

## Supplementary Material

**Suppl Table 1** Participant characteristics for subjective prognosis of gainful employment (SPE).

| Variable                                                  | SPE favorable<br>(n = 489) | SPE unfavorable<br>(n = 436) | total<br>(n = 925) | n   | p-value  |
|-----------------------------------------------------------|----------------------------|------------------------------|--------------------|-----|----------|
| <b>Socio-demographic data</b>                             |                            |                              |                    |     |          |
| Age [in years] <sup>a</sup><br>Mean ± SD                  | 52.53<br>± 6.81            | 51.72<br>± 7.57              | 52.15<br>± 7.19    | 925 | p > .05  |
| Gender, female <sup>b</sup><br>no. (%)                    | 389<br>(42.1)              | 328<br>(35.5)                | 717<br>(77.5)      | 925 | p > .05  |
| Family status (married) <sup>b</sup><br>no. (%)           | 294<br>(32.4)              | 262<br>(28.9)                | 556<br>(61.2)      | 908 | p > .05  |
| Social status <sup>b</sup><br>no. (%)                     |                            |                              |                    | 839 | p < .001 |
| lower class                                               | 51<br>(06.1)               | 87<br>(10.4)                 | 138<br>(16.4)      |     |          |
| middle class                                              | 247<br>(29.4)              | 216<br>(25.7)                | 463<br>(55.2)      |     |          |
| upper class                                               | 148<br>(17.6)              | 90<br>(10.7)                 | 238<br>(28.4)      |     |          |
| <b>Work-related data</b>                                  |                            |                              |                    |     |          |
| Employed <sup>b</sup><br>no. (%)                          | 445<br>(50.2)              | 335<br>(37.8)                | 780<br>(87.9)      | 887 | p < .001 |
| Pain-related DSL <sup>b</sup><br>≤ 2 weeks, no. (%)       | 295<br>(40.3)              | 162<br>(22.1)                | 457<br>(62.4)      | 732 | p < .001 |
| Work Ability Index <sup>b</sup> ,<br>Total score, no. (%) |                            |                              |                    | 866 | p < .001 |
| poor                                                      | 124<br>(14.3)              | 316<br>(36.5)                | 440<br>(50.8)      |     |          |
| moderate                                                  | 268<br>(30.9)              | 78<br>(09.0)                 | 346<br>(40.0)      |     |          |
| good                                                      | 71<br>(08.2)               | 5<br>(00.6)                  | 76<br>(08.8)       |     |          |
| excellent                                                 | 4<br>(00.5)                | 0<br>(00.0)                  | 4<br>(00.5)        |     |          |
| <b>Pain history</b>                                       |                            |                              |                    |     |          |
| Pain duration [in years] <sup>b</sup><br>Mean ± SD        | 13.89<br>± 10.65           | 14.26<br>± 10.26             | 14.06<br>± 10.47   | 836 | p > .05  |
| Pain staging <sup>b</sup><br>no. (%)                      |                            |                              |                    | 925 | p < .001 |
| I                                                         | 159<br>(17.2)              | 80<br>(08.6)                 | 239<br>(25.8)      |     |          |
| II                                                        | 240<br>(25.9)              | 216<br>(23.4)                | 456<br>(49.3)      |     |          |
| III                                                       | 90<br>(09.7)               | 140<br>(15.1)                | 230<br>(24.9)      |     |          |
| Pain grading <sup>b</sup><br>no. (%)                      |                            |                              |                    | 925 | p < .001 |
| I                                                         | 118<br>(12.8)              | 38<br>(04.1)                 | 156<br>(16.9)      |     |          |
| II                                                        | 83<br>(09.0)               | 33<br>(03.6)                 | 116<br>(12.5)      |     |          |
| III                                                       | 166<br>(17.9)              | 129<br>(13.9)                | 295<br>(31.9)      |     |          |
| IV                                                        | 122<br>(13.2)              | 236<br>(25.5)                | 358<br>(38.7)      |     |          |

SD = Standard deviation. <sup>a</sup> analyses of variance. <sup>b</sup> chi2 test. DSL = days of sick leave.

**Suppl Table 2** Rank correlations of the SPE total score.

| <b>Variable</b>                                                      | <b><i>r</i>*</b> | <b><i>p</i></b> | <b><i>n</i></b> |
|----------------------------------------------------------------------|------------------|-----------------|-----------------|
| <b>Gender</b> (1=female, 2=male)                                     | .035             | .289            | 925             |
| <b>Age</b>                                                           | -.026            | .435            | 925             |
| <b>Social status</b> (1=lower, 2=middle, 3=upper class)              | -.204            | <.001           | 839             |
| <b>Days of sick leave</b> (1=≤ 2 weeks, 2= > 2 weeks)                | .323             | <.001           | 732             |
| <b>Average pain intensity (DSF)</b>                                  | .269             | <.001           | 925             |
| <b>Pain sites (DSF)</b>                                              | .259             | <.001           | 925             |
| <b>Pain staging</b> (1=stage I, 2=stage II, 3=stage III)             | .229             | <.001           | 925             |
| <b>Pain grading</b> (1=grade I, 2=grade II, 3=grade III, 4=grade IV) | .369             | <.001           | 925             |
| <b>Job strain (Würzburg Screening)</b>                               | .533             | <.001           | 916             |
| <b>Depressive symptoms (CES-D)</b>                                   | .352             | <.001           | 925             |
| <b>Screening scale for chronic stress (TICS)</b>                     | .366             | <.001           | 907             |
| <b>Pain-related self-efficacy (PSEQ)</b>                             | -.501            | <.001           | 925             |
| <b>Physical health (SF-12)</b>                                       | -.451            | <.001           | 925             |
| <b>Mental health (SF-12)</b>                                         | -.263            | <.001           | 925             |
| <b>Physical work ability (WAI)</b>                                   | -.558            | <.001           | 916             |
| <b>Mental work ability (WAI)</b>                                     | -.400            | <.001           | 918             |
| <b>Functional capacity (FFbH-R)</b>                                  | -.450            | <.001           | 925             |
| <b>Pain disability related to work (DSF)</b>                         | .407             | <.001           | 921             |

*r* = Spearman's rank correlation coefficient for continuous and ordinal variables and point-biserial correlation for dichotomous variables. DSF = German Questionnaire of Pain. CES-D = Center for Epidemiological Studies Depression Scale. TICS = Trier Inventory for Chronic Stress. PSEQ = Pain Self-Efficacy Questionnaire. SF-12 = Short Form-12. WAI = Work Ability Index. FFbH-R = Hannover Functional Ability Questionnaire – back pain.

**Suppl Table 3** Median (*MD*) and mean rank (*rank*) and Mann-Whitney *U* results of the SPE categorical score (*n* = 925).

| Prognosis of employment                                  |             |                               |                                 |                      |          |          |
|----------------------------------------------------------|-------------|-------------------------------|---------------------------------|----------------------|----------|----------|
| Variable                                                 |             | Favorable<br>( <i>n</i> =489) | Unfavorable<br>( <i>n</i> =436) | <i>U</i> -statistics |          |          |
| Depressive symptoms<br>(CES-D)                           | <i>MD</i>   | 19.00                         | 27.66                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 389.99                        | 544.89                          | -08.81               | < .001   | .290     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Screening scale for<br>chronic stress<br>(TICS)          | <i>MD</i>   | 21.00                         | 27.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 373.60                        | 545.18                          | -09.85               | < .001   | .327     |
|                                                          | <i>n</i>    | 482                           | 425                             |                      |          |          |
| Pain self-efficacy<br>(PSEQ)                             | <i>MD</i>   | 43.00                         | 31.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 569.45                        | 343.61                          | -12.84               | < .001   | .422     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Physical health<br>(SF-12)                               | <i>MD</i>   | 38.79                         | 32.25                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 563.18                        | 350.64                          | -12.08               | < .001   | .400     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Mental health<br>(SF-12)                                 | <i>MD</i>   | 38.70                         | 34.34                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 519.53                        | 399.60                          | -06.82               | < .001   | .224     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Physical work ability<br>(WAI) <sup>1</sup>              | <i>MD</i>   | 03.00                         | 02.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 568.72                        | 333.93                          | -14.11               | < .001   | .467     |
|                                                          | <i>n</i>    | 486                           | 430                             |                      |          |          |
| Mental work ability<br>(WAI) <sup>1</sup>                | <i>MD</i>   | 03.00                         | 03.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 540.21                        | 368.70                          | -10.30               | < .001   | .340     |
|                                                          | <i>n</i>    | 486                           | 432                             |                      |          |          |
| Job strain<br>(Würzburg<br>Screening) <sup>2</sup>       | <i>MD</i>   | 10.00                         | 13.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 345.08                        | 584.47                          | -13.78               | < .001   | .456     |
|                                                          | <i>n</i>    | 482                           | 434                             |                      |          |          |
| Functional capacity<br>(FFbH-R)                          | <i>MD</i>   | 75.00                         | 56.25                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 561.39                        | 352.65                          | -11.89               | < .001   | .391     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Pain sites<br>(DSF)                                      | <i>MD</i>   | 04.00                         | 05.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 407.52                        | 525.22                          | -06.75               | < .001   | .222     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Average pain intensity<br>(DSF)                          | <i>MD</i>   | 05.00                         | 05.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 408.96                        | 523.61                          | -06.60               | < .001   | .217     |
|                                                          | <i>n</i>    | 489                           | 436                             |                      |          |          |
| Pain disability related<br>to work<br>(DSF) <sup>3</sup> | <i>MD</i>   | 04.00                         | 07.00                           | <i>Z</i>             | <i>p</i> | <i>V</i> |
|                                                          | <i>Rank</i> | 369.40                        | 563.79                          | -11.13               | < .001   | .366     |
|                                                          | <i>n</i>    | 487                           | 434                             |                      |          |          |

*Z* = Z-score. *V* = Cramer's *V* (effect size). CES-D = Center for Epidemiological Studies Depression Scale. TICS = Trier Inventory for Chronic Stress. PSEQ = Pain Self-Efficacy Questionnaire. SF-12 = Short Form-12. WAI = Work Ability Index. FFbH-R = Hannover Functional Ability Questionnaire – back pain. DSF = German Questionnaire of Pain. <sup>1</sup>*N*=915. <sup>2</sup>*N*=916. <sup>3</sup>*N*=921.