This manual was developed as part of the National Institute on Drug Abuse (NIDA) Grant DA08608, Cognitive Enhancements for the Treatment of Probationers (CETOP).

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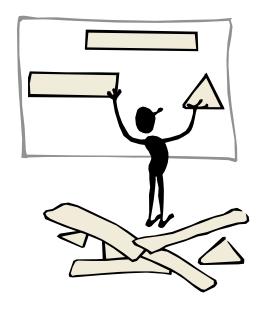
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January, 2000

Chapter One

Why Use a Map?

A Bedtime Story: Research on Mapping



Why use a map?

The purpose of this manual is to introduce a promising technique that can be used by counselors to help clients represent and resolve personal issues. In Chapters Two through Six we show you guide maps "in action." We hope you are intrigued enough to be asking if there is research that validates the effectiveness of this tool in the counseling process. In this chapter, we'll give you some background and a quick look at the major research findings on maps.

Types of maps. Node-link maps are tools that can visually portray ideas, feelings, facts, and experiences. There are three broad categories of these maps:

- 1. "free" or "process" maps
- 2. "information" maps, and
- 3. "guide maps" (the focus of this manual).

As you can see from the examples in this manual, the **nodes** in a map are drawn as enclosed boxes and represent thoughts, actions, or feelings. The map **links** are simple lines with arrows that are labeled to show the direction of influence and the interrelationships among the nodes.

Free or process maps are "draw as you go" maps. Using a chalkboard, flip chart, paper and pencil, or computer, client(s) and counselor can work together to create a map of the problem or issue under discussion. For

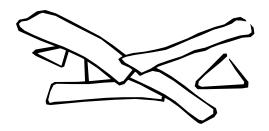
examples of the use of free mapping, see *Mapping New Roads to Recovery:* Cognitive Enhancements to Counseling (Dansereau, Dees, Chatham, Boatler, and Simpson, 1993).

Information maps were the starting point for the map system. They were used initially in academic settings when research showed them to be powerful study tools. These maps organize facts in a specific content area and present them in an easy-to-remember format. The first research on mapping was done with college students, who could remember more main ideas from maps than from comparable texts.

Guide maps are pre-structured "mini-interviews": the fill-in-the-space format guides an individual's thinking within a specific framework (e.g., personal strengths, goals), but allows ample freedom for self-expression. In a group setting, a guide map can be used to focus and keep a discussion on track. As an individual activity, it provides a structure for thinking about and putting some organization to otherwise nebulous personal issues. In group work, the map can provide some assurance that each group member has had a chance to visit a particular issue personally, even if there has been insufficient session time for each of them to air those issues within the group.

Roots and rationale. Node-link maps have an empirical base in a body of research dealing with the effects of using two dimensional visual representations. These graphic representations are frequently found to be more effective than verbal discourse or written narrative in dealing with complex problems and issues. Flow charts, organizational charts, Venn diagrams, pictures, and graphs can increase communication efficiency by making related ideas easier to locate and recognize, and, as a result, potentially more amenable to inferences and recall (Greeno, 1980; Larkin & Simon, 1987; Mayer & Gallini, 1990). Spoken language or written narrative are in physical formats that produce linear "strings" of ideas. Visual representations, on the other hand, have the capability of simultaneously clustering interrelated components to show complex multiple relationships such as parallel lines of thought and feedback loops.

Complexity often makes personal problems both difficult to analyze and solve and emotionally daunting. A visual representation such as a node-link map can capture the most important aspects of a personal issue and make



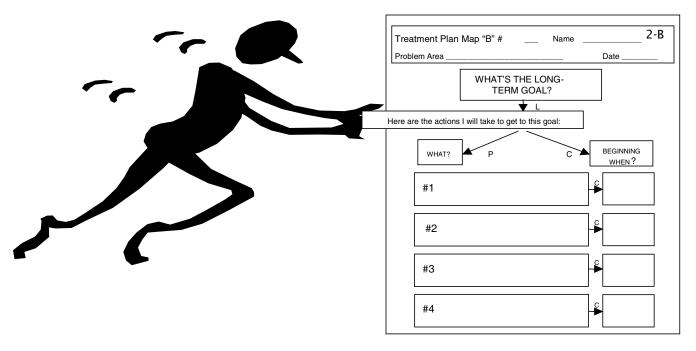
alternatives more salient for both the client and the counselor. Because this has the potential to make a problem appear more manageable and a solution more probable, it may diffuse at least some of the anxiety surrounding the issue, as well as increase motivation to work toward a solution.

Research: maps for counseling. In 1989, maps were first studied as personal management tools for college students in substance abuse prevention research (Tools for Improving Drug and Alcohol Education and Prevention, D.F. Dansereau, Principal Investigator) sponsored by the National Institute on Drug Abuse (NIDA). At the same time, again through the NIDA-sponsored DATAR (Drug Abuse Treatment for AIDS Risk Reduction) research (D. D. Simpson, Principal Investigator), maps were also being introduced to heroin-addicted clients and their counselors in three urban Texas methadone clinics. Findings from this research were quite positive. A second DATAR project (Improving Drug Abuse Treatment for AIDS-Risk Reduction) and the NIDA-sponsored CETOP project (Cognitive Enhancements for the Treatment of Probationers; D. F. Dansereau, PI) confirmed maps as useful counseling tools. The CETOP project did so with a particularly tough client pool, probation violators in a criminal justice system treatment program.

The guide maps in this manual were used primarily in the CETOP project, although several have DATAR roots. Many of the maps were drawn by Dansereau and associates initially, and then redrawn to meet counselor needs. Some of the maps were drawn by counselors and put into computer format by grant personnel.

On the following two pages is a summary of major findings from the four research projects. The research articles that support each finding are referenced here as well. A complete reference list follows this summary.

7



What Research Reveals About the Impact of Mapping: A Quick Summary



- ◆ Memory for the Session: Maps make treatment discussions more memorable.
 - ◆K. Knight, Boatler, & Simpson, 1991
 - ◆K. Knight, Simpson, & Dansereau, 1994
 - ♦ Focus: Maps increase on-task performance in group sessions and are especially helpful for clients who have attentional problems.
 - ◆Dansereau, Dees, Greener, & Simpson, 1995
 - ◆Dansereau, Joe, & Simpson, 1993
 - ◆D. Knight, Dansereau, Joe, & Simpson, 1994
 - ◆Joe, Dansereau, & Simpson, 1994
 - ◆Czuchry, Dansereau, Dees, & Simpson, 1995
 - ◆Dansereau, Joe, & Simpson, 1995
- ◆ Communication: Maps give clients greater confidence in their ability to communicate. This is especially so for non-Anglo clients and clients with limited education.
 - ◆Pitre, Dansereau,& Joe, 1996
 - ◆Dansereau, Joe, & Simpson, 1996
 - ◆Blankenship, Dees, & Dansereau,1997 in progress
 - ◆Newbern, Dansereau, & Pitre, 1999
- ♦ Ideas: Maps facilitate the production of insights and ideas. Maps:

Stimulate greater session depth,

- ◆Dansereau,Dees, Greener,& Simpson, 1995
- ◆Newbern, Dansereau, Dees, 1997

Identify gaps in thinking.

♦Pitre, Dansereau,& Simpson, 1997

Uncover psychological issues,

- ◆Collier, Czuchry, Dansereau, & Pitre, submitted
- ◆Czuchry & Dansereau, submitted
- ◆Dansereau,Joe,& Simpson, 1993

Can provide greater breadth.

◆Dansereau, Joe, & Simpson, 1993

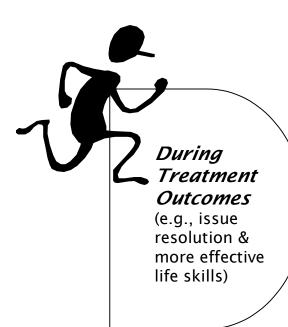
(continued)

(What Research Reveals About the Impact of Mapping, continued)



Quality of the Client & Counselor Relationship

- **♦** <u>Rapport</u>: Mapping facilitates the counselor-client therapeutic alliance.
 - ◆Dansereau, Joe, & Simpson, 1993
 - ◆Dansereau, Joe, & Simpson, 1996
 - ◆Dansereau, Joe, Dees, & Simpson, 1996
 - ◆Simpson, Joe, Rowan-Szal, & Greener, 1996



◆ <u>Positive Feelings Toward Self &</u> Treatment: Maps facilitate self-

confidence, self-efficacy & problem solving. They can foster positive feelings about personal progress in treatment and positive perceptions of treatment process.

- ◆Dansereau, Joe, & Simpson, 1993
- ◆Dansereau, Joe, & Simpson, 1995
- ◆Dansereau, Joe, Dees, & Simpson, 1996
- ◆Joe, Dansereau, & Simpson, 1994
- ◆Pitre,Dees,Dansereau, & Simpson, 1997
- ◆Czuchry,Dansereau,Dees, & Simpson, 1995
- ◆D. Knight, Dansereau, Joe, & Simpson, 1994
- ◆Pitre, Dansereau, Newbern & Simpson, 1997
- ◆Blankenship, Dees, & Dansereau,in progress
- ◆Newbern, Dansereau,& Pitre, 1999
- ◆ Show Up "Clean": Clients who map miss fewer sessions and have fewer positive urinalysis tests for opiates or cocaine.
 - ◆Czuchry, Dansereau, Dees, & Simpson, 1995
 - ◆Dansereau,Joe,Dees, & Simpson, 1996
 - ◆Dansereau, Joe, & Simpson, 1993
 - ◆Joe, Dansereau, & Simpson, 1994
 - ◆Dansereau,Joe,& Simpson, 1995
 - ◆Dees, Dansereau, & Simpson, 1997

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(What Research Reveals About the Impact of Mapping, continued)



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