

# **Impact of Electroconvulsive Therapy on Autobiographical Memory and Occupational Therapy Participation in Psychiatric Inpatients**

Elnaz Alimi, PhD, OTD, OTR/L

Faith K. Brown, OTD, OTR/L

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# Background

Electroconvulsive therapy (ECT) is a critical intervention for severe psychiatric conditions, yet its impact on autobiographical memory (AM) can disrupt identity, decision-making, and occupational engagement. While Occupational Therapy (OT) is central to psychiatric rehabilitation, the effects of ECT-related memory dysfunction on OT participation remain underexplored. This study examines how AM impairment influences engagement in structured OT groups within an inpatient psychiatric setting, highlighting participation disparities and the potential need for tailored OT approaches.

# Learning Objectives

1. Investigate differences in OT participation between inpatients receiving ECT and those not undergoing ECT
1. Assess how AM dysfunction affects engagement in task-based and discussion-based groups
1. Identify patterns of engagement and highlight potential barriers that impact therapeutic involvement

# Study Design

- Naturalistic, practice-embedded observational study
- Conducted in an inpatient psychiatric rehabilitation unit (Northwestern Memorial Hospital in downtown Chicago, IL)
- Real-world clinical setting without disruption to care
- Participation examined during routine occupational therapy services
- Mixed-methods clinical documentation and case analysis

# Study Design- Participants

Adult inpatients receiving occupational therapy services

## **Two groups:**

- Individuals receiving electroconvulsive therapy (ECT)
- Individuals not receiving ECT
  - Both groups attended daily OT groups and unit activities
  - Two in-depth case studies selected for detailed analysis

# Study Design- Participants Data Source

- Participation was evaluated using routine OT and interdisciplinary clinical documentation:
- Occupational therapy evaluation & interviews (COPM informed)
- ADL / functional performance checklists
- 3-day OT progress interviews (occupation-focused)
- Daily group participation tracking
- Milieu engagement observation
- Interdisciplinary notes (nursing, physicians, counselors, recreation therapy)
- Daily behavior and safety reports

# Study Design- OT Assessment Approach

- Client-centered occupational interviews
- Performance-based ADL observation
- Task initiation, persistence, and completion
- Social interaction and discussion engagement
- Cognitive supports needed (cues, repetition, scaffolding)
- Level of independence across activities

# Study Design- Group Participation Tracking

Daily structured tracking of:

- Attendance
- Verbal contribution
- Task completion
- Attention & memory recall
- Need for prompts or redirection
- Emotional regulation
- Social engagement

# Data Analysis

- Quantitative descriptive comparison of participation frequency and engagement levels
- Pattern identification across group types
- Thematic review of clinical notes
- Cross-disciplinary triangulation
- Two illustrative case studies for in-depth analysis

# Case Study: Janna

21-year-old inpatient woman | severe withdrawal and non-participation at admission

Before ECT (Baseline)	After ECT (Inpatient OT)	Implications for Occupational Therapy
• No ADL initiation	• Independent showering, grooming, dressing	• Participation can re-emerge even with cognitive impairment
• No hygiene or clothing change	• Completed laundry & room cleaning with minimal prompts	• Task-based activities may be easier entry points than discussion
• No group attendance	• Attended groups regularly	• Graded cueing & scaffolding support success
• Mutism, delayed processing	• Engaged in coloring, simple games, brief discussions	• Observable participation is a meaningful outcome indicator
• Complete occupational withdrawal	• Initiated self-care independently (requested supplies)	• Early ADL engagement builds confidence & recovery
	<b>9–12 months later:</b> independent community mobility to outpatient care	• Gains transferred beyond hospital → real-life participation

# Case Study: Alan

20-year-old inpatient man | severe occupational withdrawal at admission

Before ECT (Baseline)	After ECT (Inpatient OT)	Implications for Occupational Therapy
<ul style="list-style-type: none"> <li>• Loss of I/ADL engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Resumed showering, grooming, dressing with reminders</li> </ul>	<ul style="list-style-type: none"> <li>• ADLs can serve as early re-entry points to participation</li> </ul>
<ul style="list-style-type: none"> <li>• No hygiene or clothing changes</li> </ul>	<ul style="list-style-type: none"> <li>• Increased independence in daily routines</li> </ul>	<ul style="list-style-type: none"> <li>• Graded prompting supports initiation</li> </ul>
<ul style="list-style-type: none"> <li>• No group attendance</li> </ul>	<ul style="list-style-type: none"> <li>• Attended groups consistently</li> </ul>	<ul style="list-style-type: none"> <li>• Familiar, low-demand tasks improve engagement</li> </ul>
<ul style="list-style-type: none"> <li>• Minimal speech, limited response to environment</li> </ul>	<ul style="list-style-type: none"> <li>• Participated in coloring, video games, structured activities</li> </ul>	<ul style="list-style-type: none"> <li>• Task-based occupations may be more accessible than discussion</li> </ul>
<ul style="list-style-type: none"> <li>• Social withdrawal</li> </ul>	<ul style="list-style-type: none"> <li>• Greater affect range, orientation, and social interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Participation promotes emotional and cognitive recovery</li> </ul>
	<ul style="list-style-type: none"> <li>• Requested movement-based activities (gym, yoga, dancing)</li> </ul>	<ul style="list-style-type: none"> <li>• Client-driven interests enhance motivation &amp; sustained involvement</li> </ul>
	<ul style="list-style-type: none"> <li>• Ongoing attention/processing challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Continued need for scaffolding &amp; environmental supports</li> </ul>

# Conclusion and OT Implications

Inpatients receiving ECT demonstrated profound occupational withdrawal at baseline, including loss of self-care, reduced initiation, and minimal therapeutic engagement.

With structured, occupation-based supports, participation re-emerged through familiar and task-oriented activities, progressing to improved ADL independence, group involvement, social interaction, and sustained community participation after discharge.

Notably, these gains occurred **despite ongoing cognitive and memory limitations**, indicating that meaningful activity does not require full cognitive restoration and may itself drive functional recovery.

**Occupational therapy is uniquely positioned to translate medical stabilization into real-world participation by grading tasks, scaffolding performance, embedding daily routines, and prioritizing engagement over impairment.**

**Occupation is not the outcome of recovery**

**it is the mechanism of recovery.**

# References

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# Questions?



[elnaz.alimi@nm.org](mailto:elnaz.alimi@nm.org)  
[faith.brown@nm.org](mailto:faith.brown@nm.org)