

Wellbeing and Community Engagement in Individuals with Newly Acquired Spinal Cord Injuries/Disease (SCI/D)

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BACKGROUND

- In the United States, there are approximately 18,000 new cases of traumatic spinal cord injury each year (Jain et. al.). The prevalence of individuals living with SCI/D in the United States is estimated at 302,000 people (Lasfargues et. al.). Many of these cases are male (79%), the average injury age is 43 years old, and about 35% of the injuries have occurred among non-Hispanic Black individuals. According to the National Spinal Cord Injury Statistical Center (NSCISC), vehicle crashes are the most recent cause of injury in 2023, followed by falls.
- Wellbeing and community engagement appear to have a positive correlation. Studies have analyzed the association between community activity and mental health. In one study, volunteers with SCI demonstrated higher well-being (Fekete et al, 2019).

PURPOSE & HYPOTHESIS

- Few studies have observed the effect of injury (SCI) have on the interaction between well-being and overall community engagement among individuals with SCI.
- This project aims to bridge this gap by analyzing how spinal cord injuries are associated with well-being and community engagement later in an individual's recovery as far as 3-months post-discharge.
- H_A = Higher levels of well-being will be positively correlated with community engagement among individuals with newly diagnosed SCI at 3 months post-discharge.

METHODS

Participants

- Adults admitted to Strong Memorial Hospital with a new diagnosis of SCI/D who are enrolled in a longitudinal study examining disability identity development
- Mean age of the sample was 60 (SD = 14.56) and predominantly identified as male (77.5%), white (72.5%), and non-Hispanic (92.5%).

Measures

- The Participation Assessment with Recombined Tools-Objective (PART-O, Whiteneck, Dijkers,

Heinemann, et al., 2011) is an objective measure of participation, representing functioning at the societal level. Items are combined into three domain subscales: Productivity, Social Relations, and Out and About.

The Neuro-QOL Positive Affect and Well-Being Scale (PAW) is a self-report Likert scale (0-45) designed to aid clinicians and researchers to better evaluate and understand the potential role of positive health processes for individuals with chronic neurological conditions.

Table 1.
Descriptive Statistics and Correlations for Each Checklist

Checklist	n	M	SD	1	2	3	4	5
1. Wellbeing Total Score	28	36.10	0.49	—				
2. PARTO Averaged Score	28	0.73	0.62	.18	—			
3. PARTO Productivity	28	0.90	0.80	.43	.28	—		
4. PARTO Social Relations	30	3.20	0.82	-.39	-.22	.23	—	
5. PARTO Out-and-About	30	1.03	0.83	.29	.08	.20	.31	—

RESULTS

Descriptive Statistics:

- Well-being: N =28 had scores ranging from 16-45 (M=36.07, SD=8.17).
- PART-O scores for autonomy and responsibility (N=28) ranged from 0.16-1.08 (M = 0.73, SD=0.25).
PART-O Subscales: productivity (N = 28) varied from 0 to 2.67 (M=0.90, SD=0.80); social relations (N=30) ranged from 0.43 to 4.29 (M=3.20, SD= 0.82); out and about (N=30) ranged from 0 to 3 (M=1.03, SD=0.83).

Primary Analysis:

- The PART-O averaged total score was not significantly correlated with the Neuro-QOL PAW.
- The PART-O Out-and-About subscale score demonstrated a positive correlation with wellbeing (r = .293, p = 0.130) and PARTO's social relations scores (r =.310, p = 0.095). However, these correlations were not statistically significant at the conventional alpha level of 0.05.

DISCUSSION

- Overall, these results suggest that the examined relationships between the Neuro-QOL Positive Affect and Well-Being Scale and PART-O were not statistically significant at the 3-month post injury mark.
- Of note, both self-report of positive affect and well-being as well as participation at the societal level varied widely amongst participants, and future analyses will examine characteristics of high and low reporters.
- The range of scores on these self-report measures likely reflects the slow progressing of adapting to life after SCI/D
- Future analyses will also examine these correlations at the 9-month mark.

REFERENCES

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ACKNOWLEDGEMENTS

This study was funded by a two-year psychosocial research pilot grant through the Craig H. Neilsen Foundation.

We would also like to acknowledge the efforts of study staff at George Mason University.

