Current Application Term 11 1994

Course Syllabus: Current Application in Psychology PSY 320

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SC 122 Laboratory SC 118 & 119

Student conferences arranged by appointment, please stop by my office or telephone me to make an appointment.

Required Reading

Hobson, J.A. (1989) Seep. New York: W.H. Freeman.

Phillips, J.L. (1992). How to think about statistics. New York: W.H. Freeman.

Rosnow, R.L., & Rosnow, M. (1992). <u>Writing papers in Psychology.</u> California: Brooks/Cole Publishing Company.

Reserve readings at the library.

Course Description

The current applications course involves an integration of the practical aspects of psychological theory. As such, the reading assignments and projects entail the application of psychological theory within the context of contemporary practice. Emphasis is placed on providing the student with an opportunity to critically evaluate principles in order to increase their personal relevance and understanding of the science of psychology.

Course Requirements

- 1. Attendance and participation. We will go on two field trips.
- 2. Participation by the completion of in-class assignments and written exercises (e.g., Sample Applications in Phillips book). Reading and writing assignments sheet to be given out. Preparation to lead discussion on discussion day assignment.
- 3. APA style term paper of 15-20 pages. Topic is due 2/14/94. 1st draft is due 4/4/94.
- 4. 10 minute presentation of material from paper during class meetings 4/20-5/11. Sign-up sheet to be circulated.
- 5. Three examinations: Exam 1 2/25/94; Exam 2 4/15/94; Exam 3 the day of the final, 5/16/94, 10:30-12:30.

Course Grade

Attendance 10% 50 Assignments & Participation 25 % 125

Paper	30%	150
Presentation	10%	50
Examination	<u>25 %</u>	<u>125</u>
	100%	500 pts.

[Grading scheme: A=88tolOO%, B=75to87%, C=62to74%, D=51to61%, F=50%1]

Representative Course Topics

Sleep Medicine
Biofeedback
Hypnotherapy
Sport psychology
Behavioral Medicine
Health Psychology
Applied Cognitive
Psychophysiological Assessment
Research Methods & Techniques
Computer Use
Industrial Organizational
Diagnosis

Class Preparation

In order to get the most out of the lecture; you should read the assigned material prior to the lectures.

The lectures are designed to place topics in perspective, clarify concepts and present extensions of concepts. No attempt is made to cover all of the topics in the readings.

Classroom Policies

- 1. Tape recording of lectures is not permitted. Do not bring a tape recorder into the classroom.
- 2. Cheating, plagiarism or other forms of dishonesty are unacceptable. Such conduct will result in a failing grade on the exam or assignment.
- 3. Inadequate assignments will be returned with a request for revision(s), a date will then be stipulated when it has to be handed in again.

Psychology Department Sleep Research

Fellowship Resource Book

Prepared by Kathy Sexton-Radek, Ph.D. 9/97

Aim of Fellowship

This fellowship has been established as an effort to provide advanced psychology students with a sleep medicine experience. The fellowship entails supervised clinical activities and research work. A gift to the college from G. D. Searle will support the fellowship of two stipends (\$500) that are to be awarded to two advanced psychology majors selected by Dr. Sexton-Radek.

All training will be supervised by Dr. Sexton-Radek, a licensed clinical psychologist with twelve years of Sleep Medicine clinical experience. Dr. Freebeck is a Board Certified Sleep Physician who will lead the team of specialists. Thus, we will function as treatment team specialists in partnership with Dr. Freebeck. The training will be held at Suburban Pulmonary Associates and Hinsdale Hospital Sleep Clinic. Hinsdale Hospital is one of thirteen Sleep Clinics in Illinois accredited by the American Sleep Disorders Association.

Learning Objectives

- Acquire knowledge and learn skills of dispersing information on nocturnal sleep cycles.
- Develop an understanding of the operation of polysomnographic assessment of sleep.
- Assist in administering and scoring personality measures, self-report measures, and self-monitoring reports.
- Enhance the students' understanding of sleep disorders and impairments of the sleep wake cycle.
- Proficiently and accurately score and code various types of measures, data entry of research data into the computer files.
- Develop the ability to work with sensitive data and information.
- Practice and develop skills of interacting with individuals that are receiving services.
- Learn descriptively about treatments used in sleep medicine such as biofeedback, stimulus control, sleep restriction and sleep hygiene.
- Develop an awareness to recognize when further psychological treatment is necessary.

Insomnia Clinic

Step 1 Dr. Freebeck sees patient for medical exam and history.

If needed, referral made to Psychology.

Step 2 Explanation of Psychological Testing

Patient takes MCMI-111 on the computer.

Optional - Patients takes MMPI-2 paper and pencil version questions 1-325.

Step 3 Test data is saved and a copy printed out for Dr. Sexton-Radek.

Patient is given information about:

Normal Sleep Cycle (hand out) Sleep Irregularities (hand out) Sleep Hygiene (hand out)

Step 4 Follow-up appointment made with Dr. Sexton-Radek for the purpose of

reviewing test findings.

Report is written and placed in file.

Some Facts About Sleep

The study of sleep began in 1935 with the measurement of electrical patterns of the brain during sleep. Rapid eye movement sleep was discovered in 1953. A technique called polysomnography allows sleep researchers to monitor electrophysiologic activity continuously during sleep. The electroencephalogram (EEG), electro-oculogram (EOG), the electromyogram (EMG) and the electrocardiogram recordings of respiration and blood oxygen saturation are measured in a polysomnographic study. In 1968, the multiple tracings on some 1,500 feet of paper were defined into standard criteria. These criteria are used to date to determine sleep stages.

Non-REM sleep is divided into stages 1, 2, 3, and 4. These stages vary from light to very deep sleep. EEG wave patterns correspondingly change from fast/weak peaks to slow/strong waves. The first sleep spindle or K-complex of stage 2 is defined as the start of sleep. Rapid eye movement, muscle atonement and physiological brain changes characterize this type of sleep. Humans require REM sleep.

During sleep, individuals move back and forth among the four stages of non-REM sleep with intermittent awakenings.

Typical Pattern Cycle

[Lights out]	
5-15 minutes	To fall asleep
1-5 minutes	Passing through Stage 1
20 minutes	Stage 2
15-30 minutes	Enters Delta sleep
30-60 minutes	Delta sleep, then ascends to Stage 2 first REM period

Have about 4-6 cycles per night

Delta Sleep first half of night

About 6 REM per night; 4 during second half of the night

REM period lengthen in second half of the night to 20-30 minutes

Sleep Disorders

Diagnostic criteria for 307.42 Primary Insomnia

- A. The predominant complaint is difficulty initiating or maintaining sleep, or non-restorative sleep, for at least 1 month.
- B. The sleep disturbance (or associated daytime fatigue) causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The sleep disturbance does not occur exclusively during the course of Narcolepsy, Breathing-Related Sleep disorder, Circadian Rhythm Sleep Disorder, or a Parasomnia.
- D. The disturbance does not occur exclusively during the course of another mental disorder (e.g., Major Depressive Disorder, Generalized Anxiety Disorder, and a delirium).
- E. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

The Explanation of Psychological Testing

- ✓ Explain clearly and calmly to the patient that their doctor has requested additional information about them.
- ✓ It is thought that a clear understanding of behavior during wake day and importantly, their perception of their day's activities, style of interacting with others and social encounters will be helpful in understanding the nature of their sleep difficulty.
- ✓ The testing is confidential; it will take 20-40 minutes of their time.
- ✓ They will meet in a follow-up appointment with Dr. Sexton-Radek to receive feedback on the test results.
- ✓ During the testing, observation data and comments will be recorded. Dr. Sexton-Radek supervises all of my work.
- ✓ Give them a copy of the brochure.

Insomnia

Insomnia is not a disease, but is a subjective complaint of difficulty falling asleep, staying asleep, or just not seeming to get enough good sleep. Insomnia has many causes. If you suffer from insomnia, you are not alone. It is believed that serious insomnia affects up to one-fifth of the American population.

As we age, sleep becomes lighter and more easily disrupted. It is not uncommon for a 60-year-old person to awaken 6 to 10 times per night. In fact, by the time we are 60, we may have lost most, if not all, of our deep sleep. Deep sleep is believed to be important for restoring our body reserves such as energy, muscle, bones, and even our immune system used for fighting infections.

Sleeping pills typically increase our light sleep, but does nothing for restoring the essential deep sleep we so often lack. Furthermore, sleeping pills do not treat the cause for having insomnia. Sleeping pills may also be addictive, especially when used for long periods of time without education and guidelines for establishing good sleep habits. These are just a few of the many reasons sleeping pills should be used cautiously for the treatment of insomnia.

Realize that the most important aspect of managing insomnia is identifying the cause. Some of the ore common causes are as follows:

1. <u>Medical Illness:</u> Several medical conditions can result in sleeping difficulties. A few of these conditions are listed below:

Asthma Gastric Reflux Mitral Valve Prolapse
Dementia Heart Failure Parkinson's Disease
Emphysema Kidney Failure Thyroid Disease

- 2. <u>Chronic Pain Syndrome</u>: Pain, related to problems such as arthritis, back pain, headaches, and injuries, are a common cause of insomnia.
- 3. <u>Medications:</u> Physician prescribed and over the counter medications are common causes of sleep problems. Some are as follows:

Antidepressants Decongestants Steroids
Asthma medications Diet pills Thyroid Pills

Emphysema and Blood Pressure medications

- 4. <u>Psychiatric Problems:</u> It is especially important to realize that although depression and anxiety are common causes of severe insomnia, it can also be the cause of these psychological problems.
- 5. <u>Caffeine Products:</u> Food and drinks that contain caffeine include coffee, tea, soda products such as Coke or Pepsi, and chocolates.
- 6. <u>Irregular Sleep Patterns:</u> Waking up and going to sleep at varying times, as well as taking long naps, can cause insomnia. Sleep difficulties are very common for people who work the night shifts or changing shifts, and for people who frequently travel across time zones.
- 7. <u>Alcohol:</u> Although alcohol helps some people fall asleep, it typically results in awakenings with unrefreshed sleep. Alcohol also significantly disrupts your quality of sleep.
 - 8. Nicotine: The nicotine in cigarettes and chewing tobacco may result in insomnia.
- 9. <u>Exercise too close to bedtime</u>: Vigorous exercise before bedtime may result in difficulty falling asleep.

- 10. <u>Uncomfortable or Noisy Bedroom:</u> Disturbances such as snoring or restless bed partner, noises from the air-conditioning and heating systems, clocks, children, traffic, trains, television and radio, too much light, and uncomfortable room temperatures can disrupt your sleep.
- 11. <u>Social/Psychological Stresses:</u> Work related stresses, financial problems, marital discord, children, and the many other stresses we experience on a daily basis can be major factors relating to short or long term sleep problems.
- 12. <u>Eating before bedtime</u>: Eating heavy meals close to bedtime, in addition to causing heartburn and weight gain, may result in difficulty falling asleep.
- 13. <u>Periodic Leg Movements:</u> Rhythmic repetitive kicking of your legs, ankles, or arms may cause recurrent awakenings after falling asleep.
- 14. <u>Restless Leg Syndrome:</u> A strange, often uncomfortable, sensation of your legs or arms can cause great difficulty in falling asleep.
- 15. <u>Sleep-Apnea/Snoring:</u> Heavy snoring and grunting, choking, or cessation of breathing while asleep can be a very serious cause of insomnia.

Insomnia can cause problems related to handling difficult situations, completing tasks, memory impairments, mood swings, and marital discord. When associated with daytime sleepiness, persons with insomnia may have an increased risk of motor vehicle accidents. People sleeping less than 6 hours per night versus 7 to 8 hours per night have a higher death rate. Insomnia needs to be taken seriously.

If you suffer from insomnia that does not resolve by following sleep hygiene guidelines or correcting some of the above-mentioned causes, consider addressing your problem with a physician experienced in sleep disorder medicine. This is especially important if you are currently using medications to help you sleep. Relief from insomnia is best accomplished by identifying and treating the cause.