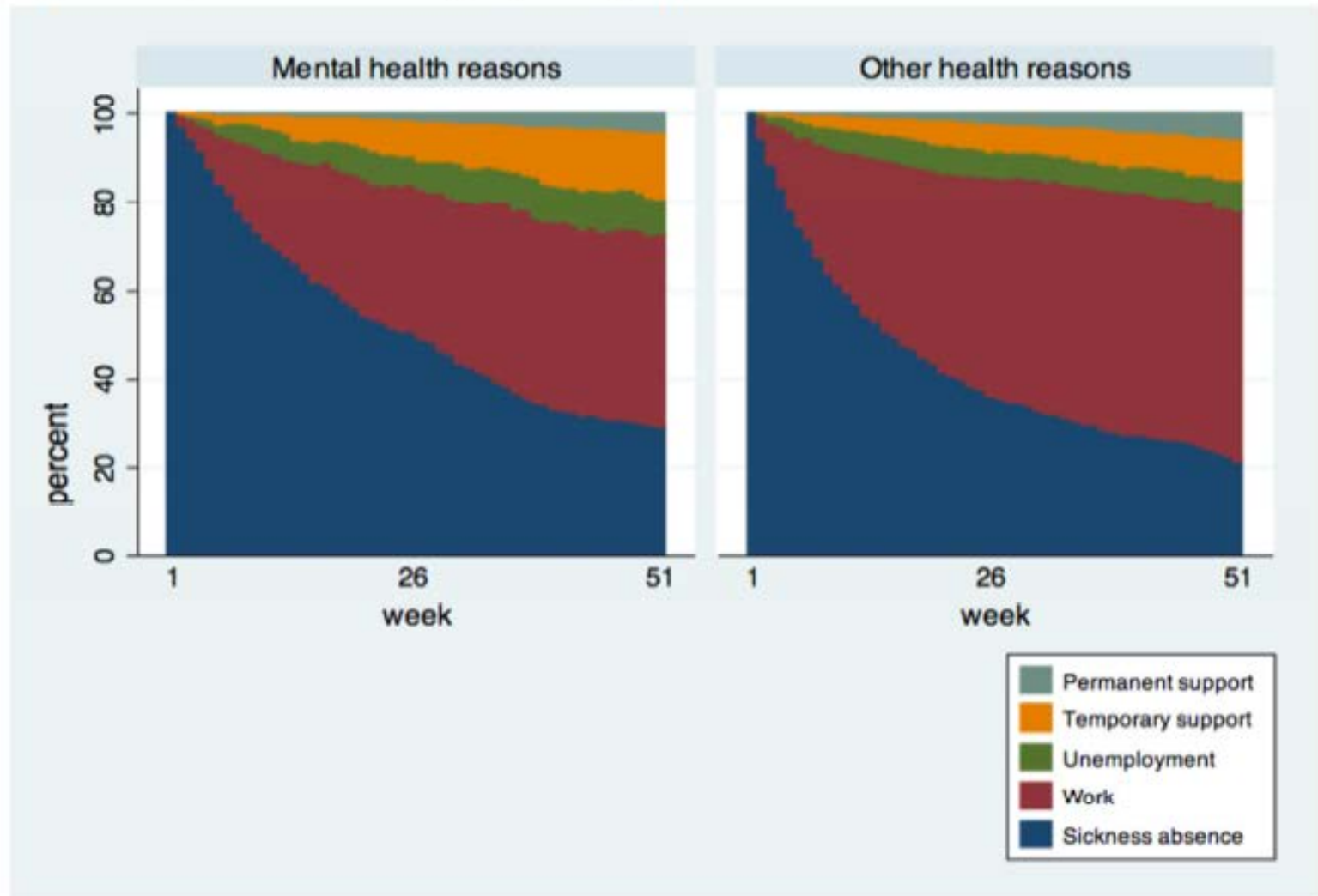
# Sequence analysis

**Table 4** Characteristic of labour market sequences in exposure groups

|  | Mental health reasons n=721 Mean (sd) | Other health reasons n=1,297 Mean (sd) | Diff | p-value* |
|---|---|---|---|---|
| **Mean duration in...** | | | | |
| Sickness absence | 27.50 (17.57) | 22.53 (17.76) | 4.97 | <0.0001 |
| Work | 15.96 (17.20) | 22.45 (19.00) | -6.49 | <0.0001 |
| Unemployment | 3.38 (6.69) | 2.80 (7.12) | 0.58 | 0.07 |
| Temporary support | 4.18 (9.49) | 2.91 (8.14) | 1.27 | <0.01 |
| Permanent support | 0.98 (5.42) | 1.31 (6.23) | -0.33 | 0.24 |

# Conclusion

- Employees on sick leave due to self-reported mental health problems have
  - more weeks in sickness absence and temporary benefits
  - higher risk of not having returned to work within a year
- The difference could be explained by their lower RTW expectations at baseline