

2001 “Sleep in America” Poll



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Background, Purpose and Objectives

The National Sleep Foundation commissioned WB&A Market Research to conduct a national survey among adults in the United States. The purpose of this survey was to determine adults' sleep habits, sleep experiences, lifestyle and health issues. The survey was also designed to gather information on adults' knowledge or attitudes about sleep, drowsy driving, and the prevalence of sleep problems and disorders among American adults as well as their perceptions of technology affecting sleep patterns.

The primary objectives of this research were to answer the following questions among American adults:

1. What are these adults' personal work/sleep habits?
2. What do adults do before going to bed and what is their perception of what helps them sleep?
3. How often does daytime sleepiness affect adults' daily activities and what they are likely to do to overcome daytime sleepiness?
4. How often and what percentage of adults experience various types of sleep problems?
5. What are their perceptions and experiences with driving drowsy?
6. What forms of medication or sleep aids do adults use to treat their sleep problem?
7. What are these adults' daily lifestyles?
8. How does Internet usage and technology affect adults' daily sleep activity?
9. What are these adults' demographic profiles?

Methodology

In order to collect the data, telephone interviews were conducted between October 25, 2000 and January 3, 2001 among a random sample of 1004 adults. The survey averaged 28 minutes in length. In order to qualify for this study, participants had to be:

- > At least 18 years of age; and
- > Living within the continental United States.

A random list of telephone numbers was purchased from SDR (Sophisticated Data Resources, Inc.). In addition, quotas were established by region based on U.S. Census household data. An equal number of males and females were interviewed. Most of the interviewing was conducted on weekdays between 5:00 p.m and 9:00 p.m, and Saturdays between 10:00 a.m and 4:00 p.m, by professional interviewers calling from WB&A's interviewing facility located near Annapolis, Maryland.

Because in research the entire population is typically not interviewed, but rather a sample of that population is surveyed, the data are subject to sampling error. The maximum sampling error of the data for the total sample of 1004 interviews is 3.1 percentage points at the 95% confidence level. However, depending upon the data being examined, the fluctuation may be smaller. Standard errors are shown below for various percentages.

		40%	30%	20%	10%	1%
		or	or	or	or	or
If the percentage found is around:	<u>50%</u>	<u>60%</u>	<u>70%</u>	<u>80%</u>	<u>90%</u>	<u>99%</u>
Then, the standard error, in percentage points would be:						
Total sample (n = 1004)	±3.1	±3.0	±2.8	±2.5	±1.9	±0.6

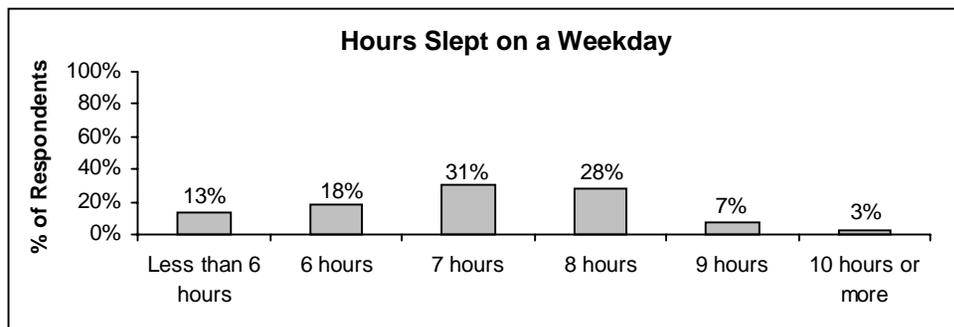
For example, if a question in the study asked among the total sample yielded a percentage of 20%, then we can be sure 95 out of 100 times that the true percentage would lie between 17.5% and 22.5% (20% ±2.5 percentage points).

Executive Summary

Executive Summary - Amount of Sleep

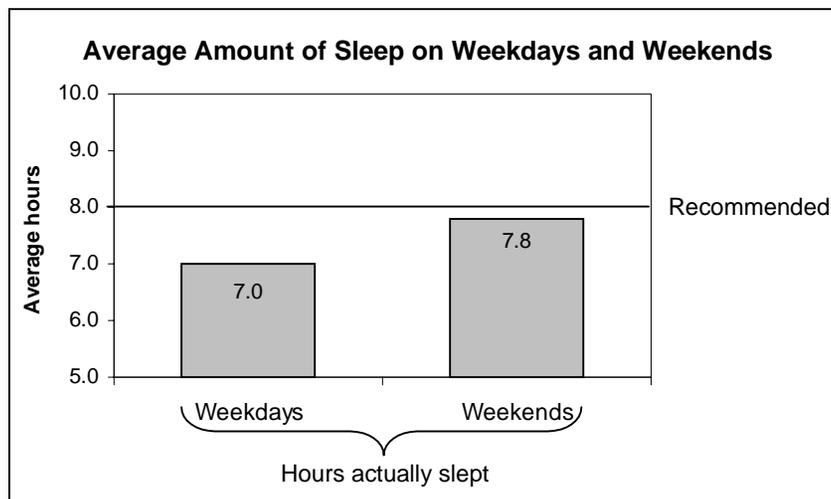
On average, adults sleep seven hours during the weekday (7.0) -- one hour less than the eight hours recommended by sleep experts.

- Only one-third of adults (37%) say they get at least the recommended eight hours or more of sleep per night during the week; and
- Almost one-third of adults (31%) say they get less than 7 hours of sleep per night during the week.



- Those who sleep less during the week include: males (average 6.9 hours) vs. females (7.1), those in the Midwest (6.8) vs. Northeast (7.1) and West (7.2), married people with children (6.7) vs. married people without children (7.2) or single people without children (7.1), those who are overweight (6.9) vs. under/ideal weight (7.1) and those who are caregivers (6.8) vs. non-caregivers (7.1).

Some adults (47%) say they are likely to increase their sleep time on the weekend as compared to weekdays. This is reflected by an average increase of about 45-50 minutes in the amount of sleep that a U.S. adult reports getting per weekend night (7.8 hours).



Executive Summary - Amount of Sleep (cont'd)

The average number of hours slept on both weekdays and weekends has remained consistent since 1998. Also, the percentage of the population reporting various amounts of sleep time has remained very stable during this period of time.

Number of Hours Slept on Weekdays (past two weeks)				
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
Less than 6 hours	12%	12%	13%	13%
6 hours	23	22	24	18
7 hours	28	31	30	31
8 hours or more	35	35	33	37
Don't know/Refused	2	-	-	1
Mean (# of hours)	na	7.0	6.9	7.0
Median (# of hours)	na	na	na	7.0

Note: 9% report getting 9 hours or more of sleep on weekdays in 2001

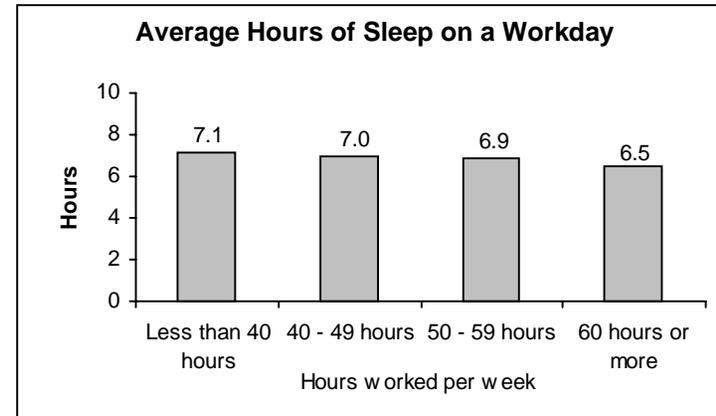
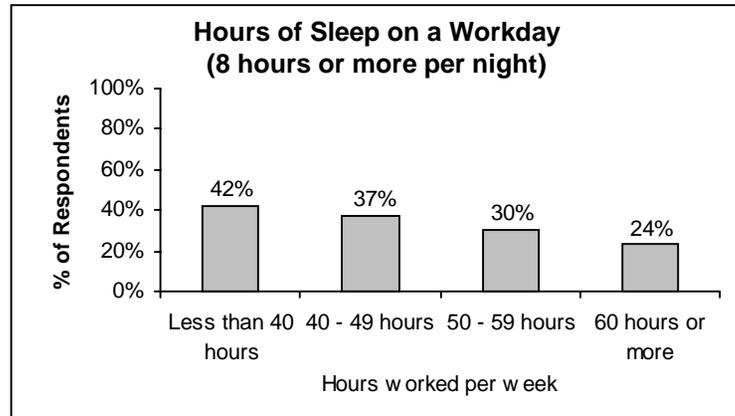
Number of Hours Slept on Weekends (past two weeks)				
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
Less than 6 hours	8%	8%	9%	7%
6 hours	14	14	14	10
7 hours	23	20	21	21
8 hours or more	53	58	56	61
Don't know/Refused	2	-	-	1
Mean (# of hours)	na	7.6	7.5	7.8
Median (# of hours)	na	na	na	8.0

Note: 25% report getting 9 hours or more of sleep on weekends in 2001

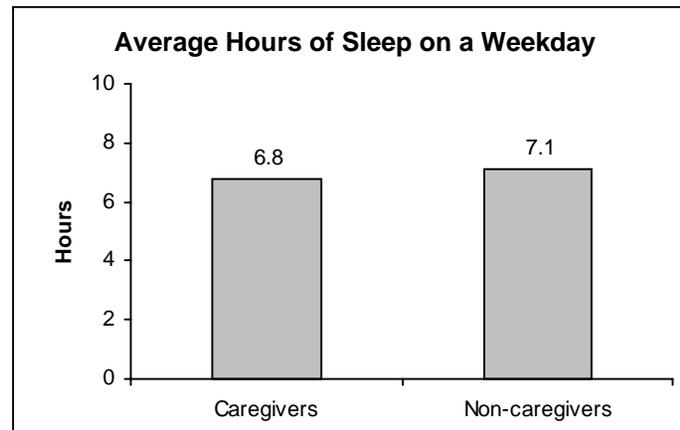
Executive Summary - Amount of Sleep (cont'd)

On weekdays, about two-thirds of U.S. adults go to bed between 10:00pm and midnight (66%), while a similar proportion wake up between 5:00am and 7:59am (70%). On weekends, about six in ten go to bed between 10:00pm and midnight (62%), while a similar proportion wake up between 6:00am and 9:00am (62%).

The amount of sleep obtained during the workweek is strongly related to the number of hours worked each week.



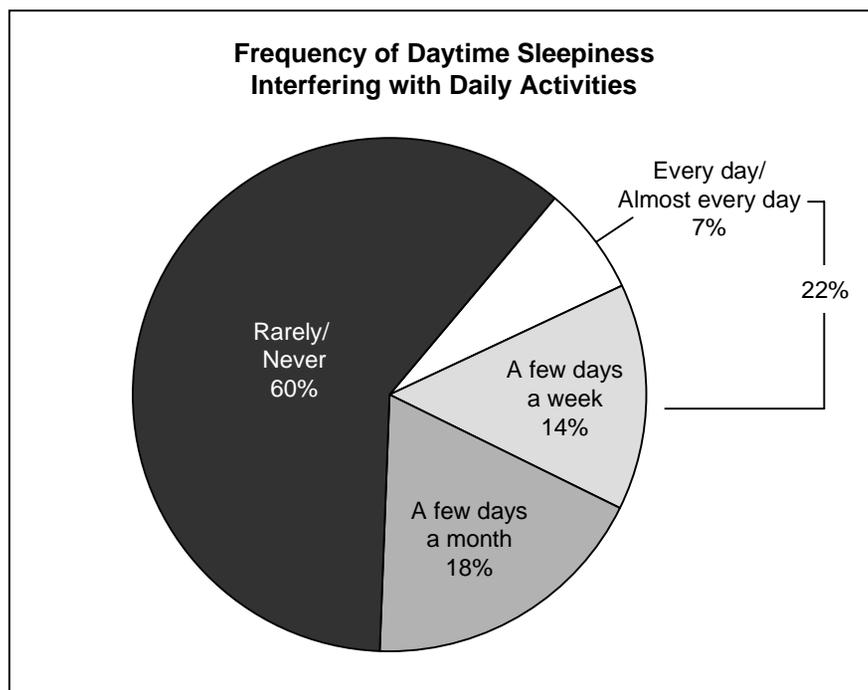
Another important determinant of the amount of sleep obtained appears to be caregiver status (i.e., caring for one or more individuals who could not live alone). Caregivers report a lower average amount of sleep than do non-caregivers.



Executive Summary - Daytime Sleepiness

A sizable proportion of adults (40%) report that they are so sleepy during the day that it interferes with their daily activities a few days per month or more; and, one out of five (22%) experience this level of daytime sleepiness at least a few days per week or more.

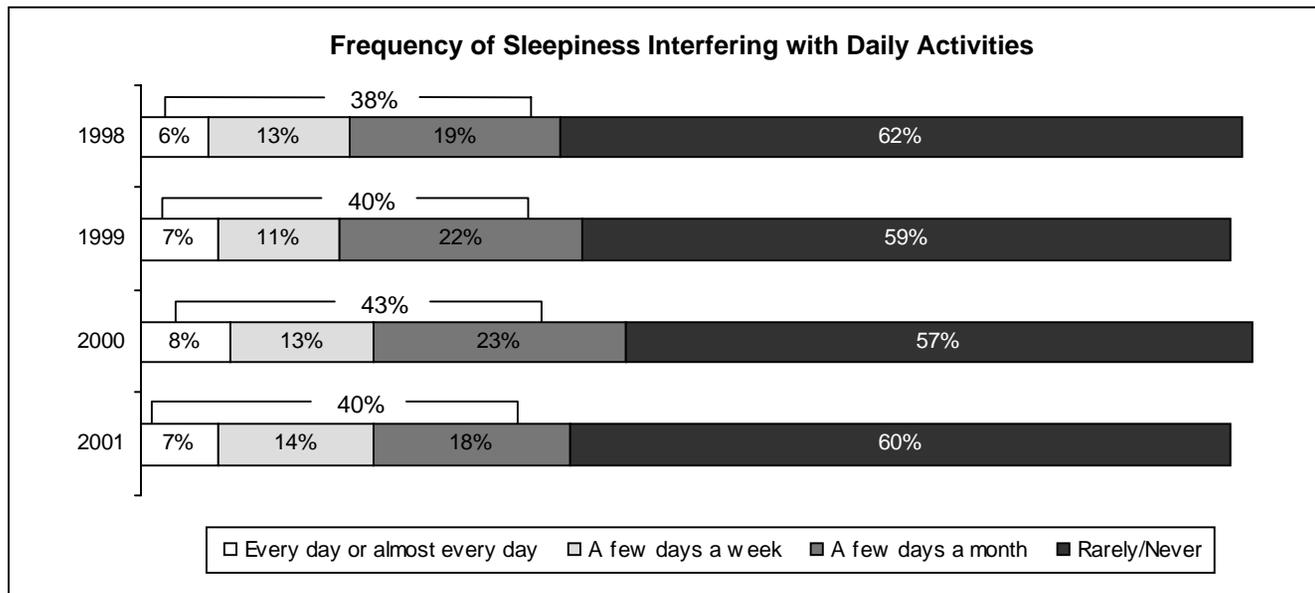
- Sleepiness interfering with one's daily activities at least a few days per month is more common among females (45% vs. 34%), those with children (50% vs. 32%), shift workers (52% vs. 36%), those with lower levels of marital satisfaction (52% vs. 35%), those experiencing periods of depression (58% vs. 32%-48%) and/or those who are caregivers of a child or person who is unable to live independently (50% vs. 34%) than among their counterparts.



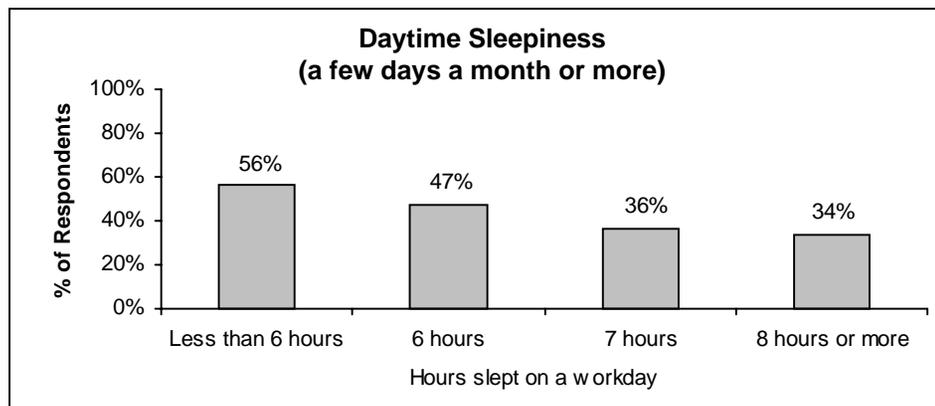
When adults are sleepy during the day, almost two-thirds (65%) say they are very likely to just accept their sleepiness and keep going; whereas, only 22% will “slow down”. A significant proportion (43%) report that they are very likely to use caffeine when sleepy, and 5% report a high likelihood of using alerting medications. Increasing time for sleep by napping or increasing sleep time on the weekend is very likely for 42% of the sample.

Executive Summary - Daytime Sleepiness (cont'd)

Frequency of sleepiness interfering with respondents' daily activities remains consistent with responses found in previous years.



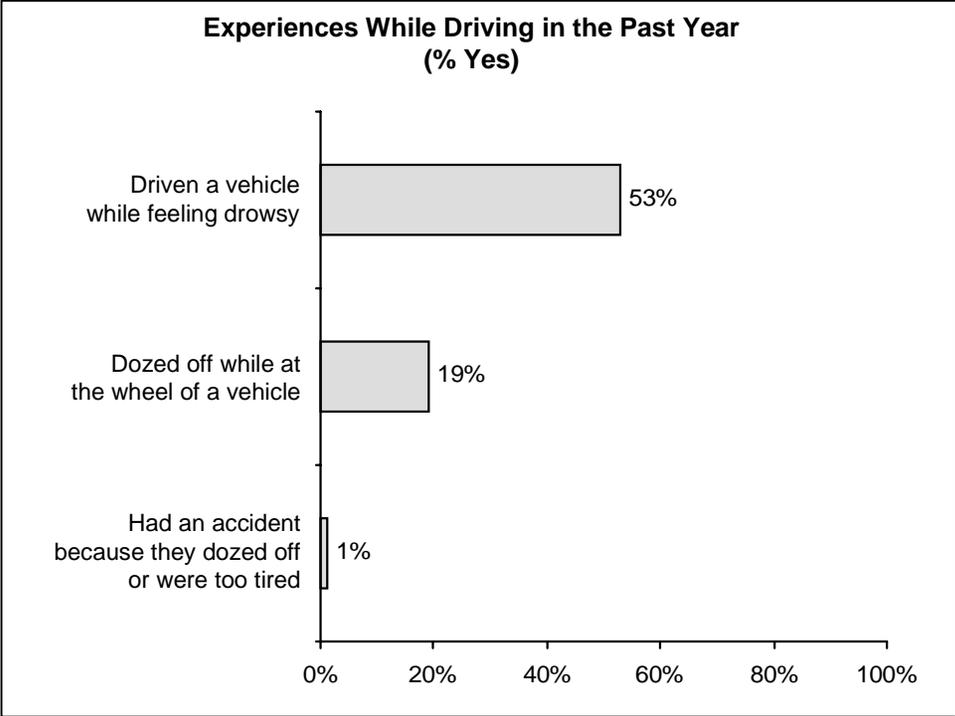
The number of hours of sleep each night is a predictor of daytime sleepiness. The fewer hours slept, the higher percentage of respondents reported sleepiness at a level that interferes with activities at least a few days per month.



Executive Summary - Drowsy Driving

More than one-half of adults in the U.S. (53%) report that they have driven while drowsy in the past year. In fact, nearly one out of five (19%) have actually dozed off while driving and 1% claim they have had an accident while driving because they were too tired or they dozed off.

- Men (59% vs. 47%), those who are 18 to 29 years old (65% vs. 51% for 30 to 64, 28% for 65 or older) and those who work forty or more hours per week (62% vs. 49%) are more likely than their counterparts to have driven drowsy.



Executive Summary - Symptoms of Sleep Disorders

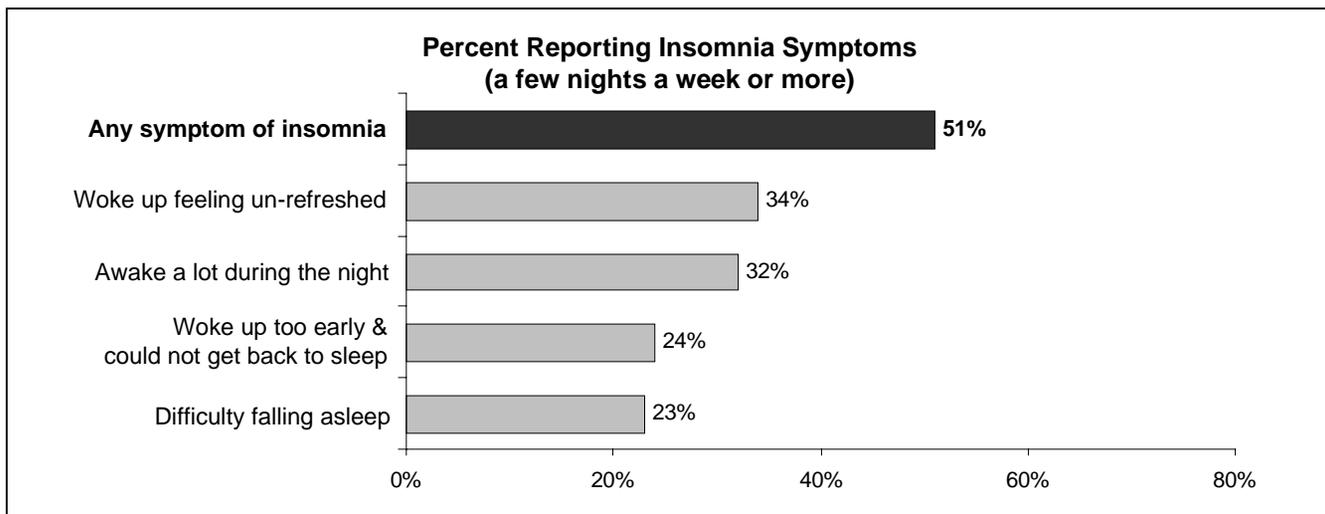
Insomnia

For this study, insomnia was defined as any of the following: difficulty falling asleep, waking a lot during the night, waking up too early and not being able to get back to sleep, and waking up feeling un-refreshed.

Overall, about one-half of the adults surveyed (51%) report having experienced one or more symptoms of insomnia at least a few nights a week in the past year. In fact, about three in ten (29%) say they have experienced insomnia every night or almost every night.

- Groups that are more likely to have symptoms of insomnia include: 18 to 29 year olds (61% vs. 51% for 30 to 64 year olds, 39% for 65 or older), females (55% vs. 47%), shift workers (61% vs. 47%), those with household incomes of \$35,000 or less (57% vs. 46%), caregivers (58% vs. 47%), those with children (58% vs. 46%), those who typically sleep with a child (78%), those with lower levels of marital satisfaction (70% vs. 44%) those who rarely or never use the Internet (54% vs. 48%) and those with hypertension (59%), nighttime heartburn (62%) or depression (74%).

The most prevalent symptoms of insomnia experienced at least a few nights a week include waking up feeling un-refreshed (34%) and being awake a lot during the night (32%). Having difficulty falling asleep and waking up too early are less common, but still experienced at least a few nights a week by about one-fourth of adults (23%-24%).



Executive Summary - Symptoms of Sleep Disorders (cont'd)

Sleep Apnea

More than one-third of U.S. adults (38%) report that they have **snored** at least a few nights a week in the past year.

- Groups that are more likely to snore include: 30 to 64 years olds (42% vs. 31% for 18 to 29, 30% for 65 or older), males (45% vs. 30%), residents of the South (45% vs. 28% West, 35% Midwest and 37% Northeast), those who are either overweight or obese (48% vs. 24%), those who are married (42% vs. 31%) and those with hypertension (46%) or diabetes (53%).

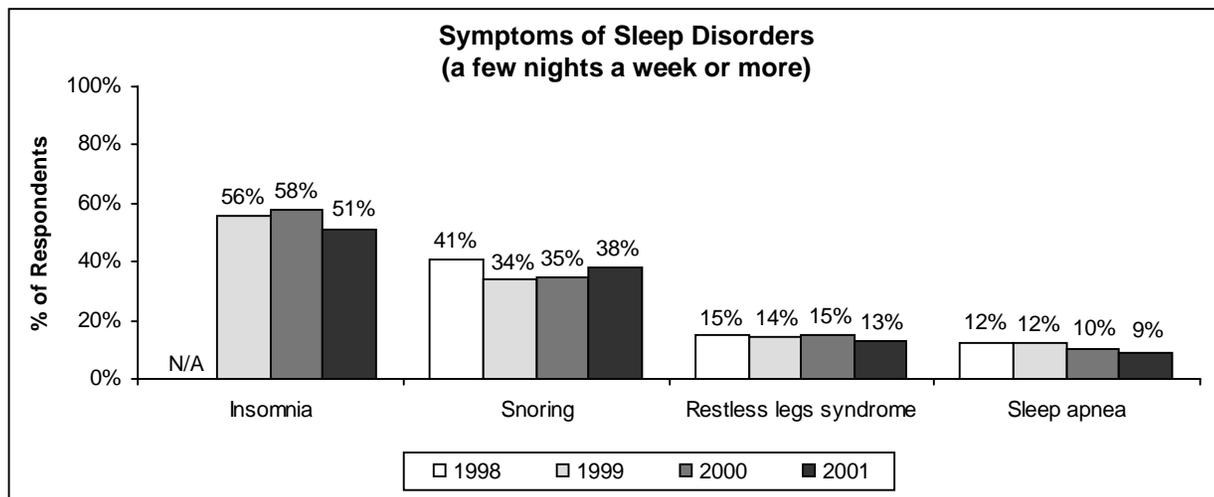
About one in ten adults (9%) report experiencing pauses in breathing during sleep (i.e., **sleep apnea**) at least a few nights a week in the past year.

- Those who are 30 to 64 years old (11% vs. 4% for 18 to 29, 7% for 65 or older), males (11% vs. 6%), obese adults (14% vs. 7%) or those with heart disease (22%), arthritis (20%), hypertension (15%) and/or nighttime heartburn (15%) are more likely than their counterparts to report having sleep apnea at least a few nights a week.

Restless Legs Syndrome

Symptoms of **restless legs syndrome (RLS)** were identified by 13% of the sample.

- Groups that are more likely to experience RLS include: those with household incomes of \$35,000 or less (18% vs. 9%), those with lower levels of marital satisfaction (19% vs. 10%), those who rarely or never use the Internet (16% vs. 10%), and those with diabetes (29%), arthritis (25%), depression (23%), heart disease (23%), hypertension (21%) and/or nighttime heartburn (19%).



Recognition of Sleep Disorders

While many adults report experiencing these problems, few have actually been diagnosed with insomnia (6%), sleep apnea (5%) or RLS (3%), and even fewer have been treated for any of these problems (1%-3%).

Executive Summary - Symptoms of Sleep Disorders (cont'd)

Any Sleep Problem

Any sleep problem is defined as difficulty falling asleep, waking a lot during the night, waking up too early and not being able to get back to sleep, waking up feeling un-refreshed, snoring, restless legs syndrome (RLS) or sleep apnea.

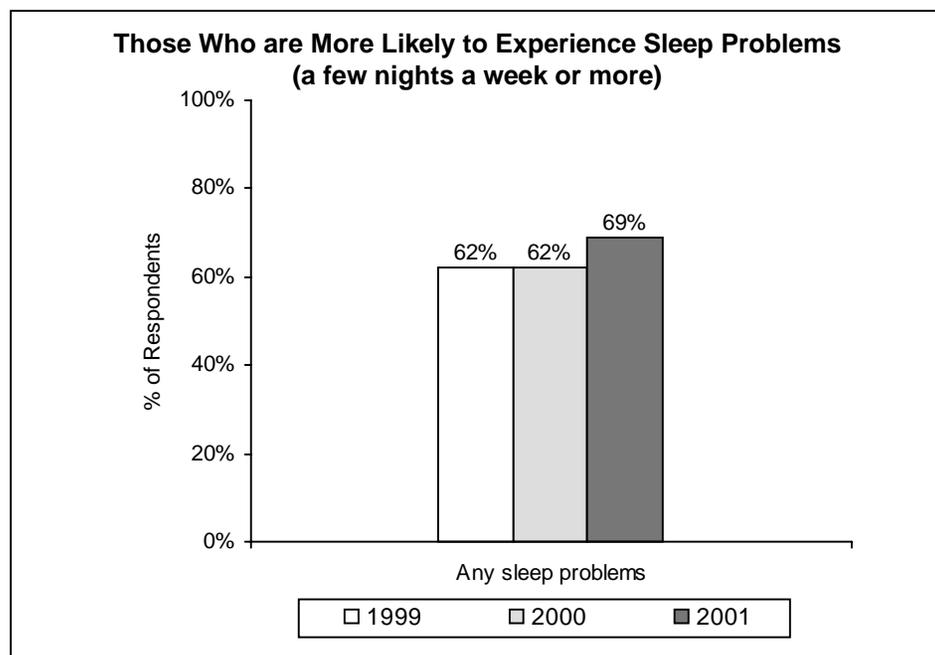
Overall, almost seven in ten of the adults surveyed (69%) report having one or more sleep problems a few nights a week or more. This proportion is a slight increase over what has been found in previous years (62% in 1999 and 2000).

Those who are most likely to experience a sleep problem include:

- Those with children in the household under 18 years of age (76%), particularly those who sleep with a child (81%);
- Those with lower levels of marital satisfaction (77%);
- Caregivers (76%);
- Those who are shift workers (74%); and
- Those who report the following medical conditions: depression (83%), nighttime heartburn (82%), diabetes (81%), cancer (79%), hypertension (79%), heart disease (78%) and/or arthritis (76%).

Adults who are less likely to experience a sleep problem include:

- Those who live in the West (63%); and
- Those who are 65 or older (59%).

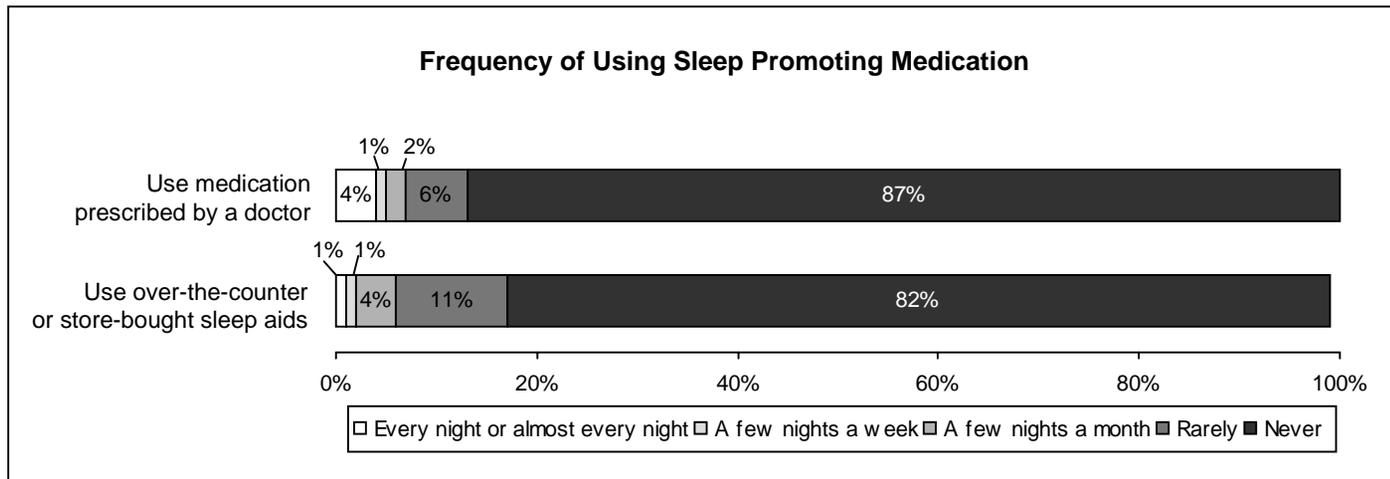


Executive Summary - Sleep Aids

Sleep Aids

More than one in ten (11%) report using prescription (6%) and/or over-the-counter (OTC) medications (6%) to help them sleep at least a few nights a month.

- Individuals reporting symptoms of medical conditions are more likely to take sleep aids, both prescription and OTC. For example, 14% of those with symptoms of depression report using prescription, and 12% report using OTC sleep aids.



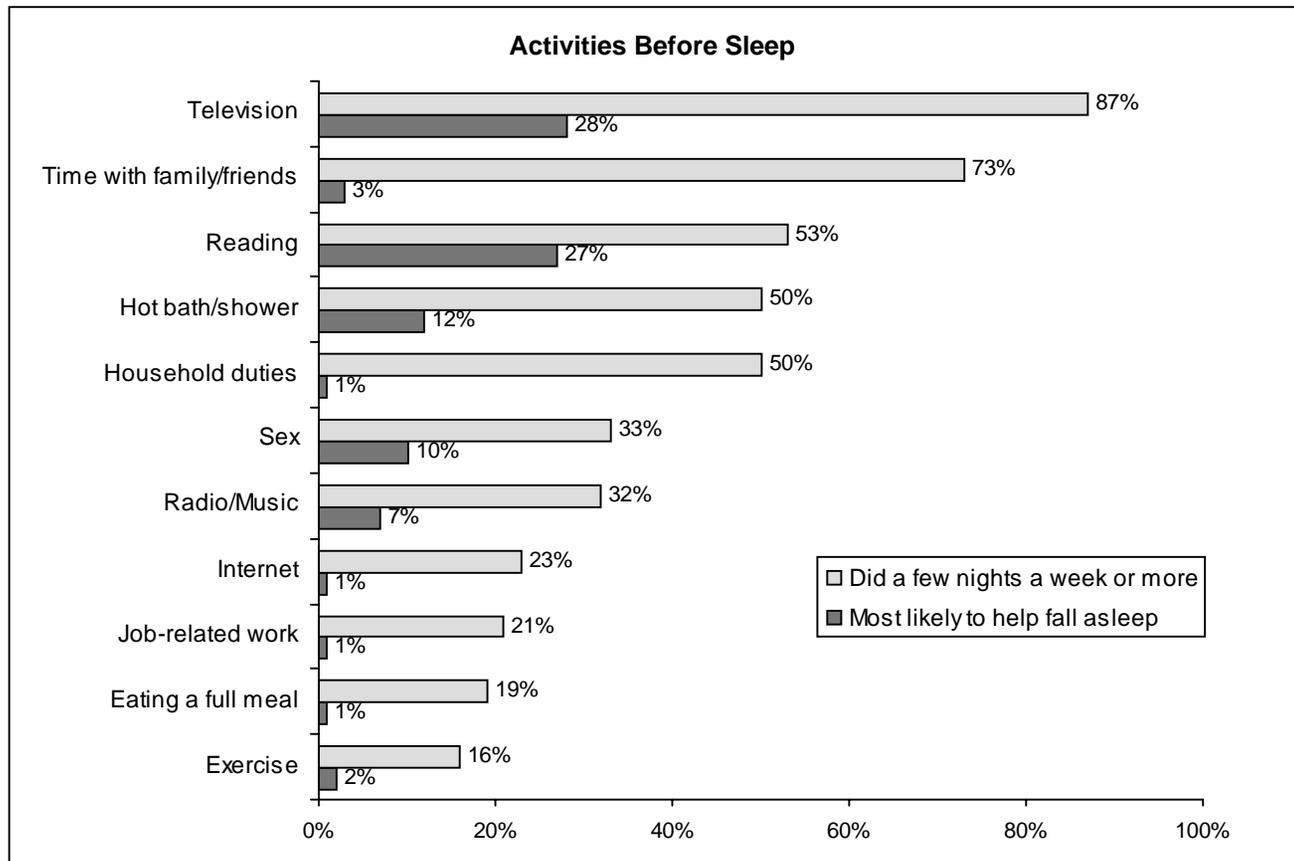
Executive Summary – Lifestyle and Sleep-Related Habits

The vast majority of U.S. adults watch TV (87%) and/or spend time with family/friends (73%) within the hour before they go to bed, at least a few nights each week. About one-half read (53%), take a hot bath/shower (50%), and/or do household duties (50%).

- Somewhat fewer have sex (33%), listen to the radio or music (32%), go on the Internet (23%), do job-related work (21%), eat a full meal (19%) and/or exercise (16%) within an hour before going to sleep.

Of these activities, adults report that watching TV (28%) and reading (27%) are most likely to help them fall asleep, followed by taking a hot bath or shower (12%), having sex (10%) and/or listening to the radio or music (7%).

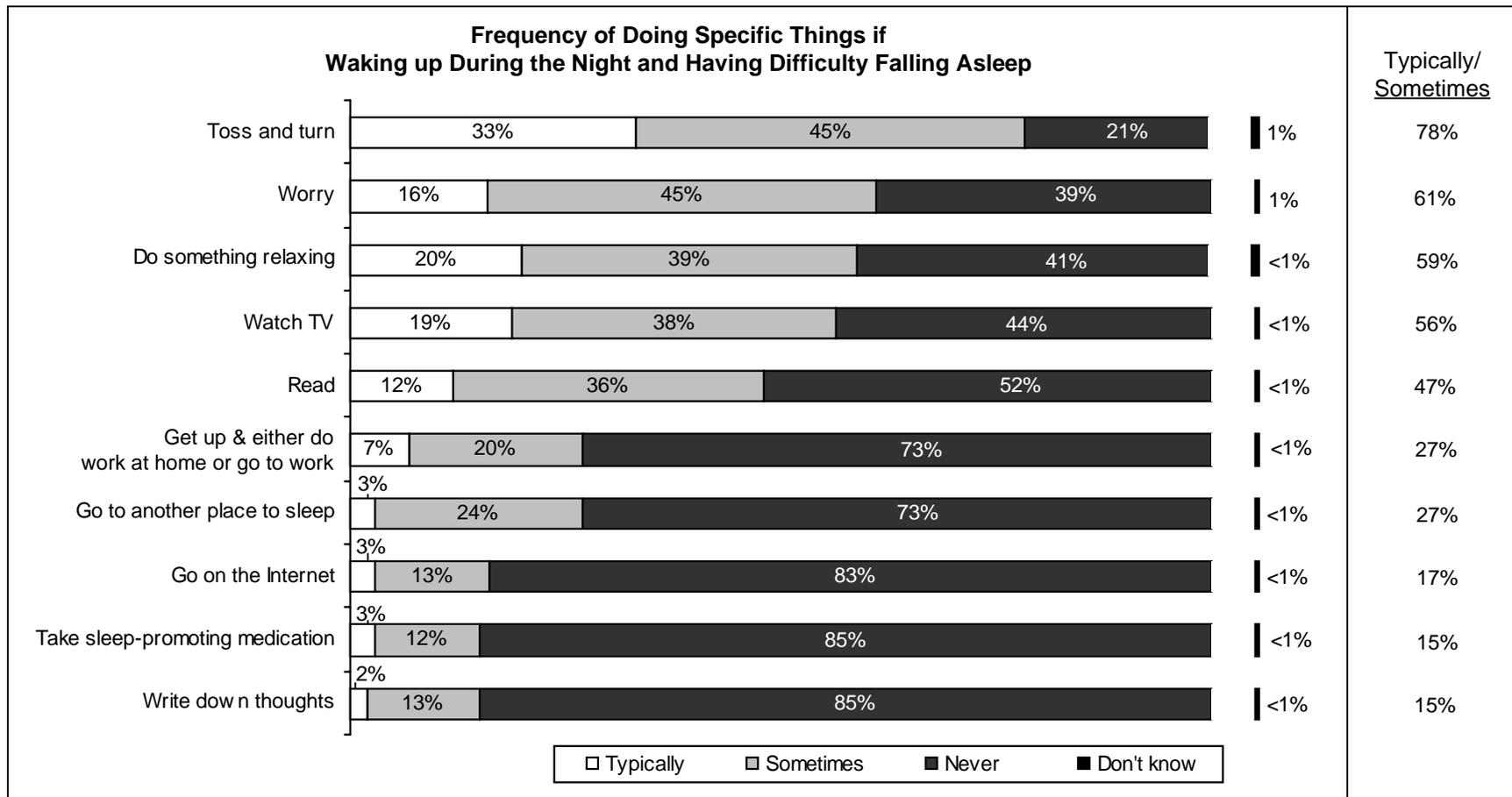
When they do go to bed, roughly six in ten adults surveyed (59%) typically sleep with another adult, while about one-third (34%) sleep alone. A few sleep with a pet (10%) or a child (5%). However, it is interesting to note that more than one in ten married adults report that they typically sleep alone (12%), and 12% of those with children say they typically sleep with a child.



Executive Summary – Lifestyle and Sleep-Related Habits (cont'd)

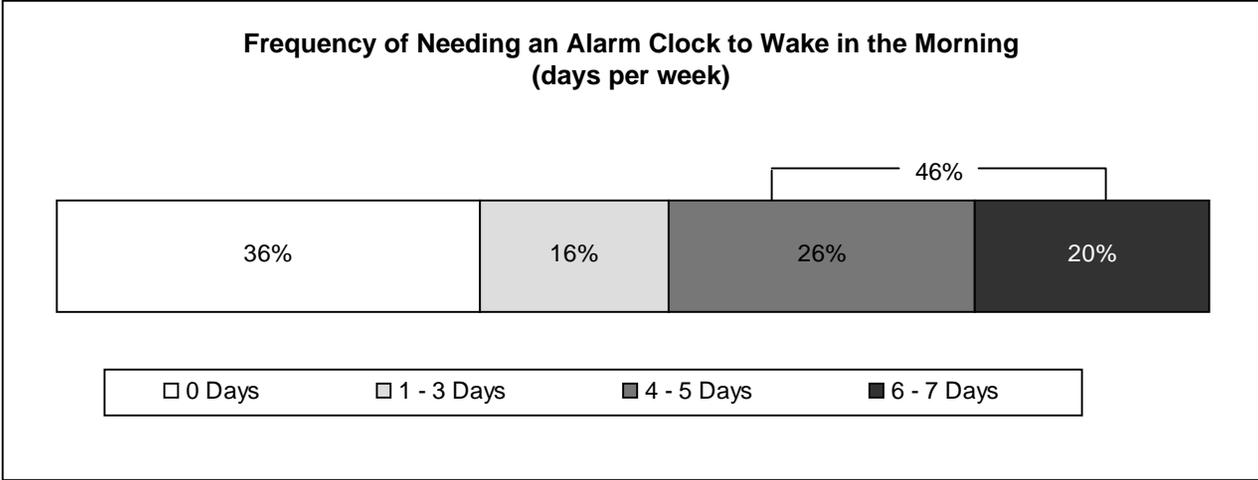
If adults wake up during the night and have difficulty sleeping, the most common reactions are to toss and turn (78%) and/or worry (61%), while about one-half or more try to remedy the situation by doing something relaxing (59%), watching TV (56%) and/or reading (47%). During the night, 27% stated that they will get up and either do work at home or go to work.

About one-fourth of adults (24%) report that “thinking about something” causes them to have difficulty sleeping at least a few nights a week. This is more prevalent among females (55% vs. 49%), those with children (57% vs. 49%), those with lower levels of marital satisfaction (61% vs. 48%) and/or shift workers (59% vs. 51%) than among their counterparts. Furthermore, the problems that keep them awake are more often related to personal issues (47%) than work issues (29%).



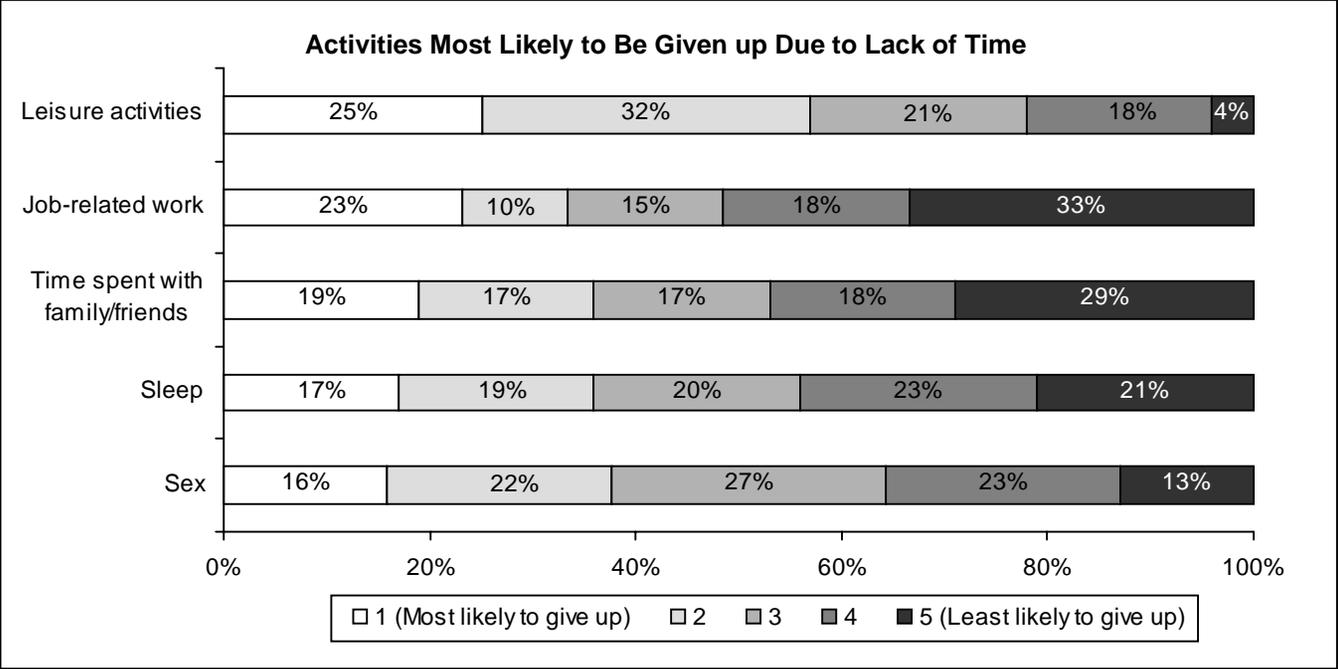
Executive Summary – Lifestyle and Sleep-Related Habits (cont'd)

Almost one-half of U.S. adults (46%) need an alarm clock to wake up four or more mornings a week.



Executive Summary – Lifestyle and Sleep-Related Habits (cont'd)

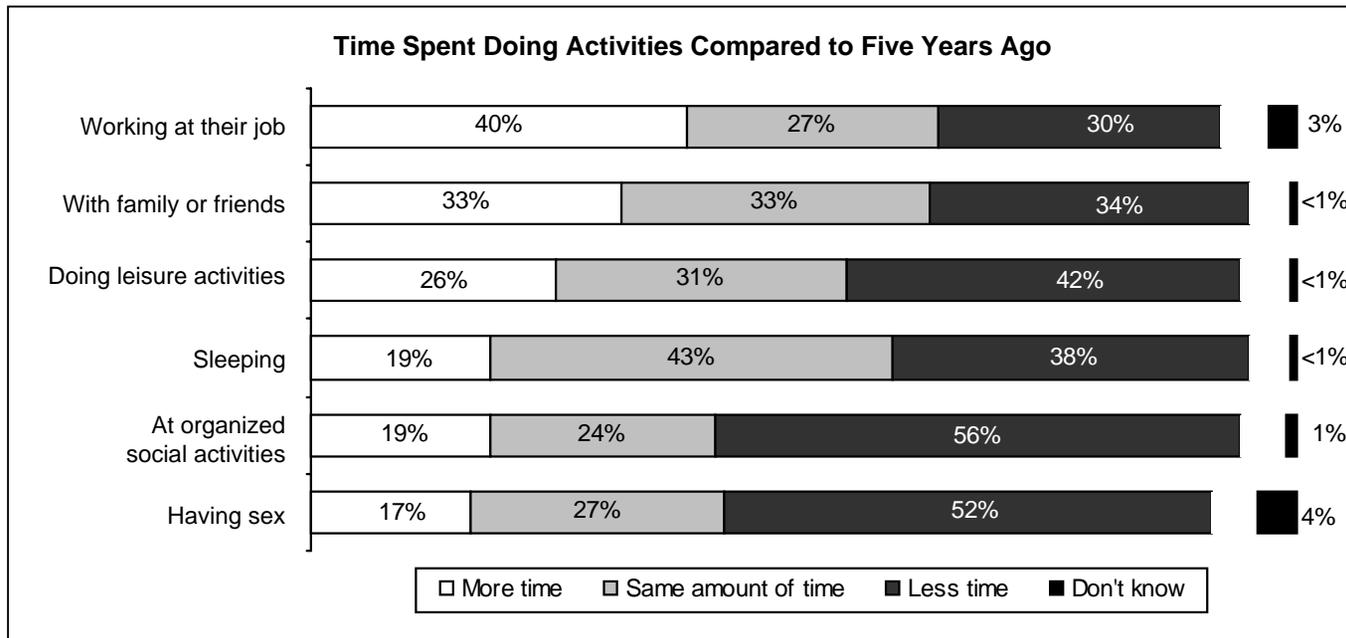
Respondents were asked to rank the activities most likely to be given up due to lack of time. Leisure activities were likely to be given up most often because there was not enough time, followed by job-related work. However, job-related work was also the least likely to be given up. Time spent with family and friends was ranked third, sleep came in fourth among respondents and having sex was least likely to be mentioned by respondents as what they were most likely to give up because of lack of time.



Executive Summary – Lifestyle and Sleep-Related Habits (cont'd)

Respondents were asked to compare the amount of time they currently spend on activities as compared to five years ago:

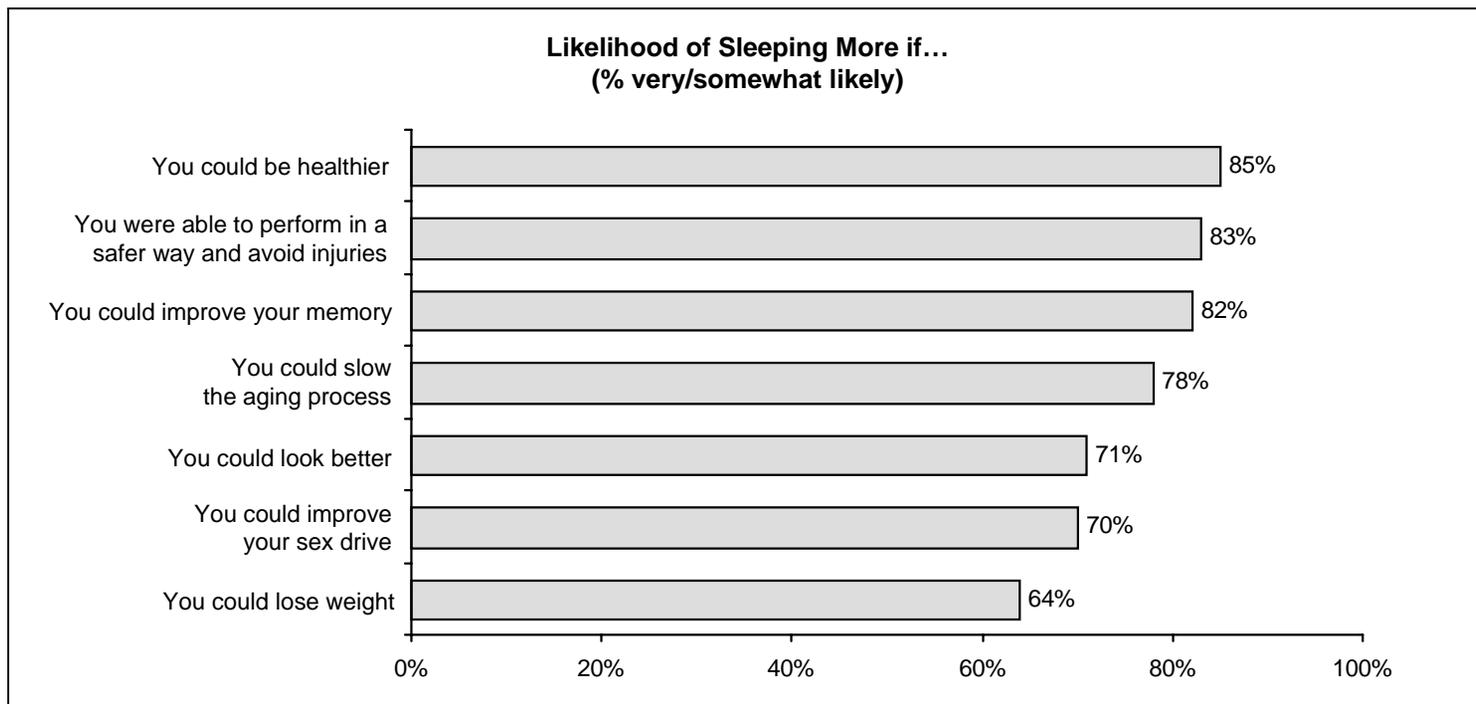
- Four in ten (40%) report that they are working more than they were five years ago, while only three in ten (30%) report that they are working less. On average, employed adults work 46 hours per week; however, more than one-third (38%) are working 50 or more hours per week.
- While many are working more than they were five years ago, there are many U.S. adults who are spending less time at organized social activities, having sex, doing leisure activities or sleeping.
- In fact, about four in ten U.S. adults (38%) state that they are spending less time sleeping than they were five years ago. In contrast, only two in ten (19%) are spending more time sleeping than five years ago.
 - Respondents who report that they are sleeping less than they did five years ago include those who are dissatisfied with their marriage (47% vs. 34%), those who work 50 hours or more per week (47% vs. 34%), shift workers (50% vs. 35%), caregivers (49% vs. 32%) and those with children (51% vs. 30%) particularly children under 6 years old (58%).



Executive Summary – Lifestyle and Sleep Related Habits (cont'd)

The survey suggests that most respondents would try to sleep more if they knew there were clear benefits. About eight in ten adults claim they would be likely to sleep more if they knew they could be healthier (85%), they would be able to perform in a safer way and avoid injuries (83%), they could improve their memory (82%) and/or they could slow the aging process (78%).

- More than six in ten would be likely to sleep more if they knew they could look better (71%), improve their sex drive (70%) and/or lose weight (64%). In fact, more than eight in ten obese adults (82%) say they would sleep more if they could lose weight.
- With the exception of being able to improve their sex drive, women are more likely than men to say they would sleep more if they were aware of most of these benefits.



Executive Summary – Lifestyle Profile

The following is a lifestyle profile of the U.S. adults surveyed:

- Americans continue to obtain less sleep than is recommended for good health, safety, and quality of life, especially during the workweek. This lifestyle choice, combined with the large number of individuals with symptoms of sleep disorders, contributes to widespread daytime sleepiness, motor vehicle accidents, medical illness, difficulties in relationships, and lowered productivity at work and at school.
- More than two-thirds (69%) are working either full-time (56%) or part-time (13%). Among these employed respondents, the majority work regular day shifts (75%). On average, employed adults work 46 hours per week; however, more than one-third (38%) are working 50 or more hours per week. In fact, 40% report that they are working more now than they did five years ago.
- Among those who are married, the vast majority give positive ratings of their marital satisfaction (83% rated as 8, 9 or 10). However, 7% give low marks for their marital satisfaction (rated as 0-5).
- About one-third (35%) report that they are a caregiver of a child or of a person who is unable to live independently. On average, they spend 43 hours per week giving care.
- Based on reported height and weight without shoes, the average body mass index (BMI) of U.S. adults is 26.2, which falls within the overweight range (25-29). In fact, more than one in five (22%) are considered obese (BMI of 30 or more).
- About one in five adults have been told by a doctor that they have hypertension or high blood pressure (22%) and/or arthritis (20%). About one in twenty have been diagnosed with diabetes (7%), heart disease (7%) and/or cancer (5%).
- More than one-fourth either frequently or sometimes experience periods of depression (28%) and/or nighttime heartburn (27%).
- During non-working hours, about one-half of the adults surveyed (51%) access the Internet at least a few days a month, with the majority (33% of all adults) doing so in the evening for an average of about one hour. Specifically, 15% of all adults say that they access the Internet every day or almost every day for at least one hour per day during non-work hours. Conversely, 40% said they never access the Internet during non-working hours.
- The majority of adults (81%) agree that technology such as cell phones, laptops, beepers and faxes save time. And, about six in ten agree that this technology makes for a better quality of life (63%) and/or makes them more productive (58%). At the same time, 43% agree that this technology adds stress to their life.