Psychologist studies sleep, learn relationship

Can a person, while awake, learn a simple task, such as breathing deeply at the sound of a tone, and then perform that task while asleep? That is the question a research team at Bowling Green and the University of Southern Mississippi is trying to answer. And if that answer is yes, researchers and doctors will be another step closer to finding relief for millions of Americans who suffer from certain types of sleep disorders.

Pietro Badia, psychology, and John Harsh, a professor at the University of Southern Mississippi, and former Bowling Green graduate student, have received a two-year, $137,000 grant from the National Institute of Health to conduct the research. According to Dr. Badia, the research has both a theoretical and a practical nature. “From a theoretical standpoint, we are trying to gain insight into whether learning while awake will transfer to the sleeping state,” he added.

Although humans spend almost one-third of their time asleep, researchers are only now beginning to investigate why humans sleep and to what extent they are able to process information while asleep. By asking subjects in his experiments to learn to alter their breathing patterns at the sound of a tone and then measuring their reactions when that tone is played while they are asleep, Dr. Badia said he hopes to understand the types of information the brain can and will process during sleep.

Dr. Badia is quick to point out that his research is in no way related to the idea that people can learn complex information, such as a foreign language, while asleep—a concept which has no validity in scientific research. His findings, however, could be helpful to the millions of Americans who suffer from two types of breathing irregularities while asleep.

The first type of disorder is labeled sleep apnea. For a variety of reasons, persons who suffer from this condition “forget” to breathe while asleep. When the person stops breathing, the oxygen content of the blood drops and when it reaches a sufficiently low level, the body is aroused to a near-awakening and the person begins to breath again.

In the second type of disorder, the same problem occurs when a person’s breathing is too shallow. In both cases, the victims are normal in every other way.

Sleep apnea episodes may last from 10 seconds to more than two minutes, and while the person is rarely aware of them, the awakenings caused by these episodes can occur hundreds of times each night. In its worst form, a person suffering from sleep apnea sleeps only a few minutes at a time and is constantly tired to the point that he may not be able to function normally, including holding down a job. These breathing irregularities increase with age and are more common in individuals who are overweight or snore. Sleeping pills and alcohol can compound the problem, and too often individuals wrongly attribute their excessive daytime sleepiness to insomnia and therefore make the problem worse by taking sedatives at night.

More than one million Americans suffer more than 10 or more attacks in an hour of sleep and are considered severe sleep apnea victims. While apnea victims rarely die in their sleep (Sudden Infant Death Syndrome may be related to sleep apnea), breathing irregularities can cause increases in blood pressure and irregular heart rhythms.

To date, the most popular means of treating these irregularities have been drugs and surgery, but these are often ineffective. The research being conducted by Dr. Badia may offer a third alternative. In his first experiment, involving 30 volunteers, Dr. Badia and his team instructed the volunteers to breathe deeply at the sound of a certain tone.

The subjects were then wired into a number of monitors which measured a variety of body functions including respiration, brain wave activity, heart rate, movements, muscle tension, and the subjects were asked to take two-hour naps.

During the naps, the researchers played back the tone periodically to see if the subjects would respond to the tone—yet not be awakened.

Initial results were positive, and the experiment has been expanded. Now, volunteers come to the University’s sleep laboratory and spend the night being monitored and tested.

Before the research grant expires, Dr. Badia and his team plan to conduct a total of five experiments dealing with behavioral control of respiration during sleep. Several parts of the experiments will be conducted at the University of Southern Mississippi, and it is hoped that the data from two diverse geographical regions will add insight into other factors which might be involved in incidents of breathing irregularities during sleep.

Dr. Badia said this behavioral approach to sleep apnea can be very helpful, although several major questions still need to be answered. One of the most important questions is whether “normal” sleepers respond to the tests in the same way as apnea victims. If successful, the theory and technique could be expanded to other sleep problems, including persons who grind their teeth, have muscle spasms, and other similar problems while asleep.

Other members of the Bowling Green research team are doctoral candidate Allen Klempert, and senior Alicia Dolce.

Enrollment decrease ‘on target’

The University’s official main campus fall quarter enrollment has been set at 17,080 students, down 579 from a year ago.

That decrease is “right on target,” according to University officials, who last January announced plans to take the size of the entering freshman class as part of a three-year plan to comply with a mandated enrollment ceiling.

Bowling Green, since 1969, has been limited to 15,000 full-time equivalent students.

Richard Eakin, executive vice provost for planning and budgeting, said this fall’s FTE total exceeded 15,336, compared to 16,788 a year ago.

The enrollment decrease also has eased campus housing problems.

Robert Rudd, director of housing, said this fall 8,000 students are living in residence units designed to house 8,000.

Rudd said on-campus housing is popular with students and noted that about 350 students who commute to campus or live off-campus apartments are currently on a waiting list for campus housing. He does not foresee Bowling Green having empty rooms in residence halls as it continues its planned enrollment reduction.

Of the 17,080 students on campus this fall, 1,974 are graduate students and 19,016 are undergraduates. On the undergraduate level there are 3,063 seniors, 3,066 juniors, 3,574 sophomores and 5,112 freshmen. The undergraduate total also includes 312 unclassified students. Of the freshmen, 3,172 entered the University for the first time.

The College of Business Administration is the largest undergraduate college, with 4,639 students, followed by the College of Arts and Sciences with 4,057 students and the College of Education, which has 2,788.

Enrollment in the College of Health and Community Services is 1,400 and the College of Musical Arts has 422 students. Both colleges showed an increase in enrollment compared to a year ago.

Another 348 students with undecided majors are enrolled in the University Division.

The Firelands College has a fall quarter headcount enrollment of 3,185, up from 3,175 a year ago. That figure, which sets a fall quarter enrollment record for the Huron campus, includes 265 new freshmen and 55 new transfer students.
Academic Council

Academic Council on Nov. 4 approved revisions in the Graduate Bulletin necessitated by a quarterly conversion to an early semester calendar.

Under the semester calendar, master's degree programs will require a maximum of 36 semester hours of graduate course work, compared to the present 48 hours. At least 18 of those must be in 500-level or higher course work, and 24 graduate course hours must be earned at Bowling Green.

Revisions in the thesis and examination options of master's degree programs also were modified to reflect the semester change. All revisions were previously approved by the Graduate Council because some are not direct mathematical conversions.

Acting Provost Etterksen also announced to Council members that Lester Barber, English, has been appointed to chair a subcommittee which will study program duplication as the University converts to the semester calendar. Members of the subcommittee are Richard Bowers, head of the division of recreation; Bartley Brennan, legal studies, sociology, College of Arts and Sciences, and Mary Miles, College of Health and Community Services.

It is expected that recommendations of the subcommittee, appointed at the request of the Academic Council, will be ready for Academic Council's consideration in December. Ramona Cormier, associate provost, reported to the Council on preparation for the University's evaluation by the North Central Association.

Dr. Cormier summarized the criteria used in the preparation of materials being prepared, including a University mission statement, a chart showing departments since "five areas; goals statements for each of the five areas; questionnaires for each unit, and a contract staff resume form.

The questionnaire is to be sent out to all faculty, and the Council also discussed nine recommendations for improving articulation between secondary and higher education. The most important recommendations are part of a report submitted by the Advisory Committee on Articulation Between Secondary Education and Ohio Colleges, appointed last year by the Board of Regents and State Board of Education. The report outlines a college preparatory curriculum for high school students which, it is hoped, will improve the academic preparation of coming college students and reduce the need for remedial courses at the collegiate level.

Academic Council adopted in principle the recommendations of the Commission and asked that further study be given the feasibility of implementing them.

Reactions to the recommendations drafted by the University's departments of English, mathematics and general education, speech communication, and educational curriculum leadership instruction were distributed to Council members.

Dr. Etterksen also read a policy statement approved by Kent State University in response to the College evaluation report. The Kent statement established provisions for advancements, such as complete program and seminar proposals or statements for conditional admission.

At the next meeting of Academic Council at 1:30 p.m. Wednesday (Nov. 18) in the Town Room of the Union, members will discuss the specific 18 recommendations of the Commission with the ultimate goal of proposing a statement on conditional and provisional admission to Bowling Green.

Writing program trains technology translators

Graduate students are also required to take a seminar in each of five major projects. The projects are frequently used by outside agencies.

The program depends heavily on Dr. Coggin, some of whom are alumni, who come to campus to conduct workshops and seminars. The students and council are another means by which the program can communicate with the "outside world."

"I wish," Dr. Coggin said of the council. "The members are people we can call upon when we have questions about how we can better serve students."

Dr. Coggin himself keeps in touch with the profession by serving as a consultant wherever he can find time in his busy campus schedule. Twenty-five graduate students are currently enrolled in the program, which draws inquiries from professional students across the country.

Students seek to enrolment in a manageable level. We get enough requests that we can stress quality," said Dr. Coggin. "So far our graduates have had a 100 percent employment rate. We need to expect that to change."

Because current emphasis is on the job market has been so strong, the demand for students is so great that Industries are actually calling us," he said.

As the University's financial situation improves, Dr. Coggin would like to see the program use more of the funds for technical writers. The occupation is technical writing, and eventually he would like to have a complete course for all technical writers in the computer science field, so that Industries are actually calling us.

Benefits are balt

More students choose ROTC

Reserve Officer Training Corps programs at the University have come a long way since their enrolling hit bottom during the last years of the Vietnam War. ROTC at Bowling Green is 346 Army and Air Force ROTC cadets at Bowling Green, and has shown an increase of over 100 of those.

Even more significant, however, according to several military instructors, is the proportionately larger increase among sophomores. Sophomores enrolled: 349 compared to 107 juniors and seniors.

Gus Fyfneyson and Patrick Carroll, Army ROTC, cite a number of reasons for the upturn in enrollment, including greater recruitment efforts, increased patriotism among students, the tight job market, decreases in the number of available student loans, a 14.3 percent increase in military salaries, and increases in the number of military scholarships.

Bowling Green's ROTC programs made 36 full scholarships available to students. Those scholarships cover tuition, books and fees and provide a $100 a month, tax-free salary during the academic year. Non-scholarship cadets also receive the salary allowance during the academic year, and army seniors also receive the salary allowance during the academic year.

Army cadets are required to enroll in two credit hours of military courses during their first two years at the University and seven to eight hours during their junior and senior years. Upon completion of their junior years, Army cadets are sent to Fort Lewis, Washington, for six weeks. During that time they are paid at half the salary rate of a second lieutenant (now $7,000 a year).

Following graduation, Army ROTC students may opt for three years of active duty and three years in the reserve to spend six years in the reserve.

Air Force cadets begin service-oriented training during the freshman year, when they are enrolled in two hours of academic and four hours of leadership instruction each week. Those who opt for a four-year ROTC program complete four weeks of summer training between the sophomore and junior years. Students who opt for an ROTC program are required to participate in six weeks of summer training each year.

A publication is a government agency that is known to reflect the information supplied by the population, and locating a record in the data base is easier. The search keys used to identify and locate publications can also permit the researcher to gain the bibliographic context of a publication.

The data base is more timely than printed sources and provides more access points than do most printed bibliographic tools.

The data base record contains basically the same information found in the libraries' card catalogs: author, title, edition, place of publication, publisher, date of publication and a physical description of the book (number of pages, size, whether or not the book has an index). Other important notes may be included. The record that describes a book that own the book are listed by geographical location in code. A listing of the title is available at the terminal.

The OCLC record retrieved at the public-use terminal is a master record which does not reflect local information such as call number, subject headings or the parts, years, volume numbers of the book, such as "Brown's Green own. The master record also contains the bibliographic records of many libraries that own the book and provide circulation information.

Members of the OCLC include libraries at Ohio State, Cambridge, New Mexico, Cornell, University of Michigan, Michigan State, Canada, England, Finland and West Germany. The OCLC network includes 148 libraries. The membership: academic, school, public, corporate, business and other special libraries.

The catalog is available 8 a.m. to 10 p.m. daily, except Sunday.

From the Library . . .

Terminal puts facts at your fingertips

Access to bibliographic information stored in the Online Computer Library Center data base is now available to the public in the main Library.

OCLC, a national, organization, and 400 bibliographic search systems, is now available in the OCLC Center data base on terminals in the Library. OCLC is a national, organization, and 400 bibliographic search systems, is now available in the OCLC Center data base on terminals in the Library.

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Faculty & Staff

Publications

Elizabeth R. Allgeier, psychology, "The Influence of an Analogical Organization on People's Understanding of Heterosexual Relations" in "Sex Roles," Vol. 7, No. 1, 1981. Dr. Allgeier also co-authored with A.R. Alverno and T. Verhoeven, "Behavioral, Social, and Emotional Consequences of Sexual Intercourse," published in "J. Sex Marital Ther." 1981. Other publications, both currently in press, are "Identification of Gender Differences in Preference for Predictability," and "Gender Differences and Related Behavior in Childhood and Adolescence," in "J. Sex Marital Ther.", both January and July 1981. Faculty review committees of the Graduate College have signed the electronic computer after reviewing the manuscript. (A.R. Alverno, T. Verhoeven, and E. Allgeier have reviewed this manuscript.)


Kenneth Johnson, geology, professor and program coordinator for the Energy and Environmental Science Program, and the editor of "Geobotany and Science." In "American Geologist," Vol. 11, No. 1, 1980. Dr. Johnson is currently a member of the editorial board of "Science."


James Kerpen, student, geology, is the editor of "The Journal of the American Philosophical Society." In "American Philosophical Society," Vol. 119, No. 2, 1980. Dr. Kerpen is currently completing his fourth year as a member of the editorial board of "Science."


More than 1,000 men, women, and boys participated in the Oct. 25 Falcon Fun Run, which was designed to raise funds for the athletic department’s general fund. The runners collected pledges totaling more than $45,000. Half of the funds will be collected will go to the athletic department, with the other half going to the various organizations that solicited pledges for the run, held in perfect weather on Whittaker Track. The event was considered to be so successful that the Falcon Fun Run will be held again next fall.

News in Review

Symphony issues special invitation

Students, faculty and staff will be the special guests at a Toledo

Employment Opportunities

CLASSIFIED EMPLOYMENT OPPORTUNITIES

NEW VACANCIES

No new vacancies were received by the Office of Personnel Support Services.

CONTINUED VACANCIES

Posting Expiration Date: Monday, Nov. 16

11-16-1 Library Media Technical Assistant 2
Pay Range 26 Library/Cataloging
Permanent part-time

11-16-2 Secretary 1
Pay Range 26 Firelands Campus
Temporary part-time
(Paid from external funds)

11-16-3 Typist
Pay Range 4 Special Education
Temporary part-time grant funded
(Paid from external funds)

FACULTY VACANCIES

5-6-A Director of El Facality
Biological Sciences (2-2332)
Feb. 1, 1982

10-19-B Assistant/Associate Professor
Psychology (2-3301)
Dec. 31, 1981

10-19-C Assistant/Associate Professor
Geology (2-2366)
Extended to Dec. 1, 1981

10-19-D Assistant/Associate Professor
Computer Science (2-2337)
Dec. 15, 1981

11-9-E Assistant Professor
Chemistry (2-2031)
Jan. 15, 1982

11-9-F Instructor/Asst. Professor
Textiles and Clothing
Home Economics (2-2206)
Jan. 31, 1982

CONTRACT POSITIONS AVAILABLE

11-9-A Videographer
TV Services
WGBU-TV (2-0121)
Nov. 20, 1981

SYMPHONY

Symphony concert at 8:30 p.m. Friday (Nov. 20) in the Masonic Auditorium. Yoel Zaltzouk, director, who is a graduate of the University this quarter, will lead the orchestra in a performance of works by Dvorak, Brahms and Verdi.

Guest artist Arto Noras, Finnish cellist, will perform Dvorak's "Concerto in B minor for Cello and Orchestra." Special to the program is the local premiere of Edgar Varese's "Eclips," a short piece composed in 1923 which uses percussion instruments to obtain an array of sounds ranging from a siren to a lion's roar.

Following the program, Zaltzouk and Noras will join the University symphony for a private wine and cheese reception.

Tickets for the University night at the symphony can still be reserved at the special price of $3.50 per person by sending your name, address and telephone number to the Masonic Auditorium, PO Box 6259, Toledo 43614. Tickets can be picked up at the box office before 6:15 p.m. the night of the performance.

Staff to receive ID cards Friday

- All faculty, contract and classified staff should receive new University ID cards Friday (Nov. 20).
- After that date, the new brown and white cards will be the only form of identification accepted by University offices and departments as proof of employment.
- The cards also must be shown when checking a book out of the University Library.

Holiday change

Monitor schedule

Because of the Thanksgiving holiday, there will be no MONITOR published on Monday, Nov. 30. The deadline for submission of materials for publication in the next issue, Nov. 23, is 5 p.m. Tuesday, Nov. 17, information which is received after that date will be held for the Dec. 7 issue.

Personnel support services will accept job postings for the Nov. 23 issue until noon Thursday (Nov. 19).

TELCOM tip can save money

Users of the TELCOM system are reminded that credit card, collect and third-party billed calls should not be made through TELCOM.

Cards of the type should be placed by dialing zero, the area code and the phone number. The Bowling Green operator will intercept and assist with the call.

In the event an operator-assisted call is placed through TELCOM (dailing "7"), charges are assessed twice—both to the budget and cost associated with the TELCOM identification number used to place the call and to the off-campus number named through the credit card, collect or third-party billed call.

Foundation hosts annual meeting

Fred H. Deering, state representative from the 84th district, updated school finance legislation at the annual meeting of the Northwest Ohio Educational Television Foundation Oct. 21 in the studios of WGPU-TV.

A tour of the station's new addition which houses the Northwest Ohio Media Center, a duplicating center and the instructional television services utilized by the Foundation, was included on the agenda for the 72 area school officials who attended.

Equipment offered for campus sale

The following equipment is for sale to University departments only:
- Four-channel physiological monitoring and data collecting system, including an Antecgon 1000c thermograph, G&W PW420 heart rate monitor and J&J 560W electromyograph. The system can be sold as a unit or in parts.
- Heath one-channel strip chart recorder, Model SR-204.
- Contact Bob Tenker, educational foundations and inquiries, 372-0151, Ext. 322, for more information.

Department hosts division meetings

The department of geography hosted the annual meeting of the East Lakes Division of the Association of American Geographers Nov. 6-7.

George Klahn, University of Michigan, who is the outgoing president of the division, delivered the keynote address on "The Image of Geography."