

Productive activities, mental health and well-being in disability: Exploring the role enhancement and the role strain hypotheses

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Research highlights

- The total productivity load relates to mental health and well-being in men.
- Paid work is important for men's mental health and well-being, but less so for women's.
- Moderate engagement in volunteering relates to enhanced mental health (men) and well-being (both genders).
- The study clearly supports the role enhancement hypothesis as mental health (men) and well-being (both genders) increases with enhanced diversity of engagement in productive activities.

Background

Engagement in productive activities is an important determinant of mental health and well-being. Persons with physical disabilities are often confronted with constraints to engage in productive activities and it remains largely unknown whether persons who nevertheless manage to be productive experience beneficial effects for mental health and well-being.

This is the first study to analyse different productive activities (paid work, volunteering, education, housework) and its gender-specific associations with mental health and well-being in the disability setting, testing two contrasting hypotheses of Role Theory:

The role enhancement hypothesis:



Engagement in different productive activities positively affects health & well-being as it provides the opportunity to interact with others and to experience emotional support and rewards.

The role strain hypothesis:



Engagement in different productive activities negatively affects health & well-being as it leads to role overload and burden and the different obligations impede successful role performance.

Methods

We used data from the Swiss Spinal Cord Injury Cohort (SwiSCI) community survey, including a representative sample of 1157 men and women of employable age who sustained a severe physical disability (spinal cord injury).

Load of engagement in paid work, volunteering, education, and housework was classified into three groups (none; moderate; high). To assess the total productivity load, a score over the four items was calculated. Diversity of engagement in productive activities was assessed with variables on the number and combination of activities.

Tobit regressions were applied to evaluate associations of load and diversity of engagement in productive activities with mental health (Mental Health Inventory, SF-36) and well-being (WHOQoL-BREF items). Analyses were adjusted for sociodemographic characteristics (age, education, receipt of disability pension), lesion characteristics (years since injury, level and completeness of lesion, aetiology) and functional capacity.

Results

Gender differences were observed for the load of engagement in productive activities with men being more often involved in paid work and education and less often in housework than women. The total productivity load was similar for both genders (Tab 1).

Tab 1. Basic characteristics of the study sample	Men (n=840)	Women (n=317)	p
Mental health, 0-100, mean (SD)	73.1 (17.3)	67.5 (18.4)	<0.001
Well-being, 0-20, mean (SD)	13.8 (3.6)	13.4 (3.7)	0.15
Age in years, mean (SD)	46.7 (11.2)	45.8 (11.2)	0.22
Paraplegia; tetraplegia, n (%)	561 (67.4); 272 (32.7)	231 (73.3); 84 (26.7)	0.001
Paid work, n (%)	549 (65.4)	160 (50.6)	<0.001
Volunteering, n (%)	442 (52.6)	142 (44.9)	<0.001
Education, n (%)	240 (28.6)	63 (19.9)	0.003
Housework, n (%)	693 (84.5)	289 (94.4)	<0.001
Total productivity load (0-100), mean (SD)	23.2 (12.9)	22.2 (11.9)	0.19

Load of engagement in productive activities

Adjusted analyses showed a positive association of total productivity load and load of paid work with mental health and well-being in men, while associations were less consistent in women. Moderate engagement in volunteering (1-8 h/week) was related to better mental health (both genders) and well-being (in women) in comparison to higher (>8 h/week) or no engagement (Fig 1 & 2). The load of engagement in education and housework were neither related to mental health nor to well-being.

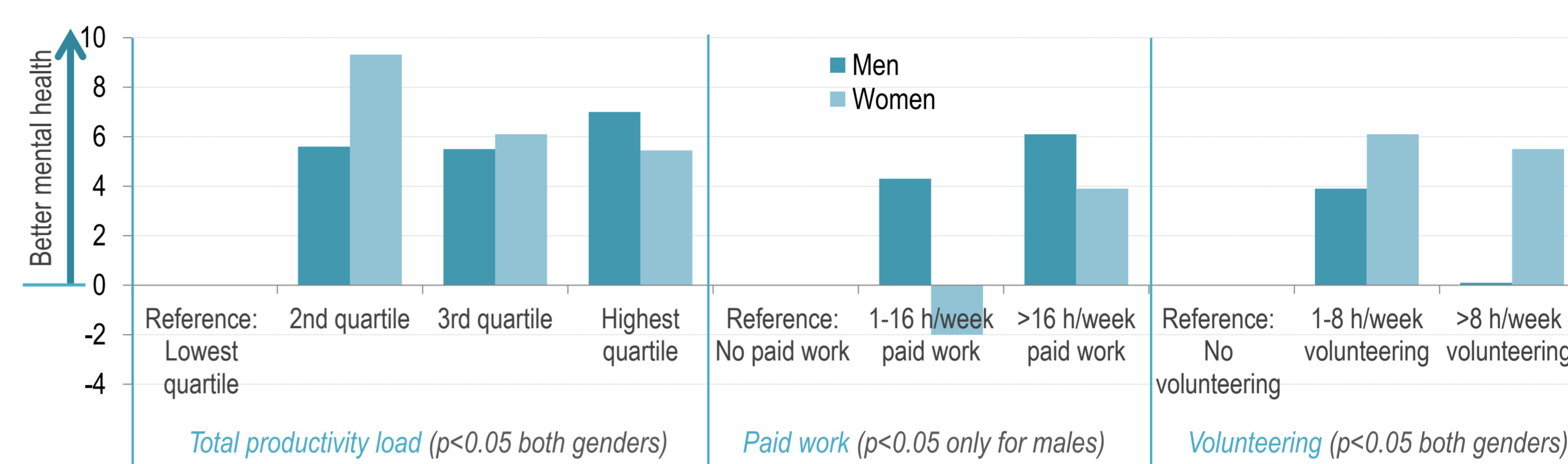


Fig 1. Load of productive activities and mental health: adjusted coefficients

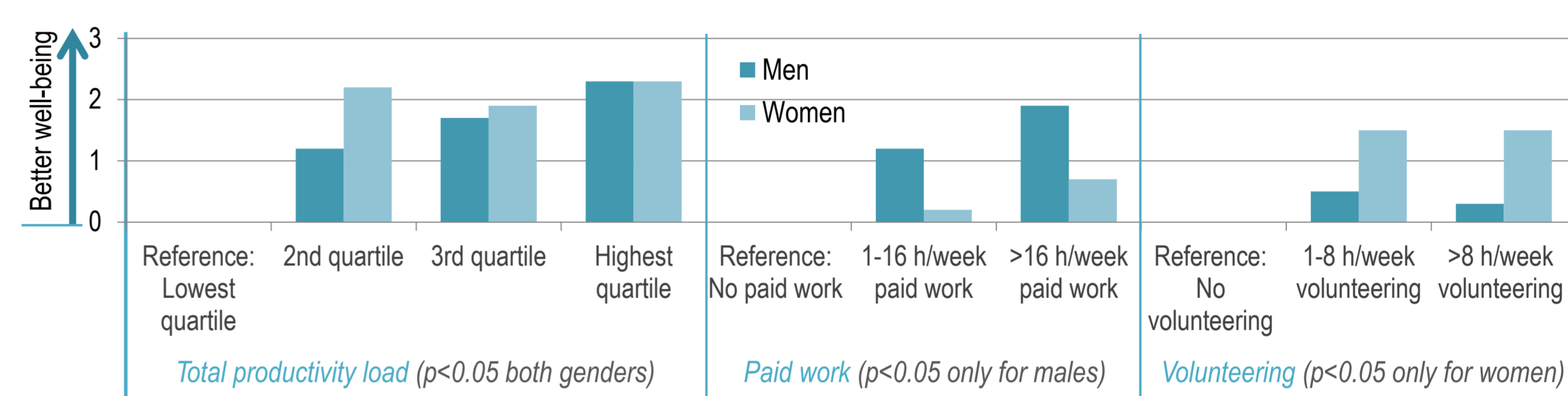


Fig 2. Load of productive activities and well-being: adjusted coefficients

Diversity of engagement in productive activities

Tab 2. Number of productive activities	Men (n=840)	Women (n=317)	p
No activity, n (%)	48 (5.9)	7 (2.3)	<0.001
1 activity, n (%)	138 (16.9)	79 (25.9)	
2 activities, n (%)	253 (30.9)	112 (37.7)	
3 activities, n (%)	259 (31.7)	90 (29.5)	
4 activities, n (%)	120 (14.7)	17 (5.6)	
Mean no. of activities (SD)	2.3 (1.1)	2.1 (0.9)	0.001

Tab 3. Combination of productive activities	Men (n=840)	Women (n=317)	p
None or one activity	186 (22.7)	86 (28.2)	<0.001
Two or three unpaid activities	116 (14.2)	69 (22.6)	
Paid work + one unpaid activity	165 (20.2)	59 (19.3)	
Paid work + two unpaid activities	231 (28.2)	74 (24.3)	
Paid work + three unpaid activities	120 (14.7)	17 (5.6)	

The number of activities was somewhat higher in men than in women (Tab 2). Women were more often engaged in unpaid activities, whereas the combination of paid work and two or more unpaid activities was more prevalent in men (Tab 3).

Results displayed in Fig 3 support the role enhancement hypothesis, as mental health (in men) and well-being (both genders) increased with the number of performed activities. In men who had paid work, mental health and well-being increased consistently with each additional unpaid activity. In contrast, engagement in paid work played a minor role for mental health and well-being in women.

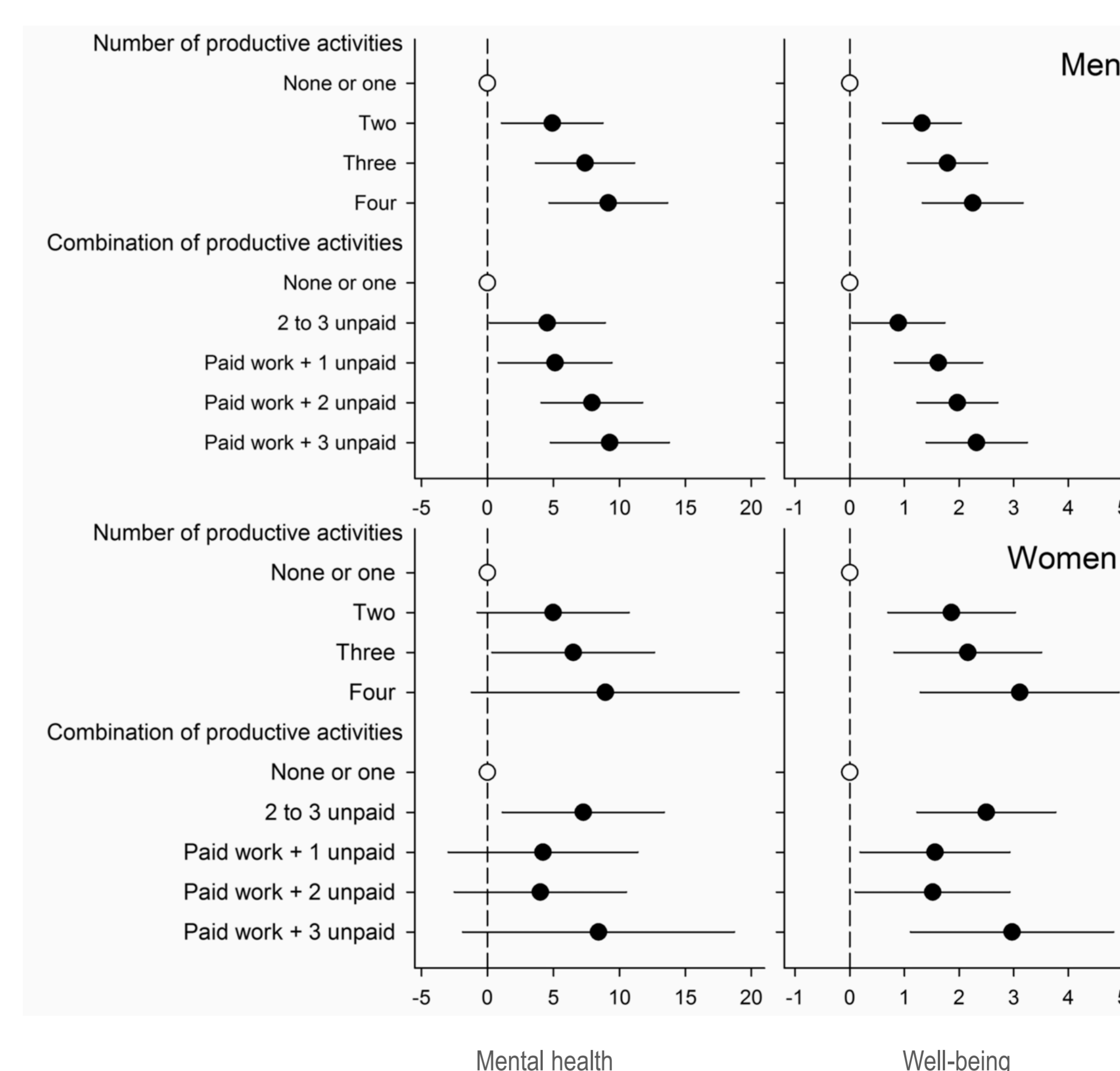


Fig 3: Diversity of productive activities, mental health and well-being: adjusted coefficients and 95% confidence intervals from tobit regressions for men (n=818) and women with spinal cord injury (n=305)

Conclusion

This study in the disability setting provided clear support for the role enhancement hypothesis. Future research on the mechanisms behind the observed associations is warranted to develop interventions and policies that strengthen resources important for engagement in productive activities as well as for mental health and well-being in persons with physical disabilities.