SLEEP STRESS & HEALTH LAB

UNIVERSITY OF SOUTH FLORIDA

Daily Affect and Emotional Tone of Dreams

Cassandra Richardson[1], Taylor F. D. Vigoureux[1], & Soomi Lee[1]*

[1]School of Aging Studies, University of South Florida

BACKGROUND

- Daytime emotions (daily affect) are thought to influence the emotional tone of our dreams that night (i.e., dream affect)[1]
- Dreams influence daytime mood[2]
- Few studies have examined both temporal directions in the same sample
- Do daily affect and dream affect have bidirectional associations?

METHODS

Participants

61 oncology nurses
- 50 participants remembered any dreams during the study
- 268 total days with dreams
- Age: 35 years ($SD = 12$)
- 91.9% female
- 65.6% white
- 77.4% 4-year college degree

Procedures

- Background survey for demographics
- Ecological Momentary Assessments 4 times daily for 14 days to assess dream and daytime affect

Statistical Analysis

Multilevel Modeling to examine bidirectional associations

Daily Affect	→	Dream Affect	→	Daily Affect
Day 1		Night 1		Day 2

Figure 1. Conceptual research model

Measures

VARIABLE	EXAMPLE ITEM	SCALE
Dream Recall	"Do you remember having any dreams last night?"	1 (*yes*) 0 (*no*)
Emotional Tone of Dreams	[If dreamed last night] "What was the emotional tone of your dream last night?	0 (*very negative*) – 100 (*very positive*)
Positive Affect	"Please rate how well each describes what you feel right now. [Happy, Pleased, Enjoyment/Fun, Joyful]"	0 (*not at all*) – 100 (*extremely*) *composite
Negative Affect	"Please rate how well each describes what you feel right now. [Tense/Anxious, Angry/Hostile, Frustrated, Unhappy]"	0 (*not at all*) – 100 (*extremely*) *composite
Covariates	Age, education, gender, race, work schedule, partnered status, parental status	

Table 1. Chart displaying measures and scales used in analyses

RESULTS

Within-Person (WP) and Between-Person (BP) Associations between Dream Affect and Daily Affect

Positive Affect	WP: *n.s.* → BP: 0.50 (0.16)**	Dream Affect

Dream Affect	WP: 0.10 (0.05)* → BP: 0.43 (0.14)**	Positive Affect

Negative Affect	WP: *n.s.* → BP: *n.s.*	Dream Affect

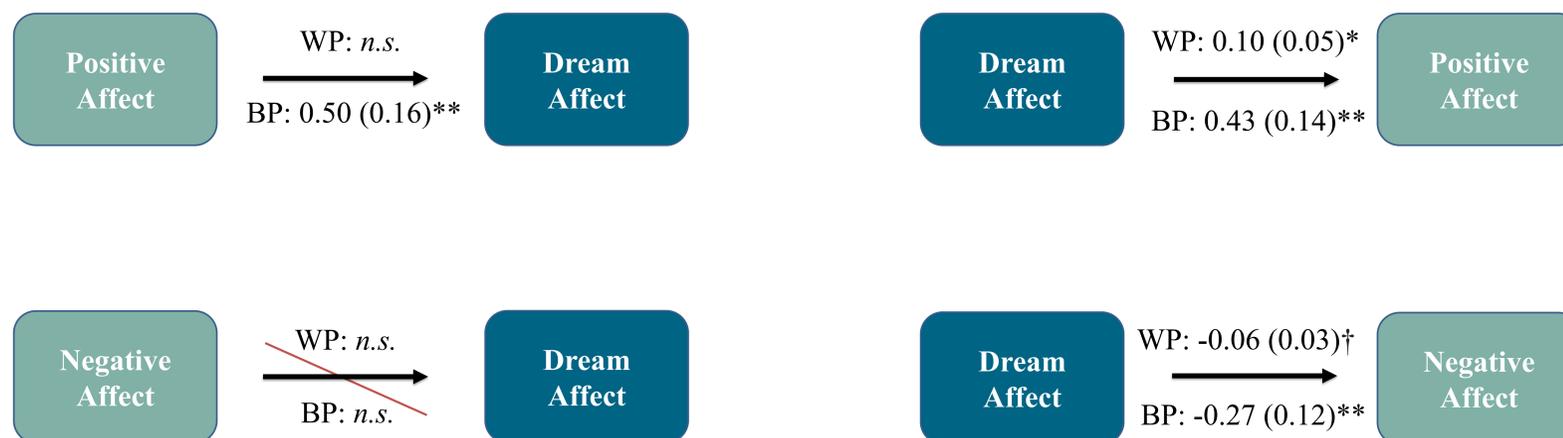| Dream Affect	WP: -0.06 (0.03)† → BP: -0.27 (0.12)**	Negative Affect

Figure 2. Model representing bidirectional associations between dream affect and daytime affect after adjusting for covariates. Numbers above the arrows represent within-person (WP) associations, while number below the arrows represent between-person (BP) associations. *$p < .05$, ** $p < .01$, † $p = .08$

DISCUSSION

- Dream affect and daytime affect were associated on average, such that participants who had more positive dream affect overall reported more positive and less negative daytime affect overall
- Dream affect was the antecedent of daytime affect (especially for positive affect), rather than vice versa
- Strengths
  - Unique sample of oncology nurses
  - Ecological validity with a daily diary design
  - Use of lagged variables to test two temporal directions
- Limitations and future directions
  - Lack of generalizability; test with larger and more diverse samples
  - Are emotions closer to sleep are more strongly associated with dream affect? → More precisely-timed affect interventions

REFERENCES: [1] Schredl, M., & Reinhard, I. (2010). The Continuity between Waking Mood and Dream Emotions: Direct and Second-Order Effects. *Imagination, Cognition and Personality, 29*(3), 271–282. [2] Schredl, M. (2000). The Effect of Dreams on Waking Life. *Sleep and Hypnosis, 2*(3), 120–124.

CONTACT: Cassandra Richardson
Email: crichardson4@usf.edu
Phone: (727) 267-1162