## Sleep Locus of Control Scale (SLOC)

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**Purpose** The SLOC is an 8-item questionnaire designed to evaluate a respondent's sleep-related locus of control - the degree to which an individual attributes his or her experiences of sleep to chance or to internal, intentional causes. Researchers posit that a chance locus of control may be associated with experiences of learned helplessness, leading individuals to believe that there is nothing they can do to improve their sleep quality [1]. Conversely, studies have shown that internally oriented beliefs about sleep responsibility may lead to greater anxiety about having sleep problems and may increase sleeponset delay [2]. Thus, beliefs that fall at either extreme of the locus-of-control spectrum may be harmful to sleep quality. The SLOC allows clinicians to identify disruptive cognitions in their patients, improving the quality of treatment interventions.

**Population for Testing** Developers validated the scale with two sample populations: an insomnia patient group with a mean age of  $50.5 \pm 11.8$  and an adult control group with a mean age of  $43.3 \pm 15.0$ .

**Administration** Requiring 3–5 min for administration, the scale is a self-report, paper-and-pencil measure.

**Reliability and Validity** The scale's psychometric properties have been evaluated in a study conducted by Vincent and colleagues [3]. Researchers found an internal consistency ranges from .47 to .73. Additionally, the insomnia patient group endorsed both internal and external loci of control to greater extremes than the control group, suggesting that a balance between the two may be ideal.

**Obtaining a Copy** An example of the scale's items can be found in an article published by Vincent and colleagues [3].

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**Scoring** Using a Likert-type scale that ranges from 1 to 6, respondents indicate the degree to which they agree with certain statements relating to their control over insomnia. Items 3, 4, and 6 are reverse-scored. Total scores can range from 8 to 48 – higher scores correspond with a greater internal locus of control, while lower scores denote attributions to external forces.

1. If I take care of m	nyself, I ca	an avoid insomn	ia		
1 Strongly disagree	2	3	4	5	6 Strongly agree
2. Whether I have ir	nsomnia is	s entirely up to n	ne		
1 Strongly disagree	2	3	4	5	6 Strongly agree
. Good sleep is larg	gely a mat	ter of luck			
1 trongly disagree	2	3	4	5	6 Strongly agree
No matter what I	do, if I ar	n going to have	a sleepless nig	ght, I will	
1 rongly disagree	2	3	4	5	6 Strongly agree
When I have inso worrying about th 1 trongly disagree					ne (e.g., not enough ing) 6 Strongly agree
People who never	r get insor	nnia are just pla	in lucky		
1 trongly disagree	2	3	4	5	6 Strongly agree
People's insomni	a results f	rom their own c	arelessness		
1 rongly disagree	2	3	4	5	6 Strongly agree
I am directly resp	onsible fo	or my sleep			
1 rongly disagree	2	3	4	5	6 Strongly agree
Vincent, N. (1998)	)				

Sleep Locus of Control Scale

#### Scoring for Sleep Locus of Control (SLOC) Scale

Internal Sleep Locus = 1+2+5+7+8

Chance Sleep Locus = 3 + 4 + 6

#### Norms for the SLOC

Samples	SLOC subscale	N M		SD	
University Alumnae <sup>a</sup>	Internal	423	18.39 (range: 5-30)	4.7	
	Chance	421	13.14 (range: 4-18)	3.2	
University Students <sup>a</sup>	Internal	228	19.27 (range: 6-30)	4.7	
	Chance	230	12.64 (range: 3-18	3.0	

#### Age-Based Norms: University Alumnae<sup>a</sup>

Age Range	SLOC subscale	Ν	М	SD
18-29	Internal	94	18.51 (range: 9-27)	4.6
	Chance	94	12.8 (range: 4-18)	3.3
30-39	Internal	68	18.82 (range: 10-29)	4.5
	Chance	67	14.10 (range: 8-18)	2.7
	Internal	89	18.52 (range: 8-30)	4.5
	Chance	89	13.36 (range: 5-18)	3.2
50-59	Internal	112	18.06 (range: 5-29)	4.9
	Chance	111	12.91 (range: 5-19)	3.0
60-69	Internal 49		18.59 (range: 8-27)	4.5
	Chance	49	12.81 (range: 7-18)	3.0
>70	Internal	9	15.77 (range: 6-28)	7.7
	Chance	9	11.88 (range 6-18)	3.8

Sample	Administration	Insomnia Type	SLOC subscale	Ν	М	SD
Adult	In-Person <sup>a</sup>	Primary Insomnia	Internal	49	14.48 (range: 5-22)	4.0
Outpatients (Clinic Referral and Community- Recruited)			Chance	50	8.56 (range: 3-16)	3.3
		Comorbid Insomnia	Internal	47	14.17 (range: 5-25)	4.3
			Chance	47	10.29 (range: 5-17)	3.2
	Online <sup>b</sup>	Primary Insomnia	Internal	68	13.60 (range 5-25)	4.6
			Chance	68	10.31 (range: 5-17)	3.2
		Comorbid Insomnia	Internal	77	14.81 (range 7-29)	4.2
			Chance	77	9.75 (range: 3-18)	3.2

Norms for Insomnia Types: Primary vs. Comorbid Insomnia

Norms for the SLOC for Adults with Chronic Primary and Comorbid Insomnia: Recruitment Differences

Administration	Recruitment	SLOC subscale	N	М	SD
In-Person <sup>a</sup>	Community Recruited	Internal	39	15.51 (range: 8-25)	4.3
	Andre State Alexand State States	Chance	39	8.97 (range: 3-15)	2.9
	Referral	Internal	42	13.54 (range: 5-20)	3.8
		Chance	43	9.39 (range: 3-17)	3.6
Online <sup>b</sup>	Community Recruited	Internal	78	14.06 (range 5-25)	4.3
		Chance	78	9.12 (range: 3-16)	3.1
	Clinic Referral	Internal	68	14.40 (range: 6-29)	4.5
	5. ( 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	Chance	68	11.06 (range: 5-18)	2.9

a. Vincent N, Sande G, Read C, Giannuzzi T. Sleep locus of control: report on a new scale. Behav Sleep Med. 2004;2(2):79-93.

b. Vincent N, Lewycky S. Logging on for better sleep: a randomized controlled trial of the effectiveness of online treatment for insomnia. Forthcoming 2009.

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#### References

- 1. Morin, C. M. (1993). Insomnia: psychological assessment and management. New York: Guilford Press.
- Van Egeren, L., Haynes, S.N., Franzen, M., & Hamilton, J. (1983). Presleep cognitions and attributions in sleep-onset insomnia. *Journal of Behavioral Medicine*, 6, 217–232.
- Vincent, N., Sande, G., Read, C., & Giannuzzi, T. (2004). Sleep locus of control: report on a new scale. *Behavioral Sleep Medicine*, 2(2), 79–93.

### **Representative Studies Using Scale**

None.