Dream Rebound:

The Return of Suppressed Thoughts in Dreams

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Reference

Wegner, D., Wenzlaff, R., & Kozak, M. (2004). Dream Rebound: The Return of Suppressed Thoughts in Dreams.

Psychological Science, 15(4), 232-236.

Background Content

- "'Royal road to the unconscious'" theory
  - Untested Complicated Logic - repression, psychic wish fulfillment, interpretations of latent content etc.
- Indirect evidence for the dream rebound of suppressed thoughts derives from
  - Dreams people report after experiences that naturally prompt thought suppression (Traumatic events, people, habits, emotions, etc.)

Introduction

- Uncomplicated version of Freud's theory:
  - Testing to find if thoughts that are suppressed in waking will recur in dreams.
- Suppressed thoughts "pops" to mind in intrusive recurrences
- Ironic Processes of Mental Control theory
  - Intentional control of mental states is accomplished through the interaction of two processes

    a.) a conscious and effortful operating process that attempts to create the desired mental state, by searching for contents consistence with that state

    b.) an unconscious and automatic ironic process that searches for mental contents indicating failure of control

- "Current Concerns"
  - Thoughts that return frequently to mind
  - Recur in dreams and are easily prompted in dreams by pre-sleep suggestions
- Suppression or Emotions?

Method

- 202 women and 128 men, Mage=20.36
- Each was randomly assigned to a condition of a 3 (instruction: suppression, expression, or mention) x 2 (instruction target: crush vs. noncrush) design
- Presleep test to think of two people in their lives a "crush" and a "noncrush"
- After the presleep task participants in the suppression condition were then engaged in a thought task
  - Suppress thoughts of one of the target for 5 minutes
  - Stream of consciousness
  - Check mark
- Participants in the other conditions also recorded stream of consciousness and indicated target thoughts with check marks.
  - Expression condition participants were instructed to focus on thoughts of the target for 5 minutes
  - Mention condition participants were prompted to write about anything
- In the morning participants were instructed to record all dreams and rate how much they had dreamed or how much they felt they had dreamed about their crush and noncrush.

Results

- Check-mark frequency differed among instruction conditions, $F(2, 327) = 24.12$, $p < .001$, $n^2 = .13$, with expression yielding more (M=5.39) than suppression (M= 2.87) or mention (M= 2.55), $p < .05$ in each case.
- References to the target in the stream-of-consciousness protocols showed a different pattern, $F(2, 327) = 6.48$, $p < .005$, $n^2 = .04$, with more references prompted by mention (M=1.04) and expression (M=0.72) than by suppression (M = .27), $p < .05$ in each case.
- More reported dreaming about the instruction target (M= 2.19) than about the nontarget (M= 1.91), $F(1, 290) = 14.46$, $p < .001$, $n^2 = .05$.
- Simple effects analysis revealed that suppression increased rated dreaming about the target (M= 2.61) compared with the nontarget (M= 1.97), $F(1, 289) = 17.17$, $p < .001$. Expression increased dreaming about the target (M= 2.20) only marginally compared with the nontarget (M= 1.94), $F(1, 289) = 3.58$, $p < .06$, and mention had no significant effect.
- Suppressed target (M= 2.61) was dreamed about more often than the expressed target (M= 2.20), $F(1, 289) = 4.77$, $p < .05$, or the mentioned target (M= 2.09), $F(1, 289) = 8.77$, $p < .005$, but the rated dreaming for expressed and mentioned targets did not differ, $F(1, 289) < 1$.
- Presleep tasks about a target increased dream references more when the target was the crush than when the target was the noncrush (Ms = 0.88 vs. 0.51), whereas when the person being coded was not the target of a presleep task, the crush was noted less than the noncrush (Ms = 0.31 vs. 0.49).

Results (cont.)

- Following suppression, dream reports included more references to the target person (M=1.00) than to the nontarget (M=0.42), $F(1, 269)=10.25$, $p < .005$. References to target and nontarget did not differ following expression or mentioning.
- A suppressed target (M=1.00) occurred in reports more often than an expressed target (M =0.56), $F(1, 269) = 4.02$, $p < .05$, or a mentioned target (M = 0.52), $F(1, 269) = 5.95$, $p < .02$, but that number of references to expressed and mentioned targets did not differ, $F(1, 269) < 1$.
- Overall, 28.8% of participants dreamed about the target, whereas 17.1% dreamed about the nontarget. Prevalence of target dreams was 34.1% following suppression, 28.2% following expression, and 24.3% following mentioning. Prevalence of nontarget dreams in these conditions, respectively, was 19.1%, 16.5%, and 15.8%.
- No significant effects were found for intensity or valence.

Discussion

- Experiment demonstrated that presleep references to a person prompted people to report dreaming about that person.
  - Suppressed thoughts = high
  - Self ratings of dreams, mentions of persons in dream reports
- Influence of emotional quality of target person muted in pre sleep experiment
- Emotional quality stronger for crush than non crush **BUT**
  - No main effect or interaction
- Brain activation during REM sleep
  - Mental control processes- deactivation of frontal lobes, activation of anterior cingulate
- Theories drawn from rebound experiment
  - *Revonsuo (2000)- helped to explain dream rebound experiment from an evolutionary approach*
    - <u>threat simulation theory-</u> While dreaming "life threatening" situations, this theory suggest that our brains are preparing ourselves for real life situations.

Limitations

- Self Reporting
    - Accuracy of remembering the dreams
- Participant's reliability
    - The reliability of the participant is dependent on them following the directions correctly
- Lack of empirical research in this field
    - "Largely untested" due to complexity of collecting data
- Indirect Limitations:
    - "Natural confounding of emotion"
    - "Spontaneous suppression"
    - Don't necessarily know which is which

Future Directions

- The impact of suppressing thoughts perceived from this study have important repercussions involving theories of dream content.
- Threat simulation theory (Revonsuo, 2000).
  - This theory is less convincing due to the study indicating that suppressed thoughts reoccur in our dreams.
- Activation synthesis theory (Hobson & McCarley, 1977).
  - Dream content is formed by brain processes attempting to interpret random activations, and that such content is thus not clearly traceable to prior events or cognitive processes. Adjustments may need to be made.
- Activation information mode(AIM) model (Hobson et al., 2000).
  - The updated version of the synthesis theory that accepts influences of thoughts during wakening on the dream synthesis process.
- The observation that suppressed thoughts reappear in dreams provides an awareness of psychoanalysis and the findings of cognitive neuroscience.

Conclusion

"Wishes suppressed during the day assert themselves in dreams" -Freud (1900/1965, p.590)

This study concluded that the presleep references used in this study (suppression, expression and mention) impelled individuals to account for an increase in dreaming of the person. However, individuals who were assigned to the suppression condition were especially likely to dream about the person. Therefore, Suppressed thoughts rebound in our dreams whether they are desired thoughts or not.