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# Annual Report INSTITUTE OF BEHAVIORAL RESEARCH

Institute of Behavioral Research Texas Christian University Fort Worth, Texas

# 1998 Annual Report

"Commemorating 36 Years of Social Science Research"

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Institute of Behavioral Research Texas Christian University P.O. Box 298740 Fort Worth, TX 76129 Phone: 817/257-7226

> Fax: 817/257-7290 E-mail: ibr@tcu.edu IBR Web site: www.ibr.tcu.edu DATOS Web site: www.datos.org

# About IBR

#### Mission

To evaluate and improve the effectiveness of programs for reducing drug abuse and related problems.

# Objectives

A multidisciplinary research approach encourages scientists from a variety of academic fields to apply their knowledge to problems that have broad societal implications. Bringing together qualified and dedicated research scientists to collaborate in a supportive environment promotes an exciting and productive research atmosphere. Collectively, these efforts are intended to

- 1) generate knowledge that informs important policy decisions in the private and public sectors,
- 2) provide critical methodological and substantive research training for graduate students,
- 3) help IBR scientists and staff achieve their professional and personal potential, and 4) raise the research reputation and visibility of Texas Christian University (TCU) through professional publications.

Bringing together qualified and dedicated research scientists to collaborate in a supportive environment promotes an exciting and productive research atmosphere.

### Focus

For many years, research staff of the Institute of Behavioral Research (IBR) have given special attention to evaluations of substance abuse and behavioral interventions provided by community-based programs, including prevention and treatment, and to the study of long-term addiction careers. Emphasis is given to naturalistic designs for studies in real-world settings and the use of advanced multivariate methodologies. Research interests have broadened in recent years to include related areas of significant public concern, such as drug abuse treatment for criminal justice populations as well as the spread of AIDS among injecting drug users and methods for reducing these and other high-risk behaviors. Other areas of interest include drug use in the workplace, organizational effectiveness, and work performance in the private and public sector.

# History

The IBR was organized in 1962 by Dr. Saul B. Sells who served as its Director until his retirement. Dr. D. Dwayne Simpson, a member of the IBR faculty since 1970, became its new Director in 1982 when he temporarily moved the Institute to Texas A&M University. Reestablished at TCU in 1989, the IBR's mission and role in the University has remained essentially unchanged for more than three decades. In 1996, it was designated as a "Center of Excellence" at TCU. The research program provides valuable training opportunities in graduate and postgraduate education, contributing to the success of many former students and staff members in academic and applied research leadership positions today.

# Organization

Although the Institute operates as a separate academic unit of the University, through common research training goals and interests it is closely affiliated with the Department of Psychology and other academic departments. Research Scientists in the IBR function much like other University faculty members; they may hold Adjunct Professor and Graduate Faculty appoint-

ments in the psychology department, serve on student thesis and dissertation committees, and teach formal courses when time and opportunities permit. Their special skills in advanced data management and multivariate analytic techniques provide the foundations for graduate training in evaluation research at TCU.

#### **Facilities**

Located on the East Campus of Texas Christian University, the IBR houses research faculty, staff, and student offices in a building that is convenient to the Department of Psychology. It contains its own library of selected books and monographs as well as a collection of over 25 journals central to its research mission. A large network of microcomputers meets the needs of research and training applications and is linked to the main University computer center and the World Wide Web. TCU's Mary Couts Burnett Library is located in an adjacent building.

# Graduate Student Training Opportunities

Research training is an integral part of IBR's commitment to the conduct of quality behavioral research. Graduate and postgraduate training is carried out in close collaboration with the Department of Psychology and other departments at TCU. Since IBR does not award academic degrees, the student must meet all requirements of the department in which a degree is to be awarded.

IBR's training program emphasizes:

- Evaluation of drug abuse interventions
- Formulating original research plans and appropriate data collection instrumentation
- Collecting and editing data, creating research files, and management of large data systems
- Use of sophisticated analytic techniques, and publication of findings
- Combining theory with practice, and communicating applied implications of results

A limited number of stipends are awarded on a competitive basis.

#### **Applications**

Potential students should contact the Graduate Program at TCU's Department of Psychology, TCU Box 298920, Fort Worth, TX 76129 for application information. Specific interest in the IBR and its emphasis on applied evaluation research in the drug abuse field should be noted at the time of the contact. Based on this information, the IBR Director and faculty will be notified of the application and its status. (TCU Policies apply equally regardless of sex, religion, handicap, race, or ethnic origin.)

#### **TCU**

The University, founded in 1873, is an independent and self-governing institution that occupies a total of 71 buildings on a campus of 237 acres in southwest Fort Worth. It is composed of six schools and colleges, all fully accredited by their respective professional organizations. Together, there are 79 undergraduate, 39 masters, and 7 doctoral programs available to the student body of about 7,200 students. The campus is located within minutes of the downtown area, the historic "Old West" Stockyards, the nationally-recognized museum district, and the city zoo. The Dallas/Fort Worth International Airport is 30 minutes away.

IBR's research program provides valuable training opportunities in graduate and postgraduate education.

# Research Staff and Personnel

### **Faculty**

#### D. Dwayne Simpson, Ph.D.,

Experimental Psychology

Director and Saul B. Sells Professor of Psychology

#### Lois R. Chatham, Ph.D., Clinical Psychology

Associate Director and Senior Research Scientist

#### Joel B. Bennett, Ph.D., Social Psychology

Associate Research Scientist

# Kirk M. Broome, Ph.D.,

Experimental Psychology

Associate Research Scientist

#### Michael L. Czuchry, Ph.D., Experimental Psychology

Associate Research Scientist

#### D. Dwayne Simpson

came to the Institute of Behavioral Research (IBR) at TCU in 1966 as a graduate student. He joined the faculty in 1970 and later assumed leadership responsibilities for the 20year Drug Abuse Research Program (DARP) on effectiveness of the national communitybased treatment system. After moving to Texas A&M University and serving as Professor of Psychology and Director of the Behavioral Research Program from 1982 to 1989, he returned to TCU as Professor of Psychology and Director of the IBR. In 1992, he was named the S. B. Sells Professor of Psychology. Simpson's principal research interests revolve around the effectiveness of drug abuse treatment in community-based and criminal justice settings. He currently directs several federally-funded projects that focus on therapeutic enhancement and program management strategies, improving the assessment of client attributes and treatment process, and development of more comprehensive evaluation models for understanding treatment effectiveness and client recovery stages. He serves on advisory boards for national research centers and other treatment evaluation projects, is on the editorial boards for professional journals, and is a Fellow in the American Psychological Association. Over 200 papers have been published from his research, and he has consulted with local, national, and international agencies about substance abuse and evaluation issues.

#### Lois R. Chatham

came to the Institute of Behavioral Research in 1989 from the US Department of Health and Human Services where she served as a member of the Senior Executive Service. She has worked at NIMH, NIDA, and NIAAA. In addition to being Associate Director of IBR, she is Co-Principal Investigator and Manager of the DATAR Project as well as Co-Principal Investigator on the Salvation Army First Choice Project. Areas of interest include

specialized treatment interventions, gender differences in response to treatment, and use of cocaine and alcohol by methadone maintenance clients.

#### Joel B. Bennett

joined the IBR in 1994 and is currently involved in the Workplace Project, studying drug use in the workplace. His research interests include attitudes towards substance abuse policy, work group (team) involvement in substance abuse, and the analysis of addiction at the level of corporate culture. He is designing and evaluating a training module for substance abuse prevention that integrates principles of organizational development with wellness programming. Methodological specializations include the design, delivery, and evaluation of training programs, large-scale survey and focus group designs, and the assessment of corporate culture.

#### Kirk M. Broome

has been with the Institute of Behavioral Research since 1993, first as a graduate student and then as a Postdoctoral Research Associate in 1996-97. His research focuses primarily on statistical models of addiction, antisocial behavior, and treatment. His experience covers the design and analysis of treatment program evaluations, with special emphasis on structural equation modeling and hierarchical linear modeling. He is currently involved in data analysis and management for the DATOS project.

#### Michael L. Czuchry

began working with the IBR as a graduate student in January, 1993. He is currently involved in data analysis, monitoring of treatment sessions, and administration of measures for the CETOP project. His research interests involve the use of cognitive enhancement tools in educational and treatment settings. Other areas of interest include the development of pedagogical games that may facilitate an openness and readiness for treatment or transition into aftercare.

#### Donald F. Dansereau

has been on the faculty at Texas Christian University since 1969, where he is now Professor of Psychology and Senior Research Scientist in the IBR. He also is Principal Investigator for the CETOP (Cognitive Enhancements for the Treatment of Probationers) Project, a NIDA-funded research grant conducted in collaboration with the Tarrant County Community Corrections Department. Dansereau teaches graduate statistics and cognitive psychology, and his research focuses on cognitive approaches for improving education, drug abuse prevention, and treatment. His interests include the development of theoretical models on how individuals acquire and use complex information. Grants from the Defense Advanced Research Projects Agency, Department of Education, U.S. Army Research Institute, National Science Foundation, and National Institute on Drug Abuse have funded his work. His publications include over 120 papers.

#### Sandra M. Dees

joined the IBR in 1992 and is Project Manager for the CETOP grant. Dr. Dees is a licensed psychologist who has been involved in research and program evaluation in the area of substance abuse prevention and treatment for the past 15 years. She works with Dr. Don Dansereau and colleagues to study the impact of using cognitive strategies in a mandated substance abuse treatment setting.

#### Jack M. Greener

joined the Institute of Behavioral Research in 1978 and supervised its industrial psychology research program until 1983. Since that time he has been an independent management consultant and was a Visiting Associate Professor of Psychology at Texas A&M University from 1986 to 1988. He rejoined the IBR in 1989. Dr. Greener's major interests are in industrial-organizational psychology, research methodology, measurement, and evaluation. Recent activities include employee selection and test validation, data system management, electronic forms

development, and substance abuse treatment evaluation research. He has directed contract research projects and published articles in professional journals in these areas.

#### Matthew L. Hiller

has been with the Institute of Behavioral Research since 1992, first as a graduate student and then as a Postdoctoral Research Associate in 1996-97. He is involved currently in the PTA, PACT, and DATOS projects. His primary research focus is evaluating criminal justice strategies for dealing with substance abuse, especially residential community-based treatment. He also is interested in treatment process, outpatient methadone treatment, mental health issues faced by substance abusers, and public policy. He has experience conducting longitudinal studies and multivariate data analysis, implementing evaluation plans, and managing large-scale data systems.

#### George W. Joe

originally joined the Institute of Behavioral Research at TCU in 1969. In 1983 he became a Research Scientist in the Behavioral Research Program at Texas A&M University, and returned to TCU in 1989. His research has focused on the components of the treatment process, evaluation models for treatment effectiveness, etiology of drug abuse, and statistical methodology. As the senior statistician for the IBR, he is widely recognized for his expertise in the application of univariate and multivariate statistical methods, and in analytic modeling of data. He also is experienced in questionnaire development, sample selection, and survey research. His publications include approximately 75 articles in professional journals.

#### Danica K. Knight

joined the Institute of Behavioral Research in 1992. Previously, she had worked on the TCU Child Development Project performing longitudinal data collection, assessment construction, and analysis of developmental data. Her interests focus on the effects of

faculty, continued next page

# Donald F. Dansereau, Ph.D., Cognitive Psychology

Senior Research Scientist

#### Sandra M. Dees, Ph.D., Experimental Psychology

Research Scientist

#### Jack M. Greener, Ph.D., Industrial– Organizational Psychology

Research Scientist

#### Matthew L. Hiller, Ph.D., Experimental Psychology

Associate Research Scientist

# George W. Joe, Ed.D.,

Research Design and Educational Measurement

Senior Research Scientist

#### Danica K. Knight, Ph.D., Experimental Psychology

Associate Research Scientist

### Research Staff and Personnel

Kevin Knight, Ph.D., Experimental Psychology

Research Scientist

Wayne E. K. Lehman, Ph.D., Experimental Psychology

Research Scientist

#### Dianna Newbern, Ph.D., Experimental Psychology

Associate Research Scientist

#### Urvashi Pitre, Ph.D., Experimental Psychology

Associate Research Scientist

Grace A.
Rowan-Szal,
Ph.D.,
Behavioral
Neuroscience

Research Scientist

substance abusing lifestyles on parenting and child development, and she has examined changes in family relations over time and how they are associated with drug abuse treatment process and outcomes in the DATAR Project. Currently, she is Principal Investigator for an evaluation of the Salvation Army First Choice Program and is examining the role of family functioning and social support systems in relation to drug abuse treatment outcomes for women and children.

#### Kevin Knight

is Co-Principal Investigator for the PTA Project and Principal Investigator for the PACT Project, and his primary research interest centers on the evaluation of substance abuse treatment in criminal justice settings. Other interests include relapse prevention, the development of client assessment and data management systems, the application of cognitive enhancement strategies to drug abuse counseling and education, and the study of treatment process. Since joining the IBR faculty in 1991, he has been centrally involved in the design and implementation of several longitudinal evaluations for treatment of probation and prison populations. As a result, he has worked closely with criminal justice agencies and data systems at national and regional levels.

#### Wayne E. K. Lehman

was a Research Scientist with the Behavioral Research Program at Texas A&M University from 1982 to 1989, before returning to the Institute of Behavioral Research at TCU. He is Principal Investigator and Project Manager for the Workplace Project. His major research efforts focus on the assessment of employee drug use, the relationship of alcohol and drug use to job performance and the work environment, and development and evaluation of workplace substance use prevention training. Methodological specializations include design and implementation of large-scale survey studies, management of complex data systems, multivariate data analysis, structural equation modeling, and hierarchical linear modeling.

#### Dianna Newbern

joined the IBR in 1994 with a background in applied cognitive psychology. Her primary interests are in individual and group process strategies that might boost learning outcomes and cognitive-behavioral change. She has conducted and published research on scripted cooperation and node-link mapping techniques and was involved in the experimental implementation and evaluation of additional activities and exercises designed to promote change through influencing such factors as motivation and self-efficacy. Dr. Newbern's duties included research design, data analysis, and the development and evaluation of technological transfer (training) programs for these strategies and techniques.

#### Urvashi Pitre

joined the IBR in 1994 as an Associate Research Scientist. She has conducted research on the use of cognitive enhancement tools in educational settings, and was data coordinator and analyst on the CETOP Project and a data analyst for the DATAR Project. Her primary role was to monitor CETOP data collection and evaluate the effectiveness of cognitive enhancement tools in the treatment of opioid addicts and substance-abusing probationers. Other areas of interest include designing and evaluating educational materials, and examining individual differences in learning.

#### Grace A. Rowan-Szal

joined the IBR in 1990. As a recipient of a National Research Service Award from NIDA, she was a postdoctoral trainee at the University of Pennsylvania (Department of Psychiatry and Pharmacology) in 1988. Her work there involved both preclinical and clinical aspects of drug dependence, with a special interest in benzodiazepine abuse. While her early studies involved animal models of drug dependence, Dr. Rowan-Szal's current research centers on behavioral and pharmacological treatment approaches for drug users. Her recent DATAR papers focus on topical issues in the drug treatment field including contingency management strategies, treatment process, and alcohol and cocaine use among methadone clients. She is currently involved in the DATOS Project studying cocaine/crack users.

#### Tiffiny L. Sia

has been with the Institute of Behavioral Research since 1995, first as a graduate student and then as a part-time research associate. She currently is working with research for the CETOP project and is also involved in the development of cognitive enhancements in both educational and treatment settings. Her interests include the implementation and investigation of pedagogical games and techniques aimed at facilitating clients' motivation for substance abuse treatment and facilitating client transition from treatment back into the community.

# **Collaborating Scientists**

#### Barry S. Brown

holds a faculty appointment with the University of North Carolina at Wilmington, and from there directs a research project on treatment aftercare services and AIDS prevention in Baltimore. In 1993, he was a Visiting Senior Scientist with the Institute of Behavioral Research after serving 17 years with the National Institute on Drug Abuse where he headed a variety of research units. He continues to work regularly with the IBR as an advisor and research collaborator on several studies, and currently chairs the Steering Committee for the Collaborative DATOS Project. Dr. Brown also is on a number of editorial and advisory boards, and has published more than 100 articles in the professional literature. Most importantly, he claims to be loved by small children and animals.

#### David R. Cross

is an Associate Professor of Psychology, specializing in developmental psychology and applied statistics. Since coming to TCU in 1985, he has carried out educational research on cooperative learning and knowledge mapping with both school-aged children and college students. He also has worked with a team of researchers on the TCU Child Development Project, a longitudinal investigation of the effects of parenting on young children's cognitive and social development. His work with the IBR has focused on the association between family background in

substance abusing clients. Currently he and his students are formulating and evaluating models of client change on three dimensions—drug use, family conflict, and peer deviance—using dynamic models of change. His quantitative research is on dynamic models suitable for developmental studies, including sequential analysis, log-linear models, structural equation models, and differential equations. He was chairman of the Department of Psychology through May, 1997.

#### J. Thomas Payte

is the founder and medical director of Drug Dependence Associates in San Antonio. Early in his career, he became interested in the treatment of opioid addiction and began gaining experience with methadone maintenance treatment during its advent in the 1960s. He has integrated this modality with other behavioral techniques to offer his patients a comprehensive treatment approach. While primarily a clinician, Dr. Payte does related teaching, consulting, clinical research, and writing. He has served on the boards of directors of the American Society of Addiction Medicine and the American Methadone Treatment Association and serves on the advisory boards of the National Alliance of Methadone Advocates and the European Methadone Association. He is editor of the new Journal of Maintenance in the Addictions. Dr. Payte's professional interests include improving quality of care, treatment outcome measures, and advocating the need for expanded availability of treatment services for opioid-addicted patients.

#### Research Associate

#### Norma G. Bartholomew

joined IBR in 1991. Her background is in community health education, professional training, and media. As part of the DATAR Project, she has developed psychoeducational intervention modules and counselor training programs in the areas of communication skills and assertiveness, human sexuality, HIV/AIDS, and aftercare. She serves as editor of the IBR newsletter, *Research Roundup*, and assists with program evaluation studies, publications, and technical reports.

**Tiffiny L. Sia**, **Ph.D.**,
Experimental
Psychology

Associate Research Scientist

Barry S. Brown, Ph.D., Clinical Psychology

David R. Cross, Ph.D., Education and Psychology

J. Thomas Payte, M.D., Addiction Medicine

Norma G.
Bartholomew,
M.A.,
Communication and
Public Address

### Research Staff and Personnel

#### Staff

#### Alan Crume

Computer Systems Consultant, maintains microcomputer hardware and network systems.

#### Virginia Dias

Administrative Research Assistant, maintains materials inventory and financial records for CETOP, interfaces with on-site coordinator, oversees purchasing, and provides Spanish translation, word processing, and graphics support.

#### Jean Fitzgerald

Editorial Assistant, provides clerical and technical support for data editors and researchers.

#### Leah Flowers

CETOP Administrative Research Assistant, maintains a tracking system for publications, manuscripts, and grant-produced materials, in addition to providing word processing, graphics, and editing support.

#### Elena Garcia

Administrative Research Coordinator, supervises clerical support staff, maintains personnel and financial records, and coordinates administrative and academic unit activities.

#### Linda Houser

Administrative Research Assistant, coordinates office and clerical functions and the activities of student assistants. Maintains inventory records and the IBR resource library.

#### Helen Huskey

Administrative Research Assistant, oversees secretarial and word processing services, as well as maintains publications and manuscript archives.

#### Mary Morton

On-site Coordinator for CETOP at a substance abuse treatment facility, acts as a liaison between university and facility personnel, maintains record files, and administers research measures.

#### Charlotte Pevoto, M.Ed.

Communication Specialist and Webmaster, manages and develops IBR and DATOS Web sites; formats and supervises publication of newsletters and special reports; assists research staff with training and presentation materials.

#### Virginia Schmidt

Data Editor, edits incoming forms and data, resolves issues through communication with site data coordinators and maintains database records.

#### Barbara Thomsen

Data Editor, edits incoming forms and data, resolves issues through communication with site data coordinators and maintains database records.

## Graduate Research Assistants

#### Jason Blankenship

Graduate student in Cognitive Psychology interested in graphic design and human factors relating to cognitive enhancement, particularly with respect to performance and memory. Jason assists the CETOP Project.

#### James Griffith

Graduate student in Quantitative Psychology interested in research methodology and psychometric theory. James contributes primarily to the DATAR Project.

#### Sarah Logan

Graduate student in Cognitive Psychology interested in program evaluation of residential drug treatment for addicted women and their children, the Women and Children Project. Other interests include personality and creativity.

#### Diane Nucatola

Graduate student in Social Psychology interested in program evaluation research for criminal justice settings. Other interests include gender studies and management information systems for large databases. Diane assists the CTC-Dallas Project.

#### Shawn Reynolds

Graduate student in Social Psychology interested in attitudes, particularly the impact of prejudice attitudes on the substance-abusing employee. Also interested in work-group (team) diversity, drug and alcohol using subcultures, assimilation and acculturation, and cross-cultural psychology. Shawn assists the Workplace Project.

#### Ryan Roark

Graduate student in Social Psychology interested in program evaluation and data management. Other interests include treatment modeling, early predictors of treatment outcomes, and current trends in substance abuse. Ryan assists the DATAR Project.

### Undergraduate Assistants

Laurie Goble Kathleen Jeffery Erin Kelley Orsolya Trizna Si Weng (Amy) Van

# Advisory and Service Activities Alcohol Research,

#### Kirk M. Broome

**Center for Substance Abuse Treatment** (CSAT), Washington, D.C. Statistical Procedures for SSI Evaluations

#### Matthew L. Hiller

Department of Justice, Office of Justice Programs, Corrections Program Office, Washington, D.C.

Assessing the Effectiveness of **Corrections Programs** 

### George W. Joe

National Institutes of Health, National Institute on Drug Abuse (NIDA), Washington, D.C.

- Ad hoc member, Treatment Research Subcommittee
- Member, Drug Abuse Special **Emphasis Panels**

### Kevin Knight

Office of National Drug Control Policy (ONDCP), Executive Office of the President, Washington, D.C. Drug Treatment in the Criminal-Justice System.

Physician Leadership on National Drug Policy (PLNDP), Washington, D.C. Health Care, Addiction, and Criminal Justice System.

Department of Justice, Office of Justice Programs, Corrections Program Office, Washington, D.C.

- Assessing the Effectiveness of Corrections Programs
- Enhancing Public Safety by Reducing Substance Abuse

Mid-America Addiction Technology Transfer Center, directed by Sue Giles, University of Missouri-Kansas City, Kansas City, MO, funded by the Center for Substance Abuse Treatment, Washington, D.C.

**Grants Application Reviewer**: Texas Commission of Alcohol and Drug Abuse (TCADA)

Journal Editorial Board: American Journal of Drug and Alcohol Abuse

#### Wayne E. K. Lehman

National Institutes of Health, National Institute on Drug Abuse (NIDA), Washington, D.C.

- Member, Epidemiology and Prevention Initial Review Group (NIDA-G)
- Member, Training and Career Development Review Committee

**Center for Substance Abuse Prevention** (CSAP), Washington, D.C. Special review meeting.

Fort Worth Independent School District, Safe and Drug-free Schools and Communities Advisory Council.

#### D. Dwayne Simpson

Office of National Drug Control Policy (ONDCP), Executive Office of the President, Washington, D.C. Drug Treatment in the Criminal-Justice System.

Physician Leadership on National Drug Policy (PLNDP), Washington, D.C. Health Care, Addiction, and the Criminal Justice System.

National Institutes of Health, National Institute on Drug Abuse (NIDA), Washington, D.C.

- **Evaluating Drug Abuse Prevention** and Treatment Services
- Integrating Health Services and Treatment Research

Department of Justice, Office of Justice Programs, Corrections Program Office, Washington, D.C.

- Assessing the Effectiveness of Corrections Programs
- Enhancing Public Safety by Reducing Substance Abuse

**Center for Substance Abuse Treatment** (CSAT), Washington, D.C. Statistical Procedures for SSI Evaluations.

**Center for Therapeutic Community** Research (CTCR), directed by George De Leon, Ph.D., National Development and Research Institutes, Inc., New York, NY, funded by National Institute on Drug Abuse, Washington, D.C.

directed by Carl Leukefeld, D.S.W., University of Kentucky, Lexington, KY, funded by National Institute on Drug Abuse, Washington, D.C.

**Drug Abuse Research Center on Treat**ment Careers (CTC), directed by Douglas Anglin, Ph.D., University of California at Los Angeles, funded by National Institute on Drug Abuse, Washington, D.C.

Institute for Addictive Behaviors, directed by Jerome Platt, Ph.D., Allegheny University of Health Sciences, Philadelphia, PA, funded by National Institute on Drug Abuse, Washington, D.C.

**Persistent Effects of Treatment Studies** (PETS), directed by Thomas McLellan, Ph.D., Delta Metrics and University of Pennsylvania, and Douglas Anglin, Ph.D., UCLA Drug Abuse Research Center, funded by Center for Substance Abuse Treatment.

**National Treatment Outcome Research** Study (NTORS), directed by Michael Gossop, Ph.D., National Addiction Centre, The Maudsley, London, funded by the **Department of Health**, England.

**European Multinational Project on Evaluation of Action against Drug Abuse** in Europe, COST A6 Group, Zurich, Switzerland.

Journal Editorial Boards: American Journal of Drug and Alcohol Abuse, Psychology of Addictive Behaviors, Substance Use and Misuse

### Journals Reviewed by **IBR Scientists:**

Addiction, American Journal of Drug and Alcohol Abuse, Drug and Alcohol Dependence, Evaluation and Program Planning, Journal of Applied Psychology, Journal of Consulting and Clinical Psychology, Psychiatric Services, Psychological Bulletin, Psychology of Addictive Behaviors, Substance Use and Misuse

# Research Projects

# The DATAR Project-Phase I

D. Dwayne Simpson, Ph.D.,

Principal Investigator

Lois R. Chatham, Ph.D.,

Project Manager

DATAR Phase
I studies
demonstrate
how cognitive
and behavioral
management
strategies can
be used to
enhance
treatment.

This project focused on the development of improved drug abuse treatment strategies to help reduce client dropout and relapse rates as well as AIDS-risky behaviors of injecting drug users (IDUs). It supported a network of treatment agencies in Texas in a collaborative effort to implement and evaluate new intervention strategies within the context of methadone maintenance services. The 5-year project provided treatment for approximately 1,000 IDUs in Texas.

The research objective was to isolate and evaluate separate components of the overall behavioral intervention process. A cognitive strategy, information and process mapping, was implemented with the help of other psychologists at TCU as a method for improving the psychoeducational and therapeutic process. This strategy was used by treatment counselors to improve the focus and organization of therapeutic efforts, as well as behavioral assessments, goal-setting, and decision-making practices of IDUs.

The use of contingency management, involving client-contracted schedules of treatment and various incentives as positive reinforcers for changing target behaviors during and after treatment, was evaluated. Finally, the behavioral and psychological facilitation offered by life skills and ancillary training was assessed, including HIV/ AIDS training to learn risk-reduction behaviors, assertiveness training (especially for women) to increase self-esteem and protection from risky drug use and sexual interactions, relapse prevention training to sensitize IDUs to psychological and environmental triggers for relapse and alternative coping strategies, and support network training to acquaint clients with self-help and treatment aftercare procedures and benefits in an effort to increase referral and attendance rates. Appropriateness and effectiveness of these methods were analyzed in relation to client characteristics.

Clients sociodemographic, family and cultural background, behavioral

# Improving Drug Abuse Treatment for AIDS-Risk Reduction

## Funded by the National Institute on Drug Abuse.

**Project Period**: September 1989 to August 1995

**Budgeted**: \$7.7 million

functioning, and psychological adjustment measures were examined as predictors at different stages of the intervention process. These were contained in a comprehensive battery of data collection instruments that were widely circulated and adopted for similar uses by other researchers across the country. Experimental and guasi-experimental methods were used to evaluate during-treatment and posttreatment outcomes as measured by length of treatment retention, behavioral performance (including urinalysis and self-report information), and psychological functioning. The study included follow-up interviews after treatment.

Results helped to develop treatment manuals and demonstrated ways to improve the quality and effectiveness of treatment for drug abusers. In addition, studies on treatment process have contributed to the measurement and understanding of motivational and engagement stages that lead to better treatment outcomes.

#### Summary publications from this research:

See IBR Web for complete list of DATAR publications (www.ibr.tcu.edu).

Simpson, D. D., Joe, G. W., Rowan-Szal, G. A., & Greener, J. M. (1995). Client engagement and change during drug abuse treatment. *Journal of Substance Abuse*, *7*(1), 117-134.

Joe, G. W., Dansereau, D. F., Pitre, U., & Simpson, D. D. (1997). Effectiveness of node-link mapping enhanced counseling for opiate addicts: A 12-month posttreatment follow-up. *Journal of Nervous and Mental Disease*, 185(5), 306-313.

Simpson, D. D., Dansereau, D. F., & Joe, G. W. (1997). The DATAR Project: Cognitive and behavioral enhancements to community-based treatment. In F. M. Tims, B. W. Fletcher, J. A. Inciardi, & A. M. Horton (Eds.), *The effectiveness of innovative strategies in the treatment of drug abuse* (pp. 182-203). Westport, CT: Greenwood Press.

Simpson, D. D., Joe, G. W., Dansereau, D. F., & Chatham, L. R. (1997). Strategies for improving methadone treatment process and outcomes. *Journal of Drug Issues*, *27*(2), 239-260.

Simpson, D. D., Joe, G. W., & Rowan-Szal, G. A. (1997). Drug abuse treatment retention and process effects on follow-up outcomes. *Drug and Alcohol Dependence*, 47, 227-235.

Simpson, D. D., Joe, G. W., Rowan-Szal, G. A., & Greener, J. M. (1997). Drug abuse treatment process components that improve retention. *Journal of Substance Abuse Treatment, 14*(6), 565-572.

# The DATAR Project-Phase II

D. Dwayne Simpson, Ph.D.,

Principal Investigator

Lois R. Chatham, Ph.D.,

Co-Principal Investigator

DATAR
Phase II
includes plans
for further
counseling
improvements
and easy-to-use
manuals.

This 5-year project continues work begun in 1989 and focuses on the development of improved drug abuse treatment to help reduce client dropout and relapse rates in a population of opiate-dependent injection drug users (IDUs). It implements and evaluates new intervention strategies for methadone maintenance services being provided by Drug Dependence Associates (Dr. Thomas Payte, Medical Director) in San Antonio. The DATAR Project funds additional treatment services (static capacity for approximately 120 outpatients) at a time when public financial support for these services has been unstable.

The overall research objective is to isolate and evaluate significant components of the therapeutic intervention process. Using a three-part strategy, the project investigates ways to improve counseling procedures, improve client engagement and focus—especially early in treatment—and address special counseling needs of clients. Improvement of counseling procedures builds on the use of a cognitive learning approach—called node-link mapping—found in earlier

DATAR work to be effective for improving the counseling process and client retention. Further refinements and applications focused on, including abbreviated mapping strategies for addressing crisis issues and enhancing client skills in defining problems and making decisions. To improve client engagement and focus early in treatment, cognitive guides (using mapping) were developed for the purpose of increasing client self-examination and for strengthening their treatment involvement and commitment as evidenced by session attendance and urinalysis results. The impact of treatment intensity variations and combinations of individual and group counseling during different treatment stages are being studied. A scale designed to measure the role Simpatia has on client engagement and retention has been added to the assessment battery. To address the special needs of clients, manual-driven psychoeducational curricula are being tested dealing with issues such as improved communication skills and increased awareness of sexual health issues for men, improved parenting

# Improving Drug Abuse Treatment Assessment and Research

Funded by the **National Institute on Drug Abuse**.

**Project Period**: September 1995 to July 2000

Budgeted: \$4.8 million

skills for both men and women, as well as a structured curricula developed specifically for the purpose of motivating clients to reduce cocaine use. To further strengthen our repertoire of engagement strategies a contingency management program utilizing small rewards for positive behaviors are being implemented during the first 90 days of treatment.

Finally, the project focuses on treatment process and outcomes. The effects of both external and internal treatment factors on outcomes are being examined. To do this, a series of studies are being conducted to investigate individual differences (including motivation and other elements of cognitive functioning) related to treatment engagement and mapping success, the role of gender and cultural issues in the treatment process, and the relationship of outcomes during and after treatment with the level of services provided and counselor alliance. Follow-up interviews with all clients are being conducted 18 months after admission to treatment.

#### Treatment Manuals from Phase II:

Bartholomew, N. G., & Simpson, D. D. (October, 1996). Time Out! For Men: A communication skills/sexuality workshop for men. Fort Worth, TX: Institute of Behavioral Research, Texas Christian University.

Newbern, D., Bartholomew, N. G., Chatham, L. R., Dansereau, D. F., & Simpson, D. D. (September, 1996). Working Together: A treatment induction workbook. Fort Worth, TX: Institute of Behavioral Research, Texas Christian University.



More information on DATAR publications and how to order treatment manuals is available on the Web (www.ibr.tcu.edu). Conference presentations also are summarized in "Web Posters," and the TCU Methadone Outpatient Treatment forms can be downloaded free of charge in the

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"Forms" section.

# The DATOS Project

D. Dwayne Simpson, Ph.D.,

Principal Investigator

George W. Joe, Ph.D.,

Co-Principal Investigator

National treatment evaluation studies such as DATOS help guide policy development at state and federal levels.

The National Drug Abuse Treatment Outcome Studies (DATOS) is a 5-year collaborative research project, funded by the National Institute on Drug Abuse (NIDA). It brings together four teams of scientists to explore separate but complementary research themes. As part of this initiative, the TCU research team is exploring issues of client retention and engagement in treatment, including the significance of selected client and program variables on retention, treatment process, and program compliance. Also, factors associated with client motivation for treatment and client perceptions of treatment are being examined to better understand their impact on program retention.

The National Development and Research Institutes of North Carolina (NDRI-NC) team, with Dr. Robert L. Hubbard as Principal Investigator, is examining issues involving the selection of treatment by drug users, including client needs, access to services, and support and impediments to treatment selections. In addition, NDRI-NC will look at factors related to service delivery and client subtypes. UCLA's Drug Abuse Research Center (Dr. M. Douglas Anglin, Principal Investigator) is exploring

factors in the addiction and treatment careers of drug abusers that influence response to treatment, including the relationship of background variables and drug use histories on decisions to enter treatment. The UCLA team also plan to test models of the process of addiction (initiation, progression, cessation, and relapse) among treatment clients. The Services Research Branch at NIDA, with Dr. Bennett Fletcher serving as Principal Investigator, is focusing on issues significant to policy development including costbenefit analyses, the changing nature of drug abuse treatment clients and the implications for treatment programming and services, and the relations of client economic conditions to treatment performance.

Within their identified research themes, DATOS investigators are examining treatment process, retention, and outcome in relation to four variable domains identified as having particular significance for contemporary drug abuse treatment. These include HIV risk behaviors, cocaine use, psychiatric comorbidity, and criminal justice status and activity. Sequential waves of studies will be undertaken to look deeper into these

# Drug Abuse Treatment Outcome Study Research Center

Cooperative Agreement

Funded by the National Institute on Drug Abuse.

**Project Period**: September 1995 to August 2000

Budgeted: \$2.14 million

research themes and variable domains described.

Core data for the DATOS project includes client information from 10,010 admissions to 96 treatment programs that participated between 1991 and 1993 in this third national evaluation study, representing outpatient methadone, outpatient drug free, long-term residential, and short-term inpatient services. One-year posttreatment follow-up with DATOS clients has been analyzed and 5-year follow-up interviews are being conducted.

#### Selected publications:

Simpson, D D. & Curry, S. J. (Editors). (1997). Special Issue: Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive Behavior,* 11(4), 211-337.

Broome, K. M., Flynn, P. M., & Simpson, D. D. (in press). Psychiatric comorbidity and retention in drug abuse treatment programs. *Health Services Research*.

Broome, K. M., Joe, G. W., & Simpson, D. D. (in press). HIV risk reduction in outpatient drug abuse treatment: Individual and geographic

differences. AIDS Education and Prevention.

Hiller, M. L., Knight, K., Broome, K. M., & Simpson, D. D. (1998). Legal pressure and treatment retention in a national sample of long-term residential programs. *Criminal Justice and Behavior*, 25(4), 463-481.

Joe, G. W., Simpson, D. D., & Broome, K. M. (1998). Effects of readiness for drug abuse treatment on client retention and assessment of process. *Addiction*, 93(8), 1177-1190.

Rowan-Szal, G. A., Joe, G. W., & Simpson, D. D. (in press). Treatment retention of crack and cocaine users in a national sample of long term residential clients. *Addiction Research*.

Simpson, D. D., Joe, G. W., Fletcher, B. W., Hubbard, R. L., & Anglin, M. D. (in press). Treatments for cocaine addiction: A national evaluation of outcomes. *Archives of General Psychiatry*.



# Women and Children Project

Danica Kalling Knight, Ph.D.,

Principal Investigator

Lois R. Chatham, Ph.D.,

Co-Principal Investigator

Research goals include the evaluation of agency services as well as individual and family factors that may impact treatment.

The focus of the 5-year Women and Children Project is to evaluate the effectiveness of treatment services provided to substance abusing women and their dependent children at the Salvation Army's First Choice Program in Fort Worth. Women who enter this 12-month residential program live with their children in small apartments on the First Choice campus and participate in a comprehensive treatment program. They receive individual, group, and family therapy, special assistance in relapse prevention, nutrition, and vocational training, and are connected with a variety of local agencies designed to assist them in securing housing, employment, and health care following graduation from the program. Children also receive special services and are integrated into the treatment program through special activities, play therapy, and family therapy. Child care is provided for children younger than school age.

The research goals of the Women and Children Project are to evaluate the

services provided by the agency and examine individual, family, and treatment-related factors that impact substance abuse problems and facilitate recovery. To accomplish these goals, a variety of data collection instruments are administered at intake, regular intervals during treatment, and follow-up conducted at 6 and 12 months after discharge.

Evaluation of treatment services includes documenting the type and intensity of services received by women and children, evaluating the effectiveness of several specialized interventions, including a newly developed IBR module on Partners in Parenting. Examination of factors relating to substance abuse and recovery is being conducted in three phases. Phase 1 focuses primarily on collecting information concerning the unique characteristics and needs of the sample. It includes plans for combining collected information with a national sample of similar programs. Phase 2 focuses on examining rela-

# Evaluating the Effectiveness of a Residential Treatment Program for Women and Their Children

Contract with The Salvation Army First Choice Program, Fort Worth Funded from the **Center for Substance Abuse Treatment**, through the Texas Commission on Alcohol and Drug Abuse.

**Project Period**: October 1995 to September 2000

**Budgeted:** \$667,520

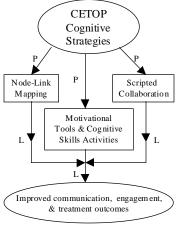
tionships between client/child characteristics at admission, treatment participation, and during-treatment outcomes. Studies conducted in this phase will seek to identify client and family characteristics that predict retention and treatment participation. The effectiveness of IBR modules and other treatment components, such as parenting skills training, are also to be examined during this phase. Phase 3 will investigate the relatively longerterm impact of various treatment components by examining outcome measures at follow-up.

The project is currently beginning Phase 2 and has yielded useful information about women and children as they enter treatment. Alcohol and crack/cocaine are the primary drugs of choice among these women. A large percentage have psychosocial problems and nearly all report a history of victimization. Approximately half of the children also have a history of victimization and a large percentage exhibit behavior problems. Studies planned for Phases 2 and 3 will place special emphasis on the identification of intergenerational patterns of parenting, family relationships, and psychosocial functioning. This work will rely on client self-reports of childhood relationships, current coping skills, and family environment, along with assessments of the children's level of functioning.



More information on the Women and Children Project and how to order treatment manuals cited is available on the Web (www.ibr.tcu.edu), and a conference presentation is summarized in "Web Posters." Women/ Children Residential Treatment forms are available for downloading free of charge from the "Forms" section.

# Research Projects



The CETOP Project

Donald F. Dansereau, Ph.D.,

Principal Investigator
D. Dwayne Simpson, Ph.D.,

Co-Principal Investigator
Sandra M. Dees, Ph.D.,

Project Manager

MAP LEGEND: P= Part L= Leads to

The focus of the 5-year CETOP (Cognitive Enhancements for Treatment of Probationers) research project is to study the impact of enhancing mandated substance abuse treatment with cognitive/behavioral tools. The project is located in the Tarrant County Substance Abuse Treatment Facility (SATF). This facility provides 4 months of intensive residential treatment to 420 probationers each year.

Program components include (1) a modified therapeutic community approach, (2) counseling to provide professional guidance and support in recovery efforts, (3) special induction and transition sessions to plan for treatment, and later, for recovery maintenance, and (4) life skills instruction and recovery education activities.

Node-link mapping, motivational tools, cognitive skills activities, and scripted collaboration are the core elements of the cognitive enhancement system.

Node-link mapping and associated visual representation strategies are designed to enhance communication and understanding. These techniques are simple methods of eliciting, representing, and organizing information so that relationships between ideas, feelings, and actions can be easily recognized and understood.

**Motivational tools** have been designed to enhance the induction and transition

phases of treatment. A series of selfstudy booklets provide **training in the cognitive skills** (e.g., decision making, problem solving) that are the "basics" of life skills.

The final element consists of a set of strategies structured to encourage **cooperative activities** among probationers. Probationers working together on a specific task can help each other clarify and elicit ideas and feelings, detect "glitches" in thinking, provide emotional support, develop alternative perspectives, and improve decision-making.

These tools are being used independently and interactively to enhance the drug abuse treatment components at the SATF.

Responses of residents receiving enhanced treatment are compared to those receiving standard treatment components. During-treatment and follow-up, assessment measures are used to assess reactions to treatment. The comprehensive battery of measures developed in the DATAR Project has been modified for use in this project.

Four studies are being conducted. The first three focus on enhancements to counseling, induction/transition, and life skills education, respectively. The overall research design is cumulative in the sense that enhancements developed and tested in each study become a regular

# Cognitive Enhancements for Treatment Of Probationers

Funded by the **National Institute on Drug Abuse**.

**Project Period**: September 1994 to August 1999

Budgeted: \$2.3 million

part of treatment for all probationers entering the SATF during later studies. The fourth study examines the effectiveness of the enhancements with special populations (e.g., females).

#### **Findings**

Mapping. Mapping-enhanced counseling, in contrast to standard counseling, produces more positive perceptions of counseling session depth and increases group participation. In addition, mapping residents give more favorable ratings to their counselors, fellow residents, security staff, and their own efforts and abilities to benefit from treatment.

Induction and Transition. Residents who received these "readiness and reentry" activities rated their communities as significantly more engaged in treatment and more helpful to them than those receiving the standard treatment. They rated themselves as more involved in treatment, and gave higher ratings to the treatment program and personnel and those with lower levels of educational experience who received these activities rated their confidence and motivation higher than did a similar group in the standard program.

The Cognitive Skills Series. These materials constitute the third phase of research which is currently being implemented. Results will be analyzed in the summer of 1999. ■

#### Publications from this research:

Czuchry, M., & Dansereau, D. F. (in press). Node-link mapping and psychological problems: Perceptions of a residential drug abuse treatment program for probationers. *Journal of Substance Abuse Treatment*.

Czuchry, M., Sia, T. L., & Dansereau, D. F. (in press). Preventing alcohol abuse: An examination of the "Downward Spiral" game and educational videos. *Journal of Drug Education*.

Czuchry, M., Dansereau, D. F., & Sia, T. L. (1998). Using peer, self-, and counselor ratings to evaluate treatment process. *Journal of Psychoactive Drugs*, (30)1, 81-87.

Newbern, D., Dansereau, D. F., & Pitre, U. (in press). Positive effects on life skills motivation and self-efficacy: Node-link maps in a modified therapeutic community. *American Journal of Drug and Alcohol Abuse*.

Pitre, U., Dansereau, D. F., Newbern, D. & Simpson, D. D. (1998). Residential drug-abuse treatment for probationers: Use of node-link mapping to enhance participation and progress. *Journal of Substance Abuse Treatment*, 15(6), 535-543.

Ratcliff, C.R., Czuchry, M., Scarberry, N.C., Dansereau, D.F., & Lord, C.R. (in press). Effects of directed thinking on intentions to engage in beneficial activities: Actions vs. reasons. *Journal of Applied Social Psychology*.

Sia, T. L., Czuchry, M., & Dansereau, D. F. (in press). Considering personal strengths: The Effect of three different methods on mood, arousal, and self-esteem. *Journal of Applied Social Psychology.* 

CETOP's objectives include the evaluation of enhanced treatment components designed to improve probationer functioning and outcomes.

# Research Projects



#### Project 1:

Prison-Based Treatment Assessment (PTA)

D. Dwayne Simpson, Ph.D., Principal Investigator Kevin Knight, Ph.D., Co-Principal Investigator

Phase 1 funded by the **Texas Commission on Alcohol and Drug Abuse** 

Project Period: February 1994 to August 1995; Budgeted: \$349,813

Phase 2 funded by the National Institute of Justice

Project Period: March 1996 to February 1998; Budgeted: \$177,728

The "Texas Criminal **Justice Treatment** Initiatives" for correctionsbased treatment have drawn national attention as farsighted and progressive attempts to break the crime and drug connection.

The relationship between substance abuse and crime and its impact on society is well documented. As levels of illicit drug use have increased, so have numbers of drug distribution offenses as well as other serious crimes. Not surprisingly, the majority of the offenders committing crimes such as assault and robbery have a history of substance abuse. Until recently, most of these offenders in Texas were left untreated and often returned to substance abuse and crime after incarceration. For example, during the first part of this decade, Texas witnessed the rearrest of 60% of its parolees and probationers and the return of 85% to drug use within 3 years after being released.

Treatment of substance abusers in prison settings, however, has been gaining interest throughout the United States, and the Texas Criminal Justice System has been a leader in this area by its progress toward establishing thousands of treatment beds in state

correctional facilities. As part of the landmark legislation signed into law in 1991, the "Texas Criminal Justice Treatment Initiatives" have established 800 In-Prison Therapeutic Community (ITC) treatment beds and another 5,000 beds for probationers with substance abuse problems. Each provides 9 months of primary treatment, followed by mandatory participation in community-based Transitional Treatment Centers (TTCs). These Centers require up to 3 months of residential treatment followed by 12 months of nonresidential treatment after release from prison. The Texas Initiatives created one of the largest treatment systems in the nation and has been viewed as a farsighted and progressive attempt to break the crime and drug connection.

Because scientific assessment and evaluation of the ITC is vital, the Texas Commission on Alcohol and Drug Abuse (TCADA) contracted with TCU to carry out the first phase of the

Prison-Based Treatment Assessment (PTA) Project. It was completed during 1995 and included the collection of baseline data on 293 ITC clients during the weeks immediately prior to their release from the Kyle New Vision Chemical Dependency Treatment Facility (south of Austin). Data related to treatment process issues (such as program structure and counseling activities) and psychosocial functioning also were collected. The Kyle ITC had an 80% graduation rate and the treatment sample included prison inmates who were appropriately selected for drug abuse treatment. Six and 12-month face-to-face follow-up interviews were collected with Kyle ITC graduates as well as with approximately 100 other Texas prison parolees identified as having a substance abuse problem who did not participate in the Kyle ITC program. Hair samples were obtained in conjunction with face-to-face interviews to determine whether drugs were used in the previous 90 days. The second phase of the evaluation was funded in June 1996 by the National Institute of Justice for conducting further analyses of the prison-based treatment process and 12-month follow-up data. Follow-up interview data indicate that the Kyle ITC graduates, particularly those who completed the aftercare program, had lower relapse and recidivism rates than did the comparison sample.

#### Publications from this research:

Knight, K., Simpson, D. D., Chatham, L. R., & Camacho, L. M. (1997). An assessment of prison-based drug treatment: Texas' in-prison therapeutic community program. *Journal of Offender Rehabilitation*, 24(3/4), 75-100.

Knight, K., Hiller, M. L., Simpson, D. D., & Broome, K. M. (1998). The validity of self-reported cocaine use in a criminal justice treatment sample. *American Journal of Drug and Alcohol Abuse*, 24(4), 647-660.

Knight, K., Hiller, M. L., & Simpson, D. D. (in press). Evaluating corrections-based treatment for the drugabusing criminal offender. *Journal of Psychoactive Drugs*.

Hiller, M. L., Knight, K., & Simpson, D. D. (in press). Prison-based substance abuse treatment, residential aftercare, and recidivism. *Addiction*.

Scientific evaluations are needed to help guide future policy and funding decisions at both state and national levels.

# Research Projects



# Criminal Justice Projects

#### Project 2:

Process Assessment of Correctional Treatment (PACT)

Kevin Knight, Ph.D., Principal Investigator Matthew Hiller, Ph.D., Co-Principal Investigator Funded by the National Institute of Justice

According to a recent Bureau of Justice

Statistics report, 5.4 million Americans

Project Period: September 1998 to November 1999; Budgeted: \$59,946

nationwide were under correctional supervision in 1995, including about 1.6 million in prisons and jails. However, the majority of individuals were under supervision in community corrections National data (3.1 million on probation, 700,000 on parole). Texas had the largest number of majority probationers (400,000), surpassing of new California, Florida, and New York. Of these, most were felony (56%) or driving arrestees while intoxicated (felony or misdehave meanor, 32%) offenders.

> National data also indicates the majority of new arrestees have substance abuse problems. Data from the Arrestee Drug Abuse Monitoring (ADAM) program, formerly the Drug Use Forecasting (DUF) system, showed that about 68% tested positive for one or more illicit drugs at the time of their arrest in 1996. Accordingly, the criminal justice system is considered one of the most important gateways to the treatment delivery system. A recent study from the DATOS project showed clients who were under legal pressure remained in communitybased long-term residential treatment longer, thereby improving posttreatment outcomes.

Many states are increasing resources for corrections-based treatment of criminal offenders with substance abuse problems. Similar programs were used in the 1970s, with the most visible being the Treatment Alternatives to Street Crime (TASC) program. In 1991, Texas adopted a major initiative (House Bill #2335) which authorized the development of a statewide network of community corrections-based residential substance abuse treatment facilities, or SATFs. The IBR has established an evaluation program for one of the first SATFs in Texas, the Dallas County Judicial Treatment Center (DCJTC).

The DCJTC is an intermediate sanctions facility located in Wilmer (on the southern edge of Dallas). It provides 228 treatment beds (70% male, 30% female) for drug-involved felony probationers court-mandated to the program in lieu of incarceration. In addition to a 6-month primary care residential phase, the DCJTC also includes 2-to-3 month residential and 6-month outpatient aftercare components. Probationers receive substance abuse treatment, life skills training, relapse prevention, and educational and vocational training in a modified therapeutic community setting. Early investigations conducted by the IBR showed that program graduates had lower rearrest rates than did program non-completers, both at 6 months and 1 year after treatment discharge. Longer follow-up evaluations are in progress.

indicates the substance abuse problems. Project 3: TCUDS Project

Kevin Knight, Ph.D., Principal Investigator
D. Dwayne Simpson, Ph.D., Co-Principal Investigator

Funded by National Institute of Justice

Project Period: January 1999 to December 2000; Budgeted: \$234,757

Although most criminal justice agencies across the United States have become invested in treating drug-abusing offenders in the past decade, the demand for treatment resources has continued to exceed availability. Not only must officials decide who should have access to limited treatment services, but they also need to determine the most appropriate type and intensity of treatment in which a drug-involved offender should be placed. These critical decisions are complicated even further in large correctional systems such as the Texas Department of Criminal Justice (TDCJ), which processes over 3,300 new inmates per month. For these agencies, improved drug abuse screening and treatment referral protocols are essential.

The primary goal of this proposal, therefore, is to examine closely the psychometric properties and validity of the Texas Christian University Drug Screen (TCUDS), an experimental instrument in early stages of implementation at several large correctional settings. Initially, the

manner in which the TCUDS is being used in the TDCJ-Institutional Division and the TDCI-State Iail Division will be explored and documented. Psychometric criteria for this instrument also will be established, particularly focusing on the internal consistency of the scale. In addition, the evaluation will include an assessment of the concurrent validity of the TCUDS with the ASI Drug Dependence scale. During the latter part of the project, normative data will be gathered on levels of inmate pre-incarceration drug use and will include prominent subgroups defined by sociodemographic and criminal background variables. Also, a preliminary outcome evaluation will examine the predictive validity of the TCUDS.

Ultimately, this project is expected to help in the development of a reliable and valid drug screen that can be used to assess the severity of drug use problems and guide efficient and effective treatment decisions within correctional settings.



More information on the TCU Criminal Justice Projects, including instructions for obtaining forms online, is available on the IBR Web (www.ibr.tcu.edu) in the "Projects" and "Forms"

sections. "Publications" also provides a list of related publications and conference presentations.

# Research Projects



# Workplace Projects

# Project 1: Employee Surveys on Drug Use and Organizational Climate

Wayne E. K. Lehman, Ph.D., Principal Investigator D. Dwayne Simpson, Ph.D., Co-Principal Investigator Funded by the National Institute on Drug Abuse

Phase I Project Period: September 1988 to August 1991; Budgeted: \$600,000 Phase II Project Period: September 1991 to August 1997; Budgeted: \$2.8 million

Concern about drug abuse in the United States work force has increased in recent years because of its serious implications for worker productivity and health. The causes and prevalence of drug use in different work settings presumably reflect greater social acceptance of some forms of drug use, increased availability of drugs, and factors in the workplace such as stress and boredom. Although objective data concerning the size or effects of drug use in the work site are limited, larger numbers of employers are implementing mandatory drug testing programs to identify drug users.

This project addressed the need for empirical information and for a clearer understanding of

This project addressed the need for empirical information and for a clearer understanding of this complex problem. Data in the first phase of the research were obtained from confidential self-report questionnaires completed by a sample of 2,000 employees in a large southwestern city in the U.S. The project was extended under a 5-year grant which added a second large municipal workforce and a smaller suburban municipality, and replicated the survey over a 3-year interval at the two larger sites. Approximately 3,400 surveys were completed in the three sites in the second phase.

The surveys included information on employee background, organizational climate and working conditions, self-reported drug use on and off the job, perceived drug use among co-workers, attitudes toward drug use and related policies on drug testing, employee

well-being, and job performance indicators such as absenteeism, sick days, accidents, and health care costs.

Participation in the study was voluntary and precautions were taken to insure confidentiality of responses.

The long-term objectives of the projects were to develop tools for assessing substance abuse risk in the workplace and to identify factors which contribute to drug use and impaired job performance. Major findings have been that personal background factors, particularly general deviance indicators, are the strongest predictors of personal substance use, and that substance use has strong associations with negative job behaviors (e.g. psychological withdrawal, antagonistic behaviors, accidents, and exposure to workplace violence). The complex role of policy, work group processes, and organizational culture also have been examined. Findings show that employee tolerance for co-worker substance use, attitudes toward discrete policy components, and work group drinking climates are each predictive of risk for substance-use related problems.

Results of this project led to the development of a prevention training program that is designed to address work group cultures and permissive attitudes that tolerate or enable employee substance use.

The objectives were to obtain estimates of drug use prevalence among employees and to identify factors which contribute to drug use and impaired job performance.

#### Project 2:

#### Drug Use in the Workplace: A Prevention Training Program

Wayne E. K. Lehman, Ph.D., Principal Investigator
Funded by the National Institute on Drug Abuse
Project Period: March 1998 to February 2001; Budgeted: \$1.1 million

The purpose of this 3-year project is to refine, implement, and evaluate a teambased substance abuse prevention program for work settings. The program is designed to increase employee awareness of issues relating to workplace alcohol and other drug use and its consequences. Because these issues and consequences occur within an organizational context, the training addresses specific factors that aggravate employee substance use and prevent effective policy implementation. These factors include supervisor/co-worker relations, stress, work group climate, and organizational change.

Three samples will be used to implement and evaluate the program: (1) a medium-sized suburban municipal workforce, (2) three high-risk departments from a large municipality, and (3) a police department.

The specific goals of this project are: (1) to develop a participatory substance abuse prevention training program for the workplace which addresses work cultures that tolerate and enable employee substance use problems and their impact on productivity and wellness; (2) to implement this enhanced training program in different work settings; (3) to evaluate the program in terms of specific training goals, including awareness of policy and work group substance use, and employee skills at reducing enabling behaviors and tolerance; (4) to assess whether these individual goals of training

are associated with a reduction in substance abuse and related problems for individuals and work groups; and (5) to produce training manuals documenting the content and implementation of the training program that can be used by other organizations. A manual to train trainers also will be produced.

#### Publications from this research:

Bennett, J. B., & Lehman, W. E. K. (1997). Employee view of organizational wellness and the EAP: Influence on substance use, drinking climates, and policy attitudes. *Employee Assistance Quarterly*, 13(1), 55-71.

Bennett, J. B., & Lehman, W. E. K. (1998). Workplace drinking climate, stress, and problem indicators: Assessing the influence of team work (group cohesion). *Journal of Studies on Alcohol, 59*, 608-618.

Bennett, J. B., & Lehman, W. E. K. (1996). Alcohol, antagonism, and witnessing violence in the workplace: Drinking climates and social alienation-integration. In G. R. VandeBos & E. Q. Bulutao (Eds.). *Violence on the job: Identifying risks and developing solutions*. (pp. 105-152). Washington, DC: American Psychological Association.

Bennett, J. B., & Lehman, W. E. K. (1996). Employee attitude crystallization and substance use policy: Test of a classification scheme. *Journal of Drug Issues*, 26(4), 831-864.

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Holcom, M. L., Lehman, W. E. K., & Simpson, D. D. (Winter, 1993). Employee accidents: Influences of personal characteristics, job characteristics, and substance use. *Journal of Safety Research*, 24, 205-221.

Lehman, W. E. K., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. *Journal of Applied Psychology*, 77, 309-321.

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Bennett, J. B., & Lehman, W. E. K. (1998). Workplace drinking climate, stress, and problem indicators: Assessing the influence of team work (group cohesion). *Journal of Studies on Alcohol*, *59*(5), 608-618.

Czuchry, M., & Dansereau, D. F. (1998). The generation and recall of personally relevant information. *Journal of Experimental Education*, 66(4), 293-315.

Czuchry, M. L., Dansereau, D. F., Sia, T. L., & Simpson, D. D. (1998). Using peer, self, and counselor ratings to evaluate treatment process. *Journal of Psychoactive Drugs*, 30(1), 81-87.

Griffith, J. D., Joe, G. W., Chatham, L. R., & Simpson, D. D. (1998). The development and validation of a Simpatía Scale for Hispanics entering drug treatment. *Hispanic Journal of Behavioral Sciences*, 20(4), 468-482.

Griffith, J. D., Knight, D. K., Joe, G. W., & Simpson, D. D. (1998). Implications of family and peer relations for treatment engagement and follow-up outcomes: An integrative model. *Psychology of Addictive Behaviors*, 12(2), 113-126.

Griffith, J. D., Libkuman, T. M., & Poole, D. A. (1998). Repressed memories: The effects of expert testimony on mock juror's decision

making. American Journal of Forensic Psychology, 16, 5-23.

Hiller, M. L., Knight, K., Broome, K. M., & Simpson, D. D. (1998). Legal pressure and treatment retention in a national sample of long-term residential programs. *Criminal Justice and Behavior*, 25(4), 463-481.

Joe, G. W., Simpson, D. D., & Broome, K. M. (1998). Effects of readiness for drug abuse treatment on client retention and assessment of process. *Addiction*, 93(8), 1177-1190.

Knight, D. K., Broome, K. M., Cross, D. R., & Simpson, D. D. (1998). Antisocial tendency among drugaddicted adults: Potential long-term effects of parental absence, support, and conflict during childhood. *American Journal of Drug and Alcohol Abuse*, 24(3), 361-375.

Knight, K., Hiller, M. L., Simpson, D. D., & Broome, K. M. (1998). The validity of self-reported cocaine use in a criminal justice treatment sample. *American Journal of Drug and Alcohol Abuse*, 24(4), 647-660.

Lehman, W. E. K., Farabee, D. J., & Bennett, J. B. (1998). Perceptions and correlates of co-worker substance use. *Employee Assistance Quarterly, 13*(4), 1-22.

Libkuman, T. M., Griffith, J. D., Wines, W. M., Dickel, M. J., & Doty, K. G. (1998). Individual differences in arousal and accessibility to information in memory. *The Journal of General Psychology: Experimental, Physiological, and Comparative Psychology, 125*, 367-395.

Otani, H., & Griffith, J. D. (1998). Hypermnesia for prose. *The Journal of General Psychology: Experimental, Physiological, and Comparative Psychology, 125*, 147-155.

Pitre, U., Dansereau, D. F., Newbern, D., & Simpson, D. D. (1998). Residential drug abuse treatment for probationers: Use of node-link mapping to enhance participation and progress. *Journal of Substance Abuse Treatment*, 15(6), 535-543.

#### **In Press**

Bartholomew, N. G., Hiller, M. L., Knight, K., Nucatola, D. C., & Simpson, D. D. (in press). Effectiveness of communication and relationship skills training for men in substance abuse treatment. *Journal of Substance Abuse Treatment*.

Bennett, J. B., Lehman, W. E. K., & Forst, J. K. (in press). Change, transfer climate and total quality training: Contextual correlates of employee



Comprehensive lists of IBR publications, arranged by year and research activity, are available in the "Publications" section of the IBR Web site (www.ibr.tcu.edu). Abstracts are included.

engagement and customer orientation. Group and Organizational Management.

Broome, K. M., Flynn, P. M., & Simpson, D. D. (in press). Psychiatric comorbidity and retention in drug abuse treatment programs. *Health Services Research*.

Broome, K. M., Joe, G. W., & Simpson, D. D. (in press). HIV risk reduction in outpatient drug abuse treatment: Individual and geographic differences. *AIDS Education and Prevention*.

Broome, K. M., Simpson, D. D., & Joe, G. W. (in press). Relapse to opioid and cocaine use following methadone treatment. In F. M. Tims, C. G. Leukefeld, & Platt, J. J. (Eds.), *Relapse and recovery processes in the addictions*. New Haven, CT: Yale University Press.

Chatham, L. R., Hiller, M. L., Rowan-Szal, G. A., Joe, G. W., & Simpson, D. D. (in press). Gender differences at admission and follow-up in a sample of methadone maintenance clients. *Substance Use & Misuse*.

Czuchry, M., & Dansereau, D. F. (in press). Node-link mapping and psychological problems: Perceptions of a residential drug abuse program for probationers. *Journal of Substance Abuse Treatment*.

Czuchry, M., Sia, T. L., & Dansereau, D. F. (in press). Preventing alcohol abuse: An examination of the "Downward Spiral" game and educational videos. *Journal of Drug Education*.

Hiller, M. L., Knight, K., and Simpson, D. D. (in press). Prison-based sub-

stance abuse treatment, residential aftercare, and recidivism. *Addiction*.

Hiller, M. L., Simpson, D. D., Broome, K. M., & Joe, G. W. (in press). Legal status at intake and posttreatment incarceration: 12-Month follow-up of methadone treatment. *Journal of Maintenance in the Addictions*.

Knight, K., Hiller, M. L., & Simpson, D. D. (in press). Evaluating corrections-based treatment for the drugabusing criminal offender. *Journal of Psychoactive Drugs*.

Knight, D. K., & Simpson, D. D. (in press). Family assessment. In R. E. Tarter, R. T. Ammerman, & P. J. Ott (Eds.), Sourcebook on substance abuse: Etiology, methodology, and intervention. Boston, MA: Allyn & Bacon.

Newbern, D., Dansereau, D. F., & Pitre, U. (in press). Positive effects on life skills motivation and self efficacy: Node-link maps in a modified therapeutic community. *American Journal of Drug and Alcohol Abuse*.

Ratcliff, C. R., Czuchry, M., Scarberry, N. C., Dansereau, D. F., & Lord, C. R. (in press). Effects of directed thinking on intentions to engage in beneficial activities: Actions vs. reasons. *Journal of Applied Social Psychology*.

Rowan-Szal, G. A., Joe, G. W., & Simpson, D. D. (in press). Treatment retention of crack and cocaine users in a national sample of long term residential clients. *Addiction Research*.

Sia, T. L., Czuchry, M., & Dansereau, D. F. (in press). Considering personal strengths: The effect of three different

methods on mood, arousal, and selfesteem. *Journal of Applied Social Psychology*.

Simpson, D. D., Joe, G. W., Fletcher, B. W., Hubbard, R. L., & Anglin, M. D. (in press). A national evaluation of treatment outcomes for cocaine dependence. *Archives of General Psychiatry*.

Ratcliff, C. R., Czuchry, M. L., Scarberry, N. C., Dansereau, D. F., & Lord, C. R. (in press). Effects of directed thinking on intentions to engage in beneficial activities: Actions vs. reasons. *Journal of Applied Social Psychology*.

#### **TECHNICAL REPORTS**

Hiller, M. L., Knight, K., & Nucatola, D. C. (1998). *Intervention evaluation: Time Out! For Men*. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Hiller, M. L., Knight, K., & Simpson, D. D. (1998). Annual report on 1997 admissions: Dallas County Judicial Treatment Center. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Knight, K., & Hiller, M. L. (1998). Community-based substance abuse treatment for probationers: 1-year outcome evaluation of the Dallas County Judicial Treatment Center. In American Probation and Parole Association Research and Technology Committee (Ed.), Conference proceedings: Applied research in criminal justice (pp. 56-60), Lexington, KY.

## Publications and Presentations

Knight, K., & Hiller, M. L. (1998). Dallas County Judicial Treatment Center (DCJTC) Client profiles and outcome evaluation: September 1994 through August 1995 admissions. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Knight, K., Hiller, M. L., & Simpson, D. D. (1998). Databook for prisonbased treatment assessment (PTA) project. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Knight, K., Hiller, M. L., & Simpson, D. D. (1998). Prison-based treatment assessment (PTA): Final activity report. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Knight, K., Hiller, M. L., & Simpson, D. D. (1998). Prison-based treatment assessment (PTA): Summary report. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Nucatola, D. C., Hiller, M. L., & Knight, K. (1998). Intervention evaluation: Time Out! For Me. Fort Worth: Texas Christian University, Institute of Behavioral Research.

### **CONFERENCE PRESENTATIONS**

(Listed chronologically by month)

Hiller, M. L., & Knight, K. (January). Evaluating corrections-based substance abuse treatment programs. Paper

presented at the annual winter training institute of the American Probation and Parole Association (APPA), Orlando, FL.

Knight, K., & Hiller, M. L. (January). Community corrections-based substance abuse treatment: Outcome evaluation of the Dallas County Judicial Treatment Center. Paper presented at the annual winter training institute of the American Probation and Parole Association (APPA), Orlando, FL.

Knight, K., & Hiller, M. L. (February). An overview of methodology for evaluating corrections-based programming. Invited presentation at the National Workshop on Assessing the Effectiveness of Corrections Programs, Department of Justice, Office of Justice Programs, Corrections Program Office, Chicago, IL.

Knight, K., Hiller, M. L., & Simpson, D. D. (February). Evaluating prisonbased modified therapeutic community treatment in Texas. Invited presentation at the National Workshop on Assessing the Effectiveness of Corrections Programs, Department of Justice, Office of Justice Programs, Corrections Program Office, Chicago, IL.

Simpson, D. D. (February). Performance indicators: Putting it all together. Invited presentation at the National Workshop on Assessing the Effectiveness of Corrections Programs, Department of Justice, Office of Justice

Programs, Corrections Program Office, Chicago, IL.

Simpson, D. D. (February). TCU studies on treatment process and outcomes. Paper presented at the Health Services Research Seminar, National Institute on Drug Abuse, Rockville, MD.

Simpson, D. D. (March). Community alternatives to incarceration for drug dependent offenders. Invited presentation at the Office of National Drug Control Policy (ONDCP) Consensus Meeting on Drug Treatment in the Criminal-Justice System, Breaking-the-Cycle with Science-Based Policies and Programs, Washington, DC.

Simpson, D. D. (March). Invited participant at the meeting on Forging the link: The Effectiveness and Outcomes of Drug Abuse Prevention and Treatment Services, National Institute on Drug Abuse, Washington, DC.

Dansereau, D. F. (April). Visualizing personal issues: The use of maps in counseling. Poster presented at the annual meeting of the Southwestern Psychological Association, New Orleans, LA.

Griffith, J. D. (April). Validation of the Simpatia Scale. Presented at the annual meeting of the Southwestern Psychological Association, New Orleans, LA.



Several on-line presentations of IBR conference materials are provided in the "Web Posters" section of the IBR Web site (www.ibr.tcu.edu).

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Broome, K. M., Joe, G. W., & Simpson, D. D. (June). *Patient and community differences in HIV risk reduction in a national treatment sample*. Paper presented at the meeting of the Committee for Problems of Drug Dependence (CPDD), Phoenix, AZ.

Griffith, J., Rowan-Szal, G. A., Roark, R., & Simpson, D. D. (June). *Meta-analysis of contingency management (CM) in drug abuse treatment*. Poster presented at the meeting of the Committee for Problems of Drug Dependence (CPDD), Phoenix, AZ.

Joe, G. W., Simpson, D. D., & Broome, K. M. (1998, June). Effects of readiness for drug abuse treatment on patient retention and assessment of process. Poster presented at the meeting of the Committee for Problems of Drug Dependence (CPDD), Phoenix, AZ.

Rowan-Szal, G. A., Chatham, L. R., Joe, G. W., & Simpson, D. D. (June). Assessment of cocaine and alcohol dependent methadone clients. Paper presented at the meeting of the Committee for Problems of Drug Dependence (CPDD), Phoenix, AZ.

Simpson, D. D. (June). Overview of DATOS and TCU studies on treatment process. Invited presentation at Annual Meeting of National Association of State Alcohol and Drug Abuse Directors, Salt Lake City, Utah.

Simpson, D. D., & Knight, K. (June). *Measuring treatment process and outcomes: Theory and practice.*Invited presentation at Residential Substance Abuse Treatment for State Prisoners Cluster Conference, Washington, DC.

Bennett, J. B., & Lehman, W. E. K. (August). Gender differences across types of employee substance use: Influence of job and background factors. Poster presented at the International Congress of Applied Psychology, San Francisco, CA.

Lehman, W. E. K., Reynolds, G. S., & Bennett, J. B. (August). Assessing the utility of a measure of tolerance for coworker substance use. Paper presented at the International Congress of Applied Psychology, San Francisco, CA.

Bartholomew, N. G. (September). *COCA: An intervention for cocaine-using patients*. Workshop presented at the American Methadone Treatment Association Conference, New York.

Rowan-Szal, G. A., Greener, J. M., Roark, R., & Simpson, D. D. (September). Demonstration of a computerized contingency management system (TCU Star Chart). Poster presented at the American Methadone Treatment Association Conference, New York.

Simpson, D. D. (September). *TCU* studies on treatment process and outcomes. Invited presentation at working meeting on Integrating Health Services and Treatment Research, National Institute on Drug Abuse, Washington, DC.

Broome, K.M. (October). Hierarchical models for treatment research. Invited presentation at Statistical Procedures for SSI Workgroup Meeting, Center for Substance Abuse Treatment, New Orleans, LA.

Simpson, D. D. (October). Research informing policy. Invited panel at National Corrections Conference on Enhancing Public Safety by Reducing Substance Abuse, Office of Justice Programs, Department of Justice, Los Angeles, CA.

Simpson, D. D. (October). *TCU* studies on treatment process and outcomes. Invited presentation at Statistical Procedures for SSI Workgroup Meeting, Center for Substance Abuse Treatment, New Orleans, LA.

Hiller, M. L., Knight, K., & Simpson, D. D. (November). *Prison-based substance abuse treatment, residential aftercare, and recidivism*. Paper presented at the annual meeting of the American Society of Criminology (ASC), Washington, DC.

Knight, K., Hiller, M. L., Broome, K. M., & Simpson, D. D. (November). Legal pressure and treatment motivation in a national sample of long-term residential programs. Paper presented at the annual meeting of the American Society of Criminology (ASC), Washington, DC.

Simpson, D. D., & Knight, K. (November). Correctional treatment in community settings. Invited presentation to Physician Leadership on National Drug Policy, "Health Care, Addiction, and Criminal Justice System," Washington, DC.



# INSTITUTE OF BEHAVIORAL RESEARCH TEXAS CHRISTIAN UNIVERSITY

TCU Box 298740 Fort Worth, TX 76129 Phone: 817/257-7226 Fax: 817/257-7290 E-mail: ibr@tcu.edu

IBR Web site: www.ibr.tcu.edu DATOS Web site: www.datos.org

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**Editorial Assistants:** 

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