

Behavioural Interventions for Sleep: Who Prefers What?

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I. Introduction

Many university students have trouble sleeping because their minds are too active with worries and other sleep disruptive thoughts that they are unable to control

Carney and Waters (2006) developed a self-help intervention called Structured Problem-Solving.

Luc Beaudoin (2016) designed an alternative self-help intervention- a sleep APP titled SOMNOtest

Beaudoin, Digdon, O'Neil and Rachor (2016) showed that both interventions and their combination helped students sleep compared to using no intervention. But there were also individual differences in how much students responded to an intervention, which is the focus of the current study



II. Methods



Participants

In-person with an optional take home component for extra credit.

Intervention Methods

- SOMNOtest sleep APP
- Structured problem-solving

Scales

- Pre-sleep Arousal Scale (PSA) (Nicassio, Mendowlitz, Fussell & Petras, 1985)
- Glasgow Sleep Effort Scale (GSES) (Broomfield & Espie, 2005)
- Composite Scale of Moringness (CSME) (Smith, Reilly, & Midkiff, 1989)
- COPE (Carver, Scheier, & Weintraub, 1989),
- Questions about using the interventions

IV. Conclusions



Sleep interventions need to consider the person's chronotype and preferred coping style, which can affect who benefits from which type of intervention. One size does not fit all.

Key References

- Carney, C. E. & Waters, W. F. (2006). Effects of a structured problem-solving procedure on pre-sleep cognitive arousal in college students with insomnia. *Behavioral Sleep Medicine*, 4, 13-28.
- Digdon, N. & Koble, A. (2011). Effects of constructive worry, imagery distraction, and gratitude interventions on sleep quality: a pilot trial. *Applied Psychology: Health and Well-being*, 3, 193-206.
- Yang, C., Han, H., Yang, M., Su, W., & Lane, T. (2010). What subjective experiences determine the perception of falling asleep during sleep onset period? *Consciousness and Cognition*, 19, 1084-1092.

III. Hypotheses and Predicted Results

1.

Morning Type
-
Problem Focused

2.

Evening Type
-
Problem Focused

3.

Morning Type
-
Emotion Focused/Avoidance

4.

Evening Type
-
Emotion Focused/ Avoidance

- Hypothesis 1: Students' chronotype (i.e., evening type, morning type or intermediate type) will affect who prefers which intervention. Because evening types are more alert at bedtime, they will be less likely to prefer the sleep APP. They may not be drowsy enough to fall asleep to the sound of the Sleep APP.
- Hypothesis 2: Students' coping styles will affect who prefers which intervention. People who typically use problem-focused coping (e.g., taking steps to solve the stressful problem) should prefer Structured Problem-Solving because it is compatible with this coping style. People who typically use emotion-focused coping (e.g., taking steps to reduce negative emotions associated with the stress) or avoidance (e.g., ignoring the problem) should prefer the Sleep APP because it can be used as a distraction without requiring any problem-solving.

