

# Original article

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Sickness absence and mental health: evidence from a nationally representative longitudinal survey <sup>1</sup>

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<sup>1</sup> Supplementary Data

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## Variable Definitions and Summary Statistics

| Variable                                   | Definition / Description                                                                                                                        | Males  |        | Females |        |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---------|--------|
|                                            |                                                                                                                                                 | Mean   | SD     | Mean    | SD     |
| Outcome variables                          |                                                                                                                                                 |        |        |         |        |
| Paid sick leave                            | Number of days of paid sick leave taken in last 12 months.                                                                                      | 2.648  | 6.404  | 3.079   | 6.543  |
| Paid sick leave + workers compensation     | Number of days absent from work in past 12 months while on either paid sick leave or workers' compensation.                                     | 3.485  | 11.627 | 3.693   | 10.287 |
| Variables of interest                      |                                                                                                                                                 |        |        |         |        |
| MHI-5 (Mental Health Inventory)            | Sub-scale of the SF-36 Health Survey that measures mental health. Scores range from 0 to 100.                                                   | 76.624 | 15.115 | 74.514  | 15.802 |
| MHI-5 (categories)                         | Categorical variables constructed from the MHI-5. Cut-offs roughly determined by quintiles, with the bottom quintile split into two categories. |        |        |         |        |
|                                            | MH1: Equals 1 if MHI-5 ≤52.                                                                                                                     | 0.091  | 0.288  | 0.114   | 0.317  |
|                                            | MH2: Equals 1 if 52 < MHI-5 ≤60.                                                                                                                | 0.077  | 0.267  | 0.085   | 0.279  |
|                                            | MH3: Equals 1 if 60 < MHI-5 ≤75.                                                                                                                | 0.182  | 0.386  | 0.203   | 0.402  |
|                                            | MH4: Equals 1 if 75 < MHI-5 ≤80.                                                                                                                | 0.204  | 0.403  | 0.214   | 0.410  |
|                                            | MH5: Equals 1 if 80 < MHI-5 ≤88.                                                                                                                | 0.265  | 0.442  | 0.243   | 0.429  |
|                                            | MH6: Equals 1 if MHI-5 >88. (ref)                                                                                                               | 0.180  | 0.384  | 0.141   | 0.348  |
| Exposure to work                           |                                                                                                                                                 |        |        |         |        |
| Usual work days per week                   | Number of days respondent usually works in a week.                                                                                              | 4.915  | 1.024  | 4.258   | 1.259  |
| Prop'n of previous 12 months in employment | Proportion of 12 months prior to interview that the respondent spent in paid employment.                                                        | 0.959  | 0.155  | 0.934   | 0.200  |
| Full-time employment                       | Equals 1 if respondent usually works 35 hours or more per week.                                                                                 | 0.838  | 0.368  | 0.506   | 0.500  |
| Demographic controls                       |                                                                                                                                                 |        |        |         |        |

| Variable                      | Definition / Description                                                                                                                                               | Males  |        | Females |        |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---------|--------|
|                               |                                                                                                                                                                        | Mean   | SD     | Mean    | SD     |
| Age                           | Age 15-24: Equals 1 if respondent is aged 15 to 24.                                                                                                                    | 0.172  | 0.377  | 0.193   | 0.395  |
|                               | Age 25-34: Equals 1 if respondent is aged 25 to 34.                                                                                                                    | 0.203  | 0.402  | 0.192   | 0.394  |
|                               | Age 35-44: Equals 1 if respondent is aged 35 to 44. (ref)                                                                                                              | 0.246  | 0.431  | 0.245   | 0.430  |
|                               | Age 45-54: Equals 1 if respondent is aged 45 to 54.                                                                                                                    | 0.239  | 0.426  | 0.246   | 0.431  |
|                               | Age 55-64: Equals 1 if respondent is aged 55 to 64.                                                                                                                    | 0.139  | 0.346  | 0.123   | 0.329  |
| # Children                    | Number of own children aged less than 15 years living with respondent.                                                                                                 | 0.820  | 1.126  | 0.871   | 1.113  |
| # Adults                      | Number of persons aged 15 years or more living in the household.                                                                                                       | 2.384  | 1.027  | 2.383   | 1.030  |
| Marital / relationship status | Married: Equals 1 if respondent is legally married.                                                                                                                    | 0.532  | 0.499  | 0.487   | 0.500  |
|                               | De-facto: Equals 1 if respondent is living with a partner in a de-facto relationship.                                                                                  | 0.164  | 0.370  | 0.162   | 0.368  |
|                               | Single: Equals 1 if respondent is single. (ref)                                                                                                                        | 0.305  | 0.460  | 0.351   | 0.477  |
| Education                     | Postgrad: Equals 1 if respondent's highest education level is a doctorate, masters degree, graduate diploma or graduate certificate.                                   | 0.103  | 0.304  | 0.123   | 0.329  |
|                               | Undergrad: Equals 1 if respondent's highest education level is a bachelor's degree, degree with honours, advanced diploma or diploma.                                  | 0.233  | 0.423  | 0.285   | 0.452  |
|                               | Certificate: Equals 1 if respondent's highest education level is a Level III or IV Certificate.                                                                        | 0.280  | 0.449  | 0.157   | 0.363  |
|                               | Year12: Equals 1 if respondent's highest education level is high school completion.                                                                                    | 0.159  | 0.366  | 0.177   | 0.382  |
|                               | Less than Year12: Equals 1 if respondent did not finish high school. (ref)                                                                                             | 0.225  | 0.417  | 0.258   | 0.437  |
| Disability                    | No disability: Equals 1 if respondent has no long-term health condition. (ref)                                                                                         | 0.841  | 0.366  | 0.840   | 0.367  |
|                               | Mild: Equals 1 if respondent has a long-term health condition that does not limit work. (Persons who only reported having a mental illness are excluded.)              | 0.080  | 0.271  | 0.068   | 0.252  |
|                               | Moderate: Equals 1 if respondent has a restrictive long-term health condition that is work limiting. (Persons who only reported having a mental illness are excluded.) | 0.079  | 0.270  | 0.092   | 0.289  |
| Physical health               | Physical functioning sub-scale of the SF-36 Health Survey. Scores range from 0 to 100.                                                                                 | 90.950 | 16.528 | 89.393  | 16.714 |
| Country of birth              | Australia: Equals 1 if respondent was born in Australia. (ref)                                                                                                         | 0.809  | 0.393  | 0.819   | 0.385  |
|                               | Overseas, main English-speaking country: Equals 1 if respondent was born in Canada, Ireland, New Zealand, South Africa, the UK or the USA.                             | 0.100  | 0.299  | 0.084   | 0.278  |
|                               | Overseas, other: Equals 1 if respondent was born in any other country.                                                                                                 | 0.091  | 0.288  | 0.097   | 0.296  |
| Indigenous                    | Equals 1 if respondent is of Aboriginal or Torres Strait Islander origin.                                                                                              | 0.015  | 0.120  | 0.017   | 0.128  |

| Variable                       | Definition / Description                                                                                                                                                                                                                                                                                                                               | Males  |       | Females |       |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|---------|-------|
|                                |                                                                                                                                                                                                                                                                                                                                                        | Mean   | SD    | Mean    | SD    |
| English speaking ability       | Equals 1 if respondent does not speak English well or at all.                                                                                                                                                                                                                                                                                          | 0.003  | 0.056 | 0.002   | 0.047 |
| Smoker                         | Equals 1 if respondent is currently a smoker.                                                                                                                                                                                                                                                                                                          | 0.242  | 0.428 | 0.191   | 0.393 |
| Ln household disposable income | Log of real equivalised disposable household income for the previous financial year (\$000 at 2010 prices) with missing values imputed and non-positive incomes set to \$1. The equivalence scale used is the OECD modified scale (which assigns a weight of 1 to the first adult in the household, 0.5 for each other adult, and 0.3 for each child). | 10.649 | 0.852 | 10.644  | 0.803 |
| Non-positive income            | Equals 1 if real disposable household income for the financial year is non-positive.                                                                                                                                                                                                                                                                   | 0.004  | 0.063 | 0.003   | 0.058 |
| Regional indicators            | Major urban: Equals 1 if respondent lives in a major Australian city (as defined in the ASGC). (ref)                                                                                                                                                                                                                                                   | 0.640  | 0.480 | 0.642   | 0.479 |
|                                | Inner regional: Equals 1 if respondent lives in inner regional Australia (as defined in the Australian Standard Geographical Classification [ASGC]).                                                                                                                                                                                                   | 0.235  | 0.424 | 0.236   | 0.425 |
|                                | Outer regional: Equals 1 if respondent lives in outer regional Australia (as defined in the ASGC).                                                                                                                                                                                                                                                     | 0.105  | 0.307 | 0.102   | 0.303 |
|                                | Remote: Equals 1 if respondent lives in remote or very remote location in Australia (as defined in the ASGC).                                                                                                                                                                                                                                          | 0.016  | 0.126 | 0.015   | 0.123 |
| SEIFA index                    | Decile of index of relative socio-economic advantage/disadvantage for regions, where 1 represents highest relative disadvantage and 10 highest relative advantage.                                                                                                                                                                                     | 5.840  | 2.814 | 5.912   | 2.820 |
| State dummies                  | Binary variables indicating the respondent's State of residence.                                                                                                                                                                                                                                                                                       |        |       |         |       |
|                                | New South Wales (ref)                                                                                                                                                                                                                                                                                                                                  | 0.282  | 0.450 | 0.290   | 0.454 |
|                                | Victoria                                                                                                                                                                                                                                                                                                                                               | 0.249  | 0.432 | 0.250   | 0.433 |
|                                | Queensland                                                                                                                                                                                                                                                                                                                                             | 0.217  | 0.412 | 0.216   | 0.412 |
|                                | South Australia                                                                                                                                                                                                                                                                                                                                        | 0.090  | 0.286 | 0.089   | 0.285 |
|                                | Western Australia                                                                                                                                                                                                                                                                                                                                      | 0.100  | 0.299 | 0.089   | 0.285 |
|                                | Northern Territory                                                                                                                                                                                                                                                                                                                                     | 0.009  | 0.095 | 0.010   | 0.100 |
|                                | Tasmania                                                                                                                                                                                                                                                                                                                                               | 0.029  | 0.167 | 0.032   | 0.177 |
|                                | Australian Capital Territory                                                                                                                                                                                                                                                                                                                           | 0.025  | 0.156 | 0.024   | 0.153 |
| NR at t+1                      | Equals 1 if the respondent did not respond at the next survey wave.                                                                                                                                                                                                                                                                                    | 0.052  | 0.222 | 0.047   | 0.211 |
| <i>Job-related controls</i>    |                                                                                                                                                                                                                                                                                                                                                        |        |       |         |       |
| Employment status              |                                                                                                                                                                                                                                                                                                                                                        |        |       |         |       |
| Employee w SL entitlements     | Equals 1 if respondent is an employee in a job with paid sick leave entitlements. (ref)                                                                                                                                                                                                                                                                | 0.640  | 0.480 | 0.622   | 0.485 |
| Employee w/o SL entitlements   | Equals 1 if respondent is an employee in a without paid sick leave entitlements.                                                                                                                                                                                                                                                                       | 0.168  | 0.374 | 0.267   | 0.442 |
| Self-employed                  | Equals 1 if respondent is self-employed (where the self-employed are defined to include both owners of unincorporated businesses and owners of incorporated businesses).                                                                                                                                                                               | 0.189  | 0.392 | 0.106   | 0.308 |
| Other employed                 | Equals 1 if responded is an unpaid family worker.                                                                                                                                                                                                                                                                                                      | 0.002  | 0.050 | 0.005   | 0.068 |

| Variable              | Definition / Description                                                                                                                                                                                                                      | Males |       | Females |       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|---------|-------|
|                       |                                                                                                                                                                                                                                               | Mean  | SD    | Mean    | SD    |
| Tenure                | Number of years the respondent has worked for their current employer.                                                                                                                                                                         | 7.483 | 8.694 | 6.117   | 7.324 |
| Firm size             | <20 employees: Equals 1 if employed at firm with fewer than 20 employees (Australia-wide).                                                                                                                                                    | 0.343 | 0.475 | 0.280   | 0.449 |
|                       | 20-99 employees: Equals 1 if employed at firm with 20-99 employees (Australia-wide).                                                                                                                                                          | 0.139 | 0.346 | 0.131   | 0.337 |
|                       | 100-499 employees: Equals 1 if employed at firm with 100-499 employees (Australia-wide).                                                                                                                                                      | 0.110 | 0.313 | 0.099   | 0.299 |
|                       | 500+ employees: Equals 1 if employed at firm with 500+ employees (Australia-wide). (ref)                                                                                                                                                      | 0.369 | 0.483 | 0.417   | 0.493 |
|                       | Missing: Equals 1 if firm size is missing.                                                                                                                                                                                                    | 0.039 | 0.194 | 0.073   | 0.260 |
| Union                 | Equals 1 if respondent is a member of a trade union or employee association.                                                                                                                                                                  | 0.251 | 0.433 | 0.252   | 0.434 |
| Regular work schedule | Equals 1 if respondent's current work schedule is a regular daytime schedule.                                                                                                                                                                 | 0.753 | 0.431 | 0.748   | 0.434 |
| Private sector        | Equals 1 if respondent works in a private sector "for profit" organisation.                                                                                                                                                                   | 0.778 | 0.416 | 0.624   | 0.485 |
| Occupation            | Categorical occupation dummies derived from the respondent's current occupation. The classifications come from the Australian and New Zealand Standard Classification of Occupations (ANZSCO), First Edition, 2006 (ABS cat. no. 1220.0).     |       |       |         |       |
|                       | Managers (ref)                                                                                                                                                                                                                                | 0.162 | 0.368 | 0.093   | 0.290 |
|                       | Professionals                                                                                                                                                                                                                                 | 0.206 | 0.405 | 0.274   | 0.446 |
|                       | Technicians and trade workers                                                                                                                                                                                                                 | 0.222 | 0.416 | 0.041   | 0.198 |
|                       | Community and personal service workers                                                                                                                                                                                                        | 0.061 | 0.240 | 0.149   | 0.356 |
|                       | Clerical and administrative workers                                                                                                                                                                                                           | 0.074 | 0.261 | 0.236   | 0.425 |
|                       | Sales workers                                                                                                                                                                                                                                 | 0.062 | 0.241 | 0.129   | 0.335 |
|                       | Machinery operators and drivers                                                                                                                                                                                                               | 0.099 | 0.298 | 0.011   | 0.104 |
|                       | Labourers.                                                                                                                                                                                                                                    | 0.114 | 0.318 | 0.068   | 0.251 |
| Industry              | Categorical industry dummies derived from the respondent's current employment industry. The classifications come from the Australian and New Zealand Standard Industrial Classification (ANZSIC), Second Edition, 2006 (ABS cat. no. 1292.0). |       |       |         |       |
|                       | Agriculture, forestry and fishing (ref)                                                                                                                                                                                                       | 0.042 | 0.200 | 0.020   | 0.139 |
|                       | Mining                                                                                                                                                                                                                                        | 0.026 | 0.161 | 0.005   | 0.068 |
|                       | Manufacturing                                                                                                                                                                                                                                 | 0.128 | 0.334 | 0.048   | 0.214 |
|                       | Electricity, gas, water and waste services                                                                                                                                                                                                    | 0.015 | 0.122 | 0.004   | 0.063 |
|                       | Construction                                                                                                                                                                                                                                  | 0.131 | 0.337 | 0.018   | 0.134 |
|                       | Wholesale trade                                                                                                                                                                                                                               | 0.040 | 0.197 | 0.022   | 0.147 |
|                       | Retail trade                                                                                                                                                                                                                                  | 0.084 | 0.277 | 0.124   | 0.329 |
|                       | Accommodation and food services                                                                                                                                                                                                               | 0.049 | 0.215 | 0.077   | 0.266 |
|                       | Transport, postal and warehousing                                                                                                                                                                                                             | 0.065 | 0.247 | 0.019   | 0.138 |
|                       | Information media and telecommunications                                                                                                                                                                                                      | 0.025 | 0.156 | 0.021   | 0.145 |
|                       | Financial and insurance services                                                                                                                                                                                                              | 0.034 | 0.180 | 0.042   | 0.200 |
|                       | Rental, hiring and real estate services                                                                                                                                                                                                       | 0.012 | 0.111 | 0.016   | 0.124 |
|                       | Professional, scientific and technical services                                                                                                                                                                                               | 0.079 | 0.269 | 0.072   | 0.259 |
|                       | Administrative and support service                                                                                                                                                                                                            | 0.025 | 0.156 | 0.033   | 0.178 |
|                       | Public administration and safety                                                                                                                                                                                                              | 0.082 | 0.275 | 0.060   | 0.237 |
|                       | Education and training                                                                                                                                                                                                                        | 0.056 | 0.231 | 0.152   | 0.359 |
|                       | Health care and social assistance                                                                                                                                                                                                             | 0.046 | 0.210 | 0.216   | 0.412 |

| Variable | Definition / Description     | Males |       | Females |       |
|----------|------------------------------|-------|-------|---------|-------|
|          |                              | Mean  | SD    | Mean    | SD    |
|          | Arts and recreation services | 0.019 | 0.135 | 0.017   | 0.129 |
|          | Other services               | 0.042 | 0.201 | 0.035   | 0.183 |

Abbreviations: ANZSIC, Australian and New Zealand Standard Industrial Classification; ANZSCO, Australian and New Zealand Standard Classification of Occupations; ASGC, Australian Standard Geographical Classification; MHI-5, 5-item Mental Health Inventory; NR, non-respondent; OECD, Organisation for Economic Co-operation and Development; Ref, reference category; SD, standard deviation; SEIFA, *Socio-Economic Indexes for Areas*; SF-36, 36-item Short Form Health Survey; SL, sick leave.