

# Understanding the Multidimensional Nature of Sexuality After Traumatic Brain Injury



Epworth  
Research

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## Introduction

- Sexuality changes occur in 36%–54% of traumatic brain injury (TBI) cases.
- Difficulties with arousal and orgasm, self-esteem and body image, communication, and intimacy are common.
- There is limited understanding regarding the aetiology, correlates, consequences, and treatment of sexuality disturbance after TBI.

## Aim

- Describe sexuality changes after TBI relative to healthy controls.
- Investigate associations of demographic, physical, psychological and social participation factors with sexuality outcome after TBI.

## Participants

- 84 individuals with mild-complicated to very severe TBI (62% male) and 88 age-, sex- and education-matched controls.
- TBI inclusion criteria: > 18 years of age, 1-10 years post-injury, sufficient English language, and no history of chronic substance abuse or psychiatric disturbances.
- Control inclusion criteria: No history of TBI or other neurological or psychiatric disturbance.

## Measures

The following measures were completed via post and/or semi-structured interview:

- Brain Injury Questionnaire of Sexuality (BIQS)
- Hospital Anxiety and Depression Scale (HADS)
- Rosenberg Self-Esteem Scale (RSES)
- Fatigue Severity Scale (FSS)
- Participation Assessment with Recombined Tools-Objective (PART-O)

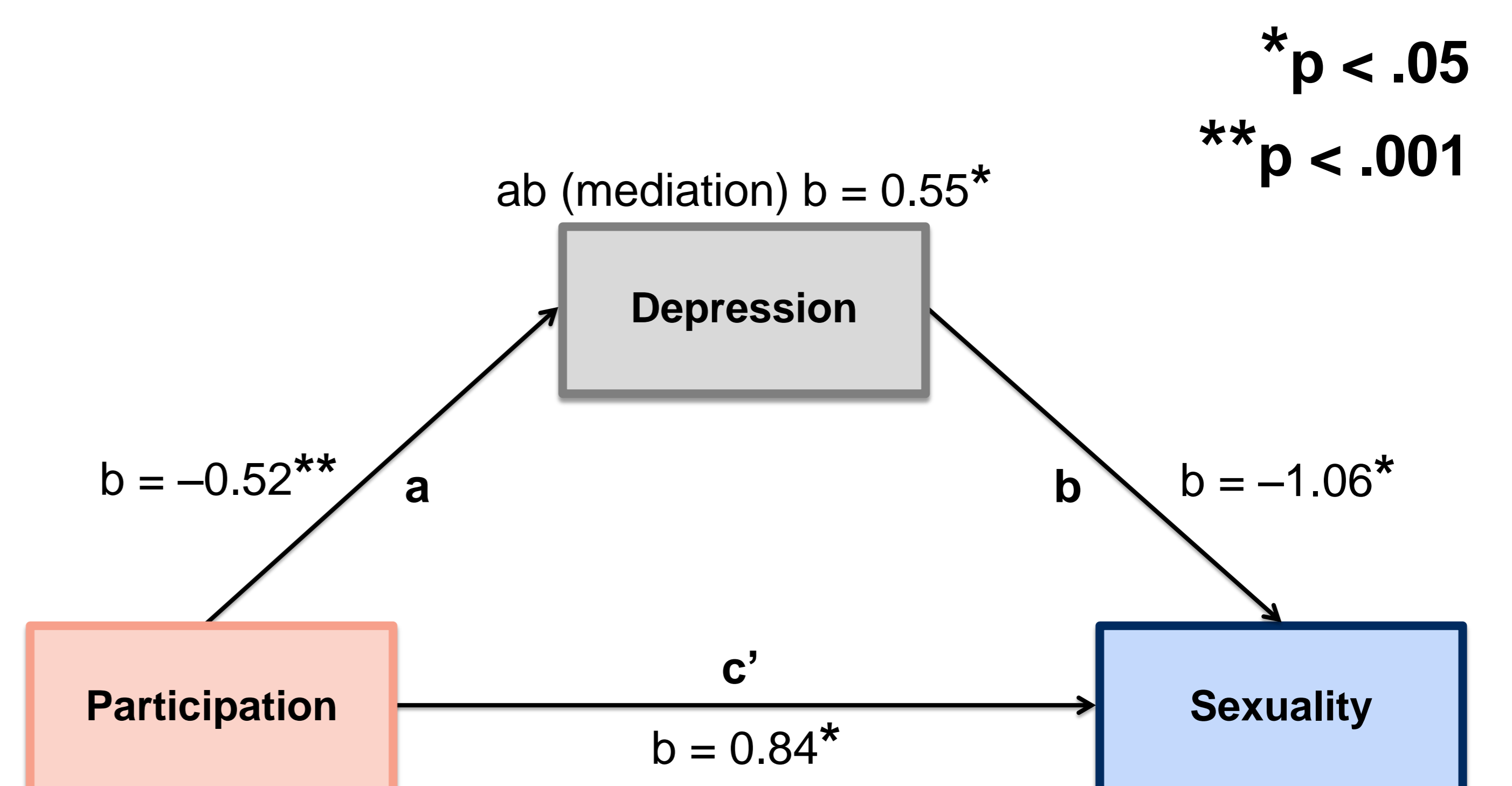
**Table 1. Descriptives for each measure.**

Measure	TBI Mean (SD)	Control Mean (SD)
Sexuality (BIQS)**	37.98 (9.15)	43.91 (6.26)
Depression (HADS)**	5.28 (4.08)	2.38 (2.35)
Self-esteem (RSES)**	18.67 (5.89)	24.31 (2.18)
Fatigue (FSS)	4.28 (1.64)	
Social Participation (PART-O)	11.76 (3.06)	

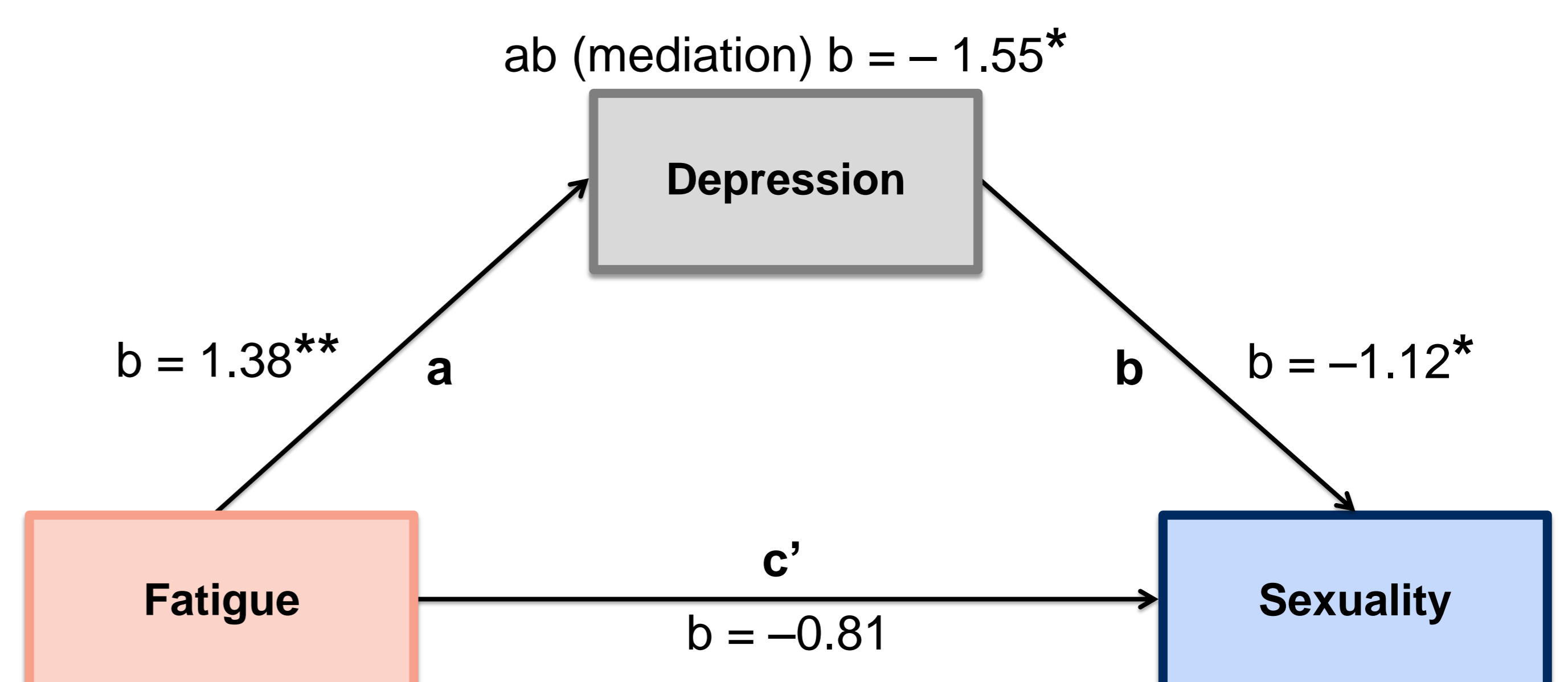
\*\*Significant difference between TBI and control participants

## Results

- Participants with TBI reported poorer sexuality, self-esteem and depression compared to healthy controls (Table 1).
- Older age, higher depression and lower self-esteem were unique predictors of poorer sexuality post-injury.
- Depression partially mediated the effect of decreased social participation on reduced sexuality after TBI (Figure 1).
- Depression completely mediated the effect of higher fatigue levels on reduced sexuality after TBI (Figure 2).



**Figure 1. Mediation model of social participation as a predictor of sexuality mediated by depression**



**Figure 2. Mediation model of fatigue as a predictor of sexuality mediated by depression**

## Conclusions

- This study confirms depression as a key mechanism through which social participation and fatigue may impact sexuality beyond the first-year post-injury.
- Clinicians must be proactive in assessing these factors early on to minimise the occurrence and severity of depression and poor sexual readjustment after brain injury.