

Research Summary

Focus on Treatment Mapping

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Mapping as a cognitive intervention

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Treatment mapping, also known as *node-link mapping*, is a visual representation system developed at TCU for helping substance abuse treatment counselors and their clients work on issues that arise during counseling. It has served as the primary cognitive enhancement strategy in the DATAR (Drug Abuse Treatment Assessment and Research) project, funded since 1989 by NIDA to study

treatment process and evaluate enhancement strategies with an objective of improving the overall effectiveness and efficiency of drug treatment.¹

Mapping is an easily learned method of eliciting, representing, and organizing information so that relationships between ideas, feelings, and actions can be readily

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Mapping-based manuals

Mapping New Roads to Recovery: Cognitive Enhancements to Counseling is a self-paced training manual developed as a primer for counselors and other clinicians interested in learning how to use node-link mapping. A step-by-step format is used to explain both the theory and application of mapping in individual and group counseling settings. The manual includes a review of cognitive learning theory, a glossary of node-link mapping terms, self-guided

exercises for practice and mastery, examples of mapped counseling sessions, and ideas for using mapping with clients.

The *TCU Guide Maps: A Resource for Counselors* manual is a compilation of structured guide maps that have been used successfully with probationers in residential treatment programs. Over 50 map templates are included for use in

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observed and understood. An example of a node-link *free* map produced during a drug abuse counseling session is shown in Figure 1. The nodes or boxes contain client-generated information and the labeled lines represent relationships between the nodes. When presented in its entirety, this much information can appear complicated. The benefit of mapping (using a *free* or *process* map) is that the information is constructed sequentially, node-by-node and link-by-link, based on the discussion between clients and counselor. Consequently, the gradually increasing complexity is matched by increasing familiarity. Our research with

versions of this representation tool has shown them to be successful in communicating critical information on drug abuse to non-residential probationers,² helping individuals analyze drug and alcohol experiences,³ and assisting outpatient treatment counselors in their interactions with opiate-dependent clients.^{4,5,6}

Based on early evidence of the utility of mapping in DATAR, the CETOP project (Cognitive Enhancements for Treatment of Probationers) extended the investigation of mapping to residential substance abuse treatment in criminal justice settings. With NIDA funding, CETOP has refined strategies for

using mapping effectively with mandated, often coerced, treatment clients. In addition to *free* mapping and *information maps* for use in psycho-educational groups, an extensive set of pre-formed, fill-in-the-node *guide* maps for addressing specific problems and issues also have been developed. This includes a special series for 12-step work designed to personalize the AA and NA steps and encourage their exploration. Several manuals have been developed describing the clinical applications of these interventions, and research in different treatment settings supports their effectiveness. ■

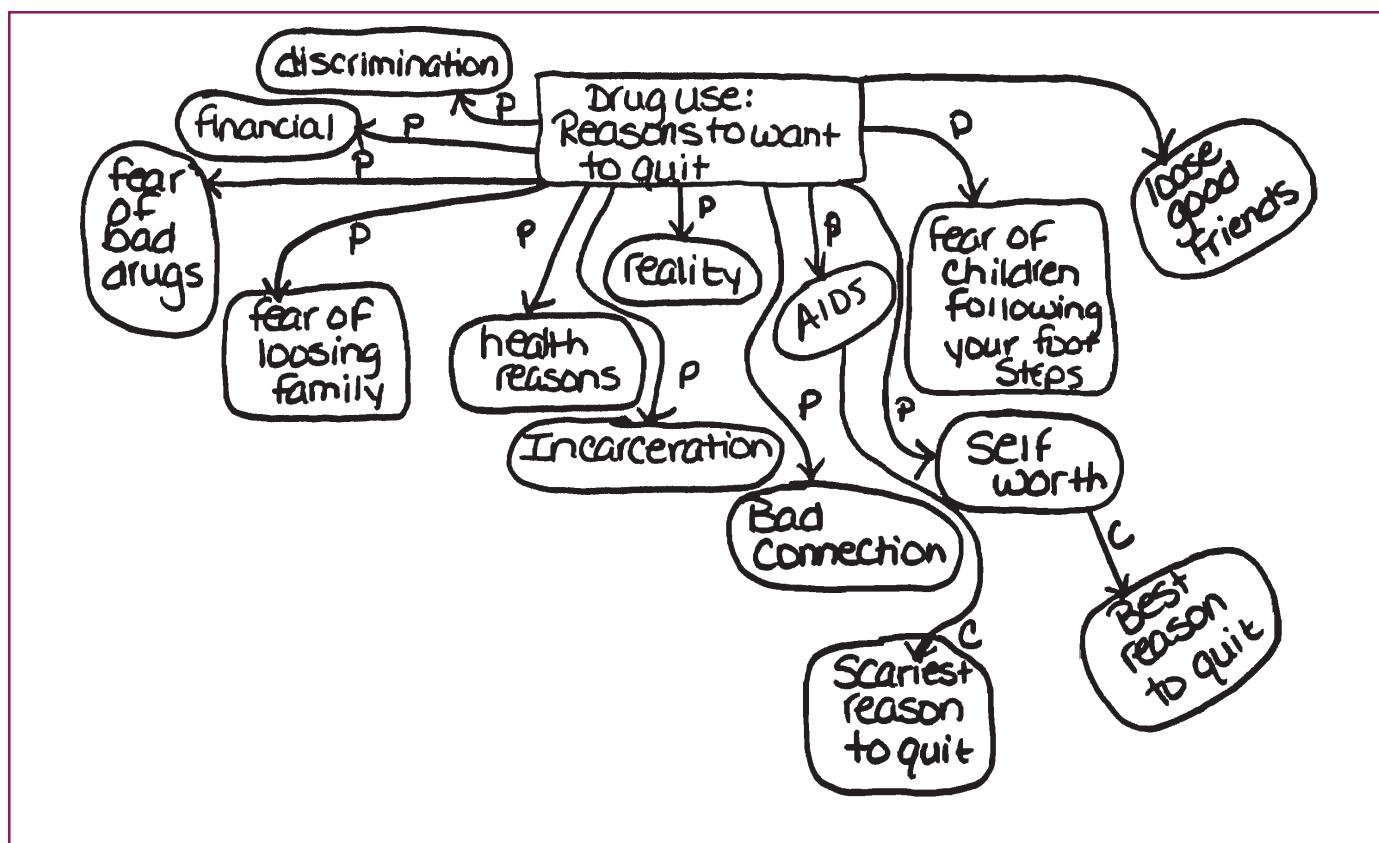


Figure 1. Example of node-link *free* map generated during a drug abuse counseling session.

Research on treatment mapping

Our general approach to research has been to compare randomly assigned clients receiving mapping-enhanced counseling with those receiving standard counseling. Based on during treatment self-assessments, we have found that mapping clients have higher ratings of their own therapeutic progress^{7,8,9,10} and have more positive affective responses to treatment.¹¹ Mapping clients have been shown

to miss fewer counseling sessions¹² and to be less likely to test positive for opiates or cocaine during treatment compared to standard clients.¹³ We also have found that mapping effects continue after clients leave treatment. Specifically, compared to standard clients, mapping clients were less likely to test positive for opiates, less likely to report using needles, and less likely to report criminal

activity 12 months after treatment discharge.^{14,15} These results provide convergent evidence that mapping can be an important tool for increasing the effectiveness of drug abuse treatment. Mapping appears to be useful with both men and women of any ethnicity and may be particularly valuable for clients with attention deficits,¹⁶ multiple drug problems,¹⁷ and less educational experience.¹⁸ ■

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both individual and group counseling settings covering a variety of recovery issues such as self-esteem, goal setting, managing feelings, getting along with others, health issues, and problem solving. The templates feature a structured, fill-in-the-blank format that guides the client's thinking within a specific topic area while also allowing freedom for self-expression. The maps are laid out for easy photocopying and the manual includes ideas for processing the content of the maps and leading discussions.

Mapping Your Steps: 12-Step Guide Maps provides mapping templates for helping clients work their 12-step program and contemplate the deeper, personal relevance of each step. This manual is an excellent resource for counselors who want to assist clients interested in immersing themselves in the steps and traditions of groups like Alcoholics Anonymous,

Narcotics Anonymous, or Cocaine Anonymous. The approach is suitable for both "old-timers" and for clients who are new to 12-step work. The maps encourage reflection and

serious consideration of the foundational ideas of 12-step programs such as powerlessness, concepts of a Higher Power, moral inventories, making amends, and helping others. ■

AVAILABLE MAPPING MANUALS

Copies of the printed manuals listed below are available through Lighthouse Institute, a part of Chestnut Health Systems. A charge of \$15 to \$25 per manual, plus postage, covers copying and handling.

Mapping New Roads to Recovery: Cognitive Enhancements to Counseling (1993; 131 pp.) D. F. Dansereau, S. M. Dees, L. R. Chatham, J. F. Boatler, & D. D. Simpson

TCU Guide Maps: A Resource for Counselors (1999; 230 pp.) S. M. Dees, & D. F. Dansereau

Mapping Your Steps: 12-Step Guide Maps (2000; 218 pp.) T. L. Sia, D. F. Dansereau, & S. M. Dees

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References

¹ 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.

² Knight, K., Simpson, D. D., & Dansereau, D. F. (1994). Knowledge mapping: A psychoeducational tool in drug abuse relapse prevention training. *Journal of Offender Rehabilitation*, 20, 187-205.

³ Dees, S. M., & Dansereau, D. F. (1993). Using schematic organizers to help college students organize personal concepts and behavior related to alcohol and cocaine use. *Addictive Behaviors*, 18(6), 645-657.

⁴ Dansereau, D. F., Joe, G. W., Dees, S. M., & Simpson, D. D. (1996). Ethnicity and the effects of mapping-enhanced drug abuse counseling. *Addictive Behaviors*, 21(3), 363-376.

⁵ Dansereau, D. F., Joe, G. W., & Simpson, D. D. (1993). Node-link mapping: A visual representation strategy for enhancing drug abuse counseling. *Journal of Counseling Psychology*, 40, 1-11.

⁶ Dansereau, D. F., Dees, S. M., Greener, J. M., & Simpson, D. D. (1995). Node-link mapping and the evaluation of drug abuse counseling sessions. *Psychology of Addictive Behaviors*, 9(3), 195-203.

⁷ Czuchry, M., Dansereau, D. F., Dees, S. M., & Simpson, D. D. (1995). The use of node-link mapping in drug abuse coun-

FREE DOWNLOADS

In addition to purchasing published copies (see page 3), mapping-based manuals also are available for downloading as Adobe® Acrobat® PDF files from the IBR Web site. See the “[Manuals](#)” section or the “[Downloads](#)” page at <http://www.ibr.tcu.edu>.

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Of related interest, the *DATOS Web site* provides background information and summaries of the most recent findings from the national, multi-site Drug Abuse Treatment Outcomes Studies at: <http://www.datos.org>.

seling: The role of attentional factors. *Journal of Psychoactive Drugs*, 27, 161-166.

⁸ Knight, D. K., Dansereau, D. F., Joe, G. W., & Simpson, D. D. (1994). *American Journal of Drug & Alcohol Abuse*, 20(4), 517-527.

⁹ Newbern, D., Dansereau, D. F., & Pitre, U. (1999). Positive effects on life skills motivation and self-efficacy: Node-link maps in a modified therapeutic community. *American Journal of Drug & Alcohol Abuse*, 25(3), 407-423.

¹⁰ Czuchry, M., & Dansereau, D. F. (1999). Node-link mapping and psychological problems: Perceptions of a residential drug abuse treatment program for probationers. *Journal of Substance Abuse Treatment*, 17(4), 321-329.

¹¹ 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.

¹² Joe, G. W., Dansereau, D. F., & Simpson, D. D. (1994). Node-link mapping for counseling cocaine users in methadone treatment. *Journal of Substance Abuse*, 6, 393-406.

¹³ Dees, S. M., Dansereau, D. F., & Simpson, D. D. (1997). Mapping-enhanced drug abuse counseling: Urinalysis results in the first year of methadone treatment. *Journal of Substance Abuse Treatment*, 14(1), 45-54.

¹⁴ Pitre, U., Dansereau, D. F., & Joe, G. W. (1996). Client education levels and the effectiveness of node-link maps. *Journal of Addictive Diseases*, 15, 27-44.

¹⁵ 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 Diseases*, 185(5), 306-313.

¹⁶ Czuchry, M., Dansereau, D. F., Dees, S. M., & Simpson, D. D. (1995). The use of node-link mapping in drug abuse counseling: The role of attentional factors. *Journal of Psychoactive Drugs*, 27(2), 161-166.

¹⁷ Joe et. al. (1994), op. cit.

¹⁸ Pitre et. al. (1996), op. cit.

Additional References

Bahr, G. S., & Dansereau, D. F. (2001). Bilingual knowledge maps (BIK-Maps) in second language vocabulary learning. *Journal of Experimental Education*, 70(1), 5-24.

Dansereau, D. F., & Dees, S. M. (2002). Mapping training: The transfer of a cognitive technology for improving counseling. *Journal of Substance Abuse Treatment*, 22(4), 219-230.

Czuchry, M., & Dansereau, D. F. (in press). A model of the effects of node-link mapping on drug abuse counseling. *Addictive Behaviors*.

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