
Women's Health Initiative Insomnia Rating Scale (WHIIRS) 101

Purpose A brief, five-item scale evaluating insomnia symptoms, the WHIIRS was developed as part of a larger study investigating a range of health issues affecting postmenopausal women. The scale requires individuals to rate the quality of their sleep and the frequency with which they experience certain sleep problems, providing a total score that may be useful for both research and clinical purposes.

Population for Testing The scale has been validated with a large sample of women aged 50–70 years.

Administration Requiring between 3 and 5 min for completion, the scale is a self-report measure completed in a pencil-and-paper format.

Reliability and Validity An initial evaluation of the scale's psychometric properties [1,2] found an internal consistency ranging from .70 to .85 and a same-day test-retest reliability of .96.

Obtaining a Copy A copy is included in a study published by Levine and colleagues [1,2].

Direct correspondence to:

Douglas W. Levine

Section on Social Sciences and Health Policy

Department of Public Health and Sciences

Wake Forest University School of Medicine

Winston-Salem, North Carolina 27157

Email: dlevine@wfubmc.edu

Scoring Questions one through four are answered using a five-point, Likert-type scale (0 means that the problem has not been experienced in the past 4 weeks, while four denotes a problem that occurs at least five times a week). Respondents indicate how often they have experienced certain sleep difficulties over the past month, with higher scores denoting higher frequencies. Question five asks individuals to rate the quality of their sleep on a typical night. Total scores will fall between 0 and 20. Though no specific cutoff has been recommended, Levine and colleagues suggest that a .5 standard deviation difference in mean scores on the WHIIRS between two treatment groups may indicate a significant difference.

Women's Health Initiative Insomnia Rating Scale

These questions ask about your sleep habits. Please mark one of the answers for each of the following questions. Pick the answer that best describes how often you experienced the situation in the past 4 weeks.

	No, not in past 4 weeks	Yes, less than once a week	Yes, 1 or 2 times a week	Yes, 3 or 4 times a week	Yes, 5 or more times a week
1. Did you have trouble falling asleep?	1	1	2	3	4
2. Did you wake up several times at night?	0	1	2	3	4
3. Did you wake up earlier than you planned to?	0	1	2	3	4
4. Did you have trouble getting back to sleep after you woke up too early?	0	1	2	3	4
5. Overall, was your typical night's sleep during the past 4 weeks:					
Very sound or restful	0	1	2	3	4
Sound or restless					
Average quality					
Restless					
Very restless					

References

1. Levine, D. W., Kripke, D. F., Kaplan, R. M., & Lewis, M. A. (2003). Reliability and validity of the women's health initiative insomnia scale. *Psychological Assessment, 15*(2), 137–148.
2. Levine, D. W., Kripke, D. F., Kaplan, R. M., & Lewis, M. A. (2003). Reliability and validity of the women's health initiative insomnia scale. *Psychological Assessment, 15*(2), 123–136.

Representative Studies Using Scale

- Brunner, R. L., Gass, M., Aragaki, A., Hays, J., Granek, I., Woods, N., Mason, E., Brzyski, R. G., Ockene, J. K., Assaf, A. R., LaCroix, A. Z., Matthews, K., & Wallace, R. B. (2005). Effects of conjugated equine estrogen on health-related quality of life in postmenopausal women with hysterectomy. *Archives of Internal Medicine, 165*(17), 1976–1986.