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### **ABSTRACT**

The evaluations of substance abuse prevention programs have been criticized for being incomplete, for lacking a comprehensive approach, and for lacking a process evaluation component. Context factors have been found to have distinctive patterns among alcohol and other drug abusers. Among the variables of interest, family cohesion, family expressiveness, and family conflict have been found to have important relationships in alcohol and other drug abusers. Pasos Adelante (Steps Forward) is an early intervention demonstration project for 3- to 5-year-old children and their parents. The program consists of a 12-week cycle for children and parents which meets 2 mornings per week for 3.5 hours plus one home visit per week. The design of Pasos Adelante attempts to improve on previous evaluation limitations by incorporating an ethnographic component into the evaluation design. The goal of this type of research is to identify the attitudes and values, patterns of behavior, and categories of thought that are characteristic of a particular culture. Through participant observation in the early childhood classrooms and parent meetings, two ethnographic assistants will identify key features and processes in program implementation. It is expected that Pasos Adelante will continue for 5 years to serve parents and children. By the incorporation of quantitative and qualitative methodologies, it is expected that the evaluation of the program will yield valuable information about: (1) the family context of parent and child in the family where there is alcohol abuse; (2) the process of the program; and (3) the outcomes of the program. (ABL)

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# QUANTITATIVE AND QUALITATIVE METHODS IN THE EVALUATION OF AN ALCOHOL AND OTHER DRUG ABUSE PREVENTION PROGRAM FOR HIGH RISK FAMILIES WITH PRESCHOOL CHILDREN

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

La Frontera Center

502 W. 29th Street Tucson, Arizona 85713 In the Fall of 1991, the La Frontera Center, Tucson Council for Alcohol and Drug Dependence (TCADD), and Community Organization for Drug Abuse Control (CODAC) combined their efforts to write Pasos Adelante (Steps Forward) a proposal to conduct a demonstration program funded by the Office of Substance Abuse Programs (OSAP) of the U.S. Government. When Pasos Adelante was funded, it provided for the coordination of a program that would run concurrently in three agencies (La Frontera Hope Center Methadone Maintenance facility, TCADD, and CODAC). This program would demonstrate the collaboration of three agencies to carry out an educational program to reduce alcohol and other drug abuse in the Tucson, Arizona area.

The evaluations of substance abuse prevention program have been criticized for being incomplete (Powers, 1990), for lacking a comprehensive approach (Powers and Miller, 1985; Powers and Miller, 1987), and for lacking a process evaluation component (Moos, Finney, and Cronkite, 1990). The lack of a process evaluation component leads to major inferential problems in the interpretation of data. Moos et al. have referred to the analogy of a "black box" where there is input to the program, output from the program, but one does not know what is going on during the program. Additionally, if there are successes or failures of the program, one does not know what may have caused these successes or failures because there was no comprehensive process evaluation. The design of Pasos Adelante attempted to improve on these limitations by incorporating an ethnographic component into the evaluation design.

## CONTEXT FACTORS

Context factors have been found to have distinctive patterns among alcohol and other drug abusers. Among many variables of interest, family cohesion, family expressiveness, and family conflict have been found to have important relationships in alcohol and other drug abusers. Filstead, McElfresh, and Anderson (1981) as well as Moos and Billings (1982) reported that alcoholic patients reported less family cohesion, less family expressiveness, and more family conflict that other normative patients. Garfinkle (1982) found that family cohesion and intellectural-cultural orientation of the family have the greatest influence on children's cognitive , social development, and verbal communication. Gottfried and Gottfried (1984) reported that home environment had a positive relationship with cognitive development in young children and verbal communication. They also found that cohesion expressiveness were related to more and better home stimulation for the child. Such home stimulation influenced the child's mental development. Fowler (1980) argued that less family cohesion was linked to developmental delay, speech and language deficits, as well as aggressive and hostile behavior. Davis and Graybill (1983) reported that families with a history of physical or sexual abuse had greater family conflict and less family cohesion and family expressiveness.

The design of the Pasos Adelante evaluation addressed three major areas: (1) the context of the program, (2) the process and



conduct of the program, and (3) the outcomes of the program. The context component was not specifically requested by OSAP (OSAP's emphasis was on process and outcome). However, the context component was added following the reasoning of Moos et al, 1990. The incorporation of quantitative and qualitative methodologies appeared to be an efficient way to meet the three components of the evaluation design.

## **PROGRAM**

Pasos Adelante (Steps Forward) is an early intervention demonstration project for 3 - 5 year old children and their parents who have a history of alcohol and other drug addition, and will in most cases be currently enrolled in treatment.

The program consists of a 12-week cycle for children and parents which meets two mornings per week for three and a half hours plus one home visit per week. The addict adult population, as a result of substance abusing lifestyles, has been shown to lack parenting skills which puts children at severe risk for numerous problems such as neglect and abuse. Through combined skills development and cognitive and affective learning, the project aims to decrease developmental age and chronological age gaps in preschool children, and to improve motor, language, social competency, communication and coping strategies in the children and improve parent effectiveness. Through these objectives, the project will decrease risk factors and increase protective factors in at-risk children. The curriculum is implemented to two places: the home and one of the three centers:

<u>Center-based</u>: The participating parents and children (3 - 5 years old) will be transported to one of the three centers for participation in programs. At the centers there will be one of three programs: (1) the parent program, (2) the children's program, and (3) a joint activity for parents and children. The center-based activities are twice a week, four and one-half hours per meeting in the morning.

Home visits: The Prevention Specialist will meet with parents' in their home. This is once a week for 45-60 minutes.

In the development and implementation of the curriculum the goals of the project are tied to the home and center activities. These activities are carefully tied to key developmental variables such as social skills, language development, and fine motor development.

## STATISTICAL EVALUATION

Measures. The following instruments will be used to measures child-related outcomes in this evaluation: the Denver Developmental Screening Test(Frankenburg and Dodds, 1981), and a locally developed child rating scale. A questionnaire will be used to cottain a measure of the parents' parenting skills. The Family Environment Scale (Mocs and Moos, 1986) will be used to measure



family environment.

Analysis. The DDST, the child rating scale, and the parent questionnaire will each separately be analyzed using a repeated measures analysis of variance. A few a priori hypotheses will be tested with Bonferroni t-tests. Student Neuman Keuls post-hoc comparisons will be used to investigate comparisons suggested by the data analysis. After the major evaluation analyses are completed, several factors will be used to examine program effects such as the age of the children (3,4,5), and variables from the family environment.

# ETHNOGRAPHIC EVALUATION

The Ethnographic Approach. An ethnographic component will be incorporated into the evaluation design because of the unique insights into human behavior that are afforded by anthropology. The differences between anthropology and other social sciences can be seen in the goals and methodology of ethnographic research. The goal of this type of research is to identify the attitudes and values, patterns of behavior, and categories of thought that are characteristic of a particular culture. Anthropologists explore the relationships among these variables in order to shed light on the relationships among culture, thought, and behavior. The unique aspect of ethnographic research is the perspective adopted by the anthropologist. The anthropologist does not approach a new research subject on the basis of predetermined, scientific categories of inquiry or hypotheses to be tested. Instead, the goal of ethnographic research is to develop an understanding of the cultural system that is as close as possible to that of the members, or natives, of that culture. Anthropologists refer to this as the "emic" point of view (Pika, 1966). Anthropologists recognize that human behavior must be observed and interpreted within the context of both ongoing social interaction and the larger cultural system. That larger cultural system includes attitudes, values, and rules governing human behavior and social interaction. By adopting this holistic perspective, anthropologists are able to explore the relationships among cultural values and individual attitudes and behaviors.

Participant Observation. The primary research method used by anthropologists to achieve these goals is participant-observation. Unlike other types of observational research in which the observer is isolated from the phenomena being observed, the anthropologist participates in the daily life of the cultural system being studied. It is through participant observation that the anthropologist comes to an understanding of the cultural system in its own, "emic", terms. Participant-observation requires the anthropologist to interact with the members of the cultural system on a consistent basis. By talking with the members of the culture about their interpretations of what has been observed, the anthropologist is able to identify culturally meaningful patterns of behavior, as well as underlying values and attitudes. All observations and information learned during this process are



recorded by the anthropologist in field notes. Field notes may be supplemented with video or audio tapes or certain cultural events. This information serves as the basis of an ethnography, or written description, of the culture that has been investigated. An ethnography includes more than a description of the cultural system; the anthropologist also uses insights gained during fieldwork to identify and discuss key cultural values, attitudes, and patterns of behavior.

Los Pasos Adelante Ethnography. The ethnography of the initial year of Pasos Adelante will focus on the process of program implementation. Two ethnographic assistants, working under the direction of the project anthropologist, will document the children's component implementation of and the component. Through participant observation in the early childhood classrooms and parent meetings, they will identify key features and processes in program implementation. Since the Pasos Adelante curriculum will be implemented by three different agencies, the ethnography will compare the processes of program implementation in the three centers. The ethnographic assistants will observe the early prevention specialists working with the parents and children, will participate in activities in the early childhood centers, and will talk informally with the parents and children. In addition, they will attend staff meetings and will discuss the process of program implementation with Pasos Adelante staff members. observations will be recorded in field notes which will be entered onto a personal computer using word processing software. "Ethnograph" software program will then be used to code those notes for key features and processes in program implementation. project anthropologist will develop the coding format and will write the ethnography from the coded fieldnotes. The ethnography will be submitted to the Pasos Adelante staff to provide them with information about the process of program implementation and to provide a basis for revising the program for subsequent years.

### **SUMMARY**

Los Pasos Adelante was funded in September 1991 by the Office of Substance Abuse Programs (OSAP). It is expected that the program will continue for five years to serve parents and children. By the incorporation of quantitative and qualitative methodologies, it is expected that the evaluation of this program will yield valuable information about (1) the family context of parent and child in the family where there is alcohol and other drug abuse, (2) the process of the program, and (3) the outcomes of the program.

#### Notes

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