# ONLINE RESOURCES

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Why do men extend their employment beyond pensionable age more often than women? A cohort study**

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**Online Resource 3 –** Association between sex and extension of employment of over 12 months with serial adjustments for potential mediators using traditional mediation analysis (interaction not taken into account) and counterfactual mediation analysis (interaction allowed) (n = 2,819).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Traditional mediation analysis**  |  | **Counterfactual mediation analysis** |
|  | **Men vs. women** | **PERM** |  | **NDE** | **NIE** | **Total effect** | **Proportion mediated** |  |
| **Adjustments** | **RR (95% CI)** | **%** |  | **RR (95% CI)** | **RR (95% CI)** | **RR (95% CI)** | **%** | **p for interactionb** |
| Unadjusted | 1.27 (1.04–1.56) | - |  | - | - | - | - | - |
|  | 1.24 (1.02–1.52) | reference |  | - | - | - | - | - |
| Married or cohabiting | 1.30 (1.06–1.59) | -24.1 |  | 1.22 (1.01–1.55) | 0.99 (0.93–1.06) | 1.25 (1.02–1.52) | -3.4 | 0.204 |
| Spouse working full-time | 1.14 (0.93–1.41) | 41.7 |  | 1.12 (0.89–1.41) | 1.12 (0.997–1.25) | 1.25 (1.03–1.53) | 51.4 | 0.732 |
| Non-manual occupation | 1.20 (0.99–1.47) | 16.7 |  | 1.21 (0.99–1.48) | 1.02 (0.99–1.05) | 1.24 (1.01–1.51) | 11.9 | 0.828 |
| Part-time retirement | 1.20 (0.98–1.46) | 17.9 |  | 1.20 (0.99–1.47) | 1.03 (1.00–1.07) | 1.24 (1.02–1.52) | 16.8 | 0.848 |
| High work time control | 1.17 (0.96–1.43) | 29.8 |  | 1.15 (0.93–1.42) | 1.09 (1.02–1.18) | 1.26 (1.03–1.53) | 42.4 | 0.557 |
| No pain | 1.23 (1.00–1.50) | 6.8 |  | 1.20 (0.98–1.48) | 1.02 (0.995–1.06) | 1.23 (1.01–1.51) | 12.8 | 0.322 |
| No chronic diseases | 1.24 (1.02–1.52) | 0.5 |  | 1.23 (1.01–1.51) | 1.01 (0.99–1.03) | 1.24 (1.02–1.52) | 4.0 | 0.228 |
| Sleep duration over 6.5 hours | 1.22 (1.00–1.50) | 7.9 |  | 1.23 (1.00–1.50) | 1.01 (0.98–1.04) | 1.24 (1.02–1.52) | 5.6 | 0.773 |
| No risk-use of alcohol | 1.23 (1.01–1.50) | 4.8 |  | 1.21 (0.99–1.49) | 1.03 (0.99–1.06) | 1.24 (1.02–1.52) | 12.5 | 0.303 |
| Normal weight (<25) | 1.27 (1.04–1.55) | -12.0 |  | 1.26 (1.03–1.55) | 0.99 (0.95–1.02) | 1.24 (1.02–1.52) | -7.8 | 0.534 |
| All mediatorsa | 1.03 (0.84–1.27) | 86.4 |  | - | - | - | - | - |

RR = risk ratio, CI = confidence interval, PERM = percentage of excess risk mediated, NDE = natural direct effect, NIE = natural indirect effect a Only factors that were found to be mediators were included in this estimate (i.e. factors mediating excess risk).
b p-value for sex-mediator interaction