The Relationship between Organisational Stressors and Mental Wellbeing within Police Officers: A Systematic Review

Additional File 6

File Format: DOC

Title: Table S12 and S13

Description: Process Adopted to Determine Overall Magnitude of Association of Included Studies by Outcome (Table S12) and

Overall Degree of Evidence Grade by MW Outcome (Table S13)

Table S12

Process Adopted to Determine Overall Magnitude of Association of Included Studies by Outcome

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mental Wellbeing Outcome (s) | Study ID(s) | Individual effect measures grades. and corresponding score (points) | High (3 pts) | Intermediate  (2 pts) | | | Low  (1 pt) | No association  (0 pts) | | | Unclear  (0 pts) | Overall magnitude of association\* | Overall magnitude of association: RAG threshold\*\* |
| Occupational Stress | Crank *et al*. (1) Morash *et al*. (2) Morash *et al.* (3) | Number of effect sizes of the following grades within included studies | 0 | 1 | | | 7 | 5 | | | 0 | 9/3 = 3.0 | Intermediate (++) |
| Score applied to effect measures in included studies | - | 2\*1 | | | 7\*1 | - | | | - |
| Anxiety | Berg *et al*. (4) | Number of effect sizes of the following grades within included studies | 0 | 1 | | | 0 | 1 | | | 0 | 2/1= 2.0 | Intermediate (++) |
| Score applied to effect measures in included studies | - | 1\*2 | | | - | - | | | - |
| Depression | Berg *et al*. (4)  Chen *et al*. (5) | Number of effect sizes of the following grades within included studies | 0 | 2 | | | 0 | 2 | | | 0 | 4/2= 2.0 | Intermediate (++) |
| Score applied to effect measures in included studies | - | 2\*2 | | | - | - | | | - |
| Psychiatric Symptoms (PS) or Psychological Distress (PD) | Adams *et al*. (6) Arial *et al*. (7)  Houdmont *et al.* (8)  Janzen *et al*. (9) | Number of effect sizes of the following grades within included studies | 1 | | 3 | 3 | | | 0 | 0 | | 12/3= 4.0 | High (++) |
| Score applied to effect measures in included studies | 1\*3 | | 3\*2 | 3\*1 | | | - | - | |
| Burnout | Xavier *et al.* (10) | Number of effect sizes of the following grades within included studies | 0 | 0 | | | 2 | 0 | | | 0 | 2/1= 2.0 | Intermediate (++) |
| Score applied to effect measures in included studies | - | - | | | 2\*1 | - | | | - |
| Emotional Exhaustion (EE) | Adams *et al*. (6)  Adebayo *et al*. (11)  Berg *et al*. (4)  Backteman-Erlanson *et al*. (12)  Houdmont *et al.* (8)  Martinussen *et* *al.* (13)  Mostert *et al.* (14)  McCarty *et al.* (15)  Xavier *et al.* (10) | Number of effect sizes of the following grades within included studies | 1 | 7 | | | 9 | 5 | | | 0 | 26/4=6.5 | High (+++) |
| Score applied to effect measures in included studies | 1\*3 | 7\*2 | | | 9\*1 | - | | | - |
| Depersonalisation (DP) | Berg *et al*. (4)  Backteman-Erlanson *et al*. (12)  Houdmont *et al.* (8)  Martinussen *et* *al.* (13)  Mostert *et al.* (14)  Xavier *et al.* (10) | Number of effect sizes of the following grades within included studies | 0 | 5 | | | 7 | 6 | | | 0 | 17/3=5.7 | High (+++) |
| Score applied to effect measures in included studies | - | 5\*2 | | | 7\*1 | - | | | - |
| Personal Accomplishment (PA) | Berg *et al*. (4) Houdmont *et al.* (8)  Martinussen *et* *al.* (13)  Xavier *et al.* (10) | Number of effect sizes of the following grades within included studies | 0 | 0 | | | 4 | 6 | | | 0 | 4/2= 2.0 | Intermediate (++) |
| Score applied to effect measures in included studies | - | - | | | 4\*1 | - | | | - |
| Suicidal Ideation | Berg *et al*. (4) | Number of effect sizes of the following grades within included studies | 0 | 0 | | | 0 | 2 | | | 0 | 0 | Low (+) |
| Score applied to effect measures in included studies | - | - | | | - | - | | | - |

*Note*. Individual grades were given to the effect size of each stressor and outcome relationship within each study (high, intermediate, low, no association, unclear). These studies were then graded using a weighted average (WA) scale, wherein a High association (+++ = *3 points*), an Intermediate association (++ = *2 points*), and a Low association (+ = *1 point*). For No association (-) and unclear (±) a *0 points scale* was allocated. In calculating the overall mean score, a weighted average was calculated for each outcome (sum of scores applied to effect measures for MW outcome/ no of grades applied to each MW outcome). \*\*The overall magnitude of association of included studies by outcome was then graded accordingly using the RAG threshold: high (+++); ≥4; intermediate (++), 2.0- 3.9; low/ no association (+) 0-1.9.

Table S13

Overall Degree of Evidence Grade by MW Outcome

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mental Wellbeing Outcome(s) | Study ID | NOS grade | Adjustment by confounder(s) results | Overall degree of evidence\* |
| Occupational Stress | Crank *et al*. (1) | High | No adjustment | Strong |
| Morash *et al.* (3) | High | Full adjustment |
| Morash *et al*. (2) | High | Full adjustment |
| Anxiety | Berg *et al*. (4) | High | Full adjustment | Insufficient |
| Depression | Berg *et al*. (4) | High | Full adjustment | Insufficient |
| Chen *et al*. (5) | High | Partial adjustment |
| Psychiatric Symptoms (PS) or Psychological Distress (PD) | Adams *et al*. (6) | High | Partial adjustment | Strong |
| Arial *et al*. (7) | High | Full adjustment |
| Houdmont *et al.* (8) | High | Partial adjustment |
| Janzen *et al*. (9) | High | Partial adjustment |
| Burnout | Xavier *et al.* (10) | Low | No adjustment | Insufficient |
| Emotional Exhaustion (EE) | Adams *et al*. (6) | High | Partial adjustment | Strong |
| Adebayo *et al*. (11) | High | Partial adjustment |
| Backteman-Erlanson *et al*. (12) | High | Partial adjustment |
| Berg *et al*. (4) | High | Full adjustment |
| Houdmont *et al.* (8) | High | Partial adjustment |
| Martinussen *et* *al.* (13) | High | Full adjustment |
| McCarty *et al..* (15) | Intermediate | No adjustment |
| Mostert *et al.* (14) | High | No adjustment |
| Xavier *et al.* (10) | Low | No adjustment |
| Depersonalisation (DP) | Backteman-Erlanson *et al*. (12) | High | Partial adjustment | Strong |
| Berg *et al*. (4) | High | Full adjustment |
| Houdmont *et al.* (8) | High | Partial adjustment |
| Martinussen *et* *al.* (13) | High | Full adjustment |
| Mostert *et al.* (14) | High | Full adjustment |
| Xavier *et al.* (10) | Low | No adjustment |
| Personal Accomplishment (PA) | Berg *et al*. (4) | High | Full adjustment | Strong |
| Houdmont *et al.* (8) | High | Partial adjustment |
| Martinussen *et* *al.* (13) | High | Full adjustment |
| Xavier *et al.* (10) | Low | No adjustment |
| Suicidal Ideation | Berg *et al*. (4) | High | Full adjustment | Insufficient |

*Note.* Degree of evidence of included studies by outcome classified as strong, moderate or insufficient. Strong evidence (+++): *Consistent findings in more than 2 studies of high quality. At least one study has adjusted for participant demographics AND additional exposure variables*.; moderate evidence (++): *Consistent findings in 2 studies of high quality or one high quality study and one intermediate quality study, or between more than 2 studies of intermediate quality. At least one study has adjusted for participant demographics OR additional exposure variables*; insufficient evidence *(+): Identification of only one study or inconsistent findings across studies*.

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