We Need BIGGER and *Better* Samples of Dream Reports.

MOST RECENT DREAM REPORTS AND **DREAM JOURNALS** ARE THE ANSWERS.

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THE ISSUE:

How to get good & LARGE samples of dream reports?

POSSIBILITY #1:

REPORTS COLLECTED IN SLEEP LABS

- When done right, they set the standard
- Past studies provide a baseline for non-lab studies

BUT:

- Labs are expensive to operate; no big grants are available
- Night work/awakenings difficult for staff
- Participants can't sustain many nights, or weeks

ALTERNATIVES?

POSSIBILITY #2: NON-LAB COLLECTION METHODS

One-week or two-week **dream diaries** are the easiest and most popular method — often in classrooms

BUT DREAM DIARIES HAVE PROBLEMS:

- Low recall means at least two weeks are needed but even that means only 4-6 dreams per person
- Volunteers lose interest; attrition rate can be high
 - or, they lose interest and write hasty reports
 - or, if reminded/pressured, they may make up some reports
 - or, *for high recallers*, writing down full accounts of several dreams every day or two can become boring and time-consuming; motivation flags even though they had good intentions

POSSIBILITY #3: DREAM DIARIES VIA "CONVENIENCE" SAMPLES (Asking friends and friends-of-friends)

BUT:

Likely to create big problems in terms of "demand characteristics"

- It's hard for friends to say "no"
- They want to please the researcher
- They wonder what the motives are

AND EVEN IF THESE ARE NOT REALLY PROBLEMS:

Experimental psychologists will *think* they are problems; they are hawks on demand characteristics.

ANY GOOD ALTERNATIVES?

YES. There are two better methods. (Coincidentally, they are polar opposites.)

MOST RECENT DREAMS (MRDs)

- Takes just 25-30 minutes; can be done with dozens or hundreds of people in a classroom or attending a meeting.
- Advantages:
 - Instant, large, anonymous samples collected in a uniform environment
 - Data is collected only from those willing to participate.

DREAM JOURNALS

- Dreams recorded for a person's own personal reasons over months, years, or decades with no thought of giving them to researchers.
- Advantages:
 - Large samples of complete dream reports with no taint of demand characteristics.
 - Research psychologists classify dream journals as "unobtrusive" archival measures; they have legitimacy.

BUT WHY ARE LARGE SAMPLE SIZES NEEDED? Two reasons, both concerning statistical issues:

- Key elements appear in less than 50% of dream reports (e.g., Aggressions, Friendliness, Sexuality, Misfortunes, Emotions) – so 60 dream reports might mean fewer than 25 elements to analyze.
- The magnitude of differences (effect sizes) are small when comparing one sample to another.

OUR RESEARCH HAS SHOWN:

- It takes **125 or more dream reports per sample** to detect differences using H/VdC content indicators.
- Dream reports with **50 or more words** are needed for reliable results

MOST RECENT DREAMS (MRDs)

CONSIDERATIONS:

- In approaching potential participants in a group setting, researchers have to **emphasize that participation is voluntary & anonymous**.
- Allow ample time (20 -25 minutes for adults, 25-30 for children and young teenagers).
- Maybe just analyze MRDs from **women and girls**. Past studies show that women and girls are more likely to turn in reports, write complete reports, and take the project seriously (i.e., there are fewer made-up dreams).
 - In mixed gender settings, collect reports from both males and females, but feel free to analyze only women/girls' reports!
 - All past research suggests that a complete theory of dreams can be developed using just one gender.

MOST RECENT DREAM COLLECTION FORM

(Note: the blanks regarding timing are designed to "prime" for recency. Otherwise, some will write their earliest or most memorable dream.)

Age: _____ Gender: _____ Date today: _____

We would like you to write down the last dream you remember having, whether it was last night, last week, or two weeks ago. But first please tell us the date this dream occurred: _____. Then tell us what time of day you think you recalled it: _____. Then tell us where you were when you recalled it: _____.

Please describe the dream exactly and as fully as you remember it. Your report should contain, whenever possible: a description of the setting of the dream, whether it was familiar to you or not; a description of the people, their age, sex, and relationship to you; and any animals that appeared in the dream. If possible, describe your feelings during the dream and whether it was pleasant or unpleasant. Be sure to tell exactly what happened during the dream to you and the other characters. Continue your report on the other side and on additional sheets if necessary.

CULLING INVALID MRDs

At the bottom of the MRD collection form, we add the following, which is surprisingly effective:

Is this a real dream, or did you make it up?

Yes, it's a real dream _____ No, I made it up ____

Upon reading through the dream reports, we also discard those that include phrases indicating that the dream is one of the following:

- A recurrent dream
- A dream from childhood
- A frightening nightmare

(Such dream reports *are* of interest in some studies, but not for descriptive empirical studies. The focus here is on everyday dreams.)

STUDIES USING MRDs WITH ADULTS

1993: Female university students at UC Santa Cruz (Domhoff, 1996)

2003: Elderly men and women aged 65-89 in Switzerland (Strauch, 2003)

2004: University students in South Africa (Malcolm-Smith & Solms, 2004)

2004: Students at Nagasaki Wesleyan College in Japan (Domhoff, Nishigawa, & Brubaker, 2004)

2008: University students in South Africa and Wales (Malcolm-Smith, Solms, Turnbull, & Tredoux, 2008)

2008: Animal rights activists in the United States (Lewis, 2008)

2012: Students at the University of Teheran in Iran (Mazandarani, Aguilar-Vafaie, & Domhoff, 2013)

POSSIBLE FUTURE STUDIES WITH ADULT MRDs

- Studies of college students in **different countries** or different regions of large countries during the same week
- Studies a week or two weeks after major disasters
- Studies of **out-patients in psychiatric clinics** for specific symptoms (e.g., anxiety states, obsessive-compulsive disorder)
 - -Collect an MRD at first visit and subsequent visits for therapy, checkups, or prescription renewals; could be written or recorded
 - -Goal of studies: To see possible effects of medications or therapy
 - -Analysis: Compare first and later MRDs for groups of patients, or compare first and later reports with adult norms

STUDIES USING MRDs WITH CHILDREN/TEENAGERS

- 1999: Children in the seventh grade (ages 11-12) in California (Avila-White, Schneider, & Domhoff, 1999)
- 1999: Children ages 8-11 in two private schools in California (Saline, 1999)

2005: Children in four age groups from 7 to 18 in Spain (Oberst, Charles, & Chamarro, 2005)

2008: Fifth-graders in Italy

(Crugnola, Maggiolini, Caprin, Martini, & Giudici, 2008)

2013: 756 children & adolescents ages 8 to 18 in Greece (Karagianni, Papadopoulou, Kallini, Dadatsi, & Abatzoglou, 2013).

FINDINGS FROM MRD STUDIES OF CHILDREN & TEENAGERS:

- Saline's 1999 study, the 2005 Spanish study, and the 2008 Italian study all showed that **the MRD method is feasible starting at about fifth grade**.
- The 2005 Spanish study and the massive 2013 Greek study showed that by ages 16-18, adolescents' dreams came very close to the H/VdC normative findings for adults.

CHILDREN'S MRDs VS. DIARY AND LAB STUDIES:

All methods tend to find the same age-related changes on several content indicators, as well as the same gender differences.

POSSIBLE FUTURE STUDIES WITH MRDs: CHILDREN

If dreaming becomes adult-like at 9–11, and begins to reveal conceptions and concerns ages 11–13, then the following possibilities would be exciting additions to the literature:

- MRD studies could be **repeated every month** or every few months during the school year **with the same large groups** of children.
 - For example, how much does dreaming change in frequency, length, and content between ages 9 & 10? 10 & 11? 11 & 13?
 - An end-of-the-year analysis of nine monthly MRD samples from the same fifth-, sixth-, and seventh-graders would be an enlightening combination of a one-year longitudinal study *and* a cross-sectional study.
 - Less feasible, but very valuable: a monthly or bi-monthly study of the same core group of children over a two- or three-year period
- Large samples of MRD's from children of the same age **in the same week in different countries**, or in many regions in very large countries. (Are there national differences?)

DREAM JOURNALS

ADVANTAGES OF DREAM JOURNALS:

- Large samples, no demand characteristics, and complete reports
- Can use the **same statistics** that are used in studies of group samples (no "autocorrelation," no issues with "independent samples")
- Can be **compared with established norms** (DJs are like personality tests; individual results are compared with group norms/averages)
- DJs can be **studied on DreamBank.net** with word and phrase searches that provide instantaneous results
- Can **compare subsets** from within DJs (e.g, dreams with aggression vs. without aggression; dreams with current partner vs. ex-partner)
- DJs provide the best possible context within which to study composite characters, metamorphoses, and other **unusual elements**

DREAM JOURNALS ARE OF PROVEN VALUE

Two major findings:

- Analyses of about 25 dream journals led to the discovery of **consistency over time** in most content categories in every instance
- Studies of about a dozen dream journals show **continuity with waking** *conceptions* **and** *concerns* in relation to major people and interests in the dreamers' lives, but not very often with daily "experience" or behavior

FUTURE STUDIES OF DJs

- *Any* long dream journal from any everyday person is of potential value; they are especially valuable if the dreamer or their friends will answer questions based on blind analyses
- Dream journals from atypical people (e.g., veterans with PTSD)
- Predict dream content based on detailed biographical information from the dreamer and her/his friends, or assessments of the dreamers' semantic and autobiographical memories

CAUTIONS/LIMITATIONS WITH DREAM JOURNALS

- Authenticate, if possible
 - If the dreams were originally written by hand, ask to see the originals (or photocopies)
 - Search the Web to see if the journal was copied from elsewhere
- Dream Journals **must be stripped of all information that could identify the dreamer**; people and places should be replaced with pseudonyms
- If results from a Dream Journal are to be published, the anonymized dream reports **must be made available to other scientists**
 - If results are published but the source data is *not* made available, those results should not be taken seriously or cited
 - Science involves data available to all; mistakes cannot be detected if the data cannot be scrutinized
 - Researchers may have biases or inadequacies of which they are not aware

BE WARY!

FURTHER INFORMATION:

www.DreamResearch.net www.DreamBank.net

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(references follow on the next slide)

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