

# Experience of using assistive technology in exercising occupational rights by individuals with spinal cord injury during community living: A photo-elicitation focus group study

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## Background

- In Bangladesh, people with spinal cord injuries (SCI) face major health and rehabilitation disparities (Islam et al., 2011).
- Structural and social barriers such as limited policies, negative attitudes, and poor accessibility restrict occupational participation and justice (Alve & Bontje, 2019).
- Assistive technology (AT), especially wheelchairs, promotes participation and social inclusion, but resource limitations hinder access and use (Habib et al., 2014; Gowran et al., 2021).
- Prior studies examined AT's impact on participation outcomes, but there is a gap on how individuals actually engage in occupations using AT (Yao et al., 2020; Folan et al., 2015).
- Yet it's unclear which occupational rights SCI individuals exercise through AT (Wilcock & Hocking, 2015).
- It was crucial to explore SCI individuals' occupational participation under this justice framework (Stadnyk et al., 2010).
- In low- and middle-income countries (LMICs), caregivers play a key role in enabling participation via AT (Yao et al., 2020).
- Therefore, this study explored how SCI individuals and caregivers engage in occupations using AT and which occupational rights are exercised within Bangladesh's resource-limited context.

## Objective

The objective of this research was exploring experiences of community dwelling individuals with SCI and their primary caregivers in their use of assistive technology (AT) and mapping their experiences to occupational rights outlined in occupational justice framework.

## Method

### Design

This study adopted a qualitative research design rooted in constructionist epistemology specifically utilized photo elicitation focus group discussions.

### Participants and Sample Size

12 Individual with SCI and their primary caregiver (in total 24)

### Sampling

Heterogenous purposive sampling

### Inclusion criteria were:

- i. Adult ( $\geq 18$  years) with SCI (tetraplegia and paraplegia) with at least one year of community living experience after discharge and having a primary caregiver ( $\geq 18$  years).
- ii. Individuals who were prescribed wheelchair, got wheelchair skill training from CRP and are using wheelchair for their occupational participation in their community.

### Data collection Method

1<sup>st</sup> Session of FGD utilised FGD guide (Guided by OJHQ)



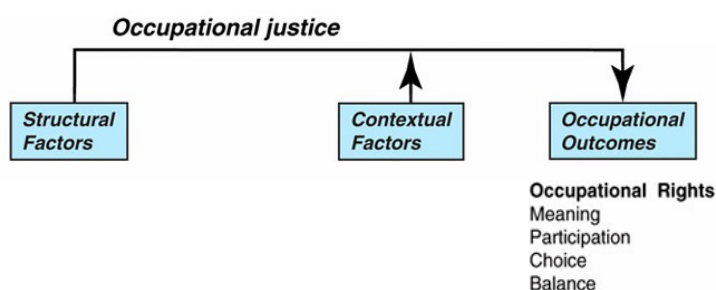
Figure 1. FGD Session

For the 2<sup>nd</sup> session, instruction for the photograph was provided.

### Analysis

Constant comparative analysis (Bogdan & Biklen, 2006).

At first, employed inductive approach then the analysis was followed by a deductive approach to evaluate the consistency of the emerging occupational participation with the established occupational rights components outlined in the occupational justice framework.



### Findings

- **Meaning:** Engaged in income generating activity, built career, fulfilled family role, govern daily occupations, sensed self-fulfilment and contributed to society.



Figure 1. Painted with his mouth while seated on specialized AT

- **Choice:** Met external expectation, facilitated collective engagement and integrated cultural and religious practices.

➤ **Balance:** Integrated structured routine and cultivated health promoting habits.

➤ **Participation:** Enhanced motivation, created enriching surroundings, achieved favourable outcome, performed reciprocal support

➤ **Visibility:** Exhibition of skills to public and sharing about talents to media.

Meaning

Choice

Balance

Participation

Visibility

Occupational Rights

**Figure 3:** According to the OJ framework (Stadnyk et al., 2010).

### Discussion

- Sustaining occupational engagement through self-management and personal adaptation, aligning with global evidence on systematic adaptation (Lai & Tang, 2018).
- Negotiating cultural expectations while exercising autonomy (Hammell, 2008).
- **Novel contribution:** *Visibility* as a distinct occupational right, extending beyond participation and inclusion discussed in prior literature (e.g., Murray & Shah, 2020).

- **Implications:** Supporting occupational visibility through advocacy, public engagement, and community-based initiatives is essential; policymakers should consider visibility within occupational justice frameworks.
- **Limitations:** Findings are context-specific to Bangladesh

### Conclusion

This study highlights how individuals with SCI in Bangladesh use AT to sustain occupational engagement, despite systemic barriers. By introducing *Visibility* as a new right, it expands the perspective of occupational justice

**Thank you!**