

THE INTERNAL CLIMATE OF STATE HOSPITALS:  
A MULTISYSTEM MULTIMETHOD ANALYSIS

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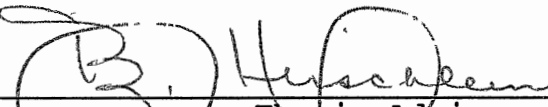
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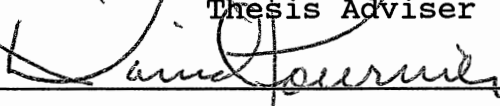
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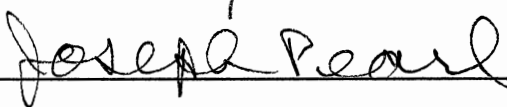
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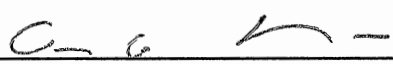
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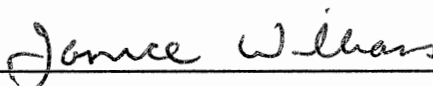
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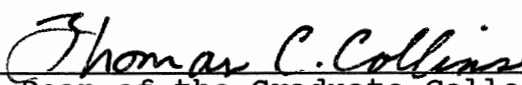
  
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## PREFACE

When I began my doctoral studies in the Fall of 1988 I had just assumed duties as superintendent of a state hospital in Oklahoma. Very few people think state hospitals are of any value to society. Judges commit people to state hospitals sometimes as an alternative to jail. At the same time judges commit patients indefinitely, federal and state authorities implement policy to reduce inpatient beds, and advocacy groups may file law suits to support the right to refuse treatment. These mixed messages can make the work in these facilities frustrating.

This research project focused on the attitudes and behaviors of staff and patients within the social group in five wards two state hospitals in Oklahoma. These wards were selected to represent two different but typical programs of service to adults with serious and debilitating mental illness. The wards were similar in size, staffing, and other ward characteristics.

The objectives of the research was to identify and evaluate relationships between selected climate and work group variables, and make practical recommendations for administrators to consider as they go about the day to day work of managing change. For this field study, the type

of research used was descriptive, correlational, causal-comparative. Five wards with specific program characteristics were selected to narrow the focus of the multisystem, multimethod approach, and to efficiently manage a large number of variables.

One thing that administrators know is that every patient, employee and work group is slightly different from another. In the day to day work environment it is difficult to know how these differences may shape the organization. Although we may think that something is this or that way from our experience, carefully collected and analyzed information may provide surprising insights to help us be more effective leaders. I hope that this study will contribute to our knowledge of state hospitals so that we can improve both the quality of care and the quality of life.

## ACKNOWLEDGEMENTS

Dr. Beulah Hirschlein, I will forever value the joy and precision you brought to our discussions. In four years of working with you, I never could lose enthusiasm, and always looked forward to our time together.

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Dr. Mike Hopkins, now I can truly say thank you for encouraging me to get this started in the first place.

Dr. Bob Helm, thank you for challenging me continually on "what exactly is your research question?"

Dr. Paul Harper, thank you for touching my future with your excellence.

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Dr. Don Baker, you helped make SPSS PC a user friendly system for me.

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Pat Thompson, my executive assistant at the hospital, your gentle friendship and efficiency are gifts valued beyond measure.

Robin Petitt, MSW, and Jonny Welsh, MSW, my research assistants, your energies, attentiveness to detail, and eagerness to learn and contribute to the public mental health system help me to believe in the future.

Commissioner Anderson, Senator Hobson, and Rodney, it is done. Thanks for sticking by me with your interest and patience.

John White, M.D., Dr. Schecter, and all the staff at Eastern State Hospital, your receptiveness to this project was of tremendous support to me. Thank you and your staff so very much for your challenging questions and enthusiasm.

The staff at Griffin Memorial Hospital are people of whom I will always be proud. They work, as do others in other similar facilities, in seriously adverse conditions, and probably always will. They work there because they choose to, and are too rarely recognized for their positive influence in the lives of those to whom they give care and treatment. Your support, trust, and confidence are blessings I do not deserve. Shirley, without you in the



library, I would still be in the stacks. May your back packing trips be everything you dreamed and more.

J. Frank James, M.D., remember the test you gave me before you hired me from Arkansas? It was to study a statistical report on the hospitals and give you some insights and observations. It terrified me in 1983. You are still my hero.

My dad left this world midway through my program, although he tried hard to hold on until this year. If not for him I would not question so much about life, nor would I enjoy it so much. We were together when he said goodbye to this life, and I believe he will be at my commencement as he said he would.

To my soul's partner, and soon to be physician, Alan Lee Podawiltz, you were my helpmate even as you labored through your first year of medical school successfully, Mr. president. Thank you for waiting for me. Did my dad leave us in each others' care? What a smart guy.

But above all, thank you, Lord, for your blessings.

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## CHAPTER I

### BACKGROUND AND STATEMENT OF THE PROBLEM

#### Introduction

People and the organizations in which they work intimately weave together in patterns of transactions, built around tasks, which may characterize the work place. As the mix of people in the work place changes, so may the character of the organization (Trauer, Bouras, & Watson, 1987; Zucker, 1977). Institutions, according to Obholzer (1987), defend themselves against the anxiety or stress inherent in task performance by organizing staff relationships with the environment in such a way as to avoid that stress. It appears that what occurs in any work group in an organization may be a reflection of what goes on in the organization as a whole. The best way to study a large organization may be, therefore, to study its small work units (Bettenhausen, 1991; Moos, 1988).

This study has taken the large institution called "state hospitals" as its overall subject. Within two state hospitals in Oklahoma it focused on five wards to study transactional patterns of staff and patients with tasks and the environment. This field study used a descriptive and

correlational design, with a multisystem, multimethod approach. The system levels addressed were the staff's and patients' perceptions of the ward's social climate, the staff's perceptions of their work group's style, and the staff's perceptions of work stress and coping behaviors. Methods included self-reports and observer reports. The unit of focus was the social group at the ward and program levels. The program level is a combination of similar wards. The statistical techniques used were correlation analysis and analysis of variance.

Chapter II contains the methodology. The data were analyzed in two stages, and reported as two separate manuscripts included in Chapter III beginning on page 40, and in Chapter IV beginning on page 72.

### Context

State hospitals have a poor public image. Some examples of how this poor image is perpetuated by the institution itself can sometimes be found even in the physical structure. For example, in the stone portal to a state hospital building, built in 1955, and facing a busy street, are carved in stone the words "GERAITRIC UNIT" [sic]. A sign in a new building, built in 1985, read "NOURISMENT CENTER" [sic], until a new administrator had it corrected in 1988. A sign near the entrance to another state hospital says "landfill," with an arrow pointing toward the hospital entrance gates. These signs send

messages, perhaps unconscious, that the organization has a poor self image.

The variables most often associated with the image and culture of state hospitals are the stigma of mental illness itself, the failures of the public system to provide for the sickest and poorest of society, the weakness of government bureaucracy, and the impact of the hospital environment on staff behaviors (Bissell, Feather & Ryan, 1984; Drude & Lourie, 1984; Okin, 1983; Ozarin, 1989; Spiro, 1982).

The first state hospital in America was established in 1773 by a 1770 statute enacted by the Virginia House of Burgesses. In the museum in Williamsburg a superintendent is quoted: "To a sensitive person, on visiting an asylum for the insane, feelings of sadness are likely to arise" (Galt, 1851). These institutions have been a major social force in America for over two centuries (Rothman, 1980). Originally state hospitals were called asylums, characterizing their basic function of providing a safe, secure place for the insane. The state hospital in 1991 is a multifunction, inpatient psychiatric treatment institution to which persons over age 18 are court committed, or voluntarily admitted, for intensive work on the symptoms of mental illness, and substance abuse.

State hospitals have decreased dramatically in size in the past two decades, turning out thousands of mentally ill adults into the streets of communities across the country (Geller, 1991; Goldman, Taube, Reiger, & Witkin, 1983;



1983; Kalifon, 1989). Without community resources to provide safe and secure treatment environments, the mentally ill wander the streets of large cities, and are confined in state hospitals by the courts only after extreme crises occur. The staff of state hospitals receive mixed messages from federal and state authorities and advocacy groups about how long patients should stay in the hospital and what kind of treatment they should receive (Isaac & Armat, 1990). The public psychiatric facility is possibly the most complex, least understood, and least respected organization in our society (Salisbury, 1962; Bissell, et al., 1984; Okin, 1983; Gralnick, 1985). These facilities may experience stresses and their staff may exhibit attitudes unlike most other health service organizations.

State hospitals for adults with mental illnesses vary in size and types of programs from state to state. In the United States there are 209 such facilities, with as many as 10 in some states. Oklahoma has three adult, full service state hospitals which together reported over 6,500 inpatient care episodes in 1988. All three hospitals are accredited by the Joint Commission on Accreditation of State Hospitals and the Health Care Finance Administration. These Oklahoma state hospitals consume approximately 45% of the state's annual public mental health appropriated dollars, but together they provide services to about 20% of the total clients of this state's public mental health system. Two of these hospitals are most similar in size, location, and

organizational components to state hospitals around the country. The third one has less than 100 beds, and provides more long term care than the other two.

State hospitals are considered to be the end of the road for tens of thousands of seriously, persistently disturbed patients (Kalifon, 1989). Society will not tolerate mental illness in the mainstream. Jails are often not appropriately staffed for the mentally ill criminal. Residential programs are not adequately structured. Funding is not adequate to provide staff and resources for the large numbers of people committed to state hospitals. As a result the two state hospitals in this study together have space and staff to effectively manage 550 patients, but had an average daily census of 630 inpatients in 1991. Because of the crowded wards, and the nature of mental illness and substance abuse behaviors, employees in state hospitals work in chaotic and stressful environments (Marcos, 1988). The demands of patient care in such a setting can put severe stress on the work groups (Goldman, Taube, Regier, & Witkin, 1983). In a recent study of work groups in a state hospital there was evidence of cynicism, hostility, and contempt among the staff toward each other, and feelings of frustration with the work (Shaw, 1990). Rigid attitudes and maladaptive behaviors can result from these conditions, as staff avoid the anxieties of performing unpleasant tasks (Diamond & Allcorn, 1986; Obholzer, 1987).

Studies suggest that there is value in studying the relationship between staff's and patients' attitudes toward the organizational climate on the wards (Carlyn & Stoffelmayr, 1981; Drude & Lourie, 1984; Mechanic, 1962; Moos, 1972; Pierce, Trickett & Moos, 1972; Verinis & Flaherty, 1978). Administrators, however may not be aware of the potential organizational benefits in asking patients or staff for their opinions about the ward environment.

#### Problem Statement

In the public policy arena officials continue to call for clarification of the role of state hospitals (Brown, 1983; Craig & Laska, 1983; Geller, 1991; Okin, 1983; Taube & Goldman, 1989). This research paper is based on the belief that before state hospitals can modify their role in a service system, the staff and the patients must be better understood in the context of the ward level social and work group environments. The ward environment can be defined as the nature of the program in which staff and patients participate. The work environment can be defined as the relationships among work group members within the task and communications contexts on the ward.

The fundamental research question is: Are there differences between resocialization programs and admissions wards in the areas of staff's and patients' perceptions of ward climate, staff's and observer's perceptions of work group style, and staff perceptions of work stress? The

overall purpose of the research is to determine whether there are conditions in state hospitals which leaders can influence to promote quality of care and a healthy work environment.

### Objectives and Hypotheses

This project has two objectives, and eight hypotheses.

The objectives are as follows:

Objective 1. Describe and analyze differences in the ward programs, and relationships between ward climate and work group style variables.

Objective 2. Describe and analyze differences in the ward programs and relationships among climate, work group style, and work profile variables.

The hypotheses are stated in the null form for the purpose of guiding the statistical approach to the study. In the analysis Chapters III and IV, however, the hypotheses are written in the substantive form based on informed hunches of this researcher (Witte, 1985). The substantive form is found in parentheses below.

The hypotheses are:

Hypothesis 1. There will be no differences in staff's and patients' scores in the Ward Atmosphere Scale (WAS) according to program orientation, i.e. resocialization programs and admissions wards. (The ward climate in the resocialization programs will differ significantly in all variables from the admissions wards. Chapters III and IV)

Hypothesis 2. There will be no difference between the resocialization and admissions programs in the differences between Staff's and patients' WAS profiles. (Staff's and patients' WAS profiles will differ in fewer areas in the resocialization program wards than in the admissions wards. Chapter III)

Hypothesis 3. WAS scores will not be related to measures of work group style. (Work group style will correlate with WAS variables of involvement, support, practical orientation and anger and aggression. Chapter III)

Hypothesis 4. There will be no significant relationship between the staff characteristics of education, staff time with patients and length of time in the job, and staff WAS scores and work group style variables. (Education, staff time with patients, and length of time in the job will be significantly related to work group style and staff WAS profiles. Chapter III)

Hypothesis 5. There will be no significant difference in scores measuring work group style between program orientations, i.e. resocialization and admissions. (Work group style in the resocialization programs will differ significantly from the style of work groups in the admissions wards. Chapter IV)

Hypothesis 6. There will be no significant difference between programs or between sample and population means in the work profile variables. (State hospital staff will have

significantly higher stress levels, and lower coping levels than the norms for the Health and Stress Profile model.

Chapter IV)

Hypothesis 7. There will be no significant relationship between WAS scores and measures of work stress and coping in the work profiles. (Work profile variables will correlate strongly with WAS variables. Chapter IV)

Hypothesis 8. There will be no significant relationship between measures of work group style and scores on closeness and flexibility in the work profile. (Work group style variables will correlate strongly with closeness and flexibility in the work profile. Chapter IV)

The multisystem, multimethod approach provided a view of organizational climate and work group attitudes from the vantage point of self report, patients' reports, and an uninvolved observer. The data from similar program wards were collapsed to form program level data.

Organizational climate measures were taken from the Ward Atmosphere Scale (Moos, 1968, 1989a) and are referred to as the WAS profile. The WAS profile was formed from standard scores on six of the ten subscales of the Ward Atmosphere Scale (Moos, 1989).

Work group style was defined according to levels of cohesion and adaptability within the work group, adapted from the Circumplex Model of family systems theory and diagnosis (Olson, Sprenkle & Russell, 1979). This model uses a twenty-item inventory called FACES III (Olson,

levels. Group behaviors were observed and rated by an (Portner, & Lavee, 1985) to capture information pertaining to cohesion and adaptability at the individual and group uninformed observer, using the Clinical Rating Scale (CRS) (Olson, 1990). Both the FACES III and the CRS have been modified for use in an organization.

Work profiles were developed using the Work Profile scale, a section of the Health and Stress Profile (HSP) developed by Olson and Stewart in 1990 from a variety of sources. This instrument provides self report data on six subscales found to be critical work environment factors, some of which are taken from two sections of an instrument called PROFILES (Personal Reflections on Family Life and Employment Stressors) (Fournier, 1981).

Definitions of the 14 variables measuring ward climates, work group styles, and work profiles, and the CRS behaviors are provided in Figure 1 on page 77 in Chapter IV. Page 39 of Chapter II shows the relationships and sources of variables used in this study.

## Theoretical Framework

### General Systems Theory

The systems approach to the study of organizations recognizes organizations as complex groups of individuals in subsystems, functioning within equally complex environments with their own subsystems. Organizations, at any level,

must achieve an appropriate relationship with the environment if they are to grow, survive, and achieve goals (Morgan, 1986).

Systems theory, developed during the 1950s from the biological sciences has become a tool for the social sciences. It provides a framework for the identification and analysis of the various parts or subsystems of organizations. These subsystems, as they interrelate, affect each other and the whole, and undergo changes which in turn affect other subsystems, the whole, and the environment.

With the concepts in general systems theory, we can build a bridge between the facts of life and behavior, to the way we think, and the way we know what we know (Bateson, 1972). Any system which has an adequate complexity of causal relationships, and appropriate energy sources, will process information, and be self-correcting toward homeostasis or morphogenesis, toward remaining the same or changing and adapting (Bateson, 1972; Wertheim, 1975).

The significance of these propositions in studying the ward atmosphere and work group dynamics in state hospitals is found in the appropriate use of social systems diagnostic tools which are grounded in general systems theory. Groups of staff working together with patients may organize their behaviors and attitudes so as to remain stable through lower or higher levels of change and adaptability. In this process, both the individual and the group will be affected.



Any assessment of organizational dynamics should include measurements at as many systems levels as possible.

### Family Systems Theory

Family systems theories represent a body of knowledge about families which has its roots in general systems theory. The tools of these theories permit an assessment of the properties and characteristics of families as social systems. The concepts from general systems theory used in studying families include the interrelationship of units within the system, boundaries, growth and change, and tasks as a function of meeting demands and needs in the social group. These same concepts are useful in studying groups at work (Hirschhorn & Gilmore 1980). This study will use a conceptual link between family systems and the study of work groups on the wards in state hospitals.

### Conceptual Framework

#### Organizational Climate

Organizational climate is a widely used construct in studies of social groups performing tasks in organizations. Because this study focused on the nature of treatment oriented work groups, organizational climate was defined according to six of the ten variables in the Ward Atmosphere Scale (WAS) (Moos, 1989). This approach is founded on the belief that environments have characters much like people,

and the interrelationships in a psychosocial context are the predominant factors in accurate assessment of that environment (Finney & Moos, 1984).

The WAS, first published in 1974, originated with 206 items. Currently (Moos, 1989) it consists of 100 questions, 10 in each subscale. The test manual provides norms from a sample of 44 hospitals in 16 states, including 55 programs in 10 state hospitals. The sample included 3,575 patients and 1,958 staff. Subscale internal consistencies range from .55 to .78. Average item subscale correlations range from .43 to .51. One week test-retest reliability coefficients for the subscales range from .68 to .83. A 73 page manual available from the publisher provides additional details on reliability, validity, normative samples, test administration, scoring, and examples of uses.

#### Work Group Style

Both cohesion and adaptability are studied in work groups and families. It is possible that the same concepts are useful for understanding common unconscious processes in both of these social groups (Obholzer, 1987). These two variables together can be used as an overall measure of work group style (Bettenhausen, 1991; Hackman, 1990).

The Circumplex Model and FACES. For this study, the Circumplex Model and its measurement instrument, FACES (Olson, Sprenkle, and Russell, 1979) operationalize the

theory, in a way that is useful for systematic research and definition of work group style. The FACES III instrument has been found to be a reliable and valid scale, based in work (Olson, 1991). It can be used with a variety of types of family structures (Olson, 1986).

The qualities of cohesion and adaptability are found to be two of the most critical factors in family functioning (Olson, Sprenkle & Russell, 1979). Moderate scores in these two dimensions are thought to be representative of the highest functioning family groups (Kuehl, Schumm, Russell, & Jurich, 1988). Cohesion contains six subscales, and adaptability contains five subscales. Each construct can be measured as one variable, capturing all the dimensions of the quality observed.

This study is based on the belief that there may be similarities between the concepts of cohesion and adaptability in families and in groups at work (Obholzer, 1987). The conceptual foundations of cohesion which are emotional bonding, independence, boundaries, coalitions, time, space, friends, decision-making, and interests, can probably be applied to groups at work (Cruser, 1989). The conceptual foundations of adaptability which are power, negotiation, roles, rules and feedback, should also be able to be applied to studying groups at work. Together with the moderating dimension of communication these two independent but related variables operationalize the concept of work group style.

Cohesion. Cohesion in work groups has been referred to as interlocking networks of communications, the desire of a member to belong and stay with a group, and a degree of exclusive bonding. It appears to be a continually changeable state depending on member involvement and the type of the involvement. Cohesion has been linked to work group effectiveness and organizational productivity (Bettenhausen, 1991; Goodman, 1986). Bettenhausen has suggested that a standard definition of cohesion as commitment to the group task be adopted.

In family systems, the definition of cohesion is as varied in terminology as it is in studies of organizations. Its underlying concepts are found, however, to be similar (Olson, Russell, & Sprenkle, 1980). These authors defined cohesion as the degree of emotional bonding among family members, and the degree of individuality they can maintain within the family group.

Adaptability. This term is used less frequently in the literature about organizations than in family studies. Organizations are referred to as flexible, able to change, in flux or in transition. Innovation, norm development, role variation and change seem to be the concepts most closely associated with the concept of adaptability. Although adaptability per se is not an often used term in organizational studies, its absence, in the form of rigidity, has been shown to interfere with effective

organizational functioning (Obholzer, 1987). The ability of organizations to exist over time has been associated with adequate problem solving processes, organizational design, and flexibility has been associated with conflict management and quality of work (Bettenhausen, 1991; Goodman, Ravlin & Schminke, 1987).

In family systems theory adaptability is defined as the ability of the group to change the power structure, role relationships, and rules in response to situational and developmental stress (Olson, Russell, & Sprenkle, 1980). These same concepts have been used in studies of groups at work (Goodman & Associates, 1986; Sundstrom, De Meuse & Futrell, 1990).

Clinical Rating Scale. As an additional system level perspective measuring cohesion and adaptability of family groups, a clinical rating scale (CRS) can be used by an uninvolved observer to record interactions among family members. Adapting this for organizational use provided another perspective of staff-staff and staff-patient communication behaviors using the same subscales in the self-report instrument capturing measures of work group style. Although the data in this study are not adequate to statistically test the relationship between observer and self-report data, the graphs of work group style provide comparative information for descriptive purposes. This

additional system level permits insight into consciously and unconsciously communicated attitudes.

### Work Profile

A multisystem method of assessing health and stress for individuals and families, called the Health and Stress Profile (HSP), was developed recently to bring theory and research tools together for the social systems practitioner (Olson & Stewart, 1990). For this study only the Work Profile (WP or work profile) section was used.

The HSP was designed as a starting point for diagnosis and planning intervention strategies with adults in every facet of their lives. It is based on a model of causal stress, buffering resources, and resulting satisfaction levels. This multisystem approach evaluates dynamic issues in overall family health and functioning. The HSP permits a diagnostician to measure the extent to which work experiences and other aspects of life influence family functioning, and specifically whether functional families have better resource utilization, or fewer stressors. There is a distinction made between stress-buffering variables and satisfaction predictor variables. Tested with 440 adults, specific main effect variables suggest that there are specific resources most effectively used in highly satisfied families, couples, and individuals.

For the work setting, adaptability and communication account for over 60% of the work satisfaction. All of the

subscales in the work profile section of the HSP report reliability coefficients ranging between  $r$  .82 to .89. The work profile section of the HSP can produce a work profile for an individual. This study also used a mean score for the ward and program levels of analysis. Population means and standard deviations are provided with the scale.

The work profile questionnaire contains 74 items, answered with a five point Likert type scale. Six subscales measure stress, coping (problem solving skills), communication, closeness, flexibility, and overall work satisfaction. These are the individual variables for this study, but can be further broken down into smaller more focused aspects of the work environment such as work benefits and compensation, coworker and supervisor relationships. Validation studies are based on the content orientation of the model, and previous research documenting the appropriateness of these variables in studying stress and adaptation in family systems functioning.

### Assumptions and Limitations

#### Assumptions

The wards were selected appropriately to compare differences and similarities between types of programs.

The instruments and statistical techniques are not sensitive to differences in numbers between the groups compared, and no findings indicated a pattern which

suggested that this size difference affected the test results.

The sample groups meet the assumptions of normality and homogeneity of variance necessary for use of parametric tests of analysis of variance.

The measurement level of data used is continuous interval.

The power of the tests used were adequate to detect a true effect, and avoid a type II error.

Confidence levels are conservative enough to avoid a type I error.

### Limitations

The sample of patients participating is minimally within the range recommended by the WAS manual (Moos, 1989b).

One of the participating hospitals is under the administrative direction of this researcher, but an examination of the data does not suggest any threat to internal validity.

Reliability in terms of consistency and stability of the modified FACES III is unknown. The Cronbach's alpha for internal consistency however was adequate for the study of attitudes.

Generalizability is limited to these five wards, and programs.



Reliability coefficients used for the modified FACES inventory measuring cohesion and adaptability are within the parameters recommended by Nunnally (1978) for research purposes, but are in the low ranges for attitude scales.

The correlation coefficient between cohesion and adaptability in FACES III for families is  $r=.03$ , meaning that each variable measures an independent aspect of functioning. In this study, the  $r=.56$  between cohesion and adaptability may mean some of the same aspects are measured by each variable, with 31% of the variance in each explaining the variance in the other.

This researcher found no published studies of the relationship between ward climate and work group style in state hospitals. No studies have been published using the Circumplex Model as a diagnostic tool for organizations. However, Champ (1986) used this model to describe the organizational effectiveness of the Head Start Program, and Olson (1982) suggested the use of the model in organizational studies.

#### Definitions

Ward atmosphere scale (WAS) Profile: A composite set of information about a group's perception of ten aspects (six selected for this study) of the relationships, activities, and attitudes in the ward. Appendix B contains an abstract.

Involvement (INV): Extent to which patient participate, and degree of activity in the program.

Support (SUP): Extent to which patients help each other and degree of supportive behaviors of staff toward patients.

Practical Orientation (PO): The extent to which patients learn practical skills and are prepared for release from the program.

Anger and Aggression (AA): The extent to which patients argue with other patients and staff, become openly angry, and display other aggressive behaviors.

Order and Organization (OO): How important order and organization are in the program.

Staff Control (SC): The extent to which the staff uses measures to keep patients under controls.

Work Group Style: Five work group styles are used in this study. Each is based on scores in cohesion and adaptability in the Circumplex Model. These styles are defined by group scores on cohesion and adaptability based on population and sample percentile cutting points.

Chaotically disengaged: constantly changing roles and rules, and extreme separateness among staff;

Chaotically enmeshed: constantly changing roles and rules, with extreme closeness, no individuality in thinking, and isolation from influence from outside the group;

Rigidly disengaged: no flexibility in roles or rules, but extreme individuality in thinking and acting, with little to no group communication;

**Rigidly enmeshed:** a closed, tightly knit, highly interdependent group with no flexibility in roles or rules.

**Balanced groups:** flexibly connected, but able to think and act independently with confidence and group support.

**Cohesion:** Degree of group identity and interdependence; attractiveness of the group to the members.

**Adaptability:** Degree of situational flexibility in roles and rules within the group.

**Work Profile:** A set of 74 questions divided into six subscales measuring staff's opinions of working conditions. Appendix B contains an abstract.

**Stress:** Schedules, physical environment, work relations, job characteristics, benefits, productivity.

**Problem Solving Resources (COPE):** Problem solving skills such as assertiveness, sense of humor, positive reframing, and brain storming.

**Communication (COMM):** Ease of self expression, clarity and sensitivity of sending and receiving messages among coworkers and supervisors, recognition.

**Closeness (CLOSE):** Interdependence, trust, pride in the work group.

**Flexibility (FLEX):** Ability to change as necessary to solve problems, degree of urgency in work tasks, policy clarity.

**Overall Work Satisfaction Level (JOBSAT):** Interest in work, sense of accomplishment, fairness of benefits,

opportunity, work relations, value of the organization.

### Summary

This study defined ward climate with six subscales of the WAS, producing a WAS profile for staff and patients in two different programs. Work group style, defined as levels of cohesion and adaptability was measured with both self-report and observer methods of reporting. The work group style captures a group's view of its own internal relationships separate from the program context. The work profile measures the perceptions of individuals and groups toward job stress, coping, and satisfaction. This study was based on a belief that these different dimensions of ward life may be related to each other differently across wards or between programs.

Studies of psychiatric wards have reported that staff attitudes are heavily influenced by environmental variables in the program structure (Bissell, Feather, & Ryan, 1984; Drude & Lourie, 1984; Moos, 1972; O'Driscoll & Evans, 1988; Pierce et al., 1972; Verinis & Flaherty, 1978). Bissell, Feather & Ryan recommended that student nurses be exposed to mentally ill patients in an environment in which progress is measured in weeks or months, rather than in a state hospital where the chronic behavior problems are extensive. Drude and Lourie found that staff who are overwhelmed with work in crowded wards tend to have negative attitudes and decreased effectiveness. Moos found that low levels of group cohesion

and weak patient-staff relationships occurred most frequently on crowded, understaffed wards. O'Driscoll and Evans reported that satisfaction with communication, and participation in decision making strongly related to staff views about the work environment. Other studies (Pierce, Trickett, & Moos, 1972; Verinis & Flaherty, 1978) reported that WAS feedback enabled both staff and patients in the subject wards to make changes in response to administrative and clinical concerns.

Staff's and patients' views of the organization seem to differ on a number of variables such as program goals, the ability of patients to build on their own strengths, unconscious projection of anger, and expectations of each other (Carlyn & Stoffelmayr, 1981; Pierce et al., 1978; Pinchoff & Mirza, 1982; Verinis & Flaherty, 1978). Relationships formed between staff and patients differ from ward to ward (Salisbury, 1962). The attitudes and behaviors of staff, influenced by the ward environment, are important aspects of organizational climate for hospital leadership to understand in order to overcome the poor self-image and improve both services and work relations.

State hospitals have historically had a significant influence on the quality of public mental health services in this country (Bachrach, 1986). There is no reason to believe that this will change in the next decade. In large institutions cultural persistence may depend on resistance to change (Diamond, 1984; Zucker, 1977). The leadership in

state hospitals must be able to make informed decisions about how to promote quality care through well functioning work groups. It seems reasonable therefore to ask questions about what variables in the ward and program seem to promote quality care, strong work group relations, and flexibility in coping with pressures and change in the work environment.

### Content of the Paper

Chapter I provided the description of the problem, its context, importance, and overall approach used in this study. Chapter I provided the conceptual framework for the study of people at work in state hospitals in interaction with their environments. Appendix A contains a complete review of the relevant literature.

Chapter II describes the design and methodology for the study. It includes sample selection, data collection methods, and the statistical approach used in analysis of the data. of terms to assist the reader.

Chapters III and IV are independent manuscripts. Chapter III was prepared according to the publication guidelines for Hospital and Community Psychiatry. That manuscript addresses hypotheses 1, 2, 3, and 4. Chapter IV was prepared according to the publication guidelines for the Journal of Mental Health Administration. That manuscript addressed hypotheses 1, 5, 6, 7, and 8.

The final sections of the paper are References, and Appendixes containing required and supporting material.

## CHAPTER II

### RESEARCH DESIGN AND METHODOLOGY

#### Introduction

State hospitals are part of the fabric of society in the United States. The internal conditions in these organizations make them a rich, untapped source of data for studies of behavior. This study was designed to test eight hypotheses about the social climate in five wards of two state hospitals. The five wards in this study were selected according to prescribed program characteristics. Purposive sampling was used to select two wards with a resocialization orientation, and three admissions wards with a behavior control orientation. The resocialization wards were coed, with a program description most like a therapeutic community program. Of the three admissions wards with a focus on behavior control, two were gender exclusive, and one was for both males and females.

The reasons for organizing the study in this way were supported by previous research and the recognition of the possibility of a type I or type II error. A type I error in this study would be in suggesting the effect of an environmental variable on the behaviors of staff or

patients, when in fact there was none. A type II error would be in not identifying a significant effect of a variable.

The first reason for the design and organization of this study is that the program of therapeutic activities on a ward characterizes that ward, and the variables used in this study were selected, with purposive sampling, to capture staff and patients perceptions of behaviors and attitudes related to those program activities (Archer & Amuso, 1980; Drude & Lourie, 1984; Edelson & Paul, 1977; Herrera & Lawson, 1987; Keppel, 1982; Kerlinger, 1986; Moos, 1989b; Obholzer, 1987; Olson, 86; Olson & Stewart, 1990; Price & Moos, 1975; Trauer, Bouras, & Watson, 1987).

The second reason is that by combining wards of similar characteristics, the larger sample size increased the power of the test to detect small effects.

This study used a descriptive and correlational design, and analysis of variance techniques. Assumptions were met for the use of multivariate analysis of variance (MANOVA), analysis of variance (ANOVA), and paired t-tests of differences in means.

In Chapters III and IV, manuscripts prepared for submission for publication, the variables measuring ward climate, work group styles, and job stress and satisfaction were analyzed in a multisystem, multimethod context. This approach was used to capture both staff's and patients' perceptions of ward climate, staff's perceptions of work



group style, observer report of work group styles between staff and between staff and patients, and staff self-reports of job stress and satisfaction. The findings supporting or refuting hypothesized relationships between and among the variables were translated into practical recommendations for administrators to use to promote quality of care and of the work environment in state hospital wards.

The purpose of the study was not to predict, but to explain reported behaviors, attitudes, and values existing in the sample ward programs. Generalizability of the results is limited to those wards, but the overall results of the study were intended to contribute to the body of knowledge about state hospitals as a class of organizations.

The systematic analysis of the aspects of ward life was intended to reveal areas in which ward environments might be influenced to promote quality of care and positive work group relationships.

#### Organization of the Study

In the fall of 1991 permission was received from the authors to use the instruments selected for this study. These permissions and the approvals of the Oklahoma State University's Institutional Review Board, and the research committees of the two participating hospitals are included in Appendix B.

After permission was granted to conduct the research a packet of materials was sent to department heads. The

packet contained sample questions, representative literature, and a summary of the research proposal. The researcher then held a face to face meeting with clinical department heads and explained the purpose of the study, scheduled staff to complete question booklets, and scheduled patients for interviews, scheduled observer times on the wards, and responded to any questions and concerns.

Prior to requesting permission to conduct the research, four randomly selected staff from non participating wards completed booklets of questions. Comments were made that the questionnaire was direct and covered adequately all of the situations and environments for all employees, that it only required about 20 minutes to answer all the questions, and that the questions were easy to read and understand. Suggestions to reverse demographic questions about time in the job, and to clarify instructions on which work group the respondent should think of when completing questions, were used by the researcher. Some comments on wording could not be used as it would have changed the original scale wording.

Three days were spent at each facility with two research assistants, both masters level social workers. One assistant was trained in the use of the CRS, and conducted the ward observations. One assistant was trained in interviewing patients, and conducted all of those interviews. The researcher met with groups of staff, gave verbal instructions, and administered the consent forms and test booklets.

### Sample and Testing

All staff except two (93) from day and evening shifts on the selected wards participated. Ten patients were selected randomly from each of the five wards to complete a face to face interview using the WAS. If a patient was unable to complete all of the questions, after three attempts, another was selected. On one ward, however, only eight patient were able to complete the questions due to their severe impairments, for a total of 48.

Criteria for ward selection was a cluster analysis of 144 psychiatric inpatient treatment program wards using the WAS (Price & Moos, 1975). A cluster is a group of subjects more similar in characteristics to each other than to any subject outside that group. Six distinct programs were identified in that study: therapeutic community, relationship oriented, action oriented, insight oriented, control oriented, and disturbed behavior. For the current study wards were selected to be most like two of these clusters, i.e. therapeutic community, and control oriented programs. This was an appropriate approach because interactions between a type of patient and a type of program may account for a portion of the variance in behavior in addition to that accounted for by the type of program or patient alone (Price & Moos, 1975). The cluster study did not analyze staff WAS scores because of the small number of staff in their sample. For this current study, however, both

staff's and patients' WAS scores were plotted along with the appropriate criterion cluster profile.

Like the therapeutic community program, the resocialization wards in the two hospitals in this study actively involve patients in the treatment planning and activities. Patients in the resocialization programs are encouraged to be self sufficient by staff who teach practical skills, and discuss problems openly. These programs are educationally structured. The therapeutic community wards identified by Price and Moos were above average in the WAS scales of involvement and support, and below average on anger and aggression, order and organization, and staff control.

Like the control oriented cluster (Price & Moos, 1975; Moos, 1989b), the admissions wards selected for this study carefully plan and manage activities based around behavior control. These wards accept both new and chronic patients in the acute phase of illness, directly from the event precipitating the admission to the hospital.

These wards represented over one third of the Price & Moos sample, whereas the therapeutic community cluster contained only 19 of their 144 sample wards. In the two state hospitals in this current study, admissions wards represent four of eight at one, and eight of 16 at the other. There were two resocialization wards operating in one of the participating hospitals, and one at the other. The other wards were long term treatment or special

population wards. Of the 93 staff and 48 patients participating in the study, there were 37 staff and 18 patients from the resocialization programs, and 56 staff and 30 patients from the admissions wards.

Because the major focus of measurement was the group score, and studies have demonstrated the appropriateness of small numbers of subjects in the groups tested with the WAS (O'Driscoll & Evans, 1988; Moos, 1989) and the Circumplex Model, this is an adequate number. Although it is desirable to have more than 30% to 45% of the patient population represented in a sample for the WAS, it is not necessary for valid use of the scale (Moos, 1989b). The 48 patients in this current study was a 38% sample. Night shift staff were not included in the study because that shift has much less contact with patients, and usually no contact with interdisciplinary staff.

All questions from the instruments used were combined into a booklet for ease of administration, and to avoid fatigue or repeated sessions for staff and patients. Booklets were given to staff in groups, and the study explained. Consent forms were provided to staff and patients. Only two staff declined to participate. The 93 staff completing booklets were interested in receiving feedback about their program. On one ward only eight patients were able to complete the interviews, due to the severity of their illness. Each staff respondent also completed a background form for basic demographic

information on the individual staff member. There was no evidence in previous studies that gender or age were related to the dependent variables studied in this research project. This project used only education, time in the job, and time with patients as independent variables of possible influence on WAS scores and work group style.

### Methodology

The measurement instruments selected for this study were chosen because of their simplicity and elegance in defining and organizing the theoretical concepts into logical groups of variables. The WAS has been widely used in field research and in organizational problem solving. The Circumplex Model has had a strong history of reliable use in family systems diagnosis and therapy. Champ (1986) modified the FACES test for collecting information from staff in Head Start Programs in Oklahoma to describe the organizational style, and Olson (1982) suggested the use of the model in organizational studies.

The Work Profile is a new instrument, and includes the concepts of closeness and flexibility, similar to the Circumplex Model, but has no published research using it at this time. In a recent paper submitted for publication the authors provide adequate information about content, construct, and criteria-related validity, reliability coefficients for consistency, and a sound theoretical base for the purposes of this study (Olson & Stewart, 1990).

Two of the subscales in the work profile were adapted for the work setting from the conceptual foundations of cohesion and adaptability in the Circumplex Model (Olson & Stewart, 1990). This current study included a correlation analysis of the relationship between the subscales of closeness and flexibility in the work profile, and cohesion and adaptability in the work group style.

The complex nature of this study required an organized, sequential approach to the data. The selected scales provided interval data, suited for the statistical tests used. The statistical tests used in this study are two recognized as particularly practical, powerful, and flexible (Kerlinger, 1986). One was the Pearson product-moment correlation to measure strength and direction of relationship among variables. The other was analysis of variance techniques of MANOVA and ANOVA. A third test used was the paired t-test for differences in scores between the sample in this study and the population norms in the Moos Ward Atmosphere Scale Manual (1989), and between the work profile scores in the sample in this study and the means of the Health Systems Profile study population. Paired t-tests test the difference in scores rather than the difference in the means of the two groups. The data and sample size were suitable for these tests. Statistics texts were used to guide the selection of tests and the strategy to approach the data (Borg & Ball, 1974; Huxley, 1982; Keppel, 1982; Kerlinger, 1986; Norusis, 1990; Witte, 1985).

Correlation analysis was used to discover or clarify relationships between variables in the study. The correlation coefficient expresses in mathematical terms, the degree of association between two variables. It answers the question of what part of the variance in one condition may be explained by the variance in another. This approach enables the research to gain insights into the variables influencing behaviors which might not be available with other designs. The Pearson correlation coefficient is abbreviated as  $r$ . The value of the  $r$  ranges from +1 to -1, with a 0 indicating no linear relationship between variables. Scatterplots indicated no curvilinear relationships between variables in this study. There are various opinions about the strength of the correlation coefficient. This study used confidence levels of .001, .01, and .05 to report significant relationships. That is to say that a conservative estimate was made of the probability that the difference could be a real one rather than due to chance or sampling error. With small sample sizes true effects may not be detected, but all assumptions were met for the use of the t-tests of hypotheses.

The analysis of variance tests were used following the tests for violation of the assumptions necessary for ANOVA. these assumptions were stated in chapter one. The two program orientations were considered as two independent treatment groups. The first overall MANOVA was conducted to discover whether there were differences between patients,



between staff, and between staff and patients in their WAS scores overall across the five wards. These were followed with MANOVA tests for differences between staff's and patients' WAS scores overall within each program orientation. The next step was an ANOVA for differences between patients-patients, and staff-staff in each of the six WAS subscale scores between program orientations. Then an ANOVA was done to test for differences between staff's and patients' six individual WAS subscale scores. This sequence of tests helped to pinpoint specific differences within the WAS profiles for staff and for patients between and within program orientations.

As a follow up to these ANOVAs, staff's and patients' WAS profiles were tested with paired t-tests for differences from the scale norms provided in the manual (Moos, 1989b). Line graphs were used to illustrate differences between program orientations in this study, and the two comparison clusters found by Price and Moos (1975).

Cronbach's Alpha tested data for acceptable reliability of the data collected with the modified FACES III, and the work profile instruments. This coefficient of reliability answered the question of how consistent the test was in measuring the variables defined by it.

The work group style variables were tested for intercorrelations, and for correlations with the WAS profile variables, followed by an examination of possible influences of selected staff demographics on work group style or WAS

scores. An overall ANOVA between the two programs tested for differences in work group styles. The styles were plotted for each ward using the percentile cutting points for scores from the family norms and from the sample norms in this study. Observer ratings were also plotted on the model for both norms. This approach provided a visual display of the levels of cohesion and adaptability reported by each of the five wards, and a comparison to the theory of the Circumplex Model.

Correlation analysis was done using the WAS profile subscales, the work group style variables, and the work profile variables, including an assessment of influences of selected staff characteristics. Differences in work profiles were tested with ANOVA between the program orientations, and differences from the HSP population norms were tested with paired t-tests.

Graphs and scatterplots were used to augment the understanding of test results.

The WAS has been shown to be effective in differentiating among different types of wards in state hospitals according to ward function, and other classification variables (Moos, 1989). The Circumplex Model has identified functional ranges in family behavior helpful to diagnosis and intervention in intergroup relations. The work profile section of the HSP (Olson & Stewart, 1990) provides practitioners with practical information about job stress, coping resources, and satisfaction. All of these

conceptual frameworks were used to provide a rich, multilevel view of the dynamics of ward life in state hospitals. The multisystem, multimethod analysis was used to capture the individual, group, and interaction levels of analysis. The last page of this chapter presents relationships and sources of variables used in this study.

Two important points about research design (Huxley, 1982) are pertinent to this study. First is that it sought to empirically establish principles about intervene in the climate and work group attitudes influencing the staff and patients in specific ward environments in state hospitals. Second is that the design accommodated multiple variables by using several dependent variables. The overall approach was descriptive, comparative, and correlational, and not predictive.

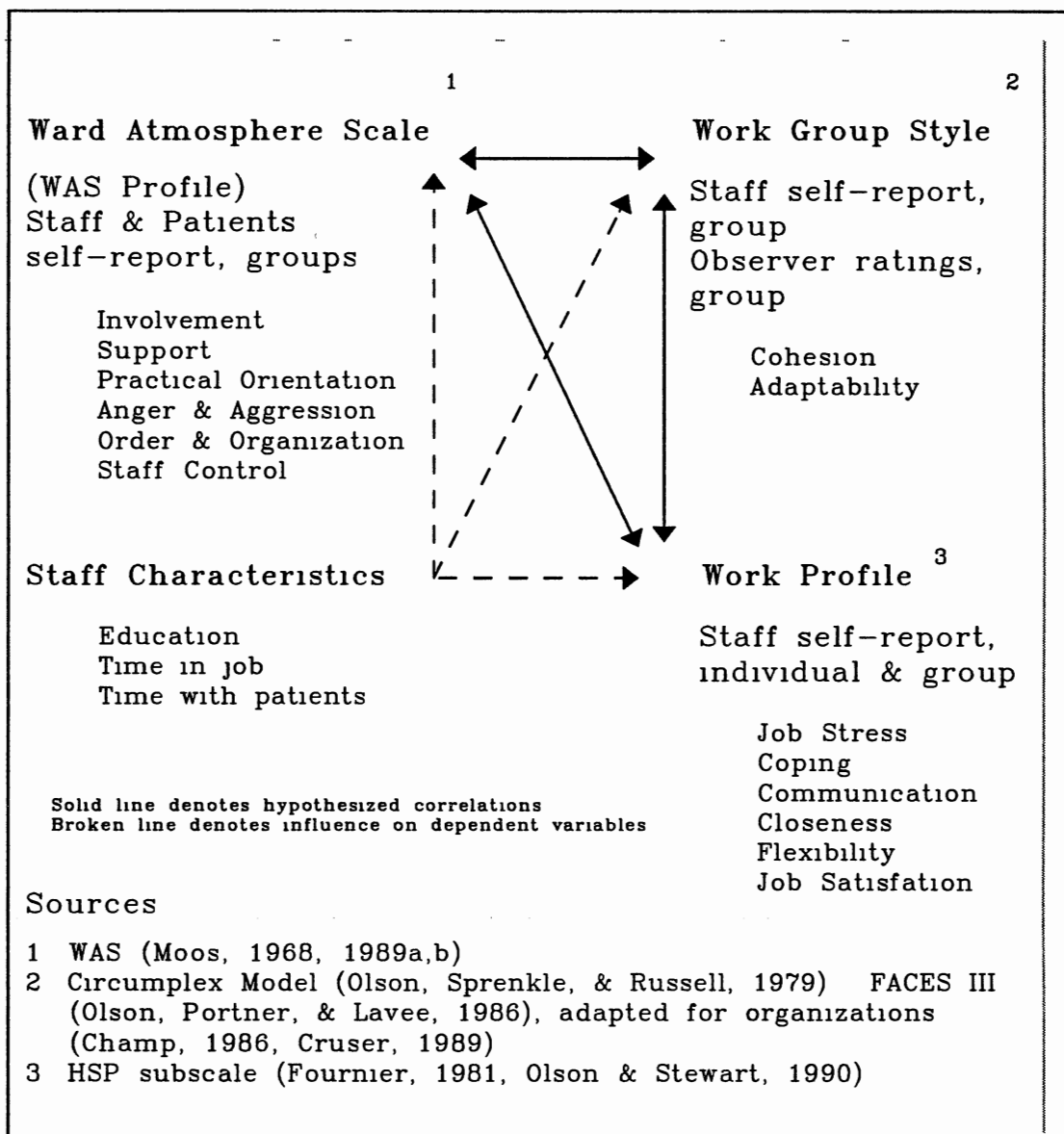


Figure 1 Sources and Relationships of Variables

## CHAPTER III

### WARD CLIMATE IN STATE HOSPITALS:

#### A MULTISYSTEM MULTIMETHOD

#### ANALYSIS

#### Introduction

While questions about the appropriate role for state hospitals are debated in the literature (1-3), administrators in those organizations are facing day to day issues of patient-staff and staff-staff relationships in the internal climate. The internal climate in a state hospital can be thought of as the personality or character of the ward and of many wards. The attitudes and behaviors of the staff in a state hospital may be unique to its climate. Information about staff's and patients' interactions with the ward climate can provide insights to areas in which changes could promote quality of care and quality of life in the work place (4-10).

The post deinstitutionalization era has influenced state hospitals in many ways, one of which is the nature of the patient population. Many of the patients in state hospitals today have few choices of places to

live which can adequately respond to their needs for structure and long term support (11-12). Patients' admissions and discharges occur more frequently than in decades past, limiting opportunities for staff and patients to form therapeutic relationships. Another less obvious problem is isolation of the work place itself both socially and geographically from the rest of society and from other parts of the hospital.

Several studies have illustrated how the demands of ward life severely stress work groups in state hospitals (13-15). A recent study reported cynicism, hostility, and even contempt among the staff toward each other, and feelings of frustration with the work (16). In wards of state hospitals, employees can develop rigid attitudes and maladaptive behaviors. One explanation of this phenomenon may be that employees are unconsciously avoiding unpleasant tasks (17,18).

There are many management tools available to assess organizational climate, but these generally take a perspective of management. In psychiatric treatment wards the organizational climate is a combination of the staff's and patients' views of the program orientation and task interaction patterns, and the group. This approach is supported by a study in which

staff-staff and staff-patient communication practices were strongly associated with treatment effectiveness (19).

This current study has taken the large institution called "state hospitals" as its overall subject. Within two state hospitals in Oklahoma it focused on five wards to study transactional patterns of staff and patients with tasks and the environment. This field study used a descriptive and correlational design with a multisystem, multimethod approach. The system levels addressed were the staff's and patients' perceptions of the ward's social climate, and the staff's perceptions of their work group's style. Methods included self-reports and observer reports. The unit of focus was the social group at the ward and program levels. The program level was a combination of similar wards. The statistical techniques used were correlation analysis and analysis of variance. The purpose of this field study was to describe and analyze differences in the ward programs, and relationships between climate and work group style variables. Because of the multiple systems interacting at different levels, the multisystem, multimethod approach was appropriate (20).

## Theory Base

Social and family systems theories provide rich contexts within which to explore work group dynamics. I used two instruments designed to measure attitudes toward social climate and work group dynamics of social bonding and response to change. These were the Ward Atmosphere Scale (WAS) (21), and the Circumplex Model of family systems functioning (22). Data from these instruments are displayed in graphs for visual feedback to the users. These graphs are helpful in group discussions exploring group norms, roles, rules, and communications styles and patterns. These discussions can then lead to mutually developed strategies for change. Managers can begin to understand why some programs have clear day to day structure, and others seems to inhibit quality care or positive work group attitudes.

### Ward Climate

The WAS has been used in studies of state hospitals for over 15 years (19,23-25). Its reliability and validity are well established. Studies report that feedback to staff using the WAS has enabled them to make important and satisfying changes in



treatment programs, and participate in resolving clinical and administrative concerns (8,9,26).

In order to narrow the focus of this study, six of the ten WAS scales were selected for use. (Refer to Figure 1 on page 47.)

### Work Group Style

Some system characteristics of work groups are similar to families in areas such as hierarchy of roles, personal boundaries, interdependence and independence of tasks and roles, the nature of rules, decision making, and communication patterns (27). The day to day patterns of interaction which influence family functioning may also influence the functioning of an organization (18). Two variables considered critical in family and work group functioning are cohesion and adaptability (28-31). With communication as the underlying factor, cohesion and adaptability are the two variables used in the Circumplex Model to measure levels of family functioning. For this study I used cohesion and adaptability to measure work group style (WGS). (Refer to Figure 1 on page 47.)

The inventory, FACES, uses 20 self-report answers with a 1 to 5 scale from "almost never" to "almost

always", with higher scores being more of the quality measured. Groups and individuals can be classified by the score coordinates for cohesion and adaptability. Cohesion styles are disengaged, separated, connected, and enmeshed. Adaptability styles are rigid, structured, flexible, and chaotic. In the Circumplex Model, a balanced style includes flexibly connected and structurally separated areas. A balanced style responds without pathology to developmental or situational changes. This model identifies degrees of separateness in personal boundaries, flexibility in roles and rules, responses to change and stress, and style of communication among group members in day to day relationships.

Families in which pathology has been diagnosed have been found to fit the curvilinear model in which more of either quality indicates problematic response to stress and change. Families sampled from populations who have not sought psychological counseling reported levels of cohesion and adaptability which are linearly related to communication. In these cases more of the qualities indicate greater ability to manage stress, or fewer stressors. This distinction is important to consider when comparing the programs in

this study to family norms from the model, and to the organization norms in this study.

For this study the Circumplex Model was modified for organizations. FACES terminology was changed to reflect organizational language. Questions using family or children changed to work group, team, or employees. Questions using chores changed to tasks or assignments. Due to similarities between family and work group social interactions this model can be adapted experimentally to identify work group styles (Champ, unpublished dissertation, 1986; Cruser, unpublished report, 1989; Olson, unpublished manuscript, 1982).

A Clinical Rating Scale (CRS) is used in the Circumplex Model to report family group functioning from the viewpoint of a trained observer (32). It provides a perspective from outside the subject system, of commitment, interaction, communications, and other transactional behaviors within a family. This perspective can then be used by the family and the therapist to examine apparent conscious and unconscious behaviors in day to day interaction. Behaviors were interpolated for the ward environment. (Refer to Figure 1 on page 47.)

## Definition of Variables

### Ward Atmosphere Variables (WAS)

*Involvement (INV)* Extent to which patients participate in the program and degree of activity existing in the program

*Support (SUP)* Extent to which patients help each other and degree of supportive behaviors of staff toward patients

*Practical Orientation (PO)* Degree to which the program is designed to help patients work on realistic skills to prepare for the future and discharge from the hospital

*Anger and Aggression (AA)* Tolerance for effective expression of feelings and attitudes

*Order and Organization (OO)* Degree of structure and evidence of efficient operations

*Staff Control (SC)* Extent to which staff use measures to keep patients under control

### Work Group Style Variables (WGS)

*Cohesion* Degree of group identity and interdependence

*Adaptability* Degree of situational flexibility in roles and rules

### Clinical Rating Scale Variables (CRS)

#### Cohesion

*Emotional bonding* Degree of separateness or togetherness

*Involvement* Extent and frequency of interaction including encouragement or discouragement of affective behaviors

*Staff - Supervisor and Staff - Patient Relationships* Clear or diffuse interpersonal boundaries

*Internal boundaries* Shared spaces, use of private space, (physical & emotional, joint or independent decision making; time & space)

*External boundaries* Preference for group associations, common grounds of interests, attitudes toward loyalty

#### Adaptability

*Leadership (control)* Style of supervision, from authoritarian to erratic and permissive

*Discipline* Range of styles from rigid to lenient

*Negotiation* Degree of participation and action orientation

*Roles* Clear with boundaries to unclear and confusing

*Rules* Rigid boundaries to inconsistency

#### Communications

*Listening skills* The extent to which staff listen to patients, to each other

*Speaking skills* The extent to which communication patterns are clear

*Self Disclosure* The degree to which staff are isolated from or reveal information

*Consistency* The extent to which content patterns are relevant to situations

*Continuity* The extent to which contacts erratic or relaxed and timely

*Respect and Regard* The extent to which attitudes express belittling or reverence toward others

#### Figure 1

## Methodology

There were four statistical and one conceptual hypotheses for this study. They are as follows:

1. The ward climate in the resocialization program wards will differ significantly in all variables from the admissions programs.
2. The WAS profiles of staff and patients will differ in fewer areas in the resocialization programs than in the admissions programs.
3. Work group style will correlate with involvement, support, practical orientation, and anger and aggression.
4. Education, staff time with patients, and length of time in the job will be significantly related to staff WAS scores and work group style variables.
5. Observer ratings of work group style will place work groups differently on the Circumplex Model than will self reports.

All staff except two (93) from day and evening shifts in five wards of two Oklahoma state hospitals, of similar size and staffing patterns, participated in the study. Wards were selected with purposive sampling to represent two of the program orientations identified using the WAS in a cluster analysis of 144 psychiatric

wards (33). For this current study, two resocialization wards, one from each facility, were selected as similar to the therapeutic community orientation in the criterion cluster analysis. There were 35 staff and 20 patients participating in those two wards. Three admissions wards, (one from the same hospital as one of the resocialization wards, and two from the second hospital) were selected as similar in program description to the behavioral control orientation. Fifty-eight staff and 28 patients participated from the admissions wards. Wards were selected in this fashion also to represent a balance of males and females in the patient population.

One research assistant interviewed 48 randomly selected patients using the WAS. If a patient was unable to participate, we selected another until ten from each ward completed interviews. In one ward, however, due to severe psychiatric crisis, only eight patients in all were able to complete the interview. Another research assistant used the CRS to observe interactions between staff, and between staff and patients in each ward across both shifts for a four hour period. That overall impression of communications patterns between staff, and between staff and patients, indicated levels of cohesion and adaptability.

## Results and Discussion

### Ward Climate

WAS profiles for each of the two programs (Figures 2 and 3) show areas in which staff and patients differed between programs. Figures 4 and 5 compare staff and patients within programs.

ANOVA results testing hypothesis 1, resulted in significant differences in four areas when staff were compared between programs. In the resocialization wards, staff and patients were more supportive of each other than in the admissions wards,  $F(1, 92) = 4.15$ ,  $p < .05$ ). Staff reported that more often program activities were carefully planned, neatness emphasized, and daily schedules followed than in the admissions areas,  $F(1, 92) = 8.53$ ,  $p < .01$ . In these resocialization programs the staff encouraged patients to develop practical skills, participate in the treatment process,  $F(1, 92) = 7.19$ ,  $p < .01$ , and express feelings of anger or disagreement, while encouraging self esteem  $F(1, 92) = 10.13$ ,  $p < .01$ . In the admissions wards this was not the case. Refer to page 47 for abbreviations of variables.

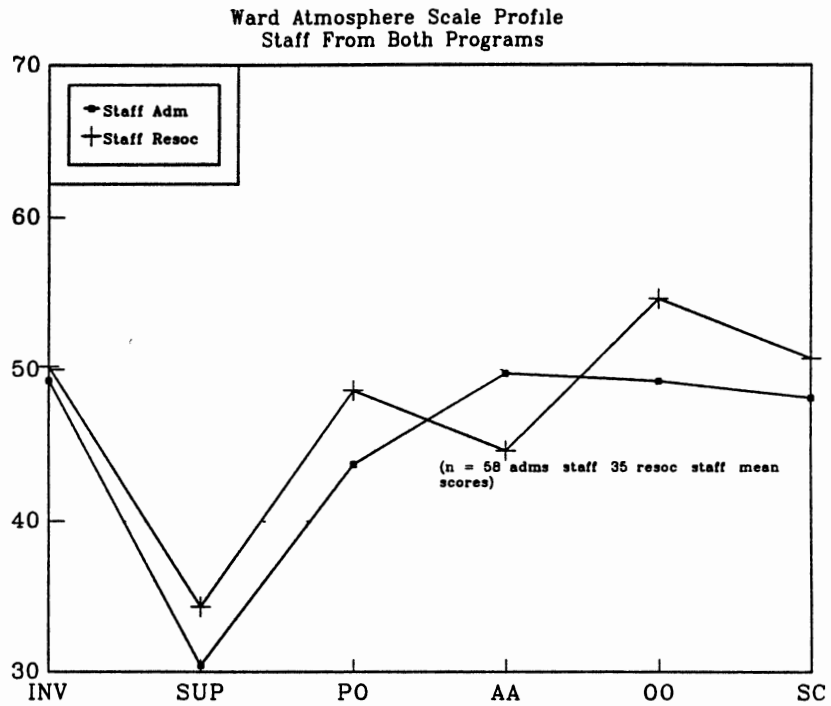


Figure 2

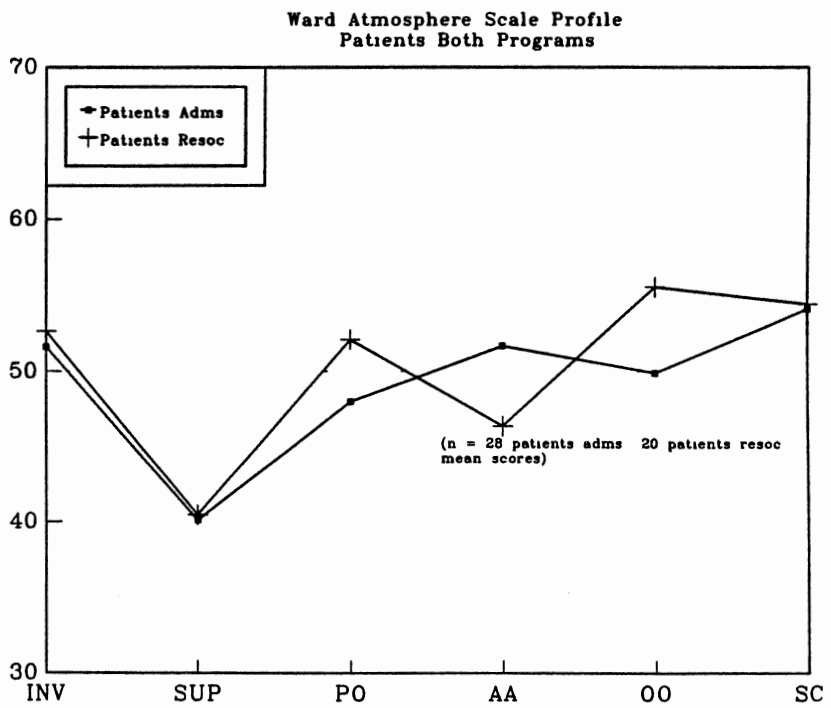


Figure 3



Patients' views differed between the two programs in two of the variables. In the resocialization programs patients reported more organization to the daily schedule, and more neatness in the ward, than those in the admissions wards  $F(1, 47) = 4.5, p < .05$ . Patients in the admissions wards reported more hostile and aggressive interactions compared to the resocialization programs  $F(1, 47) = 4.25, p < .05$ .

For hypothesis 2, an overall MANOVA, using repeated measures, was used first to detect significant differences between staff's and patients' WAS profiles overall in both programs. In the resocialization programs staff and patients differed overall in their views of the ward climate  $F(1, 53) = 7.64, p < .05$ , as they did in the admissions programs  $F(1, 84) = 25.44, p < .05$ .

Within each program orientation areas of differences were not the same. In both programs staff reported lower levels of supportive behaviors toward patients and between patients: resocialization  $F(1, 54) = 7.91, p < .05$ ; admissions  $F(1, 84) = 26.33, p < .001$ . In the admissions programs, staff reported lower levels of staff control than did the patients,  $F(1, 84) = 8.58, p < .01$ . Refer to page 47 for abbreviations of variables.

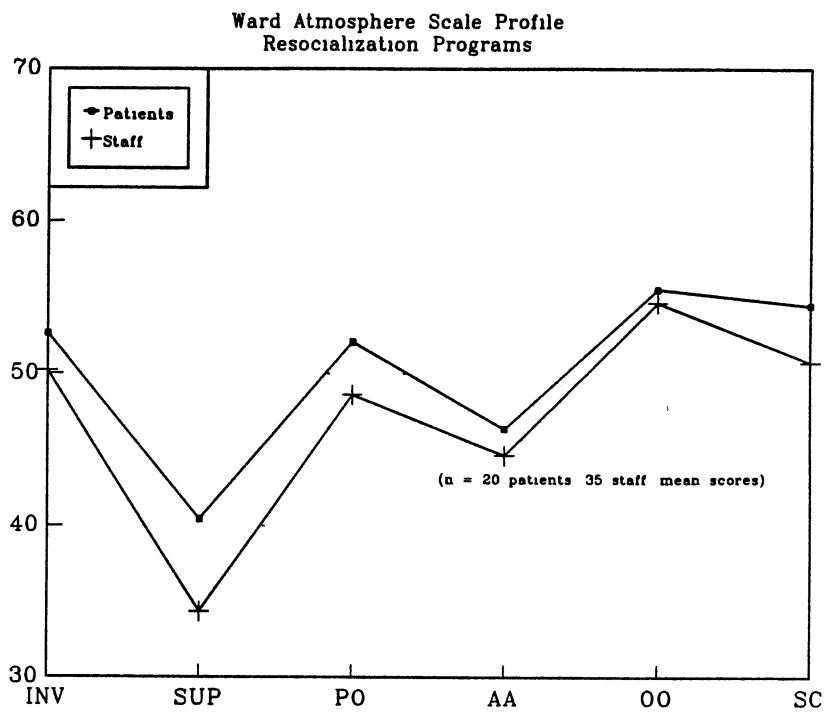


Figure 4

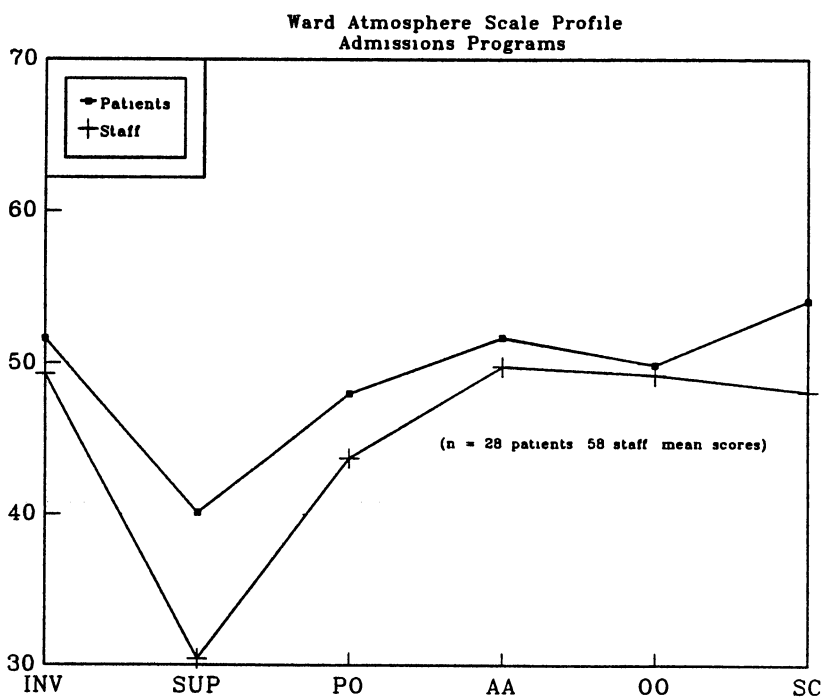


Figure 5

As a practical, but not statistically significant finding, this compares with the situation in the resocialization programs which showed staff and patients disagreeing in the same direction on levels of staff control at a  $p < .098$ .

Staff apparently feel unable to communicate supportively to the patients. If staff were to inquire as to how the patients view the idea of support, they might be able to identify their behaviors and build on their strengths in this area, and in the area of anger and aggression expression and management.

It would also be possible, with these data, for an administrator to identify differences between staff and patients views in individual wards. Knowing these differences could help leaders to understand the climate in a specific area. Between the two program types, however, staff and patients tend to agree. The second hypothesis was supported in part.

Because of the similar pattern in the profile graphs of the two programs, a follow up two-tailed t-tests for paired samples was used to test whether the study population was significantly different from the WAS population norms. This provided some indication of how close or different from most programs the wards in this study might be.

When this study population was compared to the scale norms, there were several significant findings.

Staff reports of support overall were lower than the scale norm ( $t$  -19.24,  $df$  92,  $p < .001$ ) and for patients ( $t$  -12.09,  $df$  47,  $p < .001$ ). This suggested that staff generally did not take time to encourage patients, to help new patients get acquainted, and did not know what patients wanted. One reason may have been that a short length of stay limited time to develop supportive behaviors. Also, in some areas, patients may have been too ill to interact with each other, or staff may have felt supportive but be unable to express it. This finding supports the recommendation that staff should explore the meaning of supportiveness and develop strategies to increase therapeutic interactions on the ward.

All ward staff reported emphasis on practical orientation to be below the scale norm  $t$  -4.81,  $df$  92,  $p < .001$ . Leadership should review ways to increase practical skill training for patients, try new treatment approaches, and increase vocational training to improve chances for successful community living.

For the anger and aggression scale, the wards appeared to be subdued as reflected by below average staff scores  $t$  -2.41,  $df$  92,  $p < .05$ . Although this may

seem to be a desirable situation, scores this different from the norm suggested that open communication may have been too limited. It could benefit staff and patients to review and clarify this aspect of the environment.

In most studies of ward environment, staff reported fewer controlling behaviors among themselves than perceived by the patients' (24). The patients in this study reported above the norm  $t = 3.71$ ,  $df = 47$ ,  $p < .001$ . Ward rules could be reviewed and discussed for staff to explore attitudes toward patients. Staff and patients may benefit from learning techniques for enabling patients to take responsibility for their own actions.

Differences in WAS scores for staff and patients were found to be significant overall,  $F(1, 139) = 31.29$ ,  $p < .001$ , but not between the two program orientations. Throughout the wards, staff should find ways to promote opportunities for healthy, open expression of needs, and responses to those needs.

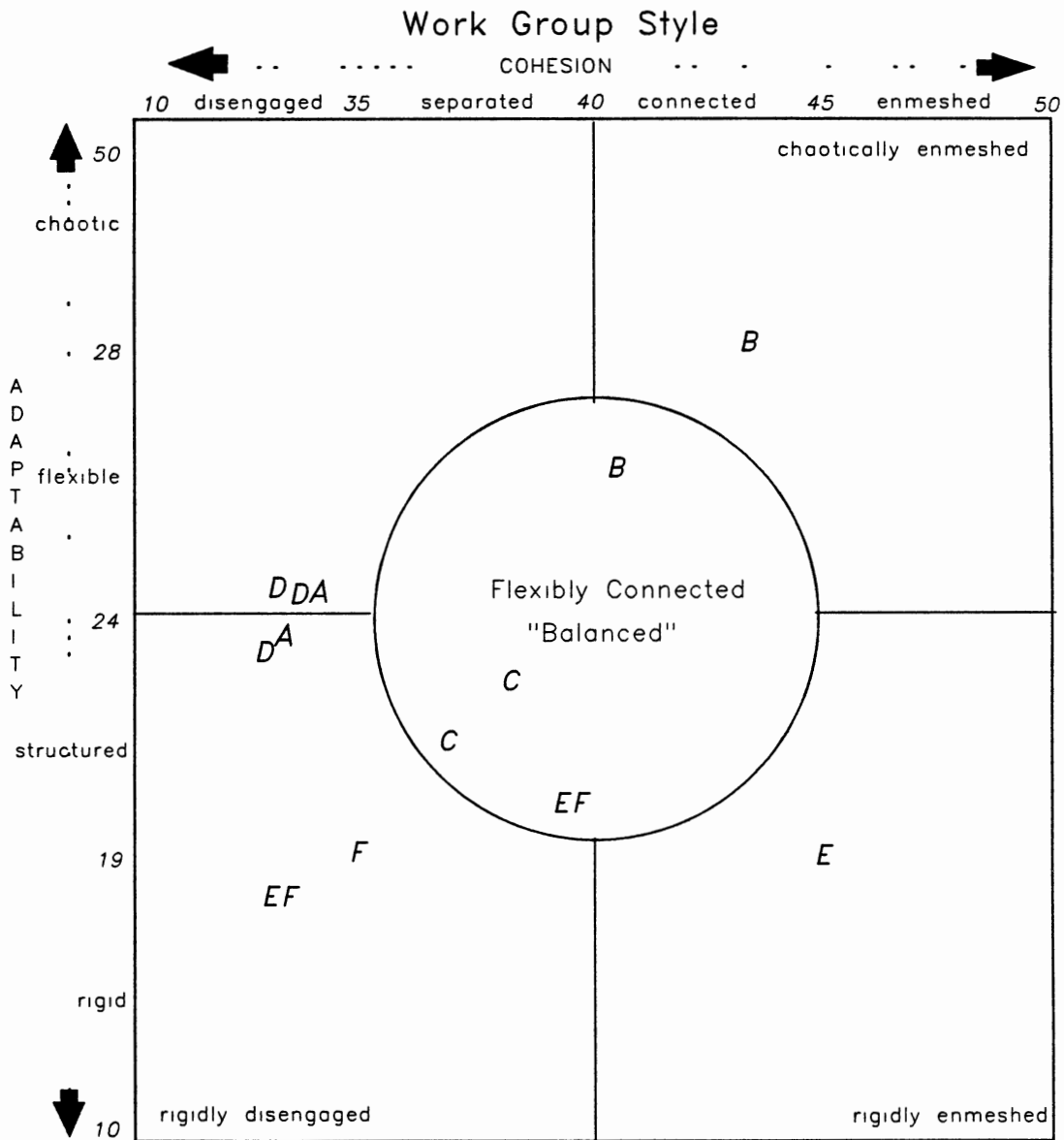
#### Work Group Style

Because the FACES instrument was modified for use in an organization, Cronbach's alpha was computed for both scales, with cohesion yielding a coefficient of .75, and adaptability a coefficient of .58. Both of

these coefficients were at an acceptable level for research purposes with attitude scales (34). The Circumplex Model uses percentile cutting points for each of the four levels of cohesion and adaptability based on data from families collected over a decade. Because of the experimental nature of this study, work group style scores were plotted using both family based norms and percentile cutting points, and with those percentile cutting points applied to the data from this study. (Refer to Figures 6 and 7).

Hypothesis 5 speculated that self-reported work group style would differ from observer reports. This study also called for a description of programs based on two view of the work group style, i.e. with family norms and hospital population norms. Differences were found in both areas.

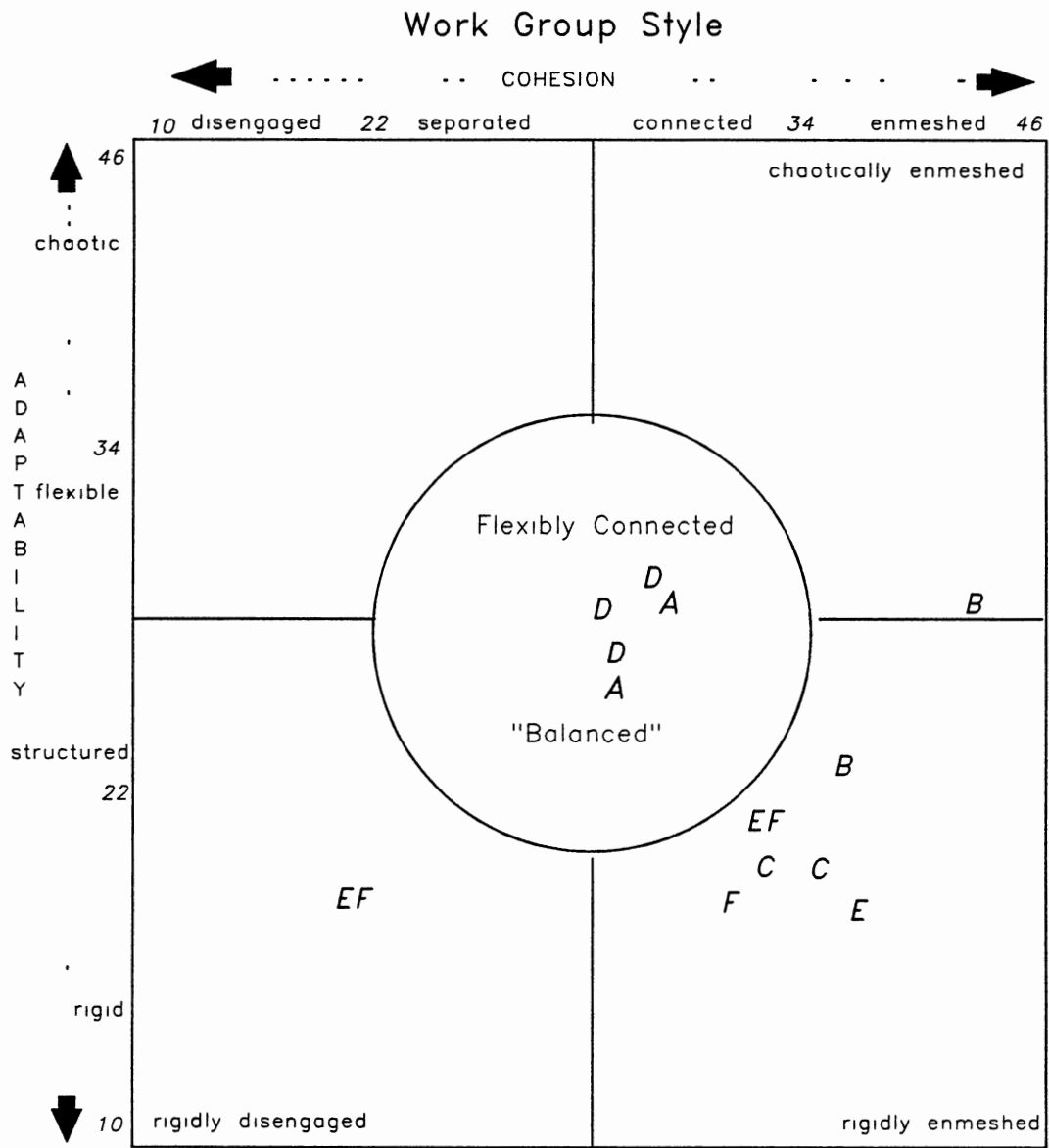
In Figure 6, the self-report results grouped the wards together near the disengaged level of cohesion, and chaotic level of adaptability. This suggested unclear roles and rules, and extreme individualization among group members. One would expect to find inconsistency in behaviors with each other, lack of role clarity, little group loyalty, and little group decision making. In contrast, Figure 7, using norms



Based on the Circumplex Model (Olson, Sprenkle, & Russell, 1979)

- Legend**
- A* Resocialization staff self-reports
  - B* Resocialization observer staff to staff
  - C* Resocialization observer staff to patients
  - D* Admissions staff self-reports
  - E* Admissions observer staff to staff
  - F* Admissions observer staff to patients

**Figure 4.** Work Group Style Using Family Norms



Based on the Circumplex Model (Olson, Sprenkle, & Russell, 1979)

**Legend**

- A Resocialization staff self-reports
- B Resocialization observer staff to staff
- C Resocialization observer staff to patients
- D Admissions staff self-reports
- E Admissions observer staff to staff
- F Admissions observer staff to patients

Figure 5. Work Group Style Using Sample Norms



from this study, the work group styles were marked by a balance of independence and participation in decision making, shared and democratic leadership, stable roles and rules, with loyalty valued but not demanded.

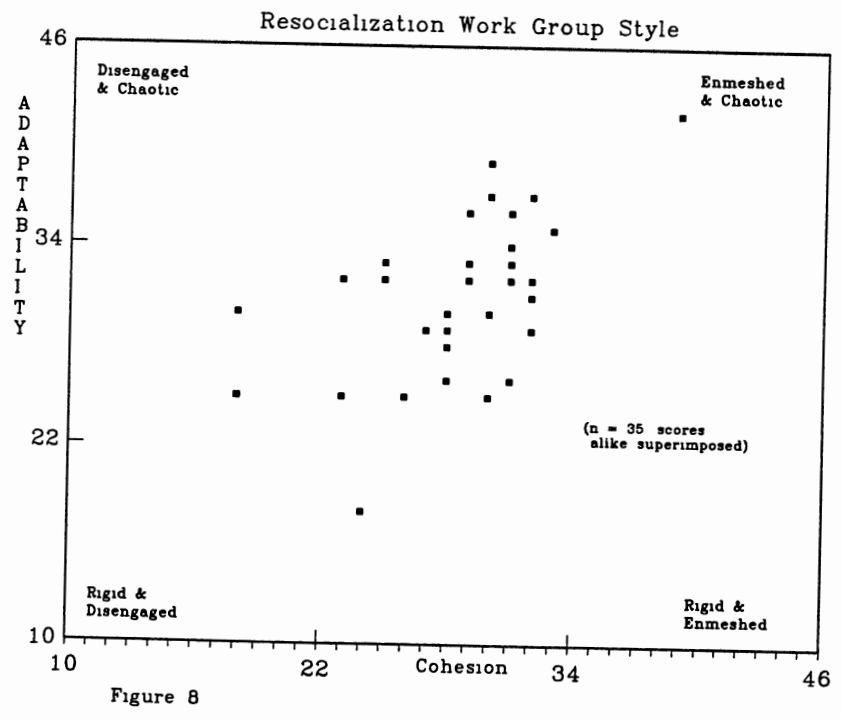
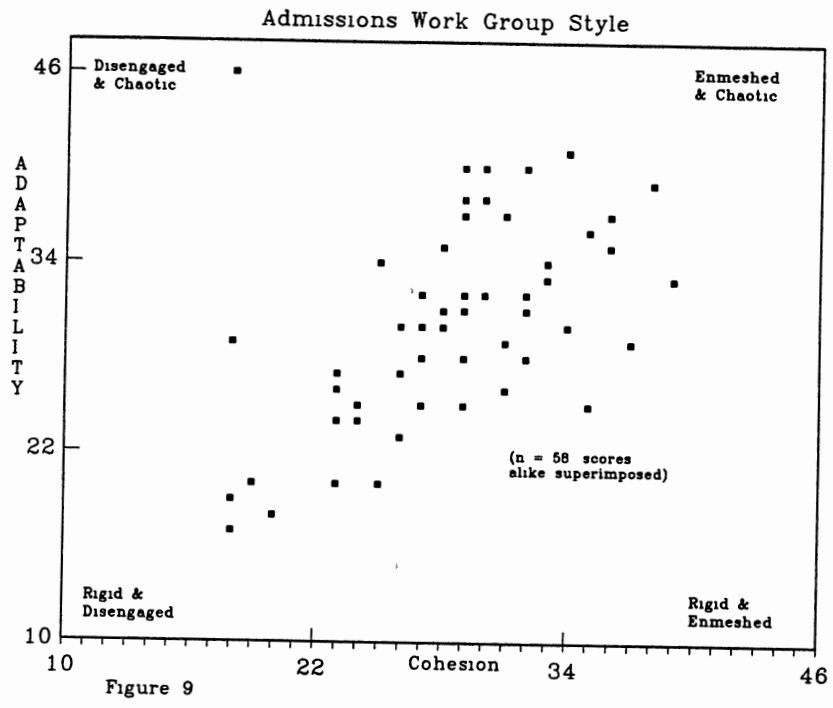
From the perspective of the observer, (refer to the legends on pages 58 and 59), and based on family norms, all the wards tended to be more rigid in the staff-patient interaction styles, with two admissions wards tending toward the rigid levels in staff to staff relationships as well. The resocialization programs were reported to demonstrate behaviors in the more flexible range of adaptability, and the more connected range of cohesion. Even though one of the admissions wards appeared more structured than the resocialization programs, the work group members seemed to be more focused on each other, depending on group communication to make decisions.

Observer ratings based on sample norms placed some of the wards in a more rigid mode of adaptability in staff-patient interaction than others, and distinguish resocialization programs from admissions wards in staff-staff interactions. In observer ratings, in both models, there were no differences in some wards in staff-staff or staff-patient relationships. This supported hypothesis 5.

To illustrate further the utility of this model, the scatterplots in Figures 8 and 9, show the variability of scores for each program orientation. These visual representations of work group style can be used in discussions with staff to explore beliefs, attitudes, and expectations about the work group. In the resocialization programs, the scores clustered more tightly than in the admissions programs. The ANOVA for between program variances in work group style revealed no significant differences.

Cohesion and adaptability had a strong linear relationship ( $r = .56$ ,  $p < .001$ ) in this study, suggesting that there maybe some overlap in what these variables measured. It is also possible that this indicates that staff consult each other more, and depend on each other more in a flexible environment than in an environment in which the routine is rigid or overly structured.

In the scatterplots, the outlying scores may have been from new staff, or from persons with less frequent contact with the members of the work group who usually work in close proximity to each other. Knowing whose scores lie in these outside areas might help know how to approach the ward leadership, the newer employees,



and other members of the team. Certainly it can be true that where a person sits determines how he or she views the work place climate. He or she may also influence that environment. In comparing this organizational model to the family systems model, it should be noted that organizations will tend to value flexibility before cohesion, whereas in families, loyalty is usually valued more than the capacity to change in response to the environment or events.

#### Climate and Work Group Style

To test hypothesis 3, pearson correlation coefficients were used to measure strength and direction of relationships between work group style and ward climate variables. The results in Table I, suggested that programs in which patients' participation is high, may have cohesive and flexible work groups. Another possible explanation is that programs requiring little staff control, with an emphasis on practical patient education may contribute to bonding and flexibility in roles and rules among the staff. With these few moderate coefficients between work group style and climate variables, the conditions reported by the work teams in this study may have

Table I

Correlations: Climate, Work Group Style  
and Staff Characteristics

<u>Work Group Style:</u>	<u>Cohesion</u>	<u>Adaptability</u>
<u>Climate:</u>		
INV	.30**	.37***
PO	.19	.22*
SC	-.06	.21*
<u>Staff Characteristics</u>		
Education	-.19	-.35**
Length of time in position	.20	.33**

\*p<.05. \*\*p<.01. \*\*\*p<.001.

reflected levels of cohesion and adaptability independent from the nature of the program or relationships to patients. In other words, program context may not influence either staff's commitment to the work group, or the group's ability to cope with situational demands for change.

Staff Characteristics

Hypothesis 4 speculated that staff characteristics of education, length of time in the job, and amount of time on an average day spent with patients would be related to staff scores on the WAS and work group style variables. Differences in the two work group style graphs suggested caution in adapting family models for use in organizations. Nonetheless, this information

can help administrators understand ward work group dynamics.

As Table I above indicates, years of education were inversely related to views of work group adaptability. Length of time in the job, however, was positively related to perceptions of work group flexibility. Persons with fewer years of education had been working in their jobs longer than those with more years of education. This may mean that the more educated staff saw less opportunity for change in the ward work group. It could also be related to familiarity with one's work group members. It may make sense to approach the employees who have been there the longest, and who are in the paraprofessional or preprofessional positions to initiate change in the work place.

There was no supporting evidence that staff time in direct contact with patients was related to work group style. The fourth hypothesis was only partly supported.

#### Conclusions and Recommendations

This paper has examined selected climate and work group variables in two types of programs in two state

hospitals. The conceptual foundations of the WAS and Circumplex Model provided methods for recording and analyzing the nature of ward life seen through the eyes of patients and staff, the work group style as seen through the eyes of the staff, and the work group style as seen through the eyes of an independent observer using a clinical rating scale adapted from family systems theory.

Four statistical and one conceptual hypotheses guided the study. From the results it appeared that this diagnostic approach could assist state hospital leadership in making decisions about program environments to promote quality care and positive work group relations. Administrators should consider each ward individually for relationship patterns between ward climate and work group style. Some of these relationships can point to commitment to a program, to the presence or absence of common goals, to fearfulness of patients, or even to different levels of perceived flexibility among the staff.

Studies using the WAS have shown that low levels of support have changed following intervention (35). We also know that wards tend to sustain a personalized environment over time despite changes in staff

composition (36). Most importantly, we know that participation, consultation, cooperation among participants in an organization tend to shape it more than technology or policy (15).

Administrators should study ward life from as many angles as possible. This can lead to more informed decisions and more well placed action, with the involvement of staff and patients.



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## CHAPTER IV

### STAFF ATTITUDES IN TWO PSYCHIATRIC INPATIENT PROGRAMS: A MULTISYSTEM MULTIMETHOD ANALYSIS

#### Introduction

State hospitals have reputations more like prisons than quality health care facilities.<sup>1,2</sup> Is it possible for the current leadership to improve the situation? Before responding to images conjured by the term state hospital, we should consider the nature of small groups and social systems.

Organizations tend to take on lives of their own. People who work in organizations find meaning in the groups they form, and work group values tend to be distinctly related to the work context.<sup>3</sup> In state hospitals, staff's relationships with patients influence the tasks and values of the organization. The staff are in a reciprocal relationship with the ward environment, simultaneously forming and being influenced by it. They largely shape the image and reputation of the facility. It is too easy for hospital leadership to overlook the complexity of factors which influence the quality of care and the quality of life

in the work place. With a better understanding of the psychosocial climate in the work unit, state hospital leadership at all levels can effectively identify, diagnose and intervene in the conditions which most likely influence organizational functioning.

#### Design and Methodology

All the day and evening shift staff, except two (93), in five wards from two state hospitals in Oklahoma participated in a study to explore three system levels of ward life. The first system level in this study was the ward climate, defined according to six of the ten subscales of the Ward Atmosphere Scale (WAS), which is one of the Social Climate Scales.<sup>4</sup> The WAS is based on the belief that organizations have personalities, just as the people who work in them.

The second system level was the nature of small group relations among the ward staff. This is called the Work Group Style (WGS), defined by levels of cohesion and adaptability in the Circumplex Model of family functioning.<sup>5</sup>

The third system level consisted of six subscales in the Work Profile, a section of the Health and Stress Profile (HSP), developed by Olson and Stewart in 1990.<sup>6</sup> This approach to measuring stress, coping, and overall life satisfaction of adults, was designed to bring theory and research together in a practical diagnostic tool for the social systems practitioner.

These three system levels were chosen to capture the richness of the similarities and differences among the selected work groups in the psychiatric wards participating. Two methods, self and observer reports, measured work group style. Ward climate was measured by staff's and patients' self-reports. Job stress, coping, and satisfaction were measured using staff self-reports. Figure 1 defines the variables used. It will be helpful first, however, to know something about the theory base for each system level measured in this study.

#### Ward Climate

The WAS has been repeatedly demonstrated as an effective tool for administrators and staff to discuss and modify treatment approaches in the psychiatric ward. Studies using feedback from the WAS have consistently reported positive changes in staff-staff and staff-patient relationships, an overall improvement in quality of care, and greater satisfaction with the work place. It has been used to make decisions about staffing patterns, and to demonstrate success of changes made in programs. The WAS is a 100 item true-false test with subscales which can be used independently to measure different aspects of the social climate.<sup>7-11</sup> The norms for this scale are the result of studies in over 40 U.S. hospitals, including 55 separate ward programs in 10 state hospitals.

### Work Group Style

For this study a family systems model was adapted for use in an organization. In family systems theory, cohesion measures emotional bonding and affiliation with the social group. Cohesion measures a similar quality in work groups, assessing the extent to which work group members identify with the group, and subscribe to group norms in performing day to day tasks.<sup>12-14</sup> Adaptability in families measures the group's ability to adjust roles and rules to respond to developmental or situational changes while maintaining the integrity of the social unit. Adaptability can be defined as the organization's ability to solve problems and to respond to environmental demands for change.<sup>15</sup> A family systems diagnostic tool can be adapted for experimental use in organizations because of the similarities between family system functions and social organizational behaviors. It should also be used with caution because contextual factors influencing family functioning may be different from those influencing work groups.<sup>16</sup>

In the Circumplex Model, information to measure cohesion and adaptability as two independent dimensions of family functioning  $r = .03$ , is collected by a self report 20 item questionnaire called FACES III.<sup>17-18</sup> For this study the FACES III instrument was modified for organizational use.



This has been done previously in unpublished manuscripts by Olson and others. For this study questions were changed from using terms such as family to group, and punishment and household chores to discipline and assignments. Cronbach's alpha coefficients were .75 for cohesion, .58 for adaptability. The correlation coefficient between these two variables in this study, was  $r = .56$ ,  $p < .001$ .

All of the data collection described to this point was from the self reporting method. Another method of recording information about work groups is from the vantage point of an uninvolved observer. A research assistant, trained in the use of the Clinical Rating Scale (CRS)<sup>19</sup>, observed behaviors in the five wards, interpolating family functioning behavioral indicators. (Refer to Figure 1.) This provided another perspective to use in designing strategies for organizational intervention.

### Work Profile

There are currently no published studies using the HSP or the Work Profile,<sup>6</sup> but based on preliminary results, this scale can be used as a starting point for diagnosis and planning intervention strategies in any setting. This 74 item inventory produces a work profile for an individual. For this study the mean group score was used to plot a profile for each of the two program orientations.

## Definition of Variables

### Ward Atmosphere Variables (WAS)

*Involvement (INV)* Extent to which patients participate in the program and degree of activity existing in the program  
*Support (SUP)* Extent to which patients help each other and degree of supportive behaviors of staff toward patients  
*Practical Orientation (PO)* Degree to which patients are prepared with realistic skills for discharge from the hospital  
*Anger and Aggression (AA)* Level of tolerance for effective expression and exchange of feelings and attitudes  
*Order and Organization (OO)* Degree of structure and evidence of efficient operations  
*Staff Control (SC)* Extent to which staff use measures to keep patients under control

### Work Group Style Variables (WGS)

*Cohesion* Degree of group identity and interdependence  
*Adaptability* Degree of situational flexibility in roles and rules

### Work Profile Variables (WP)

*Stress* Schedules, physical environment, work relations, job characteristics, benefits, productivity  
*Problem Solving Resources (Coping)* Problem solving skills, sense of humor, positive reframing and brain storming  
*Communication (Comm)* Ease of self expression, clarity and sensitivity of sending and receiving messages among co-workers and supervisors, recognition  
*Closeness (Close)* Interdependence, trust, pride in the work group  
*Flexibility (Flex)* Ability to change as necessary to solve problems, degree of urgency in work tasks, policy clarity  
*Overall Work Satisfaction (Job Sat)* Interest in work, sense of accomplishment, fairness of benefits, opportunity, work relations, value of the organization

### Clinical Rating Scale Variables (CRS)

#### Cohesion

*Emotional bonding* Degree of separateness or togetherness  
*Involvement* Extent and frequency of interaction including encouragement or discouragement of affective behaviors  
*Staff - Supervisor and Staff - Patient Relationships* Clear or diffuse interpersonal boundaries  
*Internal boundaries* Shared spaces, use of private space, (physical & emotional, joint or independent decision making, time & space)  
*External boundaries* Preference for group associations, common grounds of interests, attitudes toward loyalty

#### Adaptability

*Leadership (control)* Type of supervision styles, from authoritarian to erratic and permissive  
*Discipline* Range of styles from rigid to lenient  
*Negotiation* Degree of participation and action orientation  
*Roles* Clear with boundaries to unclear and confusing  
*Rules* Rigid boundaries to inconsistency

#### Communications

*Listening skills* The extent to which staff listen to patients, and to each other  
*Speaking skills* The presence of clear communication patterns  
*Self Disclosure* The extent to which staff isolate themselves or reveal information to each other and to patients  
*Consistency* The degree to which there is evidence of relevance in situational content patterns  
*Continuity* The degree to which contacts erratic or relaxed and timely  
*Respect and Regard* The extent to which attitudes express belittling or reverence toward others

#### Figure 1

Work profile questions are answered using a five point Likert scale. The six dimensions of work measured by the scale are: stress, problem solving (coping resources), communication, closeness, flexibility, and overall work satisfaction. Reliability coefficients are based on studies of over 400 adults, showing consistency and accuracy in the results. Cronbach's alphas from the data in this study are comparable to those for the data in the preliminary studies using the HSP. Authors' reported coefficients compare with this study's sample shown in parentheses as follows: stress .87 (.89), problem solving skills (Cope) .80 (.82), communication (Comm) .84 (.88), closeness (Close) .92 (.85), flexibility (Flex) .79 (.87), and satisfaction (JobSat) .78 (.88).

These six dimensions can be further broken down into smaller more focused aspects of the work environment such as work benefits and compensation, coworker relationships, and supervisor relationships. This permits a more indepth analysis by an administrator interested in particular issues. Sample means can be compared to HSP population means to get some idea of how different from the average work profile a group's score might be.

Validation studies are based on the content orientation of the model and previous research documenting the appropriateness of these variables in studying stress and adaptation in family systems functioning.

### Subjects and Statistical Approach

The five wards participating in this study were selected with purposive sampling to compare with two criterion programs identified with the WAS in a cluster analysis of 144 psychiatric treatment wards<sup>18</sup>. This same study found that there may be as much variance among wards within an institution as between institutions.

Two wards selected for this study have a resocialization treatment orientation. These wards were selected because of the program description similarity with the therapeutic community orientation in the criterion study. These wards provide inpatient care for chronically mentally ill patients who have been unable to function in a community setting. Activities are structured around practical skill development for successful discharge to community settings. The programs' clients are screened from within the hospital's inpatient population for acceptance into these wards. These wards are in two different hospitals. Both wards are coed. There were 35 staff and 20 patients participating from these two wards.

The other three wards are admissions wards accepting a mix of long term and short term first and repeat admissions. These were similar in purpose to the behavior control oriented programs in the criterion study. One ward was coed, and in the same hospital as one of the resocialization

wards. The other admissions wards were gender exclusive for females and males, and were in the same hospital as the other of the two resocialization wards. Staffing patterns and census size were similar in all of the wards. The admissions wards have frequent turnover in the patient population, and shorter lengths of stay than the resocialization wards. There were 55 staff and 28 patients participating from these three wards.

This field study used a descriptive and correlational design. Analysis of variance (ANOVA) and correlation analysis techniques were used with the SPSS-PC+ version 4.0 to identify differences between staff and patients, and between programs, and to explore relationships among variables in the study.

There were four statistical and one conceptual hypotheses for the study. They are as follow.

1. WAS profiles, work group styles and work profiles in the resocialization programs will differ significantly from those in the admissions wards.

2. State hospital staff will report significantly higher stress levels, and lower coping levels than the Health and Stress Profile population norms.

3. Work Profile variables will be significantly related to ward climate variables in the WAS.

4. Cohesion and adaptability in the Circumplex Model will have a strong linear relationship with measures of closeness and flexibility in the work profiles.

5. Observer ratings of work group style will place the wards in different areas of the Circumplex Model than will the self reports.

The analysis proceeded in four stages. Stage one described and interpreted the WAS profiles of each program orientation. The second stage described and interpreted self report and observer rated work group styles. The third stage described and interpreted the work profile of the two different program orientations. The last stage interpreted relationships among the system levels, and made suggestions about the practical usefulness of these models for guiding organizational diagnosis and intervention at the ward level.

### Analysis and Discussion

#### Ward Climate

An overall MANOVA for staff scores indicated some differences among the wards in four areas. Staff differed overall in their perceptions of patients' involvement in the program  $F(1, 92) = 3.43, p < .05$ . They differed in views of how much support occurred toward and among the patients  $F(1, 92) = 2.81, p < .05$ . Staff scores in tolerance for expression of anger and disagreement were different overall  $F(1, 92) = 5.97, p < .001$ . They also disagreed about the extent to which the wards were well organized  $F(1, 92) = 4.67, p < .01$ .

To increase the power of the analysis, the data for each program orientation was combined. Although the two programs did not differ significantly in the involvement

variable, they did differ in other important areas. Staff in the resocialization programs reported that they spent more time encouraging patients, believed they more often knew what patients wanted, and saw more patient to patient and staff to patient support than in the admissions programs  $F(1, 91) = 4.15, p < .05$ . As might be expected, resocialization program staff reported a greater emphasis on practical preparation of patients for discharge  $F(1, 91) = 7.19, p < .01$ , and more careful preparation of schedules, and regular attention to neatness in the ward areas  $F(1, 91) = 8.53, p < .01$ , than the admissions wards. The admissions wards, however, reported more volatility among staff and patients, with more disagreements, and episodes of anger than in the resocialization programs  $F(1, 92) = 10.13, p < .01$ . The first hypothesis was supported in part.

Because the wards were selected according to the typologies suggested by Price and Moos<sup>20</sup>, Figures 2 and 3 compare respectively the resocialization programs with the therapeutic community profile, and the admissions wards with the behavior control oriented profile. Even with the differences in the two program orientations in this study, the resocialization programs did not resemble a therapeutic community orientation. The graphs show that both program types in this study had profiles similar to the behavior control orientation profiles. Page 47 provides abbreviations for WAS profile variables.

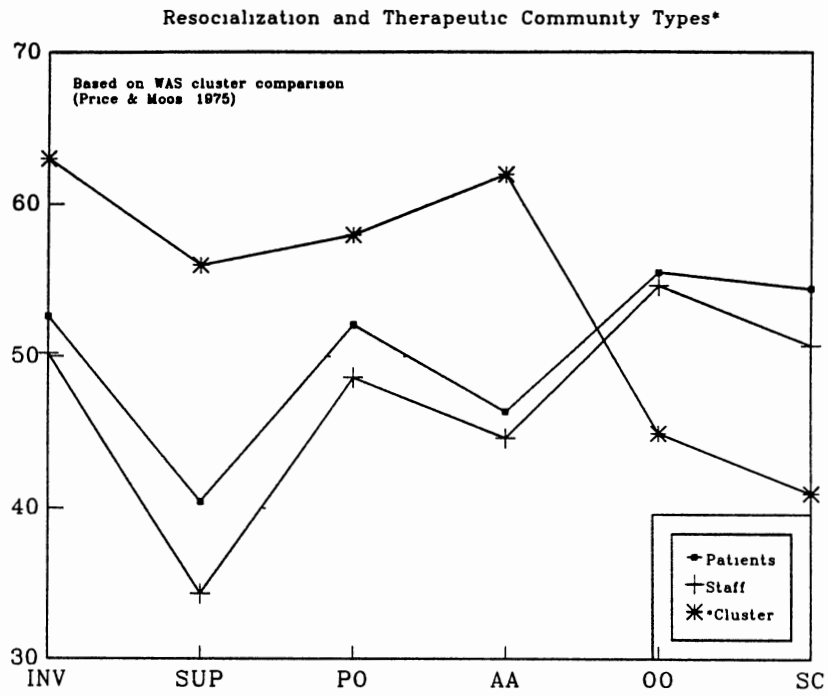


Figure 2

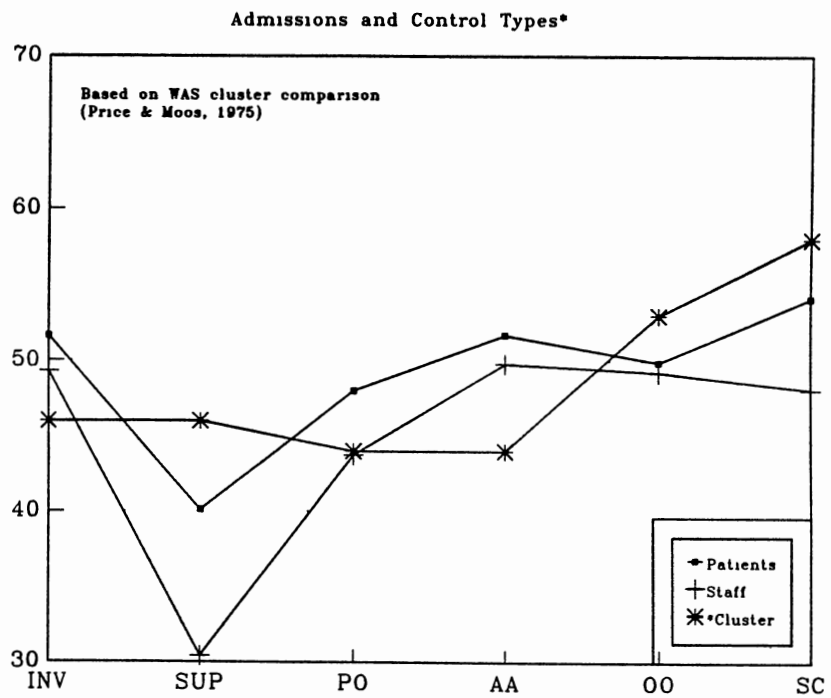


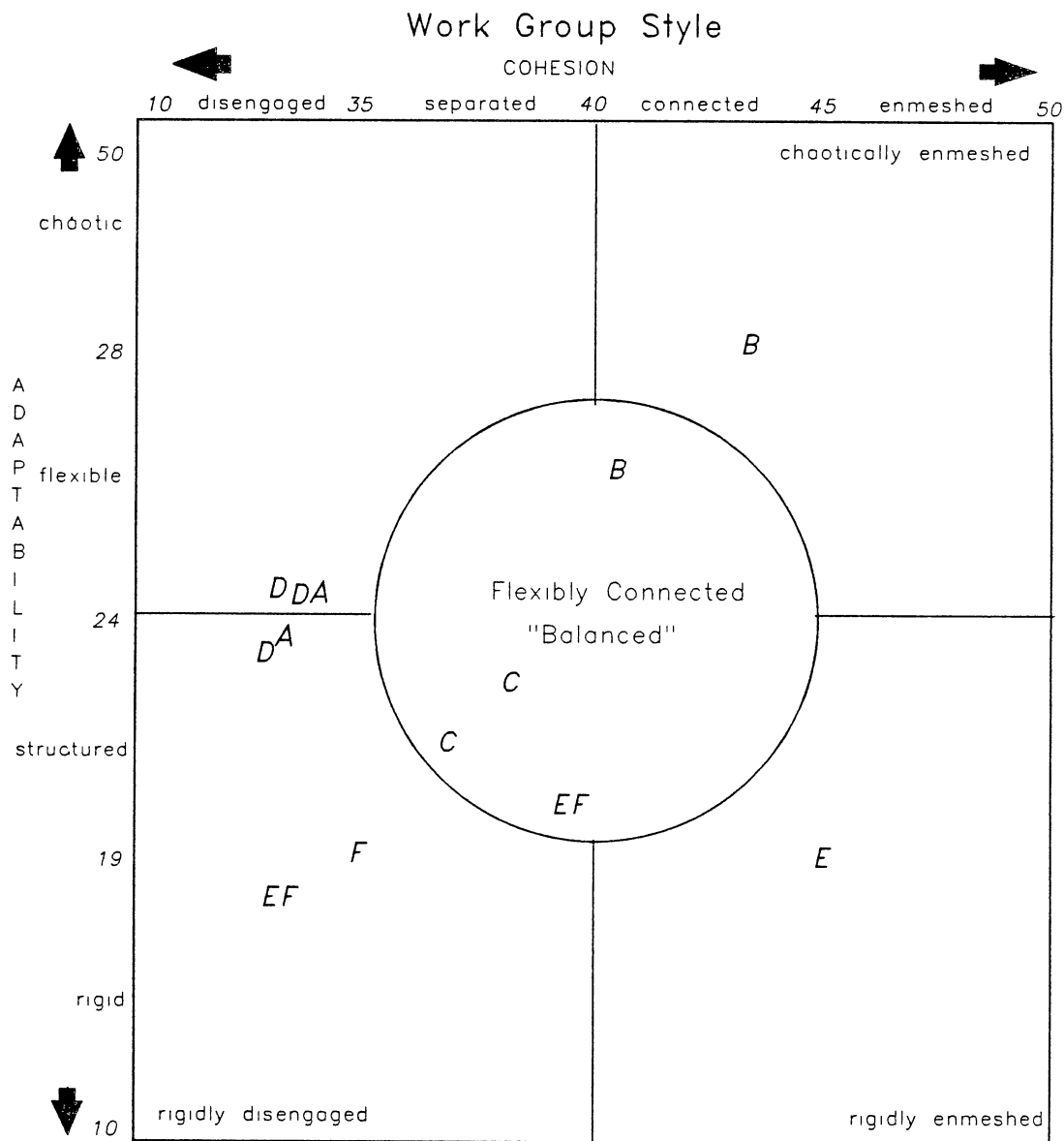
Figure 3



Each program orientation was compared to the overall WAS population norms. The resocialization programs ( $n = 35$ ) fell below the norm significantly in supportive behaviors  $\underline{t}(34) = -10.05, p < .001$ , and the amount of anger and aggression on the ward  $\underline{t}(34) = -3.37, p < .01$ . These wards, however, reported significantly more order and organization than the norm group  $\underline{t}(34) = 3.71, p < .001$ . The admissions wards ( $n = 58$ ) reported less supportive behavior  $\underline{t}(57) = -17.04, p < .001$ , and an emphasis on practical skills for discharge significantly below the model norm  $\underline{t}(57) = -4.99, p < .001$ .

#### Work Group Style

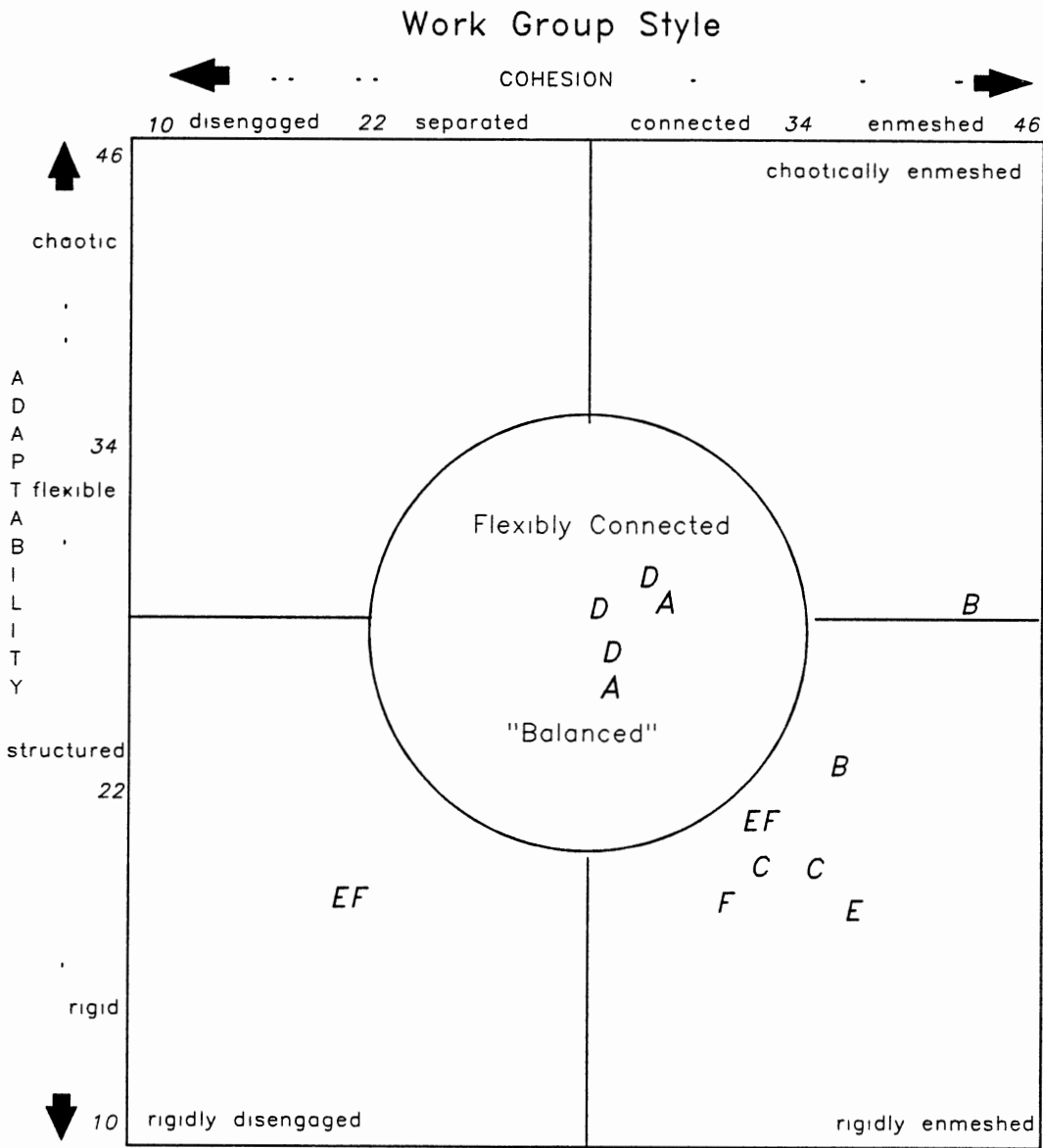
In an overall ANOVA, there were no differences among the wards in self reported work group styles. Figure 4 shows ward work group styles based on family norms and Figure 5 uses the sample population norms from this study. When wards are located on the model using family based cutting scores the trend is toward a style of uncertainty in roles and rules, constantly changing patterns of relationships, with high levels of individuality, little group spirit, and very little group decision making. When the model is shifted to apply the family based percentile cutting points to the study data the pattern is different. Two wards, one from each program orientation can be



Based on the Circumplex Model (Olson, Sprenkle, & Russell, 1979)

- Legend**
- A Resocialization staff self-reports
  - B Resocialization observer staff to staff
  - C Resocialization observer staff to patients
  - D Admissions staff self-reports
  - E Admissions observer staff to staff
  - F Admissions observer staff to patients

Figure 4. Work Group Style Using Family Norms



Based on the Circumplex Model (Olson, Sprenkle, & Russell, 1979)

- Legend**
- A Resocialization staff self-reports
  - B Resocialization observer staff to staff
  - C Resocialization observer staff to patients
  - D Admissions staff self-reports
  - E Admissions observer staff to staff
  - F Admissions observer staff to patients

**Figure 5.** Work Group Style Using Sample Norms

described as more connected and more flexible than the other three wards. These differences were not statistically significant.

The observer scored the work group styles in different style areas of the Circumplex Model. Although the resocialization wards were not distinctly different from the admissions programs under this system level, they were both seen as very closed working groups, flexible, but with ward A toward the structured style. These styles suggested fairly closed systems from the observers viewpoint, more toward the inflexible side in negotiating roles and rules among work partners, but committed to the group as a group.

### Work Profile

The second hypothesis was supported, and other information revealed by the comparison of the ward staff work profiles to the model population means. (Refer to Figure 6). Overall the stress levels were significantly higher  $t(92) = 9.68, p < .001$ , coping resources lower  $t(92) = -21.89, p < .001$ , flexibility lower  $t(92) = -3.54, p < .001$ , and overall satisfaction with the work climate lower  $t(92) = -28.68, p < .001$ . When combined by program orientation, wards did not differ on any of the work profile variables, nor were there any significant differences among the wards overall.

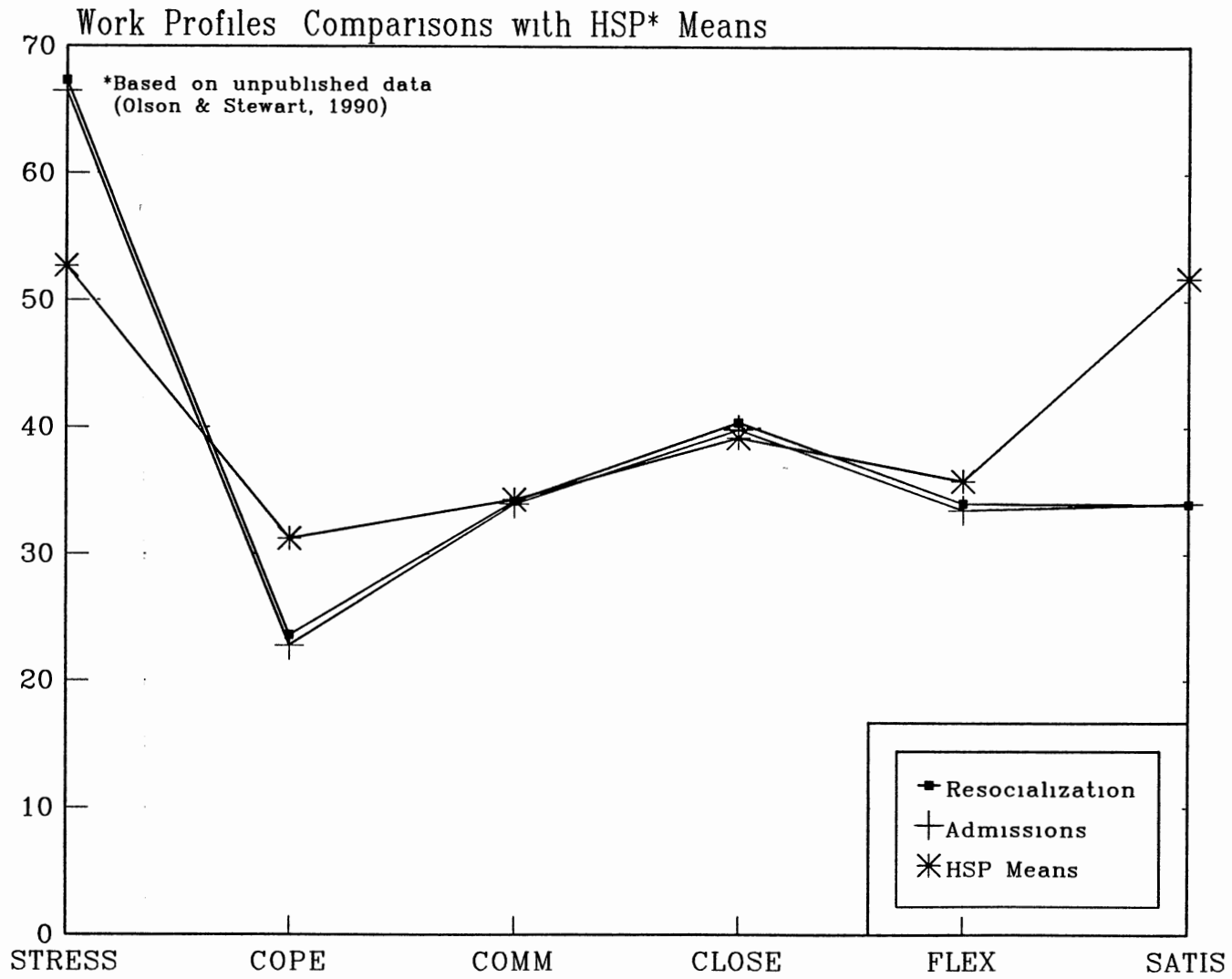


Figure 6

### Systematic Relationships

The third hypothesis was supported in part by the data reported in Table I.

Table I

#### Correlations: WAS and Work Profile

	INV	PO	AA	OO	SC
Stress	-.004	-.09	.10	-.23*	-.23*
Comm	.46***	.31*	-.24*	.39***	-.10
Close	.38***	.31**	-.24*	.41***	-.32**
Flex	.45***	.50***	-.29**	.51***	-.23*
JobSat	.19	.23*	.02	.16	-.03

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ,  $n = 93$

In areas in which staff reported active involvement of patients in the program, an emphasis on practical therapeutic activities, and a well organized schedule, the work group expressed close and flexible working relationships, and active and clear communications. The reported levels of order and organization, and patient involvement inversely correlated with stress levels. In a punitive environment, with high levels of staff control, the work group may be interpersonally distant, and rigid in enforcing policies. Staff in this situation might benefit from training in therapeutic intervention techniques and team building workshops.

In programs which experienced high levels of aggression and disagreement, staff reported low levels of interpersonal communication, and more rigidity in response to the

environment. This may be situational, or it may be a chronic condition on a ward often in chaos due to constant and rapid turnover in the patient population. The volatility of a ward may be related to a perceived need among staff to behave in a controlling way toward patients. If the ward is explosive the staff may have little time for work group relationships to develop. With weak team relationships, the stress levels can increase, and the ability to maintain order and communicate effectively is threatened. If staff are able to support an environment with low levels of staff control, the closeness and flexibility may improve.

Coefficients in Table II supported the fourth hypothesis with a moderate but significant relationship between closeness and flexibility from the work profile, and cohesion and adaptability in the work group style.

Table II

Correlations: Work Group Style and Work Profile

	Closeness	Flexibility	Cope	Communication
Cohesion	.33***	.29**	.24*	.24*
Adaptability	.25*	.27**	.06	.27**

\*p<.05, \*\*p<.01, \*\*\*p<.001, n = 93

These two sets of variables may measure slightly different aspects of work group attitudes, explaining small percentages of the variances between each pair. As a further study, it might be useful to follow up with

interviews with staff in aspects of group participation in decision making, or to collect information on variables measuring motivation, and other organizational support components in the ward<sup>11</sup>.

Tables II and III show the results of a further correlation analysis done as a follow up on the results of the correlations between climate and work profile, and work group style and work profile variables. Although closeness and flexibility were not related to coping or communication, work group style did have some relationship to communication activity within the work group, as the Circumplex Model suggests. Cohesion was related to the level of coping resources. Team members feel closer to each other in groups with active communication mechanisms, or those communications styles foster group cohesion. The relationship was clear, but the direction was not clear from these data alone.

Table III

Correlations: Work Group Style and WAS

	INV	PO	SC
Cohesion	.30**	.19	-.05
Adaptability	.38***	.23*	-.21*

\*p<.05, \*\*p<.01, \*\*\*p<.001, n = 93

Work group style was moderately related to only two of the WAS climate variables, and only adaptability related to



control, similarly to flexibility. This further supported the possibility that measures of cohesion and adaptability as collected for this study capture a slightly different aspect of work group dynamics than closeness and flexibility in the Work Profile subscale of the Health and Stress Profile.

Involvement and practical orientation were consistently related to close and flexible work group attitudes. Active treatment in a ward with an orientation to practical skills seemed to be a good combination for positive work group relations. Overall, leaders should strive for increasing coping and communications mechanisms, engaging patients in practical treatment activities, moderating the levels of anger and aggression, and promoting well organized schedules in the ward programs.

#### Conclusions and Recommendations

Studies of small groups recommend the use of better methodological tools, more emphasis on theory and conceptual models, and multimethod strategies to get the richest information about intact social groups.<sup>21</sup> Although smaller numbers are difficult to analyze statistically, information from indepth studies of small groups has influenced entire human service systems through decades of change.<sup>22,3</sup> Between group differences appears as one of the most consistently reported significant relationships in small group research

literature.<sup>23</sup> Because the groups we study may be different in ways not accounted for in the research design, administrators should be well informed about what aspects of work life are measured by the survey instrument.<sup>24</sup> It may be useful when possible to use both individual and aggregated information, observer and self report data, and staff and clients views.

Just as there are questions about the direction of the relationship between job satisfaction and performance<sup>24</sup>, there are questions also about the relationship between performance under pressure and group cohesiveness.<sup>23</sup> Although statistical analysis of climate and job variables may not provide all the answers, it is a fruitful beginning for administrators in identifying and explaining conditions in psychiatric treatment wards which may be affecting quality of care and of the work place.

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## APPENDIXES

APPENDIX A  
REVIEW OF THE LITERATURE

## REVIEW OF THE LITERATURE

The purpose of this study was to describe the organizational climate of two groups of wards with different program orientations, and work group attitudes at the group level with a multisystem, multimethod approach. This review of the literature was confined to and organized around the theory base which guided the approach to the problem, studies of and reports about state hospitals, the conceptual models, and the relationships among the variables used in the study. A large portion of the literature reviewed for this research project generally lacked reference to theory. This project has a theoretical base in general and family systems theories, and contingency theory.

### Theory

General systems theory is used in the social sciences to identify and describe, and to diagnose, analyze, and predict conditions within and surrounding organizations of human beings in interaction with each other. The concepts of general systems theory can guide studies of task oriented work groups and families (Goodman, 1986; Johnson & Robinson, 1987; Olson, Sprenkle, & Russell, 1979; Wertheim, 1975). General systems theory is a broad and overarching set of concepts and propositions which are more useful for this

project when used in a particular context. For this project, general systems theory provides a way of thinking, a way of organizing an experience into parts, the sum of which is greater than the whole experience.

Family systems theory and contingency theory, two branches of general systems theory, are the most applicable for this study of work groups in state hospitals. As social organizations these hospitals may have properties similar to families (Hirschhorn & Gilmore, 1980; Merkel & Carpenter, 1987; Obholzer, 1987). Although the terminology differs somewhat between general systems and family systems theories, common concepts lie beneath the words (Keeney & Cromwell, 1978; Olson, Sprenkle & Russell, 1979). Some of these concepts are boundaries between members and units of the system, internal and external relationships, growth and change, and functions which meet demands and needs of the system members. Several studies report that the concepts from family systems and social systems theories provide the same perspective on the unconscious processes being observed (Flower, 1991; Goodman, Ravlin & Schminke, 1987; Larcon & Reitter, 1984; Obholzer, 1987).

Contingency theory, a specific application of general systems theory in the field of management, holds that groups and individuals organize their attitudes and behaviors in response to the environment (Morgan, 1986). This study used a conceptual link between family systems theory, contingency theory, and social systems theory. The subjects for this



research project were work groups and groups of patients in wards of state hospitals, in interactions with the ward climate. With a multisystem, multimethod approach, data was collected from individual and group perspectives, using self-report and observer ratings. Cromwell and Peterson (1983) found that this multisystem, multimethod approach is necessary to identify adequately the discrete qualities of each subsystem with a group.

It has been substantiated by several authors that any social group must be evaluated within its situational context, and the interrelationships created by the interactions among the members (Bettenhausen, 1991; Goodman & Associates, 1986; Hackman, 1990). Psychoanalytic studies of organizations provide some of the best conceptual links between family systems and groups of people at work (Diamond, 1988). In his work, Diamond views organizations as products of interpersonal strategies, both defensive and adaptive, for coping with environmental stresses.

#### State Hospitals

Evidence of the effects of working with the severely and persistently mentally ill can be found in studies of burnout among mental health agency staff (Bissell, Feather & Ryan, 1984). A study using one of the social climate scales measured the impact of bureaucracy in leader behavior and communication on staff attitudes (Drude & Lourie, 1984). In a debate spanning nearly a decade of literature about the

relative value of state hospitals to society, some professionals in the field called for the replacement of these institutions (Okin, 1982, 1983), while others seek a balance in all service settings (Siegel, 1984; Ozarin, 1989).

In a review of the economic and political impact of changes on the public mental health system one author calls upon care providers to advocate for the mentally ill who suffer from the inadequacies of the bureaucracy (Brown, 1983). One highly respected author, lecturer, and researcher in the public mental health field predicts a long future of difficulty in relative valuation and role relationships for state hospitals (Bachrach, 1986). Rothman (1980), in a rigorously researched history of state hospitals, compares them to penal institutions. His work differentiated between the current political criticism of state hospitals and the original motive of kindness in attempts to protect the vulnerable from society. Most recently it is society which is protected from the mentally ill through indefinite court commitments to state hospitals. The burden of care was shifted, over a century and a half, from families and communities to the state and the staff of the facilities.

An important study of the power structure in state hospitals finds that the staff working closest to the patients acquire the strongest power base due to their control of information and patients (Mechanic, 1962). That

study, using concepts from general systems theory, contingency theory, and family systems theory, uses variables of exchange, coalitions, commitment, skills, and personal relationships to evaluate the use and effects of power.

Another important study of the internal dynamics of state hospitals explores the problems facing administrators because of the conflicting goals among the various groups in state hospitals (Carlyn & Stoffelmayr, 1981). In another way of defining organizational climate, a study by Drude & Lourie (1984) examined the relationship between staff perceptions of work environment and staff to patient ratio in three wards of a state hospital in Ohio. Crowded wards were related to high amounts of stress and negative attitudes of staff toward their work. The study did not find, however, that either condition caused the other.

Some excellent studies have been done at the ward work group level. These studies have considered a large variety of variables in attempts to explain or further understand the dynamics of ward life. In an extensive social anthropological study of a state hospital the author visited wards, recording verbal and non verbal interactions between staff and patients. He observed the communications between ward personnel and physicians, and noted observable effects on patients and staff relationships. That study made suggestions to administrators about how to improve conditions on the wards (Salisbury, 1962).

In a more recent study of work groups in a state hospital the author reported evidence of cynicism, hostility, and contempt among the staff toward each other, combined with feelings of insecurity and futility about the work itself (Shaw, 1990). In such an environment, employees have been found to develop rigid attitudes and maladaptive behaviors. Rigidity in thinking and acting has been associated with attempts to avoid the anxiety of performing unpleasant tasks (Diamond, 1984; Obholzer, 1987).

One pertinent assessment of the public mental health system finds that dysfunctions in the bureaucracy tend to produce more emotional and unpredictable behaviors which have a negative effect on performance. This same analysis suggests that employee satisfaction may be the result of quality work rather than the cause of it (Marcos, 1988). Could it be, one author asks, that our defenses, our fears, our challenges in life, work out themselves in our daily work life? Day after day with sick patients can take its toll, as staff face human contact, control issues, autonomy battles, and role clarity problems (Diamond, 1984, 1988; Salisbury, 1962).

### Organizational Climate

One definition of organizational climate is the combined output effect of environmental variables (Hersey & Blanchard, 1988). Organizational climate has been defined by Lyon and Ivancevich (1974) as a set of attributes which can

be perceived within a particular organization, department or unit. Among the most consistently addressed variables contributing to organizational climate are mission, purpose, goals, communications, control, support, skills, and ability to change (Hersey & Blanchard, 1988; Hellriegel, Slocum, & Woodman, 1989). These same authors cite the difficulty of measuring climate and the relationship between climate and other variables affecting performance.

In a recent ecological approach to analysis of factors associated with work group effectiveness, the authors recommended a list of organizational climate features for further study. This list included mission clarity, performance recognition, physical environment, resources, and authority style (Sundstrom, De Meuse, & Futrell, 1990).

Another study of organizational climate in a teaching-referral hospital used eight variables to measure climate (Lyon & Ivancevich, 1974). These included for example, disengagement, intimacy, consideration, and production. Overall, the subject work groups preferred environments with minimum obstacles to progress, and high levels of support and structure. A simpler set of variables for assessing organizational climate includes variables of structure, relationships, and process orientation (Hackman, 1990). This set of variables closely parallels the conceptual organization of the Ward Atmosphere Scale (Moos, 1974; 1989).

Ward Atmosphere Scale. A study of staff attitudes toward the work environment in three private psychiatric units supported the utility of the concept of ward atmosphere to describe organizational climate (O'Driscoll & Evans, 1988). In many of the studies of various aspects of the wards in psychiatric hospitals researchers have used the Ward Atmosphere Scale (WAS) in its original (Moos, 1968), its first published (Moos, 1974), and revised (Moos, 1989) forms. The reported research using the WAS supports its effectiveness as a measure for use in studying wards in state psychiatric hospitals. Many studies have demonstrated the utility of the concept of ward atmosphere to describe and measure organizational climate in relation to other variables (Moos, 1972; O'Driscoll & Evans, 1988; Pierce, Trickett & Moos, 1972; Verinis & Flaherty, 1978)).

A 1972 study (Pierce et al.) reported the effectiveness of feedback provided through the WAS in enabling staff to make changes to move closer to ideal conditions, and facilitating agreement between staff and patients. Areas of change included, for example, policy clarification and patients' autonomy in decision making.

One study (Verinis & Flaherty, 1978) used the WAS to assist in changing the environment of a large psychiatric ward in a Veterans Administration Hospital. Their study showed differences in the ward atmosphere and an increase in morale and cohesiveness after using the results of the measurement in staff discussions setting goals for change.

These studies support the use of the WAS as a diagnostic instrument for administrators.

### Work Group Style

In a focused review and analysis of empirical studies of small group effectiveness, cohesion and flexibility are reported as among those most consistently strong in relation to effectiveness (Goodman & Associates, 1986). These two factors vary in strength of association depending on the moderating variables in each study, but remain the most consistently and rigorously studied constructs in studies of effectiveness. The influence of program structure on ward environment has been illustrated in several important studies (Bissell, Feather, & Ryan, 1984; Drude & Lourie, 1984; Moos, 1972; O'Driscoll & Evans, 1988; Pierce, Trickett & Moos, 1972; Verinis & Flaherty, 1978). In family studies, cohesion and adaptability have been found to be reliable and valid measures of healthy family functioning with communication as an underlying variable.

Cohesion. The literature about cohesion is widespread in studies of groups at work. These works cover issues of how to define the construct, its relationship to effectiveness, the direction of its relation with job satisfaction, and summarize findings of research (Goodman, 1986; Hackman, 1990; Morgan, 1986).

One author, familiar with issues in working with groups, reminds us of the complex ideas associated with cohesion, and recommends research into the implications for decision making in treatment teams (Beeber & Schmitt, 1986). The consistent and strong link between cohesion and group performance is documented in a review of the research on five years of group studies (Bettenhausen, 1991).

Adaptability. In a survey of the literature on group process, structure, and effectiveness, flexibility is associated with relative amounts of group knowledge and accessibility to resources. It appears, from this review, that groups are more flexible or adaptable if they can be more creative with problem solving (Gist, Locke & Taylor, 1987). Adaptable groups are responsive to their environment in such a way as to maintain themselves and develop.

This feedback loop with the environment is essential for open systems to cope with change and stress. Too much change can be chaotic, and too little can result in rigidity in roles and rules, with failure in accomplishing tasks demanded by normative and non normative changes and transitions of family and group life (Olson, Sprenkle & Russell, 1979). Groups need to reach a favorable balance between tradition and change to develop and survive (Melito, 1985). In family systems theory adaptability is defined as the ability of the group to change the power structure, role relationships, and rules in response to situational and developmental stress (Olson, Russell, & Sprenkle, 1983).



Circumplex and FACES. Olson, Sprenkle, and Russell (1979) introduced a model of family systems diagnosis called Circumplex. Originally over 50 concepts from family therapy and other social science fields were clustered to form the two dimensions of adaptability and cohesion. Balanced levels of these two dimensions are thought to be representative of the highest functioning family groups (Kuehl, Schumm, Russell, & Jurich, 1986). The definitions of the three dimensions of cohesion, adaptability, and communications used as measures and descriptors of the behaviors of families have remained essentially the same since then. It is used today in family diagnosis in its third version, and has been found to be a reliable and valid scale, based in theory, and useful for both systematic research and clinical work (Edman, Cole & Howard, 1990; Olson, 1991). It can be used with a variety of types of family structures (Olson, 1986). Cohesion contains six subscales, and adaptability contains five subscales. Each construct can be measured as one variable, capturing all the dimensions of the quality observed.

This researcher suggests that there is a similarity between the variables influencing functional and dysfunctional families and work groups in state hospitals. The subscales of cohesion, emotional bonding, independence, boundaries, coalitions, time, space, friends, decision-making, and interests, can probably be applied to groups at work. The conceptual foundations of adaptability, power,

negotiation, roles, rules and feedback, should also be a measure of effectiveness in groups of people at work. Together with the moderating dimension of communication these two independent but related variables should be an indicator of effectiveness.

This study will show that there is a conceptual cross walk between family and work groups systems concepts, even though the terminology differs, and that flexibility is a factor which can define overall work group functioning.

This researcher found no published studies of the relationship between work group cohesion and adaptability, and organizational climate in state hospitals. Neither did this researcher find published studies using the Circumplex Model as a diagnostic tool for organizations. However, Champ (1986) used this model to describe the organizational effectiveness of the Head Start Program, and Olson (1982) suggests the use of the model in organizational studies.

#### Work Profile

For the environment in state hospitals it is also important to consider the factors of job stress and coping as possible influences on work group effectiveness. Job satisfaction, as an overall measure of individual expression of many attitudes and feelings about the values of work, has been described and studied in a variety of ways (Gresov, Drazin & Van de Ven, 1989; Lyon & Ivancevich, 1974; Skaret & Bruning, 1986).

For this study I have used the Work Profile developed as part of a Health and Stress Profile for families at home and at work (Olson & Stewart, 1990). The Work Profile has six subscales to measure communication, cohesion, flexibility, stress, problem solving style, and job satisfaction. The work stress portion of the scales originated with PROFILES: Personal reflections on family life and employment stressors (Fournier, 1981). This aspect of work life provides information about the staff's perception of stress and resources in the ward. Work profiles were hypothesized to correlate with other variables in the study. Appendix B contains an abstract and other information about the HSP.

#### Summary

Managers need insights into as many aspects of group dynamics as possible, especially in state hospitals. The results of treatment in these facilities can have positive and negative consequences for families of employees, families of the clients, the community, the mentally ill themselves, and the state. In his review of over 1,000 articles in a five year time period, Bettenhausen (1991) finds frequent support for a link between work group cohesion and innovation, and product quality. If establishing and maintaining cooperative work environments are essential to effectiveness in work groups, this study should be of practical use to administrators.

All of the different sets of variables to measure organizational climate have some common ground. Their theoretical constructs closely parallel the WAS, the Circumplex Model and the Work Profile. The Ward Atmosphere Scale, the Circumplex Model, and the HSP provide well organized models of variables to measure, describe, classify, and compare wards and programs in state hospitals.

**APPENDIX B**

**APPROVALS AND PERMISSIONS**

OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD  
FOR HUMAN SUBJECTS RESEARCH

*Reviewed  
3/22/92*

Proposal Title, Organization Climate and Work Group Effectiveness in State  
Hospitals: Does Ward Program Structure Make a Difference

Principal Investigator B. Hirshlein / D. Cruser

Date 1-30-92 IRB # HE- 92-026

-----  
This application has been reviewed by the IRB and

Processed as Exempt [ ] Expedite [X] Full Board Review [ ]  
Renewal or Continuation [ ]

Approval Status Recommended by Reviewer(s)

Approved [ X] Deferred for Revision [ ]  
Approved with Provision [ ] Disapproved [ ]

Approval status subject to review by full Institutional Review Board at  
next meeting, 2nd and 4th Thursday of each month.

-----  
Comments, Modifications/Conditions for Approval or Reason for Deferral or  
Disapproval

Signature *Marcia S. Tilley* Date 3-16-92  
Chair of Institutional Review Board

OFFICE OF THE  
SUPERINTENDENT



ADDRESS ALL COMMUNICATIONS  
CONCERNING PATIENTS TO THE  
SUPERINTENDENT GIVING THEIR  
FULL NAME FOR PROMPT REPLY  
PLEASE ENCLOSE SELF ADDRESSED  
STAMPED ENVELOPE

STATE OF OKLAHOMA  
DEPARTMENT OF MENTAL HEALTH  
& SUBSTANCE ABUSE SERVICES

EASTERN STATE HOSPITAL  
P O BOX 69  
VINITA OKLAHOMA  
74301 - 0069  
(918) 256 7841

DATE. February 12, 1992

TO. desAnge's Crusier, Superintendent  
Griffin Memorial Hospital  
900 E. Main  
P.O. Box 151  
Norman, Oklahoma 73070

FROM RESEARCH STANDARDS AND REVIEW COMMITTEE

PROPOSAL ENTITLED Organizational climate and work group effectiveness in state hospitals: Does ward program structure make a difference?

The Superintendent and DMHSAS has approved your research proposal involving the use of human subjects.

The expiration date of this approval is one year from above date. If the project is to continue beyond that date, please submit an updated proposal in advance for review and re-approval. If the proposal is modified in any way, it must be re-approved. Further, the Committee requests prompt notification of any complications that may occur during any procedure of your research.

Please complete and sign the enclosed "Adherence To Research Guidelines" form. The Committee will expect written progress reports every three (3) months until the project is completed or until the expiration date of the project. A copy of the form to be used for those reports is enclosed.

All continuing projects and research activities must be reviewed and re-approved at least annually by the Committee. Committee approval of a research project is for a maximum of one (1) year. It is the responsibility of the investigator(s) to resubmit the project to the Committee for annual review.

At the completion of the project: (1) a final paper outlining the results will be submitted to the Committee, (2) the Superintendent may arrange with you to share the research results through a presentation to pertinent ESH staff, and (3) the Commissioner of DMHSAS will be provided with a copy of all papers, studies, or reports arising from the research project.

Sincerely,

*Terry R. Dixon, Ph.D.*  
Chair, Research Standards and Review

*1894-1994 A Century of Dedication to People*



*Griffin*  
*Memorial Hospital*  
 900 E Main  
 P O Box 151 Norman, OK 73070  
 (405) 321-4880

March 1, 1992

Ms desAnge's Cruser, MPA  
 Griffin Memorial Hospital  
 P O Box 151  
 Norman, Oklahoma 73070

Dear Ms Cruser

This is to notify you that your research proposal, "Organizational Climate and Work Group Effectiveness in State Hospitals Does Ward Program Structure Make a Difference?" has been approved by Griffin Memorial Hospital and Don Anderson, Commissioner for the Department of Mental Health and Substance Abuse Services

This approval is contingent upon the following condition if applicable

Available pertinent treatment/diagnostic data obtained from the research be transmitted to the patients' physicians if requested by the respective physicians

Please acknowledge in writing your agreement to the above condition

Sincerely,

H L Head, MD  
 Deputy Superintendent  
 for Clinical Services  
 Chairman, Research Committee

HLH/js





## STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305 • (415) 858 3996

STANFORD UNIVERSITY SCHOOL OF MEDICINE  
 Department of Psychiatry TD 114  
 Rudolf H Moos Ph D Professor  
 Director Social Ecology Laboratory

November 18, 1991

des Anges Cruser, MPA  
 5904 N W 72nd Street  
 Oklahoma City OK 73132

Dear M Cruser

Consulting Psychologists Press forwarded your letter to me. I appreciate the description of the study you plan to conduct, which sounds intriguing and extensive. I have always been interested in the practical applications of information about social climate, and am pleased that you will use your data to make recommendations to hospital and program administrators.

I assume that Consulting Psychologists Press sent you a specimen set of materials for the Ward Atmosphere Scale (WAS). If not, I suggest you order one from them. These materials include the Second Edition (1989) of the WAS Manual, which provides a list of references and an overview of research that has been conducted using the scale. However, I do not know about the article by O'Driscoll & Evans, and would appreciate your sending me the complete reference.

I also look forward to a copy of your dissertation and the findings of your work. Good luck with your project.

Sincerely yours,

Rudolf H Moos, Ph D

RHM/dd

*P.S. I am enclosing two papers  
 that may be of interest.*

UNIVERSITY OF MINNESOTA

Twin Cities Campus

Family Social Science  
College of Human Ecology

290 McNeal Hall  
1985 Buford Avenue  
St. Paul, MN 55108

612-625 7250  
Fax 612-625-4227

October 30, 1991

RECEIVED

Ms. des Anges Cruser, MPA  
Griffin Memorial Hospital  
P.O. Box 151  
Norman OK 73070

OCT 31 1991

SUPT OFFICE

Dear Ms Cruser:

Dr. Olson asked me to thank you for your inquiry about the use of FACES. He has suggested that the Work Profile would be more appropriate for your study. You will find a copy of it enclosed with his compliments.

If you need further information, please feel free to contact us at anytime.

Sincerely,

*John Rarick*  
John Rarick  
Research Assistant

*OK to use modified Circumplex  
in your doctoral research  
Please send me products  
Signed David H. Olson  
Date 11/7/91*

APPENDIX C

MEASUREMENT INSTRUMENT

### PATIENT INTERVIEW

Questions call for yes or no answers, and statements call for true or false answers. Interviewers will be MSW trained staff from GMH, and the principle investigator

All of the questions are from the Moos Ward Atmosphere Scale normed at over 140 state hospitals and hundreds of patients around the United States over the past 18 years

- Do patients put a lot of energy into what they do around here?
- Would you say doctors have very little time to encourage patients?
- New treatment approaches are often tried on this ward
- Patients often gripe
- Patient activities are carefully planned
- Patients are rarely punished by being restricted.
- This is a lively ward
- The staff know what the patients want.
- There is very little emphasis on making patients more practical
- Do the patients often criticize or joke about the ward staff?
- Do you think that this is a very well organized ward?
- May patients may interrupt a doctor when one is talking?
- Are you proud of this ward?
- Are the staff interested in following up with patients after they have left the hospital?
- Are you encouraged to plan for the future?
- Would you say patients on the ward rarely argue?
- Do the staff make sure that the ward is always neat?
- If patients break ward rules, are they punished for it?
- Would you say there is very little group spirit on this ward?
- Would you say that nurses have very little time to encourage patients?
- Is there much emphasis on what patients will be doing after they leave?
- Do staff sometimes argue with each other?
- Would you say the ward sometimes gets very messy?

## Patient Interview Continued

- \_\_\_ If a patient argues with another patient does he or she get into trouble?
- \_\_\_ Does anybody volunteer around here?
- \_\_\_ Do doctors spend more time with some patients than with others?
- \_\_\_ Is there much emphasis on making plans for getting out of the hospital?
- \_\_\_ Do patients sometimes play jokes on each other?
- \_\_\_ Do most patients follow a regular schedule every day?
- \_\_\_ Staff don't order the patients around
- \_\_\_ Are patients pretty busy all of the time?
- \_\_\_ Do the healthier patients on this ward help take care of the less healthy ones?
- \_\_\_ Does this ward emphasize training for new kinds of jobs?
- \_\_\_ Is it hard to get people to argue around here?
- \_\_\_ Do many patients look messy?
- \_\_\_ Once a schedule is made for you, do you have to follow it?
- \_\_\_ Does the ward have many social activities?
- \_\_\_ Do the patients often help each other?
- \_\_\_ Are most patients more concerned with the past than the future?
- \_\_\_ Would you say staff never start arguments in group meetings?
- \_\_\_ Sometimes things are very disorganized around here
- \_\_\_ Patients can call staff by their first name
- \_\_\_ Very few things around here ever get people excited
- \_\_\_ The ward staff help new patients get acquainted on the ward
- \_\_\_ Patients are encouraged to learn new ways of doing things
- \_\_\_ On this ward, the staff think it is a healthy thing to argue
- \_\_\_ The staff set an example for neatness and orderliness
- \_\_\_ Patients will be transferred from this ward if they don't obey the rules
- \_\_\_ Are discussions pretty interesting on this ward?

## Patient Interview Continued

- \_\_\_\_\_ Doctors sometimes miss appointments
- \_\_\_\_\_ Staff care more about how patients feel than about their practical problems
- \_\_\_\_\_ Patients here rarely become angry
- \_\_\_\_\_ Patients are rarely kept waiting when they have appointments with staff
- \_\_\_\_\_ Is it safe for patients to discuss their personal problems around here?
- \_\_\_\_\_ Do the patients often do things together on the weekends?
- \_\_\_\_\_ Do staff go out of their way to help patients?
- \_\_\_\_\_ Do the patients have to make plans before leaving the hospital?
- \_\_\_\_\_ Do a lot of patients just seem to be passing time on the ward?
- \_\_\_\_\_ Is the day room often messy?
- \_\_\_\_\_ Do you think it is a good idea to let the doctor be the boss?

BACKGROUND INFORMATION SHEET

\_\_\_\_\_ Date of birth \_\_\_\_\_ Male  
\_\_\_\_\_ Female

Education (Please check highest level attained)

- \_\_\_\_\_ less than high school
- \_\_\_\_\_ high school diploma
- \_\_\_\_\_ associate degree (Specify \_\_\_\_\_)
- \_\_\_\_\_ some college (Specify \_\_\_\_\_)
- \_\_\_\_\_ bachelor's degree (Specify \_\_\_\_\_)
- \_\_\_\_\_ masters degree (Specify \_\_\_\_\_)
- \_\_\_\_\_ doctoral degree (Specify \_\_\_\_\_)
- \_\_\_\_\_ other (Specify \_\_\_\_\_)

\_\_\_\_\_ Job title

How long have you worked at the hospital? years \_\_\_\_\_ months \_\_\_\_\_

How long have you worked in your present profession? years \_\_\_\_\_ months \_\_\_\_\_

How long have you worked in your present position? years \_\_\_\_\_ months \_\_\_\_\_

My goal within the next two years is (please check all that apply)

- \_\_\_\_\_ stay at the hospital
- \_\_\_\_\_ finish additional schooling for another job here
- \_\_\_\_\_ finish additional schooling for another job elsewhere
- \_\_\_\_\_ find another job
- \_\_\_\_\_ other (Specify \_\_\_\_\_)

On average I spend \_\_\_\_\_ hours per day directly with patients

On average I spend \_\_\_\_\_ hours per day doing paperwork

Program Characteristics

Please indicate whether you agree (A) or disagree (D) for the most part with the following statements

- \_\_\_\_\_ There is a regular schedule of assessment and therapy sessions with patients
- \_\_\_\_\_ Treatment teams meet at regularly scheduled times
- \_\_\_\_\_ Changes in medication are discussed with patients and explained
- \_\_\_\_\_ Nurses conduct medication groups
- \_\_\_\_\_ Ward rules are written and everyone knows what they are.
- \_\_\_\_\_ Patients are oriented to ward schedules and expectations about personal care.
- \_\_\_\_\_ Staff know ahead of time when court hearings are scheduled
- \_\_\_\_\_ Staff are assigned specific patients to work with
- \_\_\_\_\_ Patient activity schedules are posted and followed
- \_\_\_\_\_ This ward has a program name
- \_\_\_\_\_ I know what the goal is on this ward
- \_\_\_\_\_ We know what each other is doing all of the time
- \_\_\_\_\_ Day and evening shift staff think the same way

### WARD ATMOSPHERE SCALE

There are 60 short statements in this section. They are statements about hospital wards. Please respond true or false to these when it is mostly true (T) or mostly false (F) for the ward on which you usually work. Please answer every question fairly quickly. This is meant to get your overall impression of your work place. Thank you.

- Patients put a lot of energy into what they do around here
- Doctors have very little time to encourage patients
- New treatment approaches are often tried on this ward
- Patients often gripe
- Patient activities are carefully planned
- Staff very rarely punish patients by restricting them
- This is a lively ward
- The staff know what the patients want
- There is very little emphasis on making patients more practical
- Patients often criticize or joke about the ward staff
- This is a very well organized ward
- Patients may interrupt a doctor when one is talking
- The patients are proud of this ward
- Staff are interested in following up patients once they leave the hospital
- Patients are encouraged to plan for the future
- Patients on this ward rarely argue
- The staff make sure that the ward is always neat.
- Patients who break the ward rules are punished for it.
- There is very little group spirit on this ward
- Nurses have very little time to encourage patients
- There is very little emphasis on what patients will be doing after they leave
- Staff sometimes argue with each other
- The ward sometimes gets very messy
- If a patient argues with another patient, he or she will get into trouble with the staff
- Nobody ever volunteers around here



## Ward Atmosphere Scale Continued

- \_\_\_ Doctors spend more time with some patients than with others
- \_\_\_ There very little emphasis on making plans for getting out of the hospital
- \_\_\_ Patients sometimes play practical jokes on each other
- \_\_\_ Most patients follow a regular schedule each day
- \_\_\_ Staff don't order the patients around
- \_\_\_ Patients are pretty busy all of the time
- \_\_\_ The healthier patients on this ward help take care of the less healthy ones
- \_\_\_ This ward emphasizes training for new kinds of jobs
- \_\_\_ It's hard to get people to argue around here
- \_\_\_ Many patients look messy
- \_\_\_ Once a schedule is arranged for a patient, the patient must follow it.
- \_\_\_ The ward has very few social activities
- \_\_\_ Patients rarely help each other
- \_\_\_ Most patients more concerned with the past than with the future.
- \_\_\_ Staff never start arguments in group meetings
- \_\_\_ Things are sometimes very disorganized around here
- \_\_\_ Patients can call staff by their first name
- \_\_\_ Very few things around here ever get people excited
- \_\_\_ The ward staff help new patients get acquainted on the ward
- \_\_\_ Patients are encouraged to learn new ways of doing things
- \_\_\_ On this ward, the staff think it is a healthy thing to argue
- \_\_\_ The staff set an example for neatness and orderliness
- \_\_\_ Patients will be transferred from this ward if they don't obey the rules
- \_\_\_ Discussions are pretty interesting on this ward
- \_\_\_ Doctors sometimes don't show up for their appointments
- \_\_\_ Staff care more about how patients feel than about their practical problems

**Ward Atmosphere Scale Continued**

- \_\_\_\_\_ Patients here rarely become angry
- \_\_\_\_\_ Patients are rarely kept waiting when they have appointments with the staff
- \_\_\_\_\_ It's not safe for patients to discuss their personal problems around here
- \_\_\_\_\_ Patients often do things together on the weekends
- \_\_\_\_\_ Staff go out of their way to help patients
- \_\_\_\_\_ Patients have to make plans before leaving the hospital
- \_\_\_\_\_ A lot of patients just seem to be passing time on the ward
- \_\_\_\_\_ The day room is often messy
- \_\_\_\_\_ It's a good idea to let the doctor know that s/he is the boss

### WORK PROFILE

During the past year how often has each of the following issues created stress for you at work

1	2	3	4	5	
Never	Seldom	Sometimes	Often	Very often	
_____					My job is everything I want it to be
_____					My employer demands too much
_____					Some things about my job are a problem
_____					The type of job I have creates problems
_____					My job is demanding, tedious, or creates tension
_____					I am tired or not physically ready for work
_____					I am not interested or happy with my job
_____					It is hard to receive a promotion
_____					Employer policy on payment of wages creates problems
_____					Salary and benefits create problems
_____					I am not paid fairly or enough for what I do
_____					My employee benefits are not adequate
_____					My work schedule creates problems
_____					Working long hours are a problem
_____					I never know what hours I will work
_____					I have no control over my work hours.
_____					I cannot get along with my co-workers
_____					I cannot get along with some of my co-workers
_____					Anger or tense relations exist in my work environment.
_____					Trouble with co-workers causes a poor work environment
_____					I have difficulty getting along with my supervisor(s)
_____					My supervisor(s) are too rigid
_____					I am not supported by my supervisor(s)
_____					My suggestions are not valued by my supervisor(s)

## Work Profile Continued

1 Never	2 Seldom	3 Sometimes	4 Often	5 Very often
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- \_\_\_\_\_ I lose time at work because of personal problems
- \_\_\_\_\_ Personal concerns reduce my productivity
- \_\_\_\_\_ Personal commitments interfere with my work performance
- \_\_\_\_\_ I have problems concentrating on my job

**When you are under stress at work how often do you do the following?**

- \_\_\_\_\_ I talk to others to find a solution to the problem
- \_\_\_\_\_ I take steps to reduce or eliminate whatever is causing stress.
- \_\_\_\_\_ I try new ways of dealing with the problem
- \_\_\_\_\_ I try to see something positive in the situation
- \_\_\_\_\_ I try to see a humorous side to the situation
- \_\_\_\_\_ I try to be creative and open to new ideas

**How often do you have the following experiences at work?**

- \_\_\_\_\_ It is easy for me to say what is on my mind to my immediate supervisor
- \_\_\_\_\_ My co-workers listen well and understand my ideas
- \_\_\_\_\_ Respectful and effective communication exists between staff and management.
- \_\_\_\_\_ My supervisor and/or co-workers tell me when I am doing a good job
- \_\_\_\_\_ Group discussions are productive and enjoyable.
- \_\_\_\_\_ Communication in our group is effective
- \_\_\_\_\_ People fail to listen to each other
- \_\_\_\_\_ I am clear about what is expected of me
- \_\_\_\_\_ I am encouraged to express my ideas and opinions
- \_\_\_\_\_ We have communication problems

## Work Profile Continued

1	2	3	4	5
Never	Seldom	Sometimes	Often	Very often

**Please answer these for the group you usually work with**

- \_\_\_\_\_ There is a sense of working together as a team
- \_\_\_\_\_ People seem distant and unfriendly
- \_\_\_\_\_ We can depend on co-workers for help
- \_\_\_\_\_ There is mutual trust and respect.
- \_\_\_\_\_ People do not seem to really care
- \_\_\_\_\_ The atmosphere is cold and impersonal
- \_\_\_\_\_ There is professional respect for each other
- \_\_\_\_\_ There is unfriendly competition
- \_\_\_\_\_ I feel personally committed to the team
- \_\_\_\_\_ I feel proud of the work of my team
- \_\_\_\_\_ New ideas or suggestions from people within the organization are encouraged
- \_\_\_\_\_ The organization is flexible and makes necessary changes to improve its services
- \_\_\_\_\_ Our group is disorganized and/or makes erratic decisions
- \_\_\_\_\_ We are encouraged to try to find new ways of solving problems
- \_\_\_\_\_ We have flexible policies for taking time off for medical and personal reasons
- \_\_\_\_\_ Our team responds quickly when change is necessary
- \_\_\_\_\_ We react well when it is necessary to change our normal operating procedures
- \_\_\_\_\_ Our team is required to adhere to too many policies
- \_\_\_\_\_ We are regulated by policies that stand in the way of progress
- \_\_\_\_\_ Supervision tends to be controlling or rigid

## Work Profile Continued

Please indicate how satisfied you are with these aspects of your work.

1	2	3	4	5	
Very dissatisfied	Somewhat dissatisfied	Somewhat satisfied	Satisfied	Very Satisfied	
_____					My work is interesting to me
_____					My work allows me to make good use of my abilities
_____					My work gives me a sense of accomplishment
_____					My salary seems fair and adequate.
_____					I am satisfied with the employee benefits
_____					There are good chances for promotion.
_____					I get along well with my supervisor
_____					I get along well with my co-workers
_____					I am satisfied with my work schedule
_____					My suggestions or ideas at work are taken into consideration
_____					Overall I am satisfied with my job

### WORK GROUP STYLE

The following statements describe common work group situations. Please use the number which best describes your work group, to enter in the box to the left of the statement.

1	2	3	4	5	
Almost Never	Once in a while	Sometimes	Frequently	Almost Always	
_____					The people I work with do not hesitate to ask each other for help
_____					The supervisors ask for subordinates' suggestions to solve problems
_____					We do not criticize each other's personal social life
_____					Employees in this area have a say in their own performance expectations
_____					The group I work with also likes to relax together
_____					Different people lead the group depending on what has to be done
_____					The people I routinely work with feel closer to each other than to people in other areas
_____					Our ward changes its ways of handling tasks
_____					Employees on this ward like to spend leisure time with each other
_____					Supervisors and subordinates discuss performance reviews together
_____					All of us feel very close to each other
_____					Supervisory decision making is strong
_____					When people on this ward have important business to discuss, everyone participates
_____					Rules change in our group
_____					We can easily think of things to do together
_____					We shift ward duties around among us
_____					We consult each other on decisions which might affect our work group
_____					On a regular day it is hard to identify the leader(s) in our group
_____					Feeling a part of the group is very important
_____					It is hard to tell who does which work assignments

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