Sleep and Dream Patterns of Political Liberals and Conservatives

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In this study the author examined the dreams of American liberals and conservatives to highlight patterns that might correlate with their opposing political views. A total of 234 participants (134 self-described liberals and 100 self-described conservatives) completed a lengthy sleep and dream survey, and their answers revealed several notable patterns. People of both political persuasions shared a common substrate of basic human sleep and dream experience. Conservatives slept somewhat more soundly, with fewer remembered dreams. Liberals were more restless in their sleep and had a more active and varied dream life. In contrast to a previous study, liberals reported a somewhat greater proportion of bad dreams and nightmares. Consistent with earlier research, the dreams of conservatives were more mundane, whereas the dreams of liberals were more bizarre.

KEY WORDS: politics, dreams, liberals, conservatives, sleep

The past century of psychological dream research has focused on the relation of dream content to basic demographic variables in the individual's life such as age, gender, occupation, health, marital status, and nationality (Foulkes, 1999; Hall & Van de Castle, 1966; Hall, 1966; Kroth, Thompson, Jackson, Pascall, & Ferreira, 2002; Lortie-Lussier, Simond, Rinfret, & De Koninck, 1992; Moffitt, Kramer, & Hoffman, 1993; Nielsen et al., 2003; Schredl & Doll, 1998; Schredl & Engelhard, 2000; Strauch & Meier, 1996; Van de Castle, 1994). One of the most important general findings to come from this research is that major patterns in dream content are *continuous* with the individual's waking life emotional concerns (Domhoff, 1996, 2003). Whatever their personal circumstances may be, people tend to dream most frequently about whatever is especially important and emotionally salient in their waking lives. In contrast to Freud's notion of dreams as disguised wishfulfillment (Freud, 1965), Jung's concept of dreaming as psychic compensation (Jung, 1948/1974), and scientific theories of dreaming as cognitively impaired neural nonsense (Crick & Mitchison, 1983; Hobson, Pace-Schott, & Stickgold, 2000), the

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empirical research on large collections of dream reports has in fact shown that dreaming reflects, in rather clear and accurate terms, the principal relationships, activities, and emotional concerns of a person's life.

To date, very little research has been done on the possible continuities between dream content and political ideology (Bulkeley, 2002; Kroth, Bautista, Bess, Cruickshank, & Stashak, 2006) Although these studies are small and provisional, the initial findings indicate that dream content does seem to be meaningfully connected to and continuous with waking-life political ideology. At the least, this result suggests that further research is warranted to verify and expand on those preliminary results. In the present article I report the main findings of a larger-scale study on the sleep and dream patterns of political liberals and conservatives in a contemporary American context. The focus on American liberals and conservatives provides a clear ideological contrast that should, according to the continuity hypothesis, manifest itself in different patterns of dream content between the two groups. Do liberals and conservatives have different kinds of dreams? That is the primary question investigated in this study.

DATA GATHERING

A sleep and dream interview (SDI) was completed by more than 700 people during the 3-year period from Fall 2001 to the end of 2004, after the U.S presidential election. This span of time represents a fairly coherent political era of conservative power, and it marks a good contrast with an earlier study using dream reports gathered during the 4-year period between 1996 and 2000, an era of relative liberal power in recent American politics (Bulkeley, 2002). The SDI consisted of 40 questions covering family background, religious and political beliefs, sleep quality, and dream experiences (see Appendix). The reports were gathered from personal interviews, college class extra credit assignments, and Internet surveys and then sorted according to the answers about political beliefs. People who identified themselves as conservative or liberal were included in this study, with the exception of a few people whose additional answers indicated an ideologically mixed perspective (e.g., a conservative democrat or a liberal republican). Future researchers may want to explore the distinctive dream patterns of such ideologically mixed people and/or look at the dreams of political independents or of people who claim to have no interest in politics whatsoever. For this study, the focus was on the simpler dichotomy of conservatives and liberals. Table 1 shows the gender and ideological distribution of the participants.

The relative proportions of liberal men, liberal women, conservative women, and conservative men is an interesting fact in itself. Many more liberal women were willing to fill out a sleep and dream survey, and many more women than men

Table 1. Participants

Gender	Liberal	Conservative
Women	101	69
Men	33	31
Total	134	100

generally were willing. Regarding the latter, this finding is consistent with results of other studies showing that women recall more dreams than men do (Armitage, 1992; Schredl, 1999; Tonay, 1993). The resulting sample, although not huge, is still larger and more detailed than those in the previous studies, and it reaches the minimal size found by Domhoff to be a plausibly representative sample of a larger group (Domhoff, 2003). The average age of all participants was 31.9 years old (conservative women 30.9 years, conservative men 33.0 years, liberal women 32.7 years, and liberal men 30.4 years), and they came from 31 different states of residence (the most from California [80], followed by New York [43], Florida [21], and Texas [11]). Table 2 shows the distribution of religious affiliations among the two groups.

Table 2. Current Religious Affiliation

Liberal	Conservative
49	83
9	0
43	17
	49

The conservatives were much more likely than the liberals to be currently part of a Christian tradition, whereas the liberals were more likely to be part of a non-Christian religious tradition or to be part of no religious tradition at all. This finding is broadly consistent with national trends in American religious and political life. Christianity is a relatively stronger force in conservative politics, whereas secular and non-Christian religious traditions are a relatively stronger force in liberal politics. Such findings increase our confidence in the general accuracy of this sample's representation of broader trends in American liberalism and conservatism.

LIMITATIONS

Before presenting the main findings, several limitations should be noted. Although larger than previous studies, this one remains quite small: just 234 people out of the millions of conservatives and liberals in America. The gender imbalance (many more females than males) is significant and is indeed a problem endemic to all dream research. The somewhat greater number of liberal than conservative participants creates another imbalance, although given the limited total number of participants it seemed better to include all who qualified rather than only as many as were present in the smallest group. The SDI format did not require any extended personal associations from the participants about their dreams (though many people did provide such associations), and this obviously limits the analysis and interpretation of those dreams. [For a defense of the study of "manifest" dreams, see Domhoff, 2003; Eggan, 1952.] Finally, the quality of the SDI reports is inevitably a limiting factor—we can never be sure the participants are not embellishing, revising, censoring, or simply fabricating the dreams they describe. The best way to deal with this is to (a) gather as many reports as possible, so major patterns will be

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more easily recognized despite the imperfections of the data and (b) use very simple methods of analysis to identify the most prominent content features, without reliance on any one particular dream report.

RESULTS

I will present the study's findings in four sets: general sleep and dream patterns, frequencies of highly memorable dream types, nightmares and bizarreness in the most recent dreams, and narrative analysis of explicitly political dreams.

General Sleep and Dream Patterns

To begin, Table 3 shows the average hours of sleep per night and the quality of sleep reported by the two groups. Table 4 shows their frequencies of dream and nightmare recall.

Overall, there was a great deal of similarity on these basic features of sleep and dream life. A fairly consistent pattern emerged, with small variations between liberals and conservatives. Everyone averaged around 7 hours of sleep a night, with moderate to good sleep quality, about one dream recalled each week, and one nightmare recalled every few months. This suggests, at a minimum, that liberals and conservatives are not entirely different species. Sharp political differences aside, these people share a common substrate of experience in the realm of sleep and dreaming (Domhoff, 1968).

Table 3. Sleep Length and Quality

Sleep variables	Liberal	Conservative
Average hours of sleep per night	6.9	7.1
Quality of sleep	2.3	2.5

Note. Quality of sleep scale: 3 = good; 2 = moderate; 1 = poor.

Table 4. Dream and Nightmare Recall

Recall types	Liberal	Conservative
Dream recall	3.9	3.5
Nightmare recall	2.3	2.1

Note. Recall scale: 5 = every night; 4 = once or twice a week; 3 = once or twice a month; 2 = once every few months; 1 = rarely or never.

It is worth noting the differences here as well. Conservatives slept somewhat longer and better than liberals did, whereas liberals had somewhat greater recall of dreams and nightmares than did conservatives. This suggests, as a preliminary interpretation, that conservatives may sleep more soundly, whereas liberals may have a more active dream life. Two additional pieces of evidence that support this interpretation come from a more detailed look at the surveys. Table 5 shows the

people who reported the poorest quality of sleep, and Table 6 shows the people who reported the most dream recall.

Table 5. Poor Sleep Quality

	1 - 7
Participant groups	People rating their sleep quality as "poor" (%)
Conservative men	0
Conservative women	7
Liberal men	12
Liberal women	16
Liberal women	16

Table 6. Most Dream Recall

Participant groups	People recalling dreams at least once a week (%)
Conservative men	55
Conservative women	65
Liberal men	58
Liberal women	75

According to these data, liberal women had the poorest quality sleep and conservative men the best. Conversely, liberal women had the most dream recall and conservative men the least. These results provide greater specificity to the initial interpretation: conservatives, especially conservative men, sleep more soundly, with less dream recall. Liberals, especially liberal women, have more restless sleep, and a more active dream life.

The differences at this level of analysis are not large. However, a similar pattern emerges in the other sets of data, suggesting that this may be a genuine point of distinction between conservatives and liberals.

Frequencies of Highly Memorable Dream Types

The SDI asked a series of questions about particular types of dreams, many of which are characterized by highly memorable images, activities, and emotions. Table 7 shows the different frequencies of each type reported by liberals and conservatives.

Table 7. Dream Type Frequencies

85	89
91	76
65	70
79	63
68	63
65	63
66	60
63	53
69	48
56	54
55	49
53	46
35	30
25	20
	91 65 79 68 65 66 63 69 56 55 53 35

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Starting with the similarities, the two groups displayed an almost identical pattern of the relative proportion among these dream types. Nightmares and sexual dreams were reported by the most people in both groups, dreams of paralysis and mystical experience somewhat less, and dreams of snakes and terrorism the least. These proportions closely correspond to the findings on "typical dreams" by Nielsen et al. (2003) with a Canadian population and by Griffith, Miyagi, and Tago (1958) with American and Japanese populations, providing further evidence of a shared substrate of human dreaming experience.

In terms of differences between the two groups, the liberals reported a modestly but consistently higher frequency of almost every type of dream. The biggest differences were in the frequencies of sexual dreams, flying dreams, and dreams in which a dead person comes back to life (the latter two being the most manifestly bizarre types of dreams included in the SDI). In 11 of the 14 types of dreams, the liberal women had the highest, or tied for highest, frequency of all participants. This finding highlights again the more active quality of liberal women's dream lives. One interesting difference was between liberal women and conservative women on reports of sexual dreams. The conservative women figure (71%) was high, but the liberal woman figure (92%) was higher still, and the liberal women dream reports were much more elaborate and detailed than the conservative women dream reports, which were very simple and brief. The liberal women's dream reports also contained far more references to sexual interactions with other women (24% of liberal women reporting at least one such dream) than were reported in the conservative women's dreams (4% of conservative women). Thus, it can be said that in their dreams, liberal women are more open to sexuality, especially homosexuality, than are conservative women. Whether this is due to conservative women having fewer (homo)sexual dreams or rather reporting fewer such dreams, cannot be decided here. But either way, the difference in the dream reports appears continuous with the two groups' differing waking attitudes toward sexual morality.

Another interesting difference is on the question about "lucid dreams," that is, dreams in which one is aware of being in a dream state. Conservative men reported the highest frequency of lucid dreams of all groups, the only instance of a higher dream type frequency among conservatives. How might this result be interpreted? One possibility is that conservative men use lucid awareness (thinking to themselves, "this is just a dream") to deflect potentially disturbing dreams and thereby protect the soundness of their sleep. This is certainly the impression given by the dream reports themselves, in which the moment of becoming lucid was almost always followed immediately by the ending of the dream. If, as some researchers suggest (Hobson et al., 2000; Kahn, Krippner, & Combs, 2000), lucidity involves a partial reactivation of the "executive" systems in the forebrain (which are normally off-line in REM sleep), then perhaps conservative men are especially inclined to reassert a forebrain-mediated sense of self-awareness within and control over the dream state.

Nightmares and Bizarreness in Most Recent Dreams

Before the questions about the 14 different types of dreams just discussed, SDI participants were asked to describe their most recent dream (MRD). This was the only type of dream used in an earlier investigation of dream content and political

ideology (Bulkeley, 2002), and there it was found that the MRD reports of conservatives had considerably more nightmarish content (aggression, misfortune, and negative emotion), whereas the liberal dreams were more bizarre, fantastical, and disconnected from ordinary waking life. The SDIs used in this study provided several kinds of data to gauge the proportions of nightmares and bizarreness among the two groups and thus to compare the present results to the previous ones. As already noted, liberals reported a higher rate of nightmare recall than did conservatives and a higher frequency of every negative type of dream. Looking more closely at the MRDs, the number of explicit nightmares was counted (a nightmare being more precisely defined as a dream that the individual describes as predominantly negative in feeling, action, and image, with unpleasant emotions [fear, sadness, shock, or helplessness], aggression, misfortune, and/or the threat of injury or death). Table 8 shows the results of this tabulation.

Table 8. Nightmares

Participant groups	People having nightmares (%)
Conservative men	7
Conservative women	17
Liberal men	17
Liberal women	17

Taking all these SDI findings together, a consistent picture emerges in which liberals experienced slightly more nightmares than did conservatives. This result conflicts, however, with the results of the earlier MRD study, which showed a higher nightmare frequency among conservatives. This difference may be due to variations among the participants (e.g., the earlier study's participants were much younger, at an average age of 20.9 years old) and the small, insufficiently representative size of both studies. Alternatively, the conflicting results may indicate there is no real connection between nightmare frequency and political ideology. That conclusion seems unlikely, however, given that the only other research on this topic found a positive correlation between conservative political attitudes and dreams of being chased, falling, and disconnected from others (Kroth et al., 2006). Another interpretation of all these findings is admittedly more speculative, but is at least consistent with the data at hand and capable of being tested in future research: Conservatives may have a higher baseline of nightmare experience than liberals, but people in both groups are likely to have more nightmares than usual during times when the other political ideology holds power. The first MRD study used dreams gathered during the second presidential term of Bill Clinton, whereas the second MRD study drew upon dreams from the post-9/11 administration of George W. Bush. It is fair to say that the former era was a period of relative strength for liberals (prompting more bad dreams among conservatives?), whereas after 9/11 the power of conservatives has risen (spurring more nightmares among liberals?). The changing frequency of nightmares, in this view, may be an accurate reflection of the waking world political climate as experienced by the two political groups.

Bizarreness is a notoriously difficult aspect of dreaming to identify and study with any precision (see Hobson et al., 2000; Hunt, 1989; Kahan, LaBerge, Levitan, & Zimbardo, 1997; Kahn & Hobson, 1993; Kahn et al., 2000; Knudson, 2001; Moffitt et al., 1993). Consistent with the approach taken in the earlier MRD study, in this investigation I focused on the somewhat simpler task of identifying dreams that were entirely realistic and mundane (i.e., could plausibly be a report of an actual waking experience). Although it requires great subtlety and care to analyze all the variations of bizarreness in dreams, it is a much easier process to identify those dreams with content that is entirely within the realm of the possible, without anything that deviates from what is common, ordinary, and expectable in waking life. Such an approach offers a strong, although indirect, measure of general dream bizarreness. The frequency of mundane dreams among the MRDs is shown in Table 9.

Table 9. Mundane Dreams

Participant groups	People having mundane dreams (%)
Conservative men	54
Conservative women	60
Liberal men	24
Liberal women	22

The dramatically higher percentage of conservatives reporting mundane dreams and thus the dramatically higher percentage of liberals reporting bizarre dreams are consistent with other findings from the SDI. Liberals also reported higher frequencies of flying dreams and dreams of the dead returning to life, and they reported a greater number and variety of dreams (e.g., liberal women homosexuality dreams). As already noted, the same basic result appeared in the earlier MRD study. Furthermore, Kroth et al. (2006) found that conservative political attitudes were negatively correlated with dreams of openness, uninhibitedness, and sexuality. All these findings point to a similar conclusion: Liberals have more dreams with unusual, abnormal elements than conservatives, whose dreams are more likely to portray ordinary characters, settings, and activities. This is not an absolute difference—conservatives certainly have some bizarre dreams, and liberals of course have some mundane dreams—but, on the whole, it appears that most liberals have a wider sphere of dream experience, with less anchoring in ordinary reality and a greater range of imagined possibility, than do most conservatives.

Narrative Analysis of Explicitly Political Dreams

The final level of analysis in this study involved the identification of specific narrative elements in the dreams. In keeping with the primary interest in politics, all dreams from the SDI involving a political character were identified. Liberals reported a total of nine political dreams (six for liberal women and three for liberal

men), whereas the conservatives had only one (a conservative woman). Most of the liberal's political dreams were rather bizarre nightmares:

I was onstage singing "If I Had a Hammer" to President Bush who was my sole audience, who didn't appreciate my talents and had me forcibly removed by his henchmen.

I was at a presidential rally, where GW Bush was speaking. There was much red white and blue. Bush speaks: "There are those who say that we are giving up our civil liberties. But I say, we should be proud to sacrifice our freedoms for America!" The crowd went wild, clapping, cheering, and waving flags. I awoke in a cold sweat.

I had a nightmare that Bush had won the presidential election by getting 80% of the vote.

In the dream I am sitting on my sofa in the apartment I was living in 4 years ago (cream sofa, white walls) watching the election night news on TV with my fiancé (same age and background, but more centralist in political view). That part is more like remembering the night of the last election. When the news analyst announces for whom each state's votes will support. They are pretty much even, until suddenly the announcer says that all of the states have changed their votes for Bush and that Bush will be the president again. The announcer looks right at me and adds "because he (Bush) doesn't like YOU, AMY!" My stomach sinks and I realized that it's all my fault. I wake up feeling affronted and guilty and out of breath.

To state the obvious, these dreams displayed vivid distress at the political leadership of President Bush. The dreams portrayed this negative emotionality in exaggerated, even absurd forms—the solo protest song, the cheering, rights-surrendering crowd, and the TV announcer who blames the election's results on the dreamer. In this way the dreams can be described as "political cartoons of the mind" in which strongly-felt political beliefs are expressed in comic, dramatically embellished images (Bulkeley, 1996).

The one conservative political dream had an entirely different tone:

I was friends with George W. Bush and we were working together on his ranch. I was happy to be there.

That, I suggest, is the continuity process of dreaming in a nutshell. This dream accurately reflected the conservative individual's waking life political feelings (happiness and intimacy with the President), just as the liberal people's nightmares accurately reflected their primary political concerns in waking life (fear of and alienation from the President).

CONCLUSION

The previously mentioned limitations of this study mean that any conclusions must be offered lightly, with much room for future testing and improvement. With that in mind, the following is a summary of the main findings:

- Liberals and conservatives are not different species, at least when it comes
 to sleep and dreaming. People of both political persuasions share a common
 substrate of sleeping and dreaming. The sharp differences at the level of
 ideology do not correspond to huge differences in how Americans sleep and
 dream.
- 2. Conservatives, especially conservative men, sleep more soundly, whereas

liberals, especially liberal women, have more troubled sleep and a more active, agitated dream life. Conservative men sleep a bit longer, with better quality sleep; they recall the fewest dreams, but have the most lucid awareness. Liberal women have the worst quality sleep, recall the greatest number and variety of dreams, and have the most dream references to homosexuality.

- 3. The liberals and conservatives in this study reported a roughly equal proportion of bad dreams and nightmares. The difference between these findings and those of the earlier MRD investigation may be due to the very different political climates of the two studies. It appears that liberals have become more upset and troubled in their dreams, whereas conservatives have become less so in theirs. No other research has been done to see whether the continuity process of dreaming extends to this level of historical change, so such an interpretation remains speculative.
- 4. The dream reports from the conservatives were much more mundane than those from the liberals. This is consistent with the earlier MRD findings and with other political psychology research on liberal/conservative differences (e.g., Jost, Glaser, Kruglanski, & Sulloway, 2003). Liberals had more dreams with unusual, distorted, fantastic elements than conservatives, whose dreams were more likely to portray normal characters, settings, and activities. This was not an absolute difference, but on the whole, liberals had a wider sphere of dream experience, with less anchoring in ordinary reality and a greater range of imagined possibility, than did conservatives.

REFERENCES

- Armitage, R. (1992). Gender differences and the effect of stress on dream recall: A 30-day diary report. Dreaming, 2, 137-141.
- Bulkeley, K. (1996). Political dreaming: Dreams of the 1992 presidential election. In K. Bulkeley, (Ed.), Among all these dreamers: Essays on dreaming and modern society. Albany, NY: State University of New York Press.
- Bulkeley, K. (2002). Dream content and political ideology. *Dreaming*, 12, 61-78.
- Crick, F., & Mitchison, G. (1983). The function of dream sleep. Nature, 304, 111-114.
- Domhoff, G. W. (1968). An unsuccessful search for further correlates of everyday dream recall. Psychophysiology, 4, 386.
- Domhoff, G. W. (1996). Finding meaning in dreams: A quantitative approach. New York: Plenum.
- Domhoff, G. W. (2003). The scientific study of dreams: Neural networks, cognitive development, and content analysis. Washington, DC: American Psychological Association.
- Eggan, D. (1952). The manifest content of dreams: A challenge to social science. American Anthropologist, 54, 469-485.
- Foulkes, D. (1999). Children's dreaming and the development of consciousness. Cambridge, MA: Harvard University Press.
- Freud, S. (1965). The interpretation of dreams. (J. Strachey, Trans.). New York: Avon Books.
- Griffith, R. M., Miyagi, O., & Tago, A. (1958). The universality of typical dreams: Japanese vs. Americans. *American Anthropologist*, 60, 1173–1180.
- Hall, C., & Van de Castle, R. (1966). The content analysis of dreams. New York: Appleton-Century-Crofts.
- Hall, C. (1966). The meaning of dreams. New York: McGraw-Hill.
- Hobson, J. A., Pace-Schott, E., & Stickgold, R. (2000). Dreaming and the brain: Towards a cognitive neuroscience of conscious states. *Behavioral and Brain Sciences*, 23, 793–842.
- Hunt, H. (1989). The multiplicity of dreams: Memory, imagination, and consciousness. New Haven, CT: Yale University Press.

Jost, J. T., Glaser, J., Kruglanski, A.W., Sulloway, F.J. (2003). Political conservativism as motivated social cognition. *Psychological Bulletin*, 129, 339-375.

Jung, C. G. (1974). On the nature of dreams. In *Dreams*. Princeton, NJ: Princeton University Press. (Original work published 1948)

Kahan, T. L., LaBerge, S., Levitan, L., & Zimbardo, P. (1997). Similarities and differences between dreaming and waking cognition: An exploratory study. Consciousness and Cognition, 6, 132-147.

Kahn, D., & Hobson, J. A. (1993). Self-organization theory and dreaming. Dreaming, 3, 151-178.

Kahn, D., Krippner, S., & Combs, A. (2000). Dreaming and the self-organizing brain. Journal of Consciousness Studies 7, 4-11.

Knudson, R. (2001). Significant dreams: Bizarre or beautiful? Dreaming 11, 167-178.

Kroth, J., Bautista, C., Bess, J., Cruickshank, K., Stashak, J. (2006). Incidence of having dreamed and conservative political attitudes. *Psychological Reports*, 98, 923–926.

Kroth, J., Thompson, L., Jackson, J., Pascall, L., & Ferreira, M. (2002). Dream characteristics of stock brokers after a major market downturn. *Psychological Reports*, 90, 1097-1100.

Lortie-Lussier, M., Simond, S., Rinfret, N., & De Koninck. J. (1992). Beyond sex differences: Family and occupational roles' impact on women's and men's dreams. Sex Roles 26, 79–96.

Moffitt, A., Kramer, M., & Hoffman, R. (Eds.). (1993). The functions of dreaming. Albany, NY: State University of New York Press.

Nielsen, T., Zadra, A., Simard, V., Saucier, S., Stenstrom, P., Smith, C., et al. (2003). The typical dreams of Canadian university students. *Dreaming*, 13, 211-235.

Schredl, M., & Doll, E. (1998). Emotions in dream diaries. Consciousness and Cognition, 7, 634-646.
Schredl, M., & Engelhard, H. (2000). Dreaming and psychopathology: Dream recall and dream content of psychiatric inpatients. Sleep and Hypnosis, 3, 44-54.

Schredl, M. (1999). Dream recall, research, clinical implications, and future directions. Sleep and Hypnosis, 1, 99-108.

Strauch, I., & Meier, B. (1996). In search of dreams: Results of experimental dream research. Albany, NY: State University of New York Press.

Tonay, V. (1993). Personality correlates of dream recall: Who remembers? *Dreaming*, 3, 1–8.

Van de Castle, R. (1994). Our dreaming mind. New York: Ballantine Books.

APPENDIX

The Sleep and Dream Interview

Demographics

- 1. Gender
- 2. Age
- 3. State or country of residence
- 4. Are you primarily right handed or left handed?
- What was the last school you attended? (grade school, high school, college, graduate/ professional)
- 6. What is your occupation?

Family Relations

- 7. How old are your parents? (If one or both of them have died, when did they die? If parents are divorced, when?)
- 8. Do you have any siblings? If yes, how old are they?
- 9. Are you married? If yes, for how long? (If divorced, when?)
- 10. Do you have any children? If yes, how old are they?

(Appendix continues)

Political Preferences

- 11. How would you describe your political views: conservative, very conservative, liberal, very liberal, moderate, or something else?
- 12. What are the political issues you care most about?
- 13. Are you registered to vote? If yes, in which political party?

Religious/Spiritual Background

- 14. Were you raised in any particular religious tradition? If yes, which one?
- 15. Do you now belong to any particular religious tradition? If yes, which one?
- 16. How important is religion or spirituality in your life? (very much, somewhat, not much, not at all)

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- 17. How many hours on average do you sleep each night?
- 18. How would you rate the quality of your sleep? (good, fair, poor)
- 19. How often do you wake up remembering a dream? (almost every morning, once or twice a week, once or twice a month, once every few months, almost never)
- 20. How often do you wake up remembering a frightening dream or nightmare? (almost every morning, once or twice a week, once or twice a month, once every few months, almost never)

Different Types of Dreaming

When answering the following questions, please describe when the dream occurred, details on the *characters* (their ages and relations to you), the *settings* (whether familiar or unfamiliar), any *colors* in the dream, and any *emotions* you felt.

- 21. Can you please describe the most recent dream you can remember, whether it was last night or a few nights ago?
- 22. Can you please describe the most memorable dream you've ever had, whether it was a few weeks ago, or several years ago, or farther back in your life?
- 23. What makes this dream so memorable?
- 24. Can you describe the very first dream you can ever remember having? How old were you at the time?
- 25. Can you describe the worst nightmare you ever had?
- 26. Have you had any dreams about terrorism, September 11, or the war in Iraq? If yes, can you describe it?
- 27. Have you ever had a dream about your work or occupation? If yes, can you describe it?
- 28. Have you ever had a dream of flying? If yes, can you describe it?
- 29. Have you ever had a dream in which someone who is dead in waking life appeared to you as if they were alive again? If yes, can you describe it?

- 30. Without revealing any more details than you want, have you ever had a dream of sexual activity? If yes, can you say in general terms what was involved?
- 31. Have you ever had a dream in which you were "lucid," and knew you were dreaming while you were still in the dream? If yes, can you describe it?
- 32. Do your dreams ever have animals in them? If yes, which ones appear the most frequently?
- 33. Do you ever dream of snakes? If yes, can you describe one?
- 34. Have you ever had a dream that you would call a mystical experience, or that was spiritually meaningful for you? If yes, can you describe it?
- 35. Have you ever had a dream in which you felt an evil or demonic presence? If yes, can you describe it?
- 36. Have you ever had a dream in which you felt paralyzed or unable to speak? If yes, can you describe it?
- 37. Have you ever had a dream in which you were falling helplessly? If yes, can you describe it?
- 38. Have you ever had a dream in which you were doing something immoral? If yes, can you describe it?
- 39. Do you have any recurrent dreams? If yes, can you describe the most common one?

Conclusion

40. Those are all the questions I have. Are there any types of dreams we haven't discussed that you think should be included in this research?