

# Usability of the Richards-Campbell Sleep Questionnaire in Individuals with Schizophrenia Living in the Community

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# Introduction

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## Why Sleep is an OT Priority in Schizophrenia

**High Prevalence:** Sleep problems affect up to 30-80% of individuals with schizophrenia.

**Multidimensional Impact:** Poor sleep negatively affects

- Cognitive functioning
- Psychiatric symptoms (hallucinations and delusions)
- Quality of life

**The OT Link:** These problems are significant barriers to daily life activities, social participation, work, and overall quality of life.

**Assessment is Key:** Accurate, feasible sleep assessment is the critical first step for effective OT intervention planning.

# The Need for a Feasible Sleep Assessment Tool

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## Objective sleep measures (e.g., PSG, actigraphy)

- Costly
- Burdensome
- Limited feasibility in community settings

**Subjective questionnaires** are commonly used.

## However:

- ❖ Many tools are long and cognitively demanding.
- ❖ This increases respondent burden in schizophrenia.

**The Need:** A brief, simple, and psychometrically sound sleep assessment tool is urgently needed.

# The Proposed Solution: RCSQ

## A Brief and Feasible Alternative

The Richards-Campbell Sleep Questionnaire (RCSQ): 5-item visual analog scale

- Items: Sleep depth, sleep latency, awakenings, returning to sleep, sleep quality.

**Scoring:** 0-100 mm per item; higher score = better perceived sleep.

### Key Advantages:

 **Completion Time:** 1-2 minutes.

 **Low Cognitive Load:** Simple, visual format.

**Proven in Medical Settings:** Validated against polysomnography in ICU populations and cross-culturally adapted.

**Unanswered Question:** Is it reliable and valid for individuals with schizophrenia?

Richards-Campbell Sleep Questionnaire

Sleep depth

My sleep last night was:

Deep sleep (100) ----- Light sleep (0)

Sleep latency

Last night, the first time I got to sleep, I:

Fell asleep almost immediately (100) ----- Just never could fall asleep (0)

Awakenings from sleep

Last night I was:

Awake very little (100) ----- Awake all night long (0)

Ability to return to sleep

Last night, when I woke up or was awakened, I:

Got back to sleep immediately (100) ----- Couldn't get back to sleep (0)

Sleep quality

I would describe my sleep last night as

A good night's sleep (100) ----- A bad night's sleep (0)

# Study Aim & Methodology

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**Aim:** To evaluate the reliability and convergent validity of the RCSQ in a community-dwelling sample of individuals with schizophrenia.

**Design:** Cross-sectional study.

**Participants:** N = 84 adults diagnosed with schizophrenia, living in the community, recruited from non-governmental mental health organizations, clinically stable adults without recent hospitalization.

**Procedure:** Ethical approval and written informed consent obtained. Data collected through face-to-face interviews. Participants completed the RCSQ and the Pittsburgh Sleep Quality Index (PSQI) in a single session.

**Statistical Analysis:** Internal consistency assessed using Cronbach's alpha. Convergent validity examined using Spearman's rank correlation between RCSQ total score and PSQI global score.

# Finding 1: Internal Consistency Reliability

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## The RCSQ Shows Excellent Internal Reliability

**Analysis:** Cronbach's alpha coefficient.

**Result:**  $\alpha = 0.882$

**Interpretation:** Values above 0.80 indicate very good internal consistency.

This indicates that the five items of the RCSQ are highly interrelated and consistently measure perceived sleep quality within our schizophrenia sample.

**Conclusion:** The RCSQ is a reliable instrument for this population.

# Finding 2: Convergent Validity

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## Relationship Between RCSQ and PSQI

**Analysis:** Spearman's rank-order correlation ( $\rho$ )

**Result:**  $\rho = -0.308$ ,  $p = 0.004$

(A negative correlation was expected, as higher RCSQ scores indicate better perceived sleep quality, whereas higher PSQI scores reflect poorer sleep quality.)

**Interpretation:** A statistically significant negative correlation was observed.


Participants who reported better perceived sleep quality on the RCSQ tended to report fewer sleep-related difficulties on the PSQI.


## Conclusion


These findings support the convergent validity of the RCSQ, indicating that it measures a construct of sleep quality that is meaningfully related to the established PSQI.


# Discussion & OT Implications

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 **A Practical Tool for Clinicians:** The RCSQ can be easily integrated into occupational therapy evaluations in community mental health settings, providing a rapid snapshot of perceived sleep quality with minimal respondent burden.

 **Monitoring Change Over Time:** Due to its brief format, the RCSQ is well suited for monitoring changes in sleep quality following occupational therapy interventions, such as sleep hygiene education, routine restructuring, or environmental modifications.

 **Client-Centered Assessment:** The simplicity of the RCSQ reduces assessment-related fatigue and frustration, supporting a client-centered approach that facilitates participation rather than creating additional barriers for individuals with schizophrenia.

 **Research Utility in OT:** The RCSQ enhances feasibility and participant retention in community-based occupational therapy research by offering a brief and reliable outcome measure of subjective sleep quality.

# Limitations

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## Study Limitations:

- Test–retest reliability was not assessed.
- The cross-sectional design limits conclusions about changes in sleep quality over time.
- Participants were recruited using convenience sampling from community-based organizations, which may limit generalizability.

# Conclusion & Key Takeaways

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## Summary

Sleep is a critical factor influencing daily functioning and well-being in individuals with schizophrenia.

The 5-item Richards–Campbell Sleep Questionnaire demonstrated high internal consistency (Cronbach's  $\alpha = 0.88$ ) and acceptable convergent validity with the PSQI ( $\rho = -0.31$ ,  $p = 0.004$ ) in community-dwelling individuals with schizophrenia.

Its brevity and ease of administration reduce assessment burden, supporting its feasibility for occupational therapy clinical practice and community-based research.

## Future Directions:

- Evaluate test–retest reliability to determine the temporal stability of the RCSQ in schizophrenia.
- Investigate RCSQ's sensitivity to change in intervention studies.
- Explore its correlation with objective sleep measures in schizophrenia.

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# THANK YOU!

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QUESTIONS?

 Key references available upon request.

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