Conclusion RR identified significantly fewer included studies than SR, but there were no significant differences in the review results. RR offered greater efficiency with far greater% of reviewed records being included. This analysis benefited from using data from a large scale epidemiological review. However, it only assessed one broad topic area. Further research and evidence synthesis is needed to assess the value of RR in an epidemiological setting.

Mental Health 2

OP83 HOW MUCH OF THE EFFECT OF DISABILITY ACQUISITION ON MENTAL HEALTH IS MEDIATED THROUGH EMPLOYMENT AND INCOME? A CAUSAL MEDIATION ANALYSIS QUANTIFYING INTERVENTIONAL INDIRECT EFFECTS USING LONGITUDINAL DATA FROM WORKING AGE AUSTRALIANS

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Background There is evidence that disability acquisition causes a decline in mental health, but few studies have examined the causal mechanisms through which the effect operates. Our previous research examined three broad groups of socio-economic characteristics and found that material factors, rather than psychosocial or behavioural, predominately mediated the effect. However, there remains a lack of understanding about which specific material factors drive the association, limiting the development of effective interventions to improve the mental health of people with disabilities. This study examined how much changes to employment and income mediate the effect of disability acquisition on mental health.

Methods We used data from the Household, Income and Labour Dynamics in Australia Survey, a longitudinal study of Australian households, which collects information annually on a wide range of demographic, social, economic, and health characteristics. We used four waves of data (2011–2014) to compare self-reported mental health between working aged individuals who acquired a disability (n=233) and those who remained disability-free (n=5419). Mental health was measured using the mental health inventory, a subscale of the SF-36 health questionnaire. We conducted a causal mediation analysis to quantify interventional indirect effects of disability acquisition on mental health operating through two distinct mediators: employment status and household income. This novel method enables quantification of path-specific effects operating through multiple mediators. We used multiple imputation with 50 imputed datasets to account for missing data and conducted analyses in Stata/SE 15.

Results Disability acquisition was estimated to cause a five-point decline in mental health (estimated mean difference: −4.8, 95% CI −7.0, −2.7). The interventional indirect effect through employment was estimated to be a 0.5 point difference (−0.5, 95% CI −1.0, 0.0), accounting for 11% of the total effect, whereas there was no evidence that income explained any of the effect.

Conclusion Using a novel approach to mediation analysis which addresses limitations of traditional mediation methods and can be estimated under weaker assumptions than natural