

Supplementary file 3

eTable 3. Mediation of the associations between father's SEP and CVD mortality by social and behavioral risk factors after excluding the farmers and the self-employed from the group of nonmanual fathers, The Stockholm Public Health Cohort (n=17 417))

IOW Approach	Mediation by education and adult SEP	Mediation by education, adult SEP + behavioral factors
	IRR (95% CI ⁴)	IRR (95% CI ⁴)
Total effect ¹	1.23 (1.08-1.42)	1.23 (1.08-1.42)
Natural direct effect ²	1.15 (0.97-1.40)	1.12 (0.96-1.32)
Natural indirect effect	1.06 (1.01-1.13)	1.10 (1.03-1.16)
Proportion mediated ⁵	32%	48%
Traditional Approach		
Total effect ¹	1.23 (1.07-1.44)	1.23 (1.07-1.44)
Direct effect ³	1.10 (0.94-1.33)	1.08 (0.93-1.27)
Indirect effect	1.12 (1.07-1.17)	1.14 (1.08-1.21)
Proportion mediated ⁵	57%	65%

Note: SEP = Socio-economic Position; CVD = Cardio-vascular Diseases; IRR = Incidence Rate Ratio; CI = Confidence Interval; IOW= Inverse Odds Weighting

¹Adjusted for age, gender, country of birth, and marital status

²Obtained by applying the inverse odds weights, in addition to adjusting for age, gender, country of birth, and marital status

³Adjusted for age, gender, country of birth, marital status, and the mediators of interest.

⁴ Percentile-based bootstrap confidence intervals are reported.

⁵The proportion mediated was calculated using the formula: $\{IRR^{NDE} (IRR^{NIE} - 1)/(IRR^{NDE} * IRR^{NIE} - 1)\} * 100$.