STAFF AND PATIENT PERCEPTIONS OF PSYCHOSOCIAL
ENVIRONMENTAL PRESS ON PSYCHIATRIC WARDS
WITH HIGH AND LOW PATIENT VIOLENCE

by

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[Signature]  Nov 29, 1979
MAUREEN CHAISSON  Date
Associate Professor of Nursing
This thesis is affectionately dedicated to
Mr. Murphy, who spoke the truth.
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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS .................................................. viii
LIST OF TABLES ............................................................. x
ABSTRACT .................................................................. xi

1. INTRODUCTION ................................................................. 1

   Statement of Purpose ......................................................... 3
   Problem Statement ............................................................. 4
   Definitions ................................................................. 4
   Administrative Control ...................................................... 4
   Anger and Aggression ......................................................... 5
   Autonomy .................................................................. 5
   Behavior (B) ................................................................. 5
   Environmental Press ......................................................... 5
   Function (f) ................................................................. 6
   Involvement .................................................................. 6
   Life Space (L) ................................................................. 6
   Niche .................................................................... 6
   Order and Organization .................................................... 7
   Person (P) ................................................................. 7
   Personal Problem Orientation ............................................. 7
   Practical Orientation ......................................................... 7
   Press .................................................................. 8
   Program Clarity ............................................................... 8
   Psychological Environment (E) ........................................... 8
   Psychosocial Environment ................................................ 8
   Psychosocial Niche ............................................................ 9
   Region (r) ................................................................. 9
   Social Ecology ............................................................... 9
   Spontaneity ................................................................. 9
   Staff Control ............................................................... 10
   Supervisory Atmosphere Scale (SAS) ................................ 10
   Support ................................................................. 10
   Violence ................................................................. 10
   Ward Atmosphere Scale (WAS) ........................................ 11
   Limitations ............................................................... 11
   Theoretical Framework ................................................... 12
2. REVIEW OF THE LITERATURE ........................................... 21
   The Impact of Administration Upon Violence in the Milieu ........ 31
   Assessment of Milieu and Management .............................. 34

3. RESEARCH DESIGN ...................................................... 39
   The Sample ........................................................... 40
   The Setting ........................................................... 47
   Authority Relationships ............................................ 48
   Functional Organization ........................................... 52
   The Research Instruments .......................................... 57
   Data Collection ...................................................... 60
   Analysis of Data ..................................................... 65

4. PRESENTATION OF DATA ................................................ 67
   Demographic Data ..................................................... 67
   Age of Participants ................................................ 67
   Gender of Participants ............................................. 69
   Size of Samples ..................................................... 72
   Education of Participants ......................................... 72
   Patients' Length of Hospitalization ................................ 74
   Patients' Length of Time on the Ward ............................. 74
   Staff Job Categories ................................................. 75
   Staff's Years Worked in a Job Affiliated with Psychiatry ...... 75
   Total Patient Attacks upon Staff During Their Careers ......... 78
   Attacks Made Upon Staff by Persons Other Than Patients ....... 80
   Summary of Demographic Data ....................................... 82

   Responses to the Ward Atmosphere Scale and Supervisory Atmosphere Scale ........................................... 84
   Presentation of Scores ............................................... 85
   Patient Profiles Compared to Staff Profiles ....................... 91
   Comparisons of Profiles of Patient Groups ........................ 105
   Comparison of Profiles of Staff Groups ........................... 117
   Conclusions .................................................................. 123
   Summary ...................................................................... 126

5. STATISTICAL ANALYSIS OF DATA ....................................... 129
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>141</td>
</tr>
<tr>
<td>Summary</td>
<td>141</td>
</tr>
<tr>
<td>Demographic Data</td>
<td>142</td>
</tr>
<tr>
<td>Data Derived from Responses to Questionnaires</td>
<td>144</td>
</tr>
<tr>
<td>Discussion</td>
<td>148</td>
</tr>
<tr>
<td>Conclusions</td>
<td>164</td>
</tr>
<tr>
<td>Recommendations</td>
<td>164</td>
</tr>
<tr>
<td>APPENDIX A: ARIZONA STATE HOSPITAL WARD</td>
<td>167</td>
</tr>
<tr>
<td>EVALUATION SCALE</td>
<td></td>
</tr>
<tr>
<td>APPENDIX B: ARIZONA STATE HOSPITAL SECLUSION</td>
<td>170</td>
</tr>
<tr>
<td>AND RESTRAINT PROCEDURE</td>
<td></td>
</tr>
<tr>
<td>APPENDIX C: PATIENT QUESTIONNAIRE</td>
<td>174</td>
</tr>
<tr>
<td>APPENDIX D: STAFF QUESTIONNAIRE</td>
<td>180</td>
</tr>
<tr>
<td>APPENDIX E: STAFF DISCLAIMER STATEMENT</td>
<td>186</td>
</tr>
<tr>
<td>APPENDIX F: STAFF DEMOGRAPHIC DATA FORM</td>
<td>188</td>
</tr>
<tr>
<td>APPENDIX G: PATIENT DISCLAIMER STATEMENT</td>
<td>189</td>
</tr>
<tr>
<td>APPENDIX H: PATIENT DEMOGRAPHIC DATA FORM</td>
<td>191</td>
</tr>
<tr>
<td>APPENDIX I: SCORING KEY FOR WARD ATMOSPHERE SCALE</td>
<td>192</td>
</tr>
<tr>
<td>AND SUPERVISORY ATMOSPHERE SCALE</td>
<td></td>
</tr>
<tr>
<td>REFERENCES</td>
<td>195</td>
</tr>
</tbody>
</table>
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Psychosocial climate profiles</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>of patients and staff on Juniper 4, the ward with lowest violence</td>
<td>86</td>
</tr>
<tr>
<td>2.</td>
<td>of patients and staff on Juniper 10, the ward with the second lowest violence rate</td>
<td>88</td>
</tr>
<tr>
<td>3.</td>
<td>of patients and staff on Juniper 8, the ward with the highest violence rate</td>
<td>90</td>
</tr>
<tr>
<td>4.</td>
<td>of patients and staff on Cholla, the ward with the second highest violence rate</td>
<td>92</td>
</tr>
<tr>
<td>5.</td>
<td>for patients on two wards: Juniper 4, the ward with lowest violence, and Juniper 10, the second lowest violence ward</td>
<td>106</td>
</tr>
<tr>
<td>6.</td>
<td>for patients on two wards: Juniper 8, the ward with highest violence, and Cholla, the second highest violence ward</td>
<td>108</td>
</tr>
<tr>
<td>7.</td>
<td>of patients on two wards: Juniper 4, the ward with lowest violence, and Juniper 8, the ward with highest violence</td>
<td>110</td>
</tr>
<tr>
<td>8.</td>
<td>of patients on two wards: Juniper 4, the ward with lowest violence, and Cholla, the second highest violence ward</td>
<td>112</td>
</tr>
<tr>
<td>9.</td>
<td>for staff on two wards: Juniper 4, the ward with lowest violence, and Juniper 10, the second lowest violence ward</td>
<td>118</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>10.</td>
<td>Psychosocial climate profiles for staff on two wards: Juniper 8, the highest volume ward, and Cholla, the ward with second highest violence</td>
<td>120</td>
</tr>
<tr>
<td>11.</td>
<td>Psychosocial climate profiles of staff on two wards: Juniper 8, the highest violence ward, and Juniper 4, the lowest violence ward</td>
<td>122</td>
</tr>
<tr>
<td>12.</td>
<td>Psychosocial climate profiles of staff on two wards: Juniper 4, the ward with lowest violence, and Cholla, the ward with second highest violence</td>
<td>124</td>
</tr>
<tr>
<td>13.</td>
<td>Life space and behavior on low violence wards</td>
<td>153</td>
</tr>
<tr>
<td>14.</td>
<td>Life space and behavior on Juniper 8 (HV-1)</td>
<td>156</td>
</tr>
<tr>
<td>15.</td>
<td>Life space and behavior on Cholla (HV-2)</td>
<td>160</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient attack rate in May, 1979</td>
<td>43</td>
</tr>
<tr>
<td>2. Age of staff compared to age of patients</td>
<td>68</td>
</tr>
<tr>
<td>3. Gender of patient participants</td>
<td>70</td>
</tr>
<tr>
<td>4. Gender of staff participants</td>
<td>71</td>
</tr>
<tr>
<td>5. Education of participants</td>
<td>73</td>
</tr>
<tr>
<td>6. Absolute frequencies of staff participants</td>
<td>76</td>
</tr>
<tr>
<td>7. Staff sample size as a percentage of population size</td>
<td>76</td>
</tr>
<tr>
<td>8. Attacks made upon staff by patients: Career totals for all psychiatric work experiences</td>
<td>77</td>
</tr>
<tr>
<td>9. Rank order of the means</td>
<td>96</td>
</tr>
<tr>
<td>10. Juniper 4 (LV-1) WAS and SAS subscale results</td>
<td>130</td>
</tr>
<tr>
<td>11. Juniper 10 (LV-2) WAS and SAS results</td>
<td>132</td>
</tr>
<tr>
<td>12. Juniper 8 (HV-1) WAS and SAS results</td>
<td>134</td>
</tr>
<tr>
<td>13. Cholla (HV-2) WAS and SAS subscale results</td>
<td>136</td>
</tr>
</tbody>
</table>
ABSTRACT

The purpose of the study was to collect data describing psycho-social environmental qualities which are found on psychiatric inpatient units where there is a low incidence of patient violence.

The data consisted of patient and staff responses to questionnaires. The Ward Atmosphere Scale, developed by Rudolf Moos and copyrighted by Consulting Psychologists' Press, was used to test the 33 patients in the sample. The Supervisory Atmosphere Scale, developed by the researcher from the Ward Atmosphere Scale, was used to test the 67 staff in the sample.

Results showed that staff and patients on low violence wards experienced significantly greater press toward practical orientation, support, and order and organization, than was experienced by patients and staff on a high violence, behavioral management ward. Press for staff on a high violence social rehabilitation ward was similar to press experienced by staff on the low violence wards; however, press for patients on the ward was different from press experienced by patients on the low violence wards.
CHAPTER 1

INTRODUCTION

Violent patients present significant problems for the nursing administrator of psychiatric facilities. Of paramount concern is the physical safety of patients, staff, and the violent patient himself. Beyond this lie other concerns: the challenge of providing quality care to the violent individual; the problem of maintaining the therapeutic qualities of the milieu for other patients; the question of how to best manage staff under the circumstances; cost factors; and the potential of legal problems. Amplification of some of the problems which occur after a patient becomes assaultive will bring the problem into sharper focus.

Patients who have attacked a staff member or another patient may by their actions limit the nature and quality of the care they receive after the incident; ironically at the time they need the care most. Such patients often experience feelings of hopelessness, guilt, fear of retaliation, and/or disillusionment in the value of therapy. All too often the patient's feelings are objectively justified by the behavior of staff members who are now afraid of him. The resultant social isolation is often consistent with that experienced before hospitalization, and serves to intensify the presenting problems. Lion, Madden, and Christopher (1976), who offer consultation to facilities where there are problems in dealing with violent patients, have found that staff avoidance significantly contributes to continuing the cycle of violent behavior in some patients.
A second factor which hinders treatment is the countertransference reaction which staff may experience. Staff who are angry about the patient's past behavior may have a distorted impression of the patient's current dangerous state because of projection of their own feelings onto the patient. Treatment based upon these distorted perceptions lacks therapeutic efficacy (Lion and Pasternak, 1973).

Observation of the staff's impotent efforts in preventing assault may have a decidedly unsettling effect on other patients in the milieu. These patients may fear physical harm from the assaultive patient, or they may experience fears of their own loss of impulse control.

Staff may have strong reactions in the aftermath of an assault. Frequently, nursing administration is blamed for "inadequate staffing," "unclear guidelines," "allowing the doctors to admit the patient to this unit," "not supporting the staff's plea for more medication," etc. Dissension and guilt may also arise among members of the nursing staff, who may blame each other for "lack of support" during the crisis.

Cost and legal factors are also important considerations for the nursing administrator. Staff who are injured will receive paid leave, and will need to be replaced; patients who are injured may be eligible for compensation, and legal actions may insue. If the milieu is very unsettled from the incident, the nursing services administrator may need to increase staffing to maintain control. She may also increase staffing to boost staff morale. Increases in staff may present problems other than monetary ones; hospitals that become notorious for outbreaks of violence have difficulty in attracting adequate numbers of competent personnel.
The aforementioned factors, including the important moral obligation to provide physical safety for staff and patients, illustrate the importance of nursing service administrators searching for ways to decrease the potential for violent behavior on psychiatric wards.

Statement of Purpose

The major purpose of the study was to collect data describing psychosocial environmental qualities which were found on psychiatric in-patient units where there was a low incidence of patient violence. Attainment of the major purpose was believed to depend upon the following subordinate purposes:

1. To determine similarities and differences between the patients' perceived psychosocial environment and the staff's perceived psychosocial environment on wards with: (a) high violence, and (b) low violence.

2. To determine if there were significant differences between patient-staff perceptions of environment on high violence wards, as compared to patient-staff perceptions obtained on low violence wards.

3. To describe components (subscale factors) of the patients' perceived psychosocial environments, and profiles of relationships among components, on: (a) high violence wards, and (b) low violence wards.

4. To determine whether there were significant differences in subscale factors and profiles for patients on high violence wards, as compared to patients on low violence wards.
5. To describe components (subscale factors) of the staff's perceived psychosocial environments, and profiles of relationships among components, on: (a) high violence wards, and (b) low violence wards.

6. To determine whether there were significant differences in subscale factors and profiles for staff on low violence wards, as compared to staff on high violence wards.

**Problem Statement**

This study sought to answer the following questions: (1) What, if any, differences exist between types of environmental press experienced by hospitalized psychiatric patients, and types of environmental press experienced by their nursing staff? (2) Are the differences found between staff and patients on high violence wards similar to the differences found between staff and patients on low violence wards? (3) Which of the ten factors of environmental press studied were different on wards with high violence rates, as compared to wards with low violence rates?

**Definitions**

**Administrative Control**

Administrative Control is a subscale of the Supervisory Atmosphere Scale which is comparable to the Staff Control subscale of the Ward Atmosphere Scale. Administrative Control measures the strictness of nursing management's control over staff.
Anger and Aggression

Anger and Aggression is a subscale category of the Ward Atmosphere Scale, and of the Supervisory Atmosphere Scale. As a category on the Ward Atmosphere Scale, it measures the extent to which a patient is allowed to argue with patients and staff, and to show signs that he is angry. On the Supervisory Atmosphere Scale, this category measures the extent to which staff are allowed to openly disagree with each other, whether they see open disagreements modeled by persons in charge of them, and whether they may openly voice objections to their working situation.

Autonomy

Autonomy is a subscale category of the Ward Atmosphere Scale, and of the Supervisory Atmosphere Scale. As a category of the Ward Atmosphere Scale, it assesses how much self-sufficiency and self-direction patients are encouraged to exercise. As a category of the Supervisory Atmosphere Scale, it assesses the extent that staff are allowed to be independent and how much responsibility they may assume.

Behavior (B)

Behavior is the observable phenomena of the perceptual-motor zone of the person. According to Lewin, behavior is a function of the life space.

Environmental Press

Environmental Press is a collection of discrete events which are seemingly manifestations of a single underlying trait. Each event in the press category produces a similar response in the person experiencing the particular manifestation of the press.
Function (f)

Function is a mathematical term used by Lewin to denote the correspondence between variables such that, for each value assumed by one, there may be a value determined for the other.

Involvement

Involvement is a subscale of the Ward Atmosphere Scale, and of the Supervisory Atmosphere Scale. As a category of the Ward Atmosphere Scale, it measures how active patients are on the ward, as well as feelings of group spirit. On the Supervisory Atmosphere Scale, this subscale measures staff's feelings of being an integral part of a cohesive, dynamic treatment team.

Life Space (L)

According to Lewin's theory, the life space of an individual is the totality of that person's psychological reality. It is composed of two parts, termed the "person," and the "psychological environment." The two parts of the life space influence one another.

Niche

Niche is similar to life space, but denotes a quality more tangible and of smaller scope. A person's niche is his set of functional role relationships to his environment. In the connotation of psychosocial niche, the person's role relationships are in large part determined by psychological and sociological factors.
Order and Organization

Order and Organization is a subscale of the Ward Atmosphere Scale, and of the Supervisory Atmosphere Scale. On the Ward Atmosphere Scale, it measures patient perceptions of staff's order and organization, as well as the order and organization expected of patients. As a subscale of the Supervisory Atmosphere Scale, it measures staff's perceptions of administration's order and organization, and the order and organization expected of staff members.

Person (P)

Person is a term used by Lewin to denote one portion of an individual's life space. Lewin conceptualized the person as consisting of two zones: a perceptual-motor zone, and an inner-personal zone. The person both affects the environment, and is affected by the environment.

Personal Problem Orientation

Personal Problem Orientation is a subscale of the Ward Atmosphere Scale, and of the Supervisory Atmosphere Scale. On the Ward Atmosphere Scale, it measures the extent to which patients are encouraged to think about, and seek to understand, their feelings and personal dilemmas. On the Supervisory Atmosphere Scale, it measures the extent to which staff are expected to openly acknowledge and deal with the impact that their personal life has upon their working life.

Practical Orientation

Practical Orientation is a subscale of the Ward Atmosphere Scale and the Supervisory Atmosphere Scale. On the Ward Atmosphere Scale this category assesses the degree to which the patient's ward environment
orients him toward preparing for the time that he will be released. As a subscale of the Supervisory Atmosphere Scale, this category measures the extent that management helps staff to achieve tangible work-related goals.

**Press**

See environmental press.

**Program Clarity**

Program Clarity is a subscale of the Ward Atmosphere Scale and of the Supervisory Atmosphere Scale. On the Ward Atmosphere Scale, it measures the extent to which the patient knows what to expect in the day-to-day ward routine, and from rules and procedures which effect him. On the Supervisory Atmosphere Scale, this category assesses the clarity and stability through time of the policies affecting the staff.

**Psychological Environment (E)**

The concept of psychological environment, as used by Lewin, denotes that part of an individual's life space which influences his person. Elements of the world to which an individual neither consciously nor unconsciously reacts are not part of his psychological environment, even though they are physically proximal to the individual. The psychological environment contains physical facts, psychological facts, and social facts. Each discrete fact is termed a region.

**Psychosocial Environment**

The psychosocial environment is similar to Lewin's concept of the psychological environment; however, the psychosocial environment may
contain regions of which the individual is unaware. The concept of psychosocial environment is more tangible and easily measured than is the psychological environment, as used by Lewin.

**Psychosocial Niche**

See niche.

**Region (r)**

Region is a term used by Lewin to denote discrete facts in a person's psychological environment. A region may be a physical fact, a psychological fact, or a social fact. In the context of this research, regions are the subscales of the Ward Atmosphere Scale and the Supervisory Atmosphere Scale.

**Social Ecology**

Social Ecology is the multidisciplinary study of the impacts of physical and social environments on human beings. The field is primarily concerned with the assessment and development of optimum human milieus.

**Spontaneity**

Spontaneity is a subscale of the Ward Atmosphere Scale and the Supervisory Atmosphere Scale. It measures the extent to which the environment encourages patients (on the Ward Atmosphere Scale) or staff (on the Supervisory Atmosphere Scale) to act openly and to freely express their feelings and thoughts.
Staff Control

Staff Control is a subscale of the Ward Atmosphere Scale which is analogous to the Administrative Control subscale of the Supervisory Atmosphere Scale. The Staff Control subscale measures restrictions placed upon patients through use of rules, schedules, regulations, and other actions taken by staff.

Supervisory Atmosphere Scale (SAS)

The Supervisory Atmosphere Scale is one of the two testing instruments used in this research. The SAS evaluates regions of press created by nursing management, by assessing staff’s perceptions of their psychosocial environmental niches. The SAS was adapted from the Ward Atmosphere Scale, which it closely resembles.

Support

Support is a subscale of the Ward Atmosphere Scale and the Supervisory Atmosphere Scale. On the Ward Atmosphere Scale, this measures how well staff understand patient needs and are willing to encourage and help patients, as well as patients' helpfulness toward one another. On the Supervisory Atmosphere Scale, the category measures nursing management's willingness to encourage and help staff.

Violence

Violence is a type of behavior which is a function of the person's life space, where life space equals the person, plus the psychological environment. For the purpose of this study, violence will be the display of destructive aggression toward a staff member, a patient, or the self,
which results in a formal notation in the patient's chart or in an incident report being filed.

**Ward Atmosphere Scale (WAS)**

The Ward Atmosphere Scale was developed by Moos to assess environmental press upon patients in psychiatric treatment milieus. One of the two testing instruments used in this research, the Ward Atmosphere Scale assesses patient's perceptions of environmental press.

**Limitations**

Every discipline that addresses itself to humanity, from theology through biochemistry, has developed theoretical constructs concerning the etiology of aggressive behavior. The limitation of the present study to one aspect of the socio-ecological theoretical sphere should not be misconstrued; the researcher believes that many other conceptual models present important contributions for understanding aggressive behavior.

The study presented here is limited not only in the depth of the field upon which it focuses, but also in the breadth. The following aspects of the research design limit the generalizability of the findings:

1. The data were collected at only one hospital.
2. Only four wards within the hospital were studied.
3. The sample was not random.

It is hoped that lacks in breadth and depth of field are compensated by the sharpness of focus attained by thoroughly studying a small aspect of a small corner of our world.
Theoretical Framework

The principal framework utilized in this study was based upon Lewin's theoretical descriptions of life space, which he defines as the whole of psychological reality, containing the totality of possible facts which can determine the behavior of the person (Hall and Lindzey, 1970).

To facilitate analysis of causal relations and the building of scientific constructs, Lewin chose to represent his concepts as mathematical models. Using this paradigm, life space may be represented thus: \( B = f(L) \), meaning that behavior \( B \) is a function \( f \) of the life space \( L \) (Hall and Lindzey, 1970).

The life space \( L \) is differentiated into two discrete areas; the person \( P \), and the person's psychological environment \( E \). The boundary between these two areas is a permeable one; therefore, environmental facts can influence the person, \( P = f(E) \), and personal facts can influence the environment, \( E = f(P) \). The person \( P \) may be conceptualized as consisting of two zones; the perceptual-motor zone, and the inner-personal zone. The inner-personal zone is further subdivided into cells, each of which represent a subjective "fact" of the personality. The psychological environment \( E \) of the individual is divided into regions. Like the cells of the inner-personal zone, the regions of the psychological environment are considered different from one another because they represent different facts. Facts may be concrete objects, such as chairs, etc., or may be beliefs, value systems, and so forth (Hall and Lindzey, 1970).

The environment can modify, displace, intensify, or minimize facts within a person when boundary conditions within the life space are favorable. When boundary conditions are unfavorable, the person reacts
inappropriately in relation to his environment. Two types of schizophrenic behavior clearly illustrate boundary problems: the excited schizophrenic may overreact to subtle changes in environment; the withdrawn catatonic may become vegetive, ceasing to react to the environment. Both of these behaviors are dysfunctional. The withdrawn catatonic patient does not display enough assertive behavior to get his needs met; the over-excited schizophrenic often displays diffuse aggressive behavior toward objects and persons in his environment.

Another basis of inappropriate reactions to the environment is the inability of an individual to recover from states of disequilibrium through use of adaptive psychological processes. Adaptive methods of reducing disequilibrium are: (1) performing an appropriate action in the psychological environment which brings goal satisfaction; (2) performing a substitute action; or, (3) relieving tension by purely imaginary means (Hall and Lindzey, 1970).

A maladaptive method of handling tension is seen in persons who exhibit violent dyscontrol. According to Lewin's theory, this may occur when energy is not dissipated from a tension-filled inner-personal cell to the appropriate region in the environment; from a proximal, substitute cell to an appropriate region in the environment; or through use of imaginary processes. Undissipated energy builds up and is diffused throughout all the cells in the inner-personal sphere. If no energy is lost, and the process is repeated again and again, there develops a tremendous pressure on the boundary between the inner-personal zone and the perceptual-motor zone. When the boundary is no longer able to resist the pressure there will be a sudden breakthrough of energy, which floods the
motor-sensory zone and produces the agitated behavior. Lewin believed that the properties of the individual's life space, including qualities of the boundary systems, could be restructured, given the right environmental circumstances (Hall and Lindzey, 1970).

In the present study, the psychiatric ward is conceptualized as one type of setting in which environment is a function of the person, $E = f(P)$, and the person is a function of the environment, $P = f(E)$. Behavior on the psychiatric unit is conceptualized as resulting from the interaction of persons and the environment. Using Lewin's paradigm: $B = f(L)$ where $L = E + P$; behavior is a function of the life space where life space equals psychological environment and the person.

The relationship between Lewin's theoretical framework and the specific conceptual framework used by the researcher will now be shown by: (1) examining concepts used by the researcher in the context of Lewin's theory; and (2) showing the stepwise development of the researcher's conceptual framework.

The idea that behavior is a function of the life space where life space equals psychological environment and the person has been shown to apply to the psychiatric ward setting. Ozarin, who studied 35 psychiatric hospitals during the 1950's, concluded that much of the patients' pathological behavior was a result of hospitalization rather than a manifestation of mental illness (Ozarin, 1954). In 1951, Schwartz conducted a well documented study in which he found a correlation between ward adjustment of patients and the influence of interpersonal events at the setting (Ellsworth and associates, 1971). Shortly afterward, Caudill published
observations of the effects of the social structure of the ward upon the patients' behavior (Caudill and associates, 1952).

The belief that the environment exerts a potent force upon psychiatric patients, which probably originated with the early Greeks, was revitalized by the research findings. Attempts were made to utilize the effect for therapeutic rather than contraproductive purposes. Milieu therapy was born, and with it the goal of knowledgeable environmental manipulation (Rioch and Stanton, 1951).

Some of the earliest attempts toward creating an optimum therapeutic milieu were brought about through changes in the philosophy of ward management, and concomitant changes in the policies, procedures, and objectives. In 1955, the 7th Mental Hospital Institute reflected the changes which were beginning to occur in hospitals in the United States and Canada. The Institute stressed that maximum security was being replaced by a staff willingness to take risks, that staff at all levels could make positive contributions to therapeutic care, and that patients, given the right environment, could be encouraged to utilize their own internal controls (American Psychiatric Association, 1955).

In the conceptual language of the present study, it might be said that the staff's behavior changed because an aspect of their life space changed. The environment created by administration's new policies, procedures, and philosophies no longer supported rigid custodial care behaviors. Employees were called upon to use different qualities of their person in this new environment, and thus their behavior changed. $B = f(L)$ where $L = E + P$. 
The staff's behavior is part of the patient's environment. When this environmental aspect changed, patients were challenged to utilize different aspects of their person, which resulted in new patient behaviors. Thus, administrative behaviors indirectly exerted a potent influence upon patient behaviors.

Evidence supporting the idea that staff behavior, per se, exerts a powerful impact upon patient behavior is found in the literature. A study by Stanton and Schwartz demonstrated a clear relationship between the manic behavioral phase of patients in their sample and covert disagreements among staff members who were caring for the patients (Stanton and Schwartz, 1954). Caudill presented a detailed case study of a patient whose behavior was both constructively and destructively influenced by staff behaviors, and from this concluded that the concept of adaptation to situational circumstances was more apropos than were the concepts of defense mechanisms or symptoms (Caudill, 1958).

Further corroboration is found in the published accounts of Lion, Madden, and Christopher, who offer consultation to mental health workers about management of violent patients. These authors have found that, "... staff reactions to a patient can be a strong force in alienating the patient and eventually worsening his psychosis or behavior by virtue of the induced sensory isolation" (Lion, Madden, and Christopher, 1976, p. 432).

The accounts presented support the idea that the behavior of staff may be considered a part of the patient's psychological environment; and thus may be considered $E_1$ according to Lewin's paradigm. This behavior of
staff, following Lewin's theoretical framework, arises from their life spaces, since \( B = f(L) \).

The impact of administrative processes upon staff, and through the staff to patients, is noted by Lion and associates. When called in as consultants because of an outbreak of violence among patients, they discovered that the problem was related to the confusion of staff about the policy governing physical restraint of patients. Several of the staff had been indicted for physical abuse of patients, and the remaining staff, believing that the restraint policy was in some yet unspecified way illegal, abandoned the practice of restraining violent patients (Lion and associates, 1976).

Stotland and Kobler cite evidence that changes in the financial structure of a hospital, which led to changes in administrative procedures, were responsible for staff morale and attitude problems which caused a suicide epidemic among patients (Stotland and Kobler, 1965).

The National Association for Mental Health (England) published a document early in the 1970's which unequivocally asserts that the proper management of staff leads to staff behaviors which significantly minimize violent behavior in patients (Coffey, 1972a).

The conceptual framework which has been developed may be written thus:

\[
\begin{align*}
\text{f(P+E)} &= B \\
\text{administrators) (staff) (patients)}
\end{align*}
\]

The persons (P), the environments (E), and the behaviors (B), of administrators, staff, and patients, have some elements in common. There
are, however, significant differences in the P, E, and B of these three groups, and in individuals within groups. It is probably easier to conceptualize the differences in inherent personality traits and in behavior than to understand how the environment is significantly different for persons who spend a large part of their time in the same place. It should be remembered, however, that the concept of environment, as used by Lewin, refers to the personal environment, i.e., those elements of the environment to which the individual reacts, whether it be via conscious or unconscious processes. This personal environment contains not only physical facts, but also psychological and social facts.

It is the social facts, in particular, which may be understood to be different for administrators, staff, and patients. Because of their different roles within the environment, certain elements of each group's personal environment are different from environmental facts effecting other groups. To underscore the variations in personal environments within the same setting, the concept of niches has been borrowed from ecology.

Variations in psycho-social niches between groups may be understood in terms of environmental press. This concept was first conceived by Murray in 1938, and has since been developed by a number of researchers. Pace and Stern applied the concept of environmental press to universities, studying students' perceptions of factors such as rules and regulations, classroom methods, etc. From responses on questionnaires, these researchers were able to develop profiles of various campus atmospheres. Inherent in the idea of environmental press is the idea that there is some underlying continuity in otherwise discrete events. Thus professors who emphasize punctuality and attendance, and who assign seats,
are exhibiting elements of a quality which may be termed "control." A number of qualities such as "control" may be grouped together to characterize an atmosphere (Pace, 1969; Stern, 1970).

Moos and his co-workers have utilized the concept of environmental press in developing a tool to measure the perceived social climates of psychiatric wards. This "Moos Ward Atmosphere Scale" (WAS) contains 100 items which are grouped into ten categories of environmental press. These are: (1) Involvement, (2) Support, (3) Spontaneity, (4) Autonomy, (5) Practical Orientation, (6) Personal Problem Orientation, (7) Anger and Aggression, (8) Order and Organization, (9) Program Clarity, and (10) Staff Control (Moos, 1974).

The Moos Ward Atmosphere Scale was utilized in the here reported study as a method of characterization of the environmental press on patients in psychiatric wards with high and low violence rates. An adaptation of the scale measured the press from nursing administration, and was administered to staff.

The ten categories of environmental press on Moos' scale may be conceptualized as equating to regions (r) of the psychological environment (E) in Lewin's model. Thus the ward environment created by staff (E₁) is subdivided into r₁ (Involvement), r₂ (Support), r₃ (Spontaneity), etc. Similarly, the psychological environment of staff (work environment), created by administration, may be subdivided into r₁ (Involvement), r₂ (Support), etc.

The expanded equation may be represented thus:

\[ B = f(E₁, r₁, r₂, r₃, ... + P) \]
The conceptual model for the current study was:

\[ f(E_1 + P) = B \]

The relationships studied were between \( r_1 \) (staff) and \( r_1 \) (patients); \( r_2 \) (staff) and \( r_2 \) (patients), and so forth. Also, \( r_1 \) for staff on low violence wards was compared with \( r_1 \) for staff on wards with higher violence rates, etc. Similar comparisons were made between regions for patients on the two types of wards. Some conclusions were drawn about profiles resulting from composites of various regions. The target behavior of interest (B) was patient violence.

It should be noted that the conceptual framework presented does not exclude the possibility of other environmental factors being operative; thus, one may suppose that there is an \( E_2 \), \( E_3 \), and so forth. Similarly, regions of \( E_1 \) may be hypothesized to extend beyond the ten regions studied. Further, \( P \) may be expanded into zones and cells. These expansions were outside the scope of the study, and thus were not included in the model.
CHAPTER 2

REVIEW OF THE LITERATURE

In modern times the idea that psychiatric treatment environments exert a profound effect upon patients may be traced to Phillippe Pinel. In 1792, Pinel removed the shackles from patients in two Paris asylums, and noted that most of the patients stopped being violent once they were free to move around. Pinel pointed out that it was a normal reaction for any human to become fearful, angry, and attempt to escape from intolerable situations where they were neglected, humiliated, and chained (Moos, 1974).

The moral treatment approach was established in England in 1806 by the Quaker William Tuke, who provided an atmosphere of kindness and consideration, treating the patients as guests. The program emphasized regular exercise, meaningful employment of time, and a family environment. This moral treatment philosophy spread to the United States, where the Quakers set up various hospitals based upon moral treatment principles (Moos, 1974). Charles Dickens visited one of these facilities during a trip to America, and wrote the following account:

Every patient in this asylum sits down to dinner every day with a knife and fork ... at every meal moral influence alone restrains the more violent among them from cutting the throats of the rest; but the effect of that influence is reduced to an absolute certainty and is found, even as a means of restraint, to say nothing of it as a means of cure, a hundred times more efficacious than all the straight-waistcoats, fetters and handcuffs, that ignorance, prejudice, and cruelty have manufactured since the creation of the world (Dickens, 1842, p. 109).
The late nineteenth and early twentieth centuries witnessed philosophical changes which emphasized organic and physical treatments instead of milieu treatment approaches. Only after decades passed did the importance of the milieu gradually reassert itself. In the 1930's Harry Stack Sullivan observed that schizophrenics exhibit fewer psychotic behaviors in wards staffed by sympathetic people (Fromm-Reichmann, 1946). In 1950 Ozarin conducted research of 35 psychiatric hospitals, and reached the conclusion that much of the patient's pathological behavior was the result of hospitalization rather than a manifestation of mental illness (Ozarin, 1954). These observations were supported in Stanton and Schwartz's classic book, The Mental Hospital, published in 1954. In this work, milieu was discussed on equal terms with individual therapies, and the conclusion was drawn that the environment may cause a symptom (Stanton and Schwartz, 1954). Caudill's detailed descriptive studies independently substantiated many of the conclusions drawn by Stanton and Schwartz (Caudill, 1958).

As the evidence accumulated substantiating the impact of the environment on behavior, a need was perceived to bring environmental variables into the realm of science. The terms "therapeutic milieu," "therapeutic environment," and "therapeutic community" were coined to denote the application of scientifically based principles to the treatment environment (Wolf, 1977). One of the many definitions of these terms is offered by Stainbrook:

The designations, milieu therapy and therapeutic community, are used . . . in psychiatric hospital practice to refer to those aspects of society and culture of the ward or hospital which may be influential in reducing the behavioral disturbances of patients. Behavior may improve because the environment is
structured to provide human relationships which satisfy emo-
tional needs, reduce psychological conflict and strengthen
impaired ego functions (Stainbrook, 1967, pp. 1296-1300).

The plethora of definitions and conceptualizations of milieu
therapy has greatly impeded progress toward a realization of the milieu
as a scientifically based treatment modality. Strauss and associates
discovered, in a survey of staff employed in psychiatric institutions,
that there was a lack of ideological consistency, and frequent arguments
over permissiveness versus control, within the nursing population
(Strauss and associates, 1964).

In 1974, at the State of the Art of Psychiatric Nursing Confer-
ence, Sills presented a paper describing nursing theory and practice re-
lated to milieu. Sills stated that a thorough review of nursing
literature on the subject caused her to reach the conclusion that there
had been no critical evaluation by nurses of milieu or therapeutic com-

dunity in the literature (Wolf, 1977).

A comparative review of literature pertaining to the milieu is
extremely difficult, due to the lack of any underlying unifying theo-
retical framework by which one may classify and compare articles with
one another. Even use of an extremely abstract classification system,
such as the one Sills (1977) uses to classify types of psychiatric and
psychiatric nursing research is of little use; "within the person assump-
tions," "within the relationship assumptions," and "within the social
system assumptions," are frequently interwoven into an undifferentiated
complexity which defies comparative assessment.

One is not even sure whether one is reading about a therapeutic
milieu or not. Sills made the point at the 1974 convention that: (1)
there is no consensus on the definition of milieu therapy; (2) published definitions are couched in ambiguous terminology; and (3) the semantic drift has increasingly caused a looseness in application of the terminology so that now almost any treatment setting is called milieu therapy (Wolf, 1977). The counterpoint should also be made: treatment settings which are not termed "therapeutic milieus" or "therapeutic communities" may contain all the requisite characteristics for being termed such, using one or another of the published definitions.

Literature addressing violence in the milieu not only springs from environments with diverse treatment philosophies, but also ascribes the etiology of the violence to a wealth of factors. Well developed theories on aggressive and violent behavior have been advanced from the points of view of biology, ethnology, sociology, social learning, social ecology, the various branches of psychology, genetics, biochemistry, anthropology, endocrinology, psychiatry, physiology, and so on (Kutash and associates, 1978); these have been used in attempts to explain violent behavior in the milieu setting.

A representative potpourri of factors believed to contribute to violence in the psychiatric hospital was presented at a symposium held at St. Elizabeth's Hospital in Washington, D.C. The impetus for the meeting was an attempt to understand and control the factors which had led to the murder of a psychiatric technician by a patient on the forensic unit at the hospital. In her report of the conference, Armstrong noted:

Sudden, unpredictable acts of violence are a recurring problem at psychiatric hospitals. And some authorities fear that the problem may get worse as today's increased awareness of patients'
rights—including the right to placement in the least restrictive setting—and more stringent commitment criteria empty the hospital of the less severely disturbed, leaving larger proportions of patients considered dangerous (Armstrong, 1978, p. 463).

Guenther, a criminologist and research consultant to the forensic division at St. Elizabeth's, stated that from his perspective there were two main theories about causes of violence in a hospital. One is the importation theory: patients bring with them the behavior patterns that they were taught in the community; those whose dominant mode of adaptation and problem solving has been violent action will continue with this behavior in the hospital (Armstrong, 1978).

The second theory discussed by Guenther was that violence is the product of the hospital social structure and process. Guenther stated a belief that violence is inherent in coercive, regimented programs where patients perceive themselves on the basis of actual or imagined criteria, to be deprived of ordinary social perquisites. He said that despite a general consensus heard from persons familiar with mental hospital life, that the ward organization and interaction patterns are important factors which may contribute to the production of violent patient behaviors, little empirical evidence exists to explain mental hospital violence in sociological or anthropological terms. Guenther said that abundant hypotheses in this area await testing (Armstrong, 1978).

Reynolds, an M.D. who is chairman of the hospital's committee on violent patients, spoke on the clinical aspects of the dangerous patient:

Violence must be seen as part of a global emergency response system built deeply into the vertebrate nervous system. The organism's perception of an emergency leads to an appropriate but nonspecific arousal state, including vascular, endocrine, and neurophysiological responses, all designed to guarantee

Reynolds believes that the physiological responses occur before the organism is able to cognitively analyze the situation. With a quick analysis, the organism decides whether fleeing or fighting is more compatible with survival, takes the appropriate course of action, and experiences affects compatible with the choice, i.e., fear if flight is chosen, anger if fight is chosen. In man, there are two phenomena which greatly complicate the basic response. The first of these is the process of reflection, which can lead to inner conflicts. A person who is physiologically aroused and whose cognitive analysis indicates that flight is most compatible with survival (i.e., is afraid) may decide to fight because of his self concept or sense of duty, even though his anger is minimal or nonexistent. Such existential conflicts between affect and behavior are part of the human condition, and are only rarely the province of psychiatry, according to Reynolds (Armstrong, 1978).

Reynolds described the second complication that humans may experience in response to the physiological arousal, as the inability to clearly differentiate internal from external data. In such instances the patient may seriously misidentify the source of an apparent emergency. This is seen in many types of patients, including character disorders, schizophrenics, and the organically impaired, and represents the major cause of violent behavior in psychiatric patients, according to Reynolds. Staff may significantly help these kinds of patients to avoid violent behavior by labeling the situation which has led to the patient's physiological arousal, and by telling the patient what action is appropriate (Armstrong, 1978).
Violent responses of individuals with genuine physiological regression of central nervous system function are not examples of projection according to Reynolds. Projection implies some initial cognition, albeit unconscious, a function beyond the physical possibilities of persons with a severe organic brain syndrome. Severely regressed persons should be allowed to stay in an environment where their flight-fight mechanisms are seldom activated, and where staff support is available. To reduce the number of failures due to causes that these patients cannot understand, they should be given only carefully graduated learning tasks. Phenothiazines should be used with an organic patient only when he is actually undergoing a psychotic episode, with symptoms of a schizophrenic type.

At other times psychotrophic drugs may cause a paradoxical increase in excitement because the patient feels his limited cognitive capacity decreasing as the drugs depress central nervous system functions (Armstrong, 1978).

Phenothiazines are helpful with schizophrenic patients because they relieve the almost constant sense of impending danger. Because of his continual sense of alarm and his propensity for distortion, there is often no way to intervene in the behaviors of an unmedicated schizophrenic without evoking a fight-or-flight response. It is important to realize, however, that raising the threshold of emergency perception in the schizophrenic still leaves him grossly disabled in interpersonal relationships. The schizophrenic may still misperceive a situation and become violent; and even when this does not occur, the control of violent behavior should not be seen as the end of treatment, but rather a preliminary step which makes treatment possible (Armstrong, 1978).
There is another type of violence which is not accompanied by an emergency fight-or-flight physiological response, nor the affective responses of anger or fear. This type of violence is rarely seen on civil wards, but is common on criminal wards. It is based upon the misperception that humans are nothing but objects. Reynolds believes that it is a mistake to segregate this type of patient with others like himself who tend to provide concensual validation for his views. Instead, this type of patient should be integrated with patients whose reaction to him will set up a state of cognitive dissonance within him. Reynolds believes that if enough people around him act surprised when treated as objects, the patient will eventually be shaken from his perceptual stance. This would be the best method for, eventually, producing decreased violence in this population (Armstrong, 1978).

A different perspective on violence was given by Shah, Chief of the Center for the Studies of Crime and Delinquency at the National Institute of Mental Health. Shah said that nearly all people can be induced to engage in violent behavior, depending upon the setting, situation, and factors present. Intervention which produces long range prevention of violent behavior must be based upon an analysis of the context in which the behavior occurs. Prevention should then be based upon removing the person from the environment which contains the particular set of factors which constellate his violent behavior, or in changing the environment so that these factors are no longer present (Armstrong, 1978).

Bach-y-Rita and associates (1971) have published results of a two year study of 130 patients whose chief complaint was explosive
violent behavior. The patients were given a wide variety of tests including neurological and physiological tests, electroencephalograms, pneumoencephalograms, genetic studies; and complete medical and psychosocial histories were taken, whenever possible. Bach-y-Rita found that the patients could be categorized into five groups. The first group (n=7) had temporal lobe epilepsy. In group two (n=30) were patients with seizure-like outbursts, usually with a loss of contact with the environment during the episode. Automatisms or prodromal symptoms including auras were present at times, as were postictal states characterized by symptoms of depression, fatigue, or less frequently, elation. Amnesia, dizziness, and altered states of consciousness were sometimes described. Group three (n=57) was made up of patients with diffuse violence. Targets of these patients' outbursts were varied, and included walls, furniture, people, self, etc. The researchers found that anxiety was very high in this group. No altered states of consciousness were reported, though the patients sometimes had prodromal symptoms. Group four (n=25) contained patients who were given the diagnosis of pathological intoxication; these patients went wild after a few drinks, and from the early stages of intoxication appeared to be psychotic. They were usually amnesic after the incident. Group five (n=11) was made up of individuals with repetitive violence directed toward specific persons or animals. There were no reports of altered states of consciousness in this group (Bach-y-Rita and associates, 1971).

Common factors, with high incidence in each of the groups studied by Bach-y-Rita were: low educational level (average 10 years); history of childhood deprivation; parents who were alcoholic, had a psychiatric
illness, or were epileptic; patients held unskilled jobs, or did not have a job; patients used alcohol or amphetamines when stress built up at home; patients used their automobiles as an outlet for angry aggressive feelings; patients had childhood histories of hyperactivity, unconsciousness due to accident or illness, and febrile convulsions, enuresis after the age of five, and, in some cases, pyromania and cruelty to animals (Bach-y-Rita and associates, 1971).

Male patients studied by Bach-y-Rita (n=117) were found to be very dependent, usually on a female figure who was placed in the mothering role. The sense of masculine identity was found to be poor. Most of the men were physically large and outwardly hypermasculine. The group was intent on physically defending their masculinity against other men, and felt exploited and angered by their relationships with women in their lives (Bach-y-Rita and associates, 1971).

Small variations in the environment provoked massive repercussions for the patients studied by Bach-y-Rita. Their usual state of feeling useless, impotent, and unable to change the environment was greatly accentuated prior to the physical violence; this was often dealt with by use of projection, and in this anxious state a chance occurrence would often be misconstrued as an aggressive insult (Bach-y-Rita and associates, 1971).

Bach-y-Rita recommends thorough medical and psychiatric examinations for all patients who are found to display violent behavior. Reduction of chronic and acute anxiety through use of medication is recommended, as are psychotherapeutic interventions which teach the patient to express anger verbally. The interaction between the patient and the environment
was repeatedly found to be the cause of violent behavior, both in organically impaired subjects, and in those who were found to have no organic problems (Bach-y-Rita and associates, 1971).

The Impact of Administration Upon Violence in the Milieu

The literature addressing patient violence in psychiatric hospitals frequently mentions the effect that administrative behaviors are believed to have upon staff behaviors and on the treatment environment. In two studies based upon widely differing operational methods, Binder and Weaver used administrative behaviors toward staff which were parallel in many respects to the behavior that staff were expected to use with patients.

Binder (1976) described the effects that changes in organizational structure had upon staff and patients in a psychoanalytically oriented milieu treatment program for adolescents. The planned change evolved out of administration's belief that staff who were allowed to be independent and responsible would provide effective models for patient behavior. It was also believed that nursing staff would learn about psychoanalytic dynamics by the personal experience of working through their ambivalence about losing paternalistic leadership and gaining more autonomy, and that this would provide them with an enlightened and more effective way of dealing with patients. To facilitate the process of change, regular groups were held in which staff brought up milieu problems. Senior clinicians then directed the group process toward understanding intrapersonal and interpersonal staff dynamics which hampered clear understanding and effective treatment of the patients. The problem of dealing with violent
patients was brought up in one staff meeting. The difficulty was traced to the loss of some staff members, the necessity of new role definitions among remaining members, intrapsychic conflicts over aggression, ambivalence in staff's feelings toward one another, and the difficulty of the limit-setting role.

A behavior modification approach was used as the theoretical basis for changing staff and patient behaviors in a study reported by Weaver and associates (1978). The administrative intervention was prompted by difficulties staff were having in dealing with violent patient behaviors on a locked security ward. Nursing administration decided that the more feedback that staff received about their own effectiveness in changing patient behaviors, the more likely they would be to keep up those types of interactions with patients which would produce desired patient behaviors. Accordingly, nursing administration began providing statistical data to the nursing staff, which served to extinguish nonfunctional treatment interventions, and to strengthen useful interventions. The staff, in turn, were able to modify the patients' behaviors, decreasing the rate of violence, and increasing adaptive patient responses.

Campbell and Mawson (1978) have published a descriptive study of violence in the hospital where they work, and have concluded that much of that behavior is a symptom of the situation, rather than the patients' diseases. They have concluded that the administrative philosophy of patient freedom, which is reflected in the architecture of their hospital, as well as in policies and procedures concerning patients, had led to much insecurity in the patients and to patient violence. One of the many
situations cited is the policy of integrating violent patients with "easy victims," i.e., geriatric patients, during mealtimes. The abundance of breakable objects, short staffing, and the knowledge that there are no seclusion rooms, encourage patients to openly display violent behaviors. The entire situation makes impossible the setting of limits, and staff are frequently hurt when they attempt to intervene in patient violence.

Donnelly (1977) remarks that patients, staff, and nursing supervisors are all part of our "violent society," which accepts football violence, plane hijacking, etc. Staff who come under the direction of a nursing supervisor whose methods provoke patient violence are likely to accept the situation without critical evaluation, and to model their behavior after that of the supervisor.

De Felippo (1976) believes that most psychiatric patients will not become assaultive unless the staff gives them "permission" to behave in a violent manner. Control of staff by good nursing management, and provision of inservice education, are believed by De Felippo to be the keys to good patient control.

Coffey (1972a,b) has described a number of ways that administrative behaviors influence violence in the milieu. It is his belief that nursing managers who are overly anxious about their performance, who want to appear to always have every aspect of the organization under their control, and who distrust their subordinates, unwittingly predispose the milieu to violence. In an attempt to resolve anxiety, this type of administrator will typically retain all authority and control, and will create a number of excessive checking systems, so that the work of subordinates is reduced to mere routine. Everything requiring the exercise
of discretion is reserved for the administrator. Because of the anxiety that difficulties evoke in the manager, nurses will feel unable to voice their problems; the result being a cramped and frustrated communication through back-biting and rumor mongering.

Coffey believes that the result of this situation will be nursing staff behavior and attitude which provokes violent responses in patients. Nursing staff will have the need to be authoritarian, the need to hit back at management, the need to relieve boredom, and the need to assert their status and position among their colleagues (Coffey, 1972a).

Coffey rather poetically states:

Management is the spring of attitudes, the architect of the environment, the fount of discipline, the source of motivation, the initiator of learning, and the artist of expression. The quality of management will determine whether attitudes are selfish and disinterested or humanitarian and caring, whether the environment is ugly and derelict or pleasant and alive, whether discipline is authoritarian or self-imposed, whether nurses are characterized by inertia and ignorance or enthusiasm and enlightenment and whether resentment and fear or helpfulness and cooperation are the main determinants of communication.

These characteristics of an organization, whichever way they are slanted by its management, are all-important influences on the prevalence of aggression and violence, and experience has shown that the closer these characteristics approximate to what is generally regarded as good management, the less is the propensity within an organization for the expression of violence by staff and patients (Coffey, 1972a, p. 36).

Assessment of Milieu and Management

Naturalistic and descriptive studies of treatment environments have served to make professionals aware of the importance of the milieu, but have failed to precisely identify variables associated with patient symptoms, behaviors, satisfaction, and improvement.
The first attempt to evaluate the effectiveness of a therapeutic community, based upon a specific rationale, was conducted by Rapaport (1960), who evaluated the Social Rehabilitation Unit at Belmont Hospital which had been founded by Jones. Rapaport considered the program ideology, the organization of patient and staff roles, and both the treatment and rehabilitation goals. Findings of the study indicated that the environmental press toward participatory democracy had been detrimental to patients who were from lower socio-economic groups, because the behaviors they learned were inappropriate to their lives outside of the hospital. The patients were employed in unskilled positions, were heavily supervised, and had few decisions that they were allowed to make.

A Characteristics of Treatment Environments' scale (CTE) was constructed by Jackson (1969) to evaluate conditions in the immediate environment of a patient in a mental hospital. The instrument was designed to describe the milieu objectively, rather than to assess perceptions of individuals. Bechtel and Gonzalez (1971) have successfully utilized the CTE in cross-cultural comparative studies of Peruvian and North American treatment environments.

In 1969 Ellsworth and associates developed a scale which helped to examine the relationship between sociopsychological characteristics of treatment settings and treatment outcomes. This Perception of Ward (POW) scale was constructed in two formats, one for patients, and one for staff. The patient POW measures inaccessible staff, involvement in ward management, satisfaction with ward life, receptive and involved staff, and expectation for patient autonomy. The staff POW measures motivated
professional staff, nursing team as involved participants, dominant professional staff, and praise for work (Moos, 1974).

In a study of 19 units in five VA hospitals, using the POW scale, Ellsworth and associates (1971) found that the units differed significantly both with respect to most of the POW dimensions, and in adjusted measures of program success. No milieu characteristics were found which identified overall successful programs, or differentiated between successful and unsuccessful programs using all criteria for program success.

It was found, however, that the most efficient, high release units were those that tended not to promote patient autonomy, and tended to be perceived quite negatively by nursing staff. Ellsworth believes that these units were run by a professional staff who did not take the time to involve either patients or nursing staff in responsible roles. The main focus of the unit was on rapid turnover of patients.

Ellsworth and associates (1971) report that the most successful units, as judged by length of time that discharged patients were able to remain out of a psychiatric hospital, were units where nursing staff perceived the professional staff (sic) as motivated and nondominant, and themselves as active participants who were praised for their work. Patients on these wards were also involved in ward management, according to the analysis made by the researchers; however, in another portion of their report they state that staff's perceived praise for work was highly correlated with patients' perception of little involvement in ward management.

In general, it was found that staff and patients had differing perceptions of the ward; and it was believed that a combination of these
perceptions may prove helpful in identifying successful treatment programs (Ellsworth and associates, 1971).

Spiegel and Keith-Spiegel (1971) used some of the items on the POW to derive a Ward Climate Inventory (WCI). Since factors on the WCI were highly intercorrelated with a global ward climate index which was obtained by summing them, the WCI probably only assesses one aspect of characteristics which differentiate among ward environments (Moos, 1974).

Moos (1974) developed the Ward Atmosphere Scale (WAS) with the goal of providing a measurement technique that could be standardized well enough to be applicable to the widest possible range of psychiatric programs. The scale went through a lengthy evolutionary process to improve its reliability and validity (described in Chapter 3 of this thesis), and has been used by Moos to test over 3,575 patients and 1,958 staff in 160 wards. The WAS has also been used to make cross-cultural comparisons of American and British programs, in implementation of change in treatment milieus (Pierce, Trickett, and Moos, 1972; Verinis and Flaherty, 1978), in assessing the effect of education on nurses' views of the therapeutic milieu (Wolf, 1978), for the comparison of two contrasting British drug treatment programs (Moos, 1974), for assessment of the effects of group therapy training (Moos, 1974), for assessing the effects of developing a token economy program (Gripp and Magaro, 1971), etc.

Penwarden modified the items of the Moos Ward Atmosphere Scale to reflect concern with staff rather than patients; in effect attempting to develop a Work Environment Scale for staff. He found a significant difference in the satisfaction and involvement parameters of the three wards he studied, and he concluded that the style of leadership had a
significant effect on the morale of nursing staff. The lowest mean staff job satisfaction scores were on wards with the lowest WAS Involvement, Spontaneity, Autonomy, and Order and Organization subscale ratings. It is believed that WAS items can reasonably be modified for use in assessing the work environment of program staff (Moos, 1974).
CHAPTER 3

RESEARCH DESIGN

The purpose of the study was to provide data describing psychosocial environmental qualities which, if fostered, may lower the incidence of violence on psychiatric in-patient units. A descriptive survey design was used for the investigation of two categories of psychiatric wards: those with high patient violence, and those with low patient violence. Questionnaires administered to patients and staff on these two types of wards yielded interval data characterizing subjects' perceptions of their psychosocial niches within the wards.

Analysis of the data provided a basis for the description of:

1. Similarities and differences between the patients' perceived psychosocial environment and the staff's perceived psychosocial environment on wards with; (a) high violence, and (b) low violence.

2. Significant differences between patient-staff perceptions of environment on high violence wards, as compared to patient-staff perceptions obtained on low violence wards.

3. Components (subscales factors) of the patients' perceived psychosocial environments, and comparison of components of profiles, on; (a) high violence wards, and (b) low violence wards.

4. Significant differences in subscale factors and profiles for patients on high violence wards, as compared to low violence wards.
5. Components (subscale factors) of the staff's perceived psycho-social environments, and comparison of components of profiles, on: (a) high violence wards, and (b) low violence wards.

6. Significant differences in subscale factors and profiles of staff on high violence wards, as compared to low violence wards.

The Sample

Two populations were studied; the first consisting of patients at Arizona State Hospital, the second consisting of staff at that facility. The original research plan included a selection process for the four wards which would be studied. From among the appropriate wards, the two wards with the highest violence rates, and the two wards with the lowest violence rates, were to have been chosen. Three types of wards were excluded from the study; those for the medically infirm, for the mentally retarded, and for children. The reasons for the exclusions were, that the majority of persons on these wards would not be able to complete the questionnaires (Moos, 1974), and/or the majority of persons were not competent to engage in business matters due to youthful age, or a court ruling of incompetency.

It was not possible to carry out the selection process, due to field conditions. The two security units were merged into one unit during a recent hospital reorganization; and it was decided that the admissions unit would not be suitable for the study, since many of the population had been on the unit for a very brief time, the population was already undergoing extensive testing which taxed their time and energies, and it would be impossible to determine whether the patients qualified
for participation, since diagnoses were often not completed for some time after admission. The loss of these two wards necessitated choosing the four remaining wards as the setting of the study. The units used were Juniper 4, Juniper 8, Juniper 10, and Cholla. The three Juniper units are social rehabilitation units. The Cholla unit is a security unit for patients who present behavioral problems.

Violence rates for the four units were determined by examining incident reports filed at the Security Office. General Administrative Procedure number 1311.1 covers the policy for incident reports at the hospital; and states that the purpose of such reports is:

... to establish the systematic review of significant or unusual events. Examples of events to be reported are as follows: accidental injuries to patients and visitors, auto accidents or traffic violations involving state vehicles, attempted suicides, fires, immoral acts, liquor violations, illegal narcotics, thefts or shortage of narcotics, damage to state property, sexual assaults, assaults, theft of property belonging to patients, staff or state, loss of hospital keys, all deaths involving unusual circumstances and any other significant events (Division of Behavioral Health Services, Regulation and Procedure Manual, Procedure number 1311.1, 1978).

The procedure further states: "It is the responsibility of all employees of the Division of Behavioral Health Services to initiate reports on all incidents which they consider unusual or significant" (Division of Behavioral Health Services, 1978).

The procedure relies both upon subjective assessment and upon knowledge of occurrence of an incident. It is therefore possible that differences in reporting practices on each of the units, the tendencies of patients either to report or not to report incidents not seen by staff, and other factors, may have biased the number and types of incidents reported.
From the incidents reported, the researcher selected only those which concerned violent assaults upon persons. All reported attacks by patients upon staff, other patients, and themselves (suicide and self-mutilation attempts) were tabulated. Assessment of violence rates for the four units was based upon incidents which occurred in May, 1979. Assessment based upon a longer time period was not possible, since the hospital had been reorganized about seven weeks prior to the research study. The reorganization included physical regrouping of patients, as well as changes in living quarters; therefore, violence rates obtained from months before May would not reflect rates for the population being studied.

After violence rates were determined, the four units were rank ordered according to these rates (see Table 1). Juniper 4, a social rehabilitation unit for high functioning patients, had no patient attacks during May. Since this was the unit with the lowest violence rate, it will be referred to as "Juniper 4 (LV-1)."

The second lowest violence rate was found on Juniper 10; which will therefore be designated as, "Juniper 10 (LV-2)." This social rehabilitation unit for moderately functioning patients had two patients who attacked during May. A total of three attacks were reported for the month.

The second to highest violence rate was found on Cholla, a security unit for patients who are behavioral management problems. Four patients made a total of five attacks during May. The designation, "Cholla (HV-2)," will be used to classify Cholla as the unit with the second highest violence rate.
Table 1. Patient attack rate in May, 1979

<table>
<thead>
<tr>
<th>Ward</th>
<th>Number of patients who attacked in May, 1979</th>
<th>Percent of attacking patients; relative to ward census</th>
<th>Number of attacks in May, 1979</th>
<th>Percent of attacks; relative to ward census</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td>2</td>
<td>4.6%</td>
<td>3</td>
<td>7.0%</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td>4</td>
<td>7.0%</td>
<td>5</td>
<td>8.8%</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td>5</td>
<td>16.1%</td>
<td>10</td>
<td>32.2%</td>
</tr>
</tbody>
</table>

The highest rate of violence was found on Juniper 8, a social rehabilitation unit for low functioning patients. The unit will be termed, "Juniper 8 (HV-1)" for purposes of the study. As shown in Table 1, five patients on Juniper 8 made a total of ten attacks during May.

After the four units were rank ordered according to violence rates, more comprehensive information about the qualities of the patient sample was obtained from administrative personnel. Patient qualities considered by the hospital to be important for classification, and the process of classification, will be described.

Under the new hospital policy, admission to specific units is expected to be determined in the following manner: generally, patients will be received on the admissions unit, where a determination of diagnoses and probable length of hospital stay will be ascertained. Patients whose hospital stay is expected to be short term will be treated and released from the admissions unit. Patients who are expected to stay in
the hospital for more than a few months, and who are not retarded, geriatric, medically infirm, or known security problems, will be referred to the social rehabilitation units. A psychologist or psychology para-professional will evaluate the patient according to the ward evaluation scale (see Appendix A).

Patients will be evaluated by their behavior of the preceding two weeks. The rater will circle the number of the statement that most accurately reflects the patient's level of functioning. Statements are arranged in a hierarchy, so that statements numbered "1" reflect the lowest level of functioning, and statements numbered "4" reflect the highest level of functioning. Addition of statement numbers for all assessment categories yields a score which will be used to determine the patient's general level of functioning. Patients receiving a score of above 40 will be placed on Juniper 4 with other high functioning patients, patients receiving a score of 25 to 39 will be placed on Juniper 10, which is designed for moderately functioning individuals. Persons scoring below 25 on the rating form will be placed on Juniper 8, which is designed for low functioning individuals. The ward evaluation scale will not be used as a criteria of admission to Cholla.

Prior to reorganization, persons already hospitalized, and believed to be appropriate for the social rehabilitation units, were rated according to the ward evaluation scale, and during reorganization these persons were transferred to the appropriate units. During the patient's hospital stay they will be periodically reassessed according to the ward evaluation scale, and reassigned as necessary. The level of functioning
of persons participating in the research project may be more clearly understood by reading the ward evaluation scale (Appendix A). 

During the hospital reorganization, some of the patients from the old maximum security section, and some from the old moderate security section, were transferred to Cholla; while others were transferred to the new Alhambra building.

Patients assigned to Alhambra will now be administered under the auspices of the Department of Corrections, rather than that of the State Hospital (though Alhambra is on the hospital grounds). Persons who are male, and who have already been sentenced for a crime prior to being judged in need of psychiatric care, are assigned to Alhambra.

Male patients who are found to be in need of psychiatric care, prior to their being sentenced for a crime, are assigned to Cholla. Trying of these patients will occur after they are considered capable of standing trial. Female offenders, whether before trial or after sentencing, are placed on Cholla. In addition, other hospital patients who are considered severe management problems, but are not under legal charges, are placed on Cholla. An explicit definition of "severe management problems" is not available. The Psychiatric Nursing Administrators on the social rehabilitation units stated that most behavior problems are managed on those units, without resorting to transferring patients to Cholla (Miller, 1979; Moore, 1979; Rodriguez, 1979). Management through time structuring, one-to-one therapy, medication, and seclusion and restraint is available on the social rehabilitation units (see Appendix B). When these efforts fail to reasonably contain the disruptive behavior, the patient is transferred to Cholla.
On the four selected wards, patients who met the following criteria were invited to participate in the study: (1) 18 years old or over; (2) had been a patient on the ward for 48 hours or more; (3) not mentally retarded; (4) not diagnosed as having an organic brain syndrome; (5) understood English; and (6) legally competent. Males and females, committed or not committed, were invited to participate. In Arizona, a decree of involuntary commitment is not automatically a determination of incompetency, and separate legal action must be taken to deprive a person of his rights to dispose of property, sue and be sued, enter into contractual relationships, etc. (White, 1975). The target sample size was 50 percent, or more, of the population.

The nursing staff on the four wards selected for the study were invited to participate in the study if they met the following selection criteria: (1) they were either an R.N., an L.P.N., or a psychiatric technician (behavioral health series personnel); (2) they had worked on the unit for two weeks or more; (3) they did not hold an administrative position, i.e., have the ability to hire and fire, institute disciplinary action, or make formal evaluations of staff performance. The rationale for exclusion of persons in positions of staff management was the probability that these persons would introduce a bias, since their perceptions of administrative behavior were expected to differ from perceptions of persons outside the administrative system. Staff members on all shifts were invited to participate. The target sample size was 50 percent, or more, of the population.
Both the staff and the patient samples were nonprobability convenience samples. Subjects who happened to be on each of the four wards during the 24 hours when each ward was tested were invited to participate, if they met the selection criteria. Within this potential sample group, the sample was self-selected by subject willingness to participate.

The Setting

The study was conducted at Arizona State Hospital in Phoenix. The hospital, established in the Territory of Arizona in 1887, was at first known as the Insane Asylum of Arizona. The facility is still the only state hospital in Arizona; though several other mental health facilities throughout the state have contracted to provide care for petitioned, committed, incompetent, and gravely disabled persons.

Arizona State Hospital operates under the provisions of Title 36, Chapter 2, Article 1 of the Arizona Revised Statutes, which provides for the establishment of the hospital and its basic purposes and powers. Admission to the hospital is covered by Title 36, Chapter 5, Article 1 of the Arizona Revised Statutes. Patients' civil and legal rights are provided by Article 2 of that chapter, while Articles 3 and 4 govern voluntary admissions and court-ordered evaluation, respectively. Further articles of Title 36, Chapter 5, govern court-ordered treatment, costs and services, judicial review, guardianship for gravely disabled persons, and hospitalization in a federal agency. Title 13, Chapter 6, Article 6 of the Arizona Revised Statutes governs the admission of
certain patients under the criminal code. Title 31, Section 224 governs the transfer of prisoners to the state hospital. Title 8, Section 242 governs the admission of juveniles to the state hospital. After July 21, 1979, the commitment process will undergo changes, due to Senate Bill 1160, which was signed into law by Governor Babbitt in April, 1979 (Arizona Revised Statutes, 1978; Contreras, 1979).

Authority Relationships

The Arizona State Hospital is under control of the State Hospital Board. The five members of the board are appointed by the Governor for five year terms; each member commencing a term on a successive year. A function of the board is appointment and supervision of the hospital superintendent. The board also has the power to adopt rules and regulations in accordance with the Administrative Procedures Act of the State (Contreras, 1979).

In accordance with law, the superintendent supervises and directs the activities of the hospital subject to the provisions of law, and subject to the rules, regulations, and approval of the board. The superintendent is directly responsible to the board for carrying out the purposes legally designated to the hospital. The person who is superintendent must be a physician with experience in the treatment of mental and nervous diseases. The operating budget is determined by the legislature. The overall structure of the mental health program of Arizona is unusual in that there never has been a department of mental health or any comparable agency (Contreras, 1979).

The Director of Nursing at Arizona State Hospital is accountable to the Clinical Director for the hospital who must be a physician. She is
responsible for working in concert with the Clinical Director and Superintendent to formulate clinical procedures which will be implemented by nursing staff, for serving on certain committees which formulate hospital policy, and for helping to interpret nursing's role within the hospital. She is also responsible for evaluating applications for employment, and for interviewing prospective employees, though it is not her function to hire staff. She arranges interviews for promising candidates with the Psychiatric Nursing Administrator on the unit where there is a need for staff. Individuals hired by the Psychiatric Nursing Administrators are placed in an orientation class which is, in greater part, taught by the Director of Nursing. The class lasts for more than two weeks, and serves to introduce non-licensed personnel to basic nursing skills, and to acquaint all nursing personnel with a beginning understanding of interpersonal techniques used in caring for the hospital's patients. The class includes an introduction to disruptive behavior, and a demonstration of procedures used in restraining patients. The responsibilities of the Director of Nursing at Arizona State Hospital do not include budgeting, since the budget is decentralized. The responsibilities also do not include supervision, hiring, or firing of personnel. The position is one of staff, rather than line, authority.

The Psychiatric Nursing Administrator for each unit is accountable to the unit Clinical Director, who is a physician. The responsibilities of the position include hiring, firing, and evaluating nursing personnel. The Psychiatric Nursing Administrator works with the Clinical Director in teaching and directing the delivery of nursing care for patients on the unit. The Psychiatric Nursing Administrator, along with the Clinical
Director, psychologists, social workers, and some member of the nursing staff, participate in staffings, where specific patients are discussed, and plans are made for their care. The Psychiatric Nursing Administrator works with Psychiatric Nursing Administrators from other units to plan for coordination of services for better patient care. She works with the Clinical Director of the unit in planning the nursing budget.

The charge nurse for each shift is accountable to the Psychiatric Nursing Administrator. The charge nurse assumes some of the responsibility for scheduling, and is responsible for evaluating employees who work under her supervision. She is responsible for coordinating the efforts of the nursing team to bring about optimum patient care. The charge nurse is responsible for making emergency decisions, including the decision to seclude and/or restrain patients. She is responsible for seeking consultations on patient care and obtaining physicians' orders, as needed.

Psychiatric nurses are accountable to the charge nurse and the Psychiatric Nursing Administrator. They are responsible for making clinical observations, collecting and reporting pertinent psychosocial and biophysical data, and for performing interventions based upon their skills, knowledge, and legal and institutional sanctions. They are responsible for administration of medications and implementation and treatment plans ordered by the physician. In addition, they assist with, or direct, individual, group, and family psychotherapeutic activities. Psychiatric nurses participate in planning patient care, and attend some staffing meetings for this purpose.
Behavioral Health Series Personnel is a designation given a group of nonlicensed paraprofessionals working at Arizona State Hospital. Personnel in this series represent a continuum, ranging from persons with only a rudimentary knowledge of human behavior and psychotherapeutic interventions, through the spectrum to persons who have extensive practical and theoretical knowledge of the psychosocial realm. Expertise in this group is acknowledged by a system of upward mobility. Members of this group are hired into the nursing department, and are accountable to the charge nurse and Psychiatric Nursing Administrator. After a series of promotions, these personnel may achieve a rating of "specialist five"; at this time they are taken out of the nursing department and become accountable to the psychology department.

The role of most behavioral health series personnel is analogous to that of psychiatric technicians. The title, however, helps to underscore the altered role of this group of paraprofessionals, whose historical roots seem inextricably enmired in the spectre of the "insane asylum."

Responsibilities of Behavioral Health Series Personnel are dependent upon the worker's level of expertise and organizational role; and include observation, assessment of psychosocial processes, and intervention as appropriate. Therapeutic and safety techniques used by these personnel include individual, group, and activity therapies, use of problem solving techniques, and use of restraining procedures. The personnel also participate in staffing meetings.

The balance of authority, responsibility, and power between the psychiatric staff nurses and the behavioral health series personnel is
currently being reassessed by hospital management. It is believed that licensed members of the nursing staff will be given greater authority than they now possess; with a corresponding decrease in the authority of behavioral health series personnel (Contreras, 1979). Speculations about personal as well as patient-oriented effects which might result from proposed changes were frequently mentioned to the researcher by members of the staff.

Staff members at the state hospital, as well as patients, were regrouped during reorganization. Staff were allowed to choose the unit on which they would like to work, with the result that many staff choose to work with a different behavioral category of patient than they had worked with before reorganization. The regrouping resulted in many staff not being well acquainted with their co-workers, charge nurses, and Psychiatric Nursing Administrators.

Functional Organization

The state hospital has been reorganized four times since 1972. In that year, patients were assigned to units according to their county of origin. Due to a scarcity of patients from some counties, certain areas were combined. In about 1975, a reorganization placed patients in units according to the care needed; roughly divided into acute care, long term security, child, mentally retarded, and geriatric units. In about 1977, federal guidelines were published, which categorized patients by catchment areas, consisting of broad geographical areas within the state. At that time it was felt that hospital services could best be provided by regrouping patients in accordance with the federally designated catchment areas. In 1979, the hospital again underwent a
reorganization based upon the premise that patients would receive the best care if placed in areas according to the type of care needed. This plan was more specific than the 1975 plan; creating among other changes, a three part social rehabilitation unit, and assigning sentenced male prisoners to a facility administered by the Department of Corrections (Alhambra)(Smith, 1979).

Patients were relocated onto the social rehabilitation units April 10, 1979, 7-1/2 weeks prior to this research study. Patients were relocated onto the Cholla unit (behavior management) on April 26, six weeks prior to the study. There are both male and female patients on all units studied (Miller, 1979; Moore, 1979; Rodriguez, 1979; Contreras, 1979).

Explicit program goals for each of the units studied, and operational methods for obtaining the goals, were not available at the time of the study, since the details were still being worked out. The Psychiatric Nursing Administrators on all four units, however, stated that a major focus was, and would continue to be, teaching the patients activities of daily living. The administrators agreed that the patients need to achieve a sense of self pride and worth; and that the hospital could help by stressing cleanliness and good grooming, an active and organized daily routine, and the acquisition of basic skills, such as reading, writing, cooking, etc. Efforts were also being made on each of the units to enhance the patients' sense of play and fun. Nursing staff took patients to plays, circuses, concerts, and other activities both on and off the hospital grounds. Some of the patients on Juniper 10 had been taken on an overnight camping trip several weeks before the
study. Patients on Cholla could be taken off the hospital grounds only if there were no charges against them (Hopkins, 1979; Miller, 1979; Moore, 1979; Rodriguez, 1979).

Juniper 4 is the social rehabilitation unit for the highest functioning patients; those who score 40 or above on the ward evaluation scale (see Appendix A). The unit is not locked, however, seclusion and restraints are available for behavioral control. The patients on this unit have the greatest contact with the outside world. The hospital is used as a base from which patients try out their abilities to cope with potential discharge. Patients receive passes to try out use of transportation systems, employment interviews, looking for housing, etc. Many of the patients begin outside employment while still in the hospital, and are helped to get to the job on time, understand their relationship with their employer, and cope with the stresses of the job (Rodriguez, 1979).

Patients on Juniper 4 who are not ready for employment are given passes to attend skills workshops held on the hospital grounds. All patients on the unit are expected to participate in therapy groups and other unit activities.

Juniper 10 is the social rehabilitation unit for patients scoring between 25 and 39 on the ward evaluation scale (see Appendix A). These patients are considered moderately functioning. At the time of the survey, the unit was not locked. Since that time, it was decided that the unit would be locked for a trial period, to see whether this would enhance the patients' attendance records at group therapy, activity therapy, and other structured activities.
Juniper 10 has an active token economy system, but is not considered a strict behavior modification unit. Seclusion and restraints are available for behavioral management. Patients who progress well, according to evaluation by the ward evaluation scale, are transferred to Juniper 4. Patients who are unable to benefit from the programs available may be reevaluated and transferred to Juniper 8. Some of the patients on Juniper 10 are now at the highest level of functioning that they can obtain. A portion of these will remain on the unit for an indefinite period of time, some will be transferred to other sheltered care facilities, and some will be tried at home, if the support system there is considered good (Moore, 1979).

Juniper 8 (HV-1) is the social rehabilitation unit for low functioning patients; those who score below 25 on the ward evaluation scale (see Appendix A). The unit is locked, though patients may move freely about most of the area inside the unit. Seclusion and restraints are available for behavioral management. Much of the staff time on this unit is spent in helping the patients stay clean and well groomed. Self care groups and activity groups are available to patients. Outings off of the unit are planned about two nights a week. There are few discharges from the unit. Patients who are discharged are followed for one year, and are directly readmitted to the unit if necessary (Miller, 1979).

Cholla (HV-2) is a behavioral management unit for males who are in need of psychiatric care before they are able to stand trial for legal charges, for females in need of psychiatric care before trial or after sentencing, and for males and females who are not facing legal charges, but who have become severe behavioral management problems on other units. The
security system at Cholla includes not only locked outside doors, but locks on all other rooms as well. Access between the dining room and dayroom; dayroom and exercise yard; exercise yard and male dormitory; dormitory and television room, etc., are all controlled by access to a key.

During the day most patients are locked out of their dormitories. Males and females may mingle and have free access to the area included in the exercise yard and dayroom, which are areas of about the same size, and rather small considering the number of patients using them. At night, males and females are widely separated in different parts of the building. Males are in dormitories which are partitioned to increase their privacy. Females are in individual locked rooms. Seclusion and restraints are available for male patients. Females are secluded and/or restrained in their rooms, when necessary.

Activities include groups, education in the activities of daily living, current events discussions, games, and access to a well stocked library. Patients not charged with crimes may occasionally be taken on outings, if their behavior warrants it. A number of patients told the researcher that they were not getting enough one-to-one time for discussing their problems with nursing staff members, physicians, psychologists, etc.

Discharge from security units is usually a lengthy process. A decision must be made that those facing charges are ready for trial, and then a further wait occurs for the trial date. Patients may not consider the prospect of facing trial an incentive for getting better. Females already sentenced may consider the facility preferable to jail or prison,
and therefore not change their behaviors. Patients who are not involved with the legal system may also face a lengthy stay, since other units may be reluctant to take them back (Connolley, 1979; Hopkins, 1979).

The Research Instruments

Two questionnaires were used for the survey; the Moos' Ward Atmosphere Scale (WAS) was administered to patients, and the Sikes' Supervisory Atmosphere Scale (SAS) was administered to nursing staff.

The Moos' Ward Atmosphere Scale was developed to provide a tool for the comparison and evaluation of treatment milieus, based upon a social ecological approach. The overall goal was provision of a measurement technique that would be standardized well enough to be applicable to a wide range of psychiatric programs (Moos, 1974).

Content validity of the WAS was developed by a sophisticated and lengthy process. Two trained behavioral observers studied three different psychiatric wards for several weeks, generating several hundred descriptive items. Books such as Maxwell Jones' Therapeutic Community and Ken Kesey's One Flew Over the Cuckoo's Nest were read to obtain additional descriptive qualities, resulting in a pool of over 500 items (Moos, 1974).

A review of the literature appropriate for describing environmental press in treatment environments resulted in 12 press categories which were adequate to cover all the content areas identified in the item pool. Items were sorted into these categories by two independent judges. Item overlap was eliminated, and the number of positively and negatively worded items was balanced to control for acquiescence response set. Twenty-three additional items were formulated to identify strong positive
and negative halo perceptions. The resultant test consisted of 206 items (Moos, 1974).

Concurrent validity of the WAS was then determined by administering the test to patients and staff on 14 wards. For each of the 206 items, one-way analysis of variance was calculated separately for staff and patients. For patient responses, 83% of the items discriminated significantly among wards at the .05 level; 71% discriminated significantly among wards at the .01 level. For staff responses, 62% discriminated at the .05 level, and 52% discriminated among wards at the .01 level. At this point the test was revised to retain those items which significantly discriminated among wards (Moos, 1974).

The resultant 120 item form was administered to patients and staff on 160 psychiatric wards in the United States and Canada. From this a standardization sample was obtained, and 20 items were dropped from the test (Moos, 1974).

Construct validity for the WAS was determined by correlations with similar scales. Subscales of the WAS and Perception of Ward testing similar content showed a .23 correlation. Correlations between some WAS subscales and Ward Climate Inventory subscales were above .40 for patient responses (Moos, 1974).

Test-retest reliabilities of the 10 WAS subscales are: Involvement, .79; Support, .78; Spontaneity, .69; Autonomy, .76; Practical Orientation, .68; Personal Problem Orientation, .83; Anger and Aggression, .71; Order and Organization, .75; Program Clarity, .76; and Staff Control, .77. Test-retest reliability for the test as a whole shows that the average profile correlation after one week was .92 for patients and .91
for staff. After 3 years, 4 months, the average profile correlations were .73 for patients, and .96 for staff in stable treatment programs (Moos, 1974).

The Moos' Ward Atmosphere Scale was used by permission of Consulting Psychologists' Press, which holds the copyright on the WAS. Testing materials were also obtained from this company; however, these proved to be unsatisfactory and were not used. WAS questionnaires were printed in minute, pale blue type which would be difficult for patients (especially those on phenothiazines) to read. WAS answer sheets were composed of confusingly numbered squares and were equally unsuitable for the population being studied. The WAS questions were retyped to facilitate ease in reading, and patients were asked to mark their answers on the same sheet to decrease confusion, and increase the ease with which the patients could complete the questionnaire (see Appendix C).

The Sikes' Supervisory Atmosphere Scale (SAS) was adapted by the researcher from the Moos' Ward Atmosphere Scale, and was used by permission of Consulting Psychologists' Press. The SAS was based upon the same broad theoretical framework as the WAS (Lewin's Field Theory); and upon the same, more specific theoretical considerations of environmental press suggested by Murray and Stern. Whenever possible, items were translated directly from the context of "staff's effect upon patients" to "nursing administration's effect upon staff" by changing single words. For example, the WAS item, "Patients often gripe," was changed to, "Staff often gripe." Other items on the WAS did not apply, and had to be changed entirely; however, the context and scoring direction were maintained in the
new item. The printing format for the SAS was the same as that used for the WAS (see Appendix D).

Three steps were taken to improve the face validity of the SAS; the test was read and corrections were made by an expert in the field, a pretest was conducted by administering the SAS to staff on an in-patient psychiatric unit, and the terminology was discussed with members of the Arizona State Hospital research committee. The construct validity of the WAS may be carried over to the SAS because they use similar statements to measure the same 10 press constructs of the perceived environment.

Data Collection

The rights of patients and staff who participated in this study were protected according to the guidelines of The University of Arizona for non-invasive research, and the guidelines of the Department of Behavioral Sciences' research committee at Arizona State Hospital. The study was approved by the ethical review committees at the College of Nursing and Arizona Health Sciences Center. The research committee and Assistant Administrator of Behavioral Sciences at Arizona State Hospital gave their permission for the study to be conducted at that facility.

After permission was granted by Arizona State Hospital to conduct the study, hospital records were reviewed to determine the incidence of reported attacks that patients had made on, (a) staff, (b) other patients, and (c) themselves (suicide or self-mutilation attempts) on each of the units of the hospital, during the preceding month. The wards chosen for the study were rank ordered according to violence rates (see Table 1, p. 43).
The Director of Nurses, as a member of the hospital research committee, met with the researcher prior to hospital approval of the project. At that time the purpose and procedures for the research were discussed with the Director of Nurses. After approval, the researcher made arrangements with the Director of Nurses for the specific dates when the research would be done, as well as the units where it would be carried out. The Director of Nurses then informed the Psychiatric Nursing Administrators about the project.

The researcher made appointments with each of the Psychiatric Nursing Administrators, and met with them to discuss the project and to arrange for suitable times for conducting the research with staff and with patients. The Psychiatric Nursing Administrator for Juniper 10 was unable to meet with the researcher; however, the project was discussed with her by phone, and with her designate in person. Since the Psychiatric Nursing Administrator on Cholla was new to her job, many of the arrangements for the research were made with the day charge nurse.

The Psychiatric Nursing Administrators and charge nurses explained the project to the staff, and told them the times that the researcher would be on the unit to collect patient and staff data. Data were collected over a four day period, one day per ward. Data collection for each unit was completed within 24 hours to keep environmental factors for each group as consistent as possible.

Data collection for staff proceeded as follows: Staff were given the questionnaire in groups composed of most of the people on their shift. Members of the shift who were watching the unit during the group meeting were then given the questionnaire individually. A special meeting time
was arranged with the day and night shifts. The afternoon shift com-
pleted the questionnaire directly after coming on duty and hearing report.

A brief description of the project was presented to staff, and
questionnaires were handed out. Each subject was asked to read the in-
formed consent statement (see Appendix E). The form stated the title and
purpose of the study, the time that would be required to answer the ques-
tionnaire, and the researcher's opinion that there were no attendant
risks to the subjects. It also stated that individual subjects were ex-
pected to receive no benefits from their participation in the study;
however, the hospital would receive reports of grouped anonymous data,
which would aid in assessment of on-going programs. It further stated
that it was the researcher's opinion that patients in psychiatric hos-
pitals might be assisted if the study yielded recommendations for im-
proving the social environments in these facilities.

Because the research was non-invasive, and believed to be of no
risk to subjects, the consent was in the form of a disclaimer. The form
stated that subject consent was assumed if the subject responded to the
questionnaire. No names were used on the questionnaire, and subjects were
assured that there was no record of their participation or non-
participation in the study. Subjects were told that the questionnaires
were confidential, and that only the researcher and her assistants would
have access to the forms. All reports of the project would be in the
form of grouped anonymous data.

Subjects were assured that they were under no obligation to par-
ticipate in the study, and that they could withdraw from the study at
any time without incurring any ill will. They were also told that
completion or non-completion of the questionnaire in no way affected their job. All subjects were told that they were free to ask questions at any time.

After any initial questions were answered, the staff proceeded to fill out the demographic data form (see Appendix F) and the questionnaire (Appendix D). Demographic data on staff included their sex, age category, professional classification, length of time working for the hospital, length of time that they had worked in psychiatry, years of post high school education, the number of times that they had been attacked by patients, both in their current job, and during their lifetime, and the number of times that they had been attacked by persons other than patients during their lifetime.

Staff subjects were given the following directions: "There are 100 short statements on this questionnaire. They are statements about jobs in psychiatric hospitals. Please decide which statements are true for your job and which are not. Mark true when you think the statement is true or mostly true. Mark false when you think the statement is false or mostly false. The results will be most accurate if you answer every item. If you have questions about the questionnaire, please ask them at any time. Please do not put your names on the demographic data sheet or on the questionnaire." The questionnaire took about 20 minutes for the staff to complete.

Data collection for patients proceeded as follows: Individual patients were approached by staff members, who briefly explained the project to them. Staff encouraged patients to participate, but did not pressure them to do so. On Juniper 4 and Cholla, the researcher met with
groups of about five patients at a time. A staff member sat in the room while the patients on Cholla completed the questionnaire. On Juniper 4, a staff member occasionally looked in on the room. A few patients on Juniper 4 were on work passes during the time that groups were tested; the researcher gave these patients the questionnaire individually during the evening shift.

Patients on Juniper 10 and Juniper 8 had difficulty in reading and in comprehending the questionnaire. The researcher tested these patients individually, reading each item and making explanations when necessary.

Each patient subject on all wards was handed the questionnaire by the researcher, and asked to read the patient consent form while the researcher read it aloud. The consent statement contained the same basic information as that described for the staff consent form, however, it was worded in a simple vocabulary, as recommended by the hospital research committee. Patients were told that completion or non-completion of the questionnaire in no way affected their relationship with their doctor, the nursing staff, or their treatment. All subjects were told that they were free to ask questions at any time, and could withdraw from the study at any time without incurring any ill will (see Appendix G).

After any initial questions were answered, patients were asked to complete the demographic data form. Demographic data on patients included sex, age category, length of current hospitalization, length of being on the present ward, and educational data (see Appendix H).
Patient subjects were given the following directions for completing the questionnaire: "There are 100 short statements on this questionnaire. They are statements about wards. Please decide which statements are true for your ward and which are not. Mark true when you think the statement is true or mostly true. Mark false when you think the statement is false or mostly false. The results will be most accurate if you answer every item. If you have trouble in reading the items, or want to ask any questions, please ask for help at any time. Please do not put your names on the demographic data sheet or on the questionnaire."

Patients on Juniper 4 and Cholla took about 30 minutes to complete the questionnaire. Patients on Juniper 8 and Juniper 10 took about 45 minutes to complete the questionnaire.

In addition to patient and staff questionnaires, and data concerning incidents of patient violence, the researcher collected descriptive data on the nature of the units, and average patient census and unit staffing data.

Analysis of Data

Scores for each of the ten subscales of the SAS or WAS were computed separately for each subject (see Appendix I for subscale scoring directions). Data obtained were then combined to form eight groups, representing either patients or staff on each of the four units tested. A group mean was computed for each of the ten WAS or SAS subscales; also, two other measures of central tendency, the median and mode, were determined. Measures of variation utilized for this study were the variance and the standard deviation.
Figures were constructed to graphically depict: (1) profiles of mean scores for patients, as compared to those of staff, for each of the units tested; (2) profiles of supervisory atmosphere on each of the two higher violence wards, as compared to the supervisory atmosphere profile from the ward reporting no violence; (3) profiles of ward atmosphere on each of the two higher violence wards, as compared to the ward atmosphere profile from the ward reporting no violence.

T-tests were performed upon paired patient and staff mean scores, for each subscale, for each ward. T-tests were also performed by pairing subscores of staff on the ward reporting no violence, with those of staff on a high violence ward; also, by pairing subscores of patients on the ward reporting no violence with those of patients on a high violence ward. For these tests, the ward with the second highest violence rate was used, due to the small sample size of patients on the highest violence ward. Results of all t-tests which showed differences significant at a level of .05 or less were reported.

Demographic data for patients and staff were tabulated, and descriptive qualities of each subject group were reported. The Pearson r was utilized to determine the level of correlation between: (1) length of employment in a psychiatric facility and the number of times attacked by patients; (2) the number of times staff have been attacked by patients and the number of times that they have been attacked by persons other than patients; (3) the age of the staff member and the number of attacks made upon him by patients.
CHAPTER 4

PRESENTATION OF DATA

The data from this study are presented in two sections. The first section describes demographic characteristics of the populations studied. The second section describes Ward Atmosphere Scale and Administrative Atmosphere Scale test results.

Demographic Data

Age of Participants

The age range for all participants was 18 years to over 50 years. Forty-six percent of the total staff sample were less than 29 years old, while 32 percent of the total patient sample were less than 29 years old. Thirty percent of the total staff sample were in the 29 through 39 year age group, comparing closely to the 31 percent of the total patient sample in this age group. About seven percent of total staff participating were in the 40 through 50 year range; 18 percent of the patient sample were in this range. Seventeen percent of the staff were over 50 years old, and eight percent of the patients reported being in this age group. Eleven percent of the patient sample did not report their age.

A ward-by-ward comparison of ages of staff and patient subjects may be seen in Table 2. On each of the wards, the majority of patients and staff were less than 40 years old. Cholla (HV-2) was the only ward where all age groups were represented in both patient and staff samples.
Table 2. Age of staff compared to age of patients. -- Percentage of sample in each age group

<table>
<thead>
<tr>
<th>Ward and Role</th>
<th>Age not Reported</th>
<th>18 through 28</th>
<th>29 through 39</th>
<th>40 through 50</th>
<th>Over 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=13)</td>
<td>0.0</td>
<td>46.1</td>
<td>38.5</td>
<td>0.0</td>
<td>15.4</td>
</tr>
<tr>
<td>Patients (N=10)</td>
<td>0.0</td>
<td>40.0</td>
<td>20.0</td>
<td>30.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=18)</td>
<td>0.0</td>
<td>44.4</td>
<td>22.2</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Patients (N=4)</td>
<td>25.0</td>
<td>50.0</td>
<td>0.0</td>
<td>25.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=13)</td>
<td>0.0</td>
<td>46.1</td>
<td>23.1</td>
<td>7.7</td>
<td>23.1</td>
</tr>
<tr>
<td>Patients (N=3)</td>
<td>33.3</td>
<td>0.0</td>
<td>66.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=23)</td>
<td>0.0</td>
<td>47.9</td>
<td>34.8</td>
<td>4.3</td>
<td>13.0</td>
</tr>
<tr>
<td>Patients (N=16)</td>
<td>0.0</td>
<td>37.5</td>
<td>37.5</td>
<td>18.8</td>
<td>6.2</td>
</tr>
</tbody>
</table>
Juniper 8 (HV-1) had staff participants from all age groups; however, patients who reported their ages were only in the 29 through 39 age group. Apparently three age groups were not represented by Juniper 8 patient participants.

**Gender of Participants**

One hundred subjects participated in the study. There were a total of 67 staff participants; 32 were male, and 35 were female. Thirty-three patients participated in the study. Twenty-three of the patients were male, nine were female, and one did not specify sex. Table 3 shows the number and percent of patients of each sex, on each of the wards sampled. Juniper 4 (LV-1) had the most equal number of patient participants of each sex. On Cholla (HV-2) patients of both sexes responded; however, most of the sample were male. Patient respondents on Juniper 10 (LV-2) were all male, while those on Juniper 8 (HV-1) were all female. Table 4 shows number and percent of staff of each sex, on each of the wards sampled. On all units, both male and female staff responded to questionnaires. As the table shows, Juniper 8 (HV-1) staff were most equally divided between female and male participants. There were more male staff than female staff in the Cholla (HV-2) sample. On the two lower violence units, more female staff than male staff were in the sample.

Demographic data on gender of participants showed that no patient or staff subject group had equal numbers of female and male respondents. Staff groups in general had a more equal number of respondents of both sexes than did patient groups. One patient group was represented by similar numbers of male and female subjects.
Table 3. Gender of patient participants

<table>
<thead>
<tr>
<th>Ward</th>
<th>No. of males in sample</th>
<th>% of sample who were male</th>
<th>No. of females in sample</th>
<th>% of sample who were female</th>
<th>Total No. in sample</th>
<th>Sample as a % of ward patient population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td>5*</td>
<td>50.0**</td>
<td>4*</td>
<td>40.0**</td>
<td>10</td>
<td>41.7</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td>4</td>
<td>100.0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>100.0</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td>14</td>
<td>87.5</td>
<td>2</td>
<td>12.5</td>
<td>16</td>
<td>28.1</td>
</tr>
<tr>
<td>Totals</td>
<td>23*</td>
<td>69.7**</td>
<td>9*</td>
<td>27.2**</td>
<td>33</td>
<td>21.3</td>
</tr>
</tbody>
</table>

* One participant did not report sex

** Percentages are based on incomplete information
<table>
<thead>
<tr>
<th>Ward</th>
<th>No. of males in sample</th>
<th>% of sample who were male</th>
<th>No. of females in sample</th>
<th>% of sample who were female</th>
<th>Total No. in sample</th>
<th>Sample as a % of total non-administrative staff on ward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td>4</td>
<td>30.8</td>
<td>9</td>
<td>69.2</td>
<td>13</td>
<td>59.1</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td>7</td>
<td>38.9</td>
<td>11</td>
<td>61.1</td>
<td>18</td>
<td>81.8</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td>7</td>
<td>53.8</td>
<td>6</td>
<td>46.2</td>
<td>13</td>
<td>59.1</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td>14</td>
<td>60.9</td>
<td>9</td>
<td>39.1</td>
<td>23</td>
<td>59.0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>32</strong></td>
<td><strong>47.8</strong></td>
<td><strong>35</strong></td>
<td><strong>52.2</strong></td>
<td><strong>67</strong></td>
<td><strong>63.8</strong></td>
</tr>
</tbody>
</table>
Size of Samples

The population pool size for patients on the four wards, estimated from the mean May census, was 155 patients. A total of 33 patients responded to the questionnaire, which was about 21 percent of the population. The population pool size for nonadministrative staff working on the four units was 105. A total of 67 staff participated in the study, which was about 64 percent of the population.

As may be seen in Table 3, Juniper 4 (LV-1) had the highest percentage of patient participation, relative to ward census. Cholla (HV-2) had the highest absolute number of participants. Absolute and relative patient participation on Juniper 8 (HV-1) and Juniper 10 (LV-2) was lower than on other units studied. Sample sizes for staff on each ward may be seen in Table 4. Staff on Juniper 10 (LV-2) had the highest percentage of participation, relative to the total number of nonadministrative staff on the unit. The absolute number of staff participating was highest on Cholla (HV-2).

Education of Participants

Table 5 shows a comparison of the education levels attained by staff and patient participants on each of the wards. Thirty-six percent of the total patient sample did not finish high school, as compared to 1.4 percent for the total staff sample. Sixty-four percent of the patients sampled either did not finish high school or had no education after high school. About 12 percent of the staff had not finished high school, or had no education after high school. Thirty-one percent of the staff had completed four or more years of education after high school; six percent of the patients had attained that educational level.
<table>
<thead>
<tr>
<th>Ward and Role</th>
<th>Did not finish high school</th>
<th>No education after high school graduation</th>
<th>1 yr. post high school</th>
<th>2 yrs. post high school</th>
<th>3 yrs. post high school</th>
<th>4 yrs. post high school</th>
<th>5 or more years post high school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=13)</td>
<td>0.0</td>
<td>15.4</td>
<td>30.8</td>
<td>0.0</td>
<td>7.7</td>
<td>30.8</td>
<td>15.3</td>
</tr>
<tr>
<td>Patients (N=10)</td>
<td>50.0</td>
<td>10.0</td>
<td>10.0</td>
<td>0.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=18)</td>
<td>5.6</td>
<td>11.1</td>
<td>16.7</td>
<td>16.7</td>
<td>16.7</td>
<td>16.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Patients (N=4)</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=13)</td>
<td>0.0</td>
<td>15.4</td>
<td>7.7</td>
<td>23.1</td>
<td>23.1</td>
<td>0.0</td>
<td>30.7</td>
</tr>
<tr>
<td>Patients (N=3)</td>
<td>33.3</td>
<td>33.3</td>
<td>0.0</td>
<td>33.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff (N=23)</td>
<td>0.0</td>
<td>4.3</td>
<td>13.1</td>
<td>30.4</td>
<td>30.4</td>
<td>13.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Patients (N=16)</td>
<td>31.2</td>
<td>37.5</td>
<td>6.3</td>
<td>18.7</td>
<td>6.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Data showed that, on the average, staff participants had attained a much higher educational level than had patient participants. Each of the measures of central tendency used; mean, median, and mode, showed a higher level of education for staff than for patients.

**Patients' Length of Hospitalization**

Length of current hospitalization for patients on Juniper 4 (LV-1) ranged from six to 104 weeks, with a mean of 21 weeks. Two patients did not report their length of hospitalization. One patient on Juniper 10 (LV-2) had been hospitalized for eight weeks, two had been hospitalized for one year, and the fourth patient did not report length of hospitalization. Two patients on Juniper 8 (HV-1) did not report their hospitalization time. The third patient reported a stay of one year. Patients on Cholla (HV-2) reported hospitalizations ranging from two to 338 weeks, with a mean of one year. One patient did not report this datum. Demographic data on patients' length of hospitalization showed that patient participants who were on higher violence units had a longer mean length of stay than had patient participants who were on lower violence units.

**Patients' Length of Time on the Ward**

Patients who met the selection criteria for participation in the study had been on their wards for at least 48 hours. Cholla had only been open for six weeks; the social rehabilitation units had been open for 7-1/2 weeks.
Staff Job Categories

Six registered nurses, four licensed practical nurses, and 57 behavioral health series personnel participated in the study. A sample of this size included 75 percent of all nonadministrative registered nurses working on units where the study was conducted; 80 percent of the licensed practical nurses on those units, and 62 percent of the behavioral health series personnel. Table 6 shows the absolute frequencies of staff who participated, by job category, for each unit. Table 7 shows the sample size as a percentage of the population size, for each unit. The tables show that no registered nurses from Juniper 8 (HV-1) were included in the survey, and that the licensed practical nurse on Juniper 10 (LV-2) was also not among those participating. Of the three staff groups that participated in the survey, the largest nursing group within the hospital, behavioral health series personnel, was represented by the largest absolute number of respondents. Relative to the group's total size, however, the behavioral health series had a lower percentage of participation than did the groups of licensed personnel.

Staff's Years Worked in a Job Affiliated with Psychiatry

Variance in length of employment in a job related to psychiatry was two months to 20 years. Table 8 shows the distribution of staff by years of working experience. About half of the staff had worked less than five years; three-fourths had worked less than nine years. Staff on each of the units where the study was conducted had the following work experience: Staff on Juniper 4 (LV-1) varied in employment from
Table 6. Absolute frequencies of staff participants

<table>
<thead>
<tr>
<th>Ward</th>
<th>R.N.</th>
<th>L.P.N.</th>
<th>Behavioral Health Series Personnel</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4 (LV-1)</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Juniper 10 (LV-2)</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Juniper 8 (HV-1)</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Cholla (HV-2)</td>
<td>2</td>
<td>2</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>4</td>
<td>57</td>
<td>67</td>
</tr>
</tbody>
</table>

Table 7. Staff sample size as a percentage of population size*

<table>
<thead>
<tr>
<th>Ward</th>
<th>R.N.</th>
<th>L.P.N.</th>
<th>Behavioral Health Series Personnel</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper 4</td>
<td>100.0</td>
<td>100.0</td>
<td>52.0</td>
<td>59.1</td>
</tr>
<tr>
<td>Juniper 10</td>
<td>100.0</td>
<td>0.0 (P=1)</td>
<td>84.2</td>
<td>81.8</td>
</tr>
<tr>
<td>Juniper 8</td>
<td>0.0 (P=2)</td>
<td>100.0</td>
<td>63.2</td>
<td>59.1</td>
</tr>
<tr>
<td>Cholla</td>
<td>100.0</td>
<td>100.0</td>
<td>54.3</td>
<td>59.0</td>
</tr>
<tr>
<td>Totals</td>
<td>75.0</td>
<td>80.0</td>
<td>62.0</td>
<td>63.8</td>
</tr>
</tbody>
</table>

* Psychiatric Nursing Administrators and Charge Nurses were not included in the population from which sample was drawn.
Table 8. Attacks made upon staff by patients: Career totals for all psychiatric work experiences

<table>
<thead>
<tr>
<th>Years worked in a job affiliated with psychiatry</th>
<th>No. of subjects in category</th>
<th>% of subjects in category</th>
<th>Total patient attacks on subjects in category</th>
<th>% of total reported attacks</th>
<th>Average attacks per year, per person *</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 months to 1 year</td>
<td>5</td>
<td>7.46</td>
<td>13</td>
<td>1.53</td>
<td>6.66</td>
</tr>
<tr>
<td>1 year to 2 years</td>
<td>5</td>
<td>7.46</td>
<td>4</td>
<td>.47</td>
<td>.66</td>
</tr>
<tr>
<td>2 years to 3 years</td>
<td>11</td>
<td>16.41</td>
<td>97</td>
<td>11.45</td>
<td>3.97</td>
</tr>
<tr>
<td>3 years to 4 years</td>
<td>8</td>
<td>11.94</td>
<td>143</td>
<td>16.88</td>
<td>5.72</td>
</tr>
<tr>
<td>4 years to 5 years</td>
<td>4</td>
<td>5.97</td>
<td>184</td>
<td>21.72</td>
<td>11.15</td>
</tr>
<tr>
<td>5 years to 6 years</td>
<td>7</td>
<td>10.46</td>
<td>54</td>
<td>6.38</td>
<td>1.48</td>
</tr>
<tr>
<td>6 years to 9 years</td>
<td>9</td>
<td>13.43</td>
<td>151</td>
<td>17.83</td>
<td>2.25</td>
</tr>
<tr>
<td>9 years to 12 years</td>
<td>3</td>
<td>4.48</td>
<td>132</td>
<td>15.58</td>
<td>4.40</td>
</tr>
<tr>
<td>12 years to 15 years</td>
<td>6</td>
<td>8.96</td>
<td>28</td>
<td>3.32</td>
<td>.38</td>
</tr>
<tr>
<td>15 years to 20 years</td>
<td>8</td>
<td>11.94</td>
<td>41</td>
<td>4.84</td>
<td>.31</td>
</tr>
<tr>
<td>Staff who did not report years worked</td>
<td>1</td>
<td>1.49</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Totals</td>
<td>67</td>
<td>100.00</td>
<td>847</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

* Computed by dividing mean number of attacks for persons in the category by mean number of years that persons in the category had worked. The mean number of years worked by persons in each category was determined from raw demographic data, and was accurate to the nearest week.
52 weeks to 20 years, with a mean of seven years and a mode of two years. Staff on Juniper 10 (LV-2) varied in psychiatric employment from two years to 16 years, with a mean of 6.5 years. Staff on Juniper 8 (HV-1) had worked in the field from 12 weeks to 13 years, with a mean of three years. Staff on Cholla (HV-2) had worked in psychiatry between eight weeks and 18.5 years, with a mean of 6.5 years, and a mode of five years. The data show that participants with less than a year's work experience were on the higher violence units. Mean number of years worked in a job affiliated with psychiatry was similar for the two low violence units and one of the high violence units. Subjects on the other high violence unit, Juniper 8 (HV-1), had less psychiatric experience, as determined by the mean.

**Total Patient Attacks Upon Staff During Their Careers**

Staff reported a total of 847 patient attacks for their combined years of working in psychiatry. The decision of what constitutes an attack was left to individual subjects, rather than being defined by the researcher. Reports of attacks, therefore, reflect participants' subjective impressions of having been attacked. Table 8 shows patient attacks reported by subjects, compared to the number of years that staff members have worked in psychiatry. Staff working over 12 years reported a lower mean attack rate per year, than did less experienced staff. Data, however, failed to show an overall trend toward a decrease in number of attacks with increasing increments of work experience.

Age of staff compared to number of attacks they reported was also determined. Eight of the 11 staff over 50 years old reported having
been attacked by patients. This age group reported a total of 34 attacks, with a variance from one to 13 attacks. Four of the five staff 40 through 50 years old reported having been attacked. One had been attacked five times, one had been attacked three times, and two had been attacked twice. Sixteen of the 20 staff members who were 29 through 39 years old had been attacked. Variance was two to 120 attacks, with a mode of 10 attacks. Total attacks upon this group were 413. Twenty-five of the 31 staff who were 18 through 28 reported having been attacked by patients. Range of attacks was one to 148. Total attacks were 378. Data comparing percentages of persons who had been attacked, as opposed to persons who had not been attacked, showed that similar percentages of each were reported in all age categories. Those staff in the 29 through 39 age group who were attacked, however, reported a much higher mean of attacks per person, than did staff in other age groups.

Number of reported attacks was next compiled according to the unit upon which each staff member worked. Staff working on Juniper 4 (LV-1) reported a range of 0 to 10 attacks during their lifetimes, with a mean of five attacks. Juniper 10 (LV-2) staff reported from 0 to 120 attacks, with a mean of 14 attacks. Juniper 8 (HV-1) staff stated that they had been attacked from 0 to 40 times, with a mean of six attacks. Cholla (HV-2) staff reported from 0 to 148 attacks, with a mean of 20 attacks. Participants who had recently chosen to work on the behavioral management unit (Cholla), were those who also reported the highest mean for patient attacks during their working experience. There was no clear demarcation, however, between attacks reported by staff on high violence
units, compared to low violence units. Staff on one of the lower violence units reported the second highest mean for patient attacks.

**Attacks Made Upon Staff by Persons Other Than Patients**

Each staff subject was asked to decide how many times he or she had been attacked by persons other than patients. Rather than supply an explicit definition for the term "attacked", the researcher elicited responses based upon subjective perceptions of participants.

Forty staff, representing 59.7 percent of the sample, reported that they had never been attacked by persons other than patients. The other 27 staff reported a total of 168 attacks made upon them by non-patients during their combined lifetimes. Staff on Juniper 4 (LV-1) reported from 0 to 12 attacks, with a mean of 1.5 and a mode of 0. Staff on Juniper 10 (LV-2) reported from 0 to 10 attacks, with a mean of 1.3 and a mode of 0. Staff on Juniper 8 (HV-1) reported from 0 to 10 attacks, with a mean of 1.5 and a mode of 0. Cholla (HV-2) staff reported from 0 to 50 attacks, with a mean of 4.5 and a mode of 0.

Data showed no natural division between non-patient attacks upon persons who work on low violence wards and non-patient attacks upon persons who work on high violence wards. A difference could be seen, however, between reports of staff who work on social rehabilitation units: Juniper 4, Juniper 8, and Juniper 10; and staff who work on the behavioral management unit, Cholla. Participants working on Cholla (HV-2) reported attacks whose mean was three times that of the means of subjects working on social rehabilitation units. The mean may have been skewed upward by the variance of attacks; the highest attack of the
range reported that about five times greater than those reported on the social rehabilitation units.

Nine of the 11 staff over 50 years old reported that they had never been attacked by non-patients. Two of these staff (18% of the age group) reported having been attacked twice. None of the five staff aged 40 through 50 reported having been attacked by persons other than patients. Ten staff 29 through 39 reported that they had never been attacked by non-patients; the remaining members (50% of this group) said they had been attacked between one and six times, with the total attacks on this group being 29. Eighteen of the 31 staff who were 18 through 28 years old reported having been attacked by non-patients (58% of the age group). Range for attacks was one through 50. One hundred and thirty-two attacks were reported by members of this age group. Staff in the 18 through 28 year age group reported a higher percentage of persons who were attacked, and a higher mean of attacks, than did any other age group.

Eight of the 35 females studied reported having been attacked by non-patients. This was about 23 percent of the female sample. Attacks upon females totaled 24. Two females reported having been attacked once; five were attacked twice, and one reported having been attacked 12 times. Eighteen of the 32 male staff, 56 percent, reported having been attacked by non-patients. Range of number of attacks was one through 50, with a mode of five. Attacks upon males totaled 144. Dats showed that a higher percentage of males were attacked than were females. The mode of attacks reported was higher for males than for
females, and the variance reported by the male sample showed a higher figure at the upper end of the range.

Summary of Demographic Data

One hundred subjects participated in the study. There were a total of 67 staff participants, which was about 64 percent of the non-administrative staff who worked on the units where the study was conducted. Three categories of staff were included in the study; registered nurses, licensed practical nurses, and behavioral health series personnel. Of these, the largest nursing group within the hospital, behavioral health series personnel, was represented by the largest absolute number of respondents. Relative to the group's total size, however, the behavioral health series had a lower percentage of participation than did groups of licensed personnel.

Of the 67 staff participants, 32 were male and 35 were female. On each of the wards staff of both genders participated in the study; however, no group had equal numbers of male and female respondents. The age range of staff was 18 to more than 50 years. Forty-six percent of the total staff sample were less than 29 years old. About 12 percent of the staff had not finished high school, or had no education after high school. Thirty-one percent of the staff had completed four or more years of education after high school. Variance in length of employment in a job related to psychiatry was two months to 20 years. The data showed that participants with less than a year's work experience were on the higher violence units. Mean number of years worked in a job affiliated with psychiatry was similar for the two low violence units.
and one of the high violence units. Subjects on the other high violence unit, Juniper 8 (HV-1), had less psychiatric experience, as determined by the mean.

Staff reported a total of 847 patient attacks for their combined years of working in psychiatry. Staff working over 12 years reported a lower mean attack rate per year, than did less experienced staff. Data, however, failed to show an overall trend toward a decrease in number of attacks with increasing increments of work experience. Data on age of staff compared to number of patient attacks they reported showed that comparable percentages of persons in each age category reported having been attacked. Those staff in the 29 through 39 age group who were attacked, however, reported a much higher mean of attacks per person, than did staff in other age groups. Staff working on Cholla (HV-2) reported the highest mean for patient attacks during their working experience. Staff on one of the lower violence units reported the second highest mean for patient attacks.

Staff reported a total of 168 attacks made upon them by non-patients during their combined lifetimes. Participants working on Cholla (HV-2) reported attacks whose mean was three times that of the means of subjects working on social rehabilitation units. Staff in the 18 through 28 year age group reported a higher percentage of persons who were attacked, and a higher mean of attacks, than did any other age group. Data showed that a higher percentage of males were attacked by non-patients, than were females. About 60 percent of the staff reported that they had never been attacked by persons other than patients.
Of the 100 subjects who participated in the study, 33 were patients. This was about 21 percent of the mean May census for the wards where the study was conducted. Juniper 4 (LV-1) had the highest percentage of patient participation, relative to ward census. Cholla (HV-2) had the highest absolute number of participants. Twenty-three of the total patients who participated were male, nine were female, and one did not specify sex. One patient group, Juniper 4 (LV-1), was represented by similar numbers of male and female subjects. Patient respondents on Juniper 10 (LV-2) were all male, while those on Juniper 8 (HV-1) were all female.

The age range for patients was 18 years to over 50 years. Most of the patients in the sample were less than 40 years old. Sixty-four percent of the patients in the sample either did not finish high school, or had no education after high school. Six percent of the patients had completed four or more years of education after high school.

Patient's length of current hospitalization ranged from two weeks to 338 weeks. Demographic data showed that patient participants who were on higher violence units had a longer mean length of hospitalization than had patient participants who were on low violence units. Patient's length of stay on their present ward varied from 48 hours to 7-1/2 weeks.

Responses to the Ward Atmosphere Scale and Supervisory Atmosphere Scale

Questionnaires administered to patients and staff on four wards yielded data that were used to characterize psychosocial niches on each of the wards. The Ward Atmosphere Scale was administered to patients to assess their psychosocial press from the staff. The Supervisory
Atmosphere Scale was administered to patients to assess their psycho-social press from administration. Items on the two scales are very similar; and the scoring directions are identical. The scales are discussed in Chapter 3, pages 57 through 60. The scales are presented in Appendices C and D.

The questionnaires (scales) consist of 100 items, providing information about 10 variables: involvement, support, spontaneity, autonomy, practical orientation, personal problem orientation, anger and aggression, order and organization, program clarity, and control. Responses yielded interval data that were used to quantify relative amounts of environmental press toward each variable that were experienced by each subject. The mean response for each subject group, for each variable, was then determined. Psychosocial niche profiles were constructed; these consist of graphs illustrating relative amounts of press toward each of variables, as experienced by each group. The graphs, and statements about the graphs, are presented in the remainder of this chapter. A statistical analysis of the data is presented in Chapter 5.

**Presentation of Scores**

**Juniper 4 (LV-1).** This ward is a social rehabilitation unit for high functioning patients. Juniper 4 reported no patient attacks during May, and therefore was the lowest violence ward in this study. Thirteen staff and 10 patients on this ward responded to the questionnaires. Figure 1 graphically depicts mean patient and staff profiles for the ten test subscores. The figure shows that the greatest environmental press for patients on the unit was toward a practical orientation. Other
Figure 1. Psychosocial climate profiles of patients and staff on Juniper 4, the ward with lowest violence.
press categories having a mean greater than 50 percent of the possible range were: autonomy, order and organization, support, program clarity, involvement, and control. The patient qualities least elicited by the ward environment were a personal problem orientation, spontaneity, and expression of anger and aggression.

Staff on Juniper 4 indicated that environmental press from administration was rather uniform in its promotion of staff involvement; provision of support; encouragement of spontaneity, autonomy, and expression of anger and aggression; and its emphasis of practical orientation, program clarity, and order and organization. The environmental qualities least experienced by staff were an atmosphere of supervisory control, and an orientation toward personal problem solving.

Juniper 10 (LV-2). This ward is a social rehabilitation unit for moderately functioning patients. Juniper 10 reported three patient attacks in May; these were made by two individuals. The unit had the second to lowest attack rate of the four units studied. Four patients and 18 staff on the ward responded to the questionnaires. Figure 2 shows mean patient and staff profiles for the ten test subscales. The figure shows that the greatest environmental press for patients on the unit was practical orientation. Press in the areas of involvement, support, control, order and organization, autonomy, and program clarity were also relatively high. Patient qualities least elicited by the ward environment were spontaneity, expression of anger and aggression, and an orientation toward personal problem solving.

Staff on Juniper 10 indicated that press from administration was greatest in its promotion of staff's spontaneity and autonomy, and that
Figure 2. Psychosocial climate profiles of patients and staff on Juniper 10, the ward with the second lowest violence rate
press for clarity of rules and procedures for their performance was also relatively high. The least press was from administrative control. Personal problem orientation was also relatively lower than other scale means.

**Juniper 8 (HV-1).** This ward is a social rehabilitation unit for low functioning patients. Five patients on the unit made attacks in May. There were a total of ten attacks during the month. Juniper 8 had the highest attack rate of the four units studied. Three patients and 13 staff on the ward responded to the questionnaires. Figure 3 shows mean subscale scores and profiles for patient and staff subjects. The figure shows that the greatest press experienced by patients was toward control. Press toward autonomy and expression of anger and aggression was also relatively high. Lowest mean patient scores were in the categories of involvement, spontaneity, program clarity, order and organization, and support. All patient scores had means that were greater than 50 percent of the possible range.

Staff on Juniper 8 indicated that the support they received and the clarity of their work program were press categories most experienced on their unit. Other press categories having a mean of greater than 50 were: involvement, practical orientation, spontaneity, autonomy, order and organization, and expression of anger and aggression. Categories having means of less than 50 were personal problem orientation and control.

**Cholla (HV-2).** This unit is the security ward for behavioral management problems. Five attacks were reported to occur on this unit during May; the attacks were made by four patients. Cholla had the
Figure 3. Psychosocial climate profiles of patients and staff on Juniper 8, the ward with the highest violence rate
second highest attack rate of the four units studied. Sixteen patients and 23 staff on the ward responded to the questionnaires. Figure 4 graphically depicts mean patient and staff responses to each of the ten test subscores. The figure shows that the greatest press that patients experienced was toward control. Interestingly, the second highest press was toward expression of anger and aggression. All other means were below 50. The lowest means for the patient sample were in the categories of autonomy, support, person problem orientation, and involvement.

Staff on Cholla indicated that the greatest press in their psychosocial environment was toward the expression of anger and aggression. Other categories with means greater than 50 percent of the possible range were involvement, autonomy, and spontaneity. The staff's control by administration was the category with the lowest mean score. Other relatively low means were in the categories of personal problem orientation, program clarity, and order and organization.

**Summary.** Scores for patient and staff subjects on each of four wards were presented graphically and in written description. The scores were group means for each of ten variables used to characterize psychosocial environmental niches on the wards. Descriptive comparisons of scores are presented in the remainder of this chapter.

**Patient Profiles Compared to Staff Profiles**

Data provided a basis for the description of similarities and differences between the patients' perceived psychosocial environment and the staff's perceived psychosocial environment on wards with:
Figure 4. Psychosocial climate profiles of patients and staff on Cholla, the ward with the second highest violence rate.
(a) low violence, and (b) high violence. This section presents patient profiles compared to staff profiles on the two types of ward. Data were described in terms of absolute and relative values. Descriptions of absolute values address similarities and differences in numerical values of the means. Possible values of means lay within a range of 0 to 100. For descriptive purposes absolute means having values within a range of five or less of each other were reported as being similar. Absolute means having numerical values which differed by more than 15 were reported as being dissimilar. Descriptions of relative values address the rank order of mean scores of each patient or staff subject group, on each ward. Mean scores were rank ordered from lowest absolute mean to highest absolute mean.

Description of both relative and absolute means provides perspective in understanding environmental press. For example: A mean of 30 is low in the absolute sense, because it falls well below most of the possible range. In the relative sense, however, a mean of 30 may be high, if means for the other nine subscales fall below a mean of 30.

**Comparisons of Absolute Values.** Comparison of Juniper 4 (LV-1) absolute values for patients with those for staff is shown in Figure 1, page 86. The figure shows that persons in the two roles felt similar press in the areas of support, autonomy, program clarity, and personal problem orientation. The two groups had dissimilar absolute mean values for spontaneity and control. Seven patient means and eight staff means were higher than a mean of 50.

Comparison of absolute means of staff and patients on Juniper 10 (LV-2) is shown in Figure 2, page 88. The figure shows that the two
subject groups felt similar environmental press in the area of personal problem orientation. The least similarity in absolute means was in the category of control. Other absolute means that were dissimilar were spontaneity and expression of anger and aggression. Seven patient means and eight staff means were above a mean of 50.

Juniper 8 (HV-1) absolute mean values for patients, as compared to staff, may be seen in Figure 3, page 90. The figure shows similarities in absolute mean scores in the areas of spontaneity and order and organization. The greatest differences in mean scores were in the areas of personal problem orientation and control. Other dissimilar absolute means were expression of anger and aggression and autonomy. All absolute values for patients fell above a mean of 50. Eight staff means fell above a mean of 50.

Comparison of absolute means for staff and patients on Cholla (HV-2) may be seen in Figure 4, page 92. Greatest similarities in press for the two groups were in spontaneity, personal problem orientation, and practical orientation. Dissimilar absolute means were found in the categories of control, autonomy, and involvement. Two patient means were above a mean of 50. Four staff means were above a mean of 50.

Comparison of Relative Values. Subscale means for each patient or staff group on each ward were rank ordered according to ascending absolute numerical value. The subscale with the lowest mean for the group was assigned the rank of "1", the second from lowest the rank of "2", and so on. In the case of identical means, ranks were averaged. For example, in the cases of two identical "lowest" means, the ranks of
"1" and "2" would be averaged, and both scores assigned the rank of 1.5. The next rank to be filled would be the third rank. There were a total of ten ranks. For purposes of descriptive comparison, subscales with a subtractive difference of three or fewer ranks were reported as being similar in rank. Subscales with a subtractive difference of six or more ranks were reported as being dissimilar in rank order.

Comparison of Juniper 4 (LV-1) relative rank of means for patients with those for staff is shown on Table 9, pages 96 and 97. The table shows that the patients' ranks for the subscales of personal problem orientation and program clarity were very similar to the staff's ranks for these subscales. The subtractive difference of staff and patient rank of means for the personal problem orientation subscale was found to be 1 rank. The subtractive difference of the program clarity ranks was found to be 1.5 ranks. Other subscales in which rank order of staff and patient means were similar were the subscales of support, autonomy, and control. There was a subtractive difference of three or less ranks for each of these subscales. Rank of means for patient and staff groups for the subscale of spontaneity were dissimilar, since the subtractive difference in ranks was six ranks. Comparisons of ranks of means for other subscales showed that they did not meet the criteria for being considered either similar or dissimilar.

Comparison of Juniper 10 (LV-2) relative rank of means for patients with those for staff is shown on Table 9, pages 96 and 97. The table shows that the least differences in rank of patient and staff means were in the subscales of personal problem orientation and anger and aggression. The subscales of involvement, support, practical
Table 9. Rank order of the means. -- Means for each subscale were rank ordered within each of the 4 staff and each of the 4 patient groups. A rank of 10 indicates greatest press toward the subscale. A rank of 1 indicates least press toward the subscale.

<table>
<thead>
<tr>
<th>Subscale Name</th>
<th>Juniper 4 (LV-1)</th>
<th>Juniper 10 (LV-2)</th>
<th>Cholla (HV-2)</th>
<th>Juniper 8 (HV-1)</th>
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<td>Subscale Name</td>
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orientation, and order and organization were also similar in rank for patients and staff. The greatest difference in rank of means was for the category of spontaneity. The second greatest difference was for control.

Comparison of Juniper 8 (HV-1) relative rank of means for patients with those for staff is shown on Table 9, pages 96 and 97. The table shows that practical orientation ranked identically for patient and staff groups. Ranks of patient and staff means for the subscale of order and organization were also very similar. Greatest differences in rank of patient and staff means were found for the subscales of control and involvement.

Comparison of Cholla (HV-2) relative rank of means for patients with those for staff is shown on Table 9, pages 96 and 97. The table shows that subscales of spontaneity, personal problem orientation, and anger and aggression ranked similarly for patients and for staff. Order and organization, program clarity, and practical orientation were also similar in rank for patients and staff. The greatest difference in rank of means was for control. The second greatest difference was for autonomy.

Conclusions. Data categorized into ten subscales were collected on each of four wards. Comparisons were made between the mean response of patients to each subscale, and the mean response of the nursing staff on their ward to the same subscale. Both absolute values of the means and relative ranks of the means were used for the comparisons. After similarities and differences in patient and staff absolute and relative means were determined for each unit, the data were examined to determine
if any similarities, or differences, were consistent across all four wards. No consistently similarly perceived subscale was found; however, one consistently dissimilarly perceived subscale was found. Descriptive data based upon absolute values indicated that there was no ward on which patients' press toward control was similar to their nursing staff's press toward control. The direction of dissimilar control within each of the four wards was found to be consistent across wards. Absolute means for the control subscale for all patient groups fell above 50 percent of the possible range; absolute means for all staff groups fell below 50 percent of the possible range. Comparison of rank order of means on three wards supported the conclusion that control was dissimilar for patients and their nursing staff, and also supported the direction of difference that was found in comparison of absolute means. Comparison of rank order of means on the lowest violence unit, however, yielded results which failed to support the conclusion of dissimilar control. On this unit, rank of means for patients and staff met the criteria for being considered similar on the control subscale. The direction of difference of the mean ranks was consistent with that of the other three units, however.

Data were next examined to determine if any subscale absolutely and relatively similar for patients and staff within one or more low violence units was also absolutely and relatively similar for patients and staff within one or more high violence units. Program clarity was absolutely and relatively similar for patients and staff on one low violence unit (LV-1); program clarity was also relatively similar for patients and staff on one high violence unit (HV-2). Program clarity
did not meet the criteria for either being considered absolutely similar or dissimilar on the HV-2 unit. The absolute values for program clarity for patients and staff on the low violence unit (LV-1) were above 50 percent of the possible range. Rank orders for the subscale were near the midpoint of ranks. Patient and staff ranks for program clarity on the high violence unit were slightly lower than the ranks for patients and staff on the low violence unit.

A second subscale that was similar for patients and staff on one or more low violence units and one or more high violence units was the personal problem orientation subscale. Personal problem orientation was absolutely and relatively similar for patients and staff on both low violence units, and for patients and staff on one high violence ward (HV-2). On all three units, personal problem orientation fell below 50 percent of the possible range, and its rank was within the lower third of the possible ranks.

Data were next examined to determine if any subscale absolutely and relatively dissimilar for patients and staff within one or more low violence units was also absolutely and relatively dissimilar for patients and staff within one or more high violence units. The only subscale that met this criteria was the subscale of control, which has been described.

After data were examined to determine those characteristics that the high violence/low violence dichotomies had in common, data were examined to determine characteristics peculiar to either high violence wards or low violence wards. The most striking finding was that patients and their nursing staff on each of the two low violence
wards had both absolutely and relatively dissimilar means for spontaneity; while patients and their nursing staff on each of the two high violence wards had similar absolute means for spontaneity. Relative rank of means for spontaneity were similar on one high violence ward (HV-2), and did not meet the criteria for either being considered similar or dissimilar on the other high violence ward.

The findings for the spontaneity subscale may be placed in context by comparison of values. Absolute values for spontaneity for patients on each of the two low violence wards were below 50 percent of the possible range; while absolute values for their nursing staffs were above 50 percent of the possible range. Relative rank of means for Juniper 4 (LV-1) staff were six ranks above those of patients on the ward, and relative ranks for Juniper 10 (LV-2) staff were nine ranks above those of patients on the ward. On high violence units, absolute values for spontaneity for patients and staff were near the midpoint of the possible range. Relative rank of means for patients and staff on Cholla (HV-2) were 7.5 and 7.0, respectively.

Another subscale which was found to differ for staff and patients on low violence wards, as opposed to staff and patients on high violence wards, was the autonomy subscale. Patients and their nursing staff on one low violence ward (LV-1) were found to have similar absolute and relative rank of means for the autonomy subscale; while patients and their nursing staff on the two high violence wards had dissimilar absolute means for autonomy. On one high violence unit (HV-2), autonomy was also dissimilar in rank; though on the other high violence unit the
ranks did not meet the criteria for being considered either similar or dissimilar.

Comparisons of scores for absolute means and ranks of means for autonomy show that patients and staff on the low violence unit have means higher 50 percent of the possible range, and that the ranks of the means are above the midpoint of ranks. On the two high violence units, the direction of dissimilarities of absolute means for autonomy were found to differ. On Juniper 8 (HV-1) patients and staff both had means above 50 percent of the possible range; however, the patient's mean for the subscale met the descriptive criteria for being considered significantly higher than the staff's mean for the subscale. On the other high violence unit (HV-2) the patients' mean for autonomy was well below 50 percent of the possible range, while the staff's mean was near the midpoint of the possible range. The direction of dissimilarities for relative rank of means also differed on each of the high violence units. Autonomy had the lowest rank of any subscale for patients on Cholla (HV-2); but it ranked second highest of subscales for patients on Juniper 8 (HV-1).

Findings indicate that support tends to be similar for patients and their nursing staff on low violence units. On the lowest violence unit, patients and their nursing staff had similar absolute means for the support subscale, and on both low violence units, relative rank of means for the support subscale were similar for patients and their nursing staff. Absolute means for support were above 50 percent of the possible range, and relative ranks of means were near or above the midpoint of ranks. Relative rank of means and absolute means for the
support subscale for patients and staff on high violence units did not meet the criteria for being considered either similar or dissimilar.

Findings for the anger and aggression subscale were equivocal. Patients and staff on Juniper 10 (LV-2) had absolutely dissimilar, but relatively similar means for anger and aggression. Staff and patients on Cholla (HV-2) had relatively similar means for the subscale. Staff and patients on Juniper 4 (HV-1) had absolutely dissimilar means for the subscale.

Summary. Data provided a basis for the discription of similarities and differences between the patients' perceived psychosocial environment and the staff's perceived psychosocial environment on wards with: (a) low violence, and (b) high violence.

Data were first examined to determine similarities or dissimilarities of patient-staff perceptions that tended to occur both on high violence units and on low violence units. Patients and their nursing staff on two low violence units and one high violence unit were found to have similarly perceived psychosocial press toward personal problem orientation. Persons on these wards perceived low press toward this quality. On one low violence unit and on one high violence unit, patients and their nursing staff had similar perceptions of psychosocial press toward program clarity. Perceived press toward program clarity for staff and patients on the low violence unit was somewhat higher than the perceived press toward program clarity on the higher violence unit. On all wards where the study was conducted, patients perceived a greater press toward control within their psychosocial environments than staff perceived within their psychosocial environments.
Data were next examined to determine similarities or dissimilarities in patient-staff perceptions that were peculiar to either high violence wards or to low violence wards. The most striking finding was that patients and their nursing staff on high violence wards perceive similar press toward spontaneity, but patients and their nursing staff on low violence wards perceive differing press toward spontaneity. Patients and staff on high violence wards perceived moderately high press toward spontaneity. Staff on low violence wards perceived high press toward spontaneity; but the patients on these wards perceived low press toward the variable.

Another subscale that was found to be different for patients and staff on low violence wards, as opposed to patients and staff on high violence wards, was the autonomy subscale. Findings indicate that patients and staff on low violence wards may tend to have similar, rather high press toward autonomy. Patients and staff on high violence units were found to have dissimilar press toward autonomy; however, the direction of difference was inconsistent for the high violence wards.

Findings indicated that press toward support was similar, and rather high for patients and staff on low violence units. No conclusions could be reached about staff-patient similarities or differences in support on the high violence units, using the delineated descriptive criteria. Also, no conclusions could be reached about staff-patient similarities or differences in anger and aggression for low violence units in contrast to high violence units.
Comparisons of Profiles of Patient Groups

Data provided the basis for a description of components (sub-scale factors) of the patients' perceived psychosocial environments, and profiles of relationships among components, on: (a) low violence wards, and (b) high violence wards. This section presents descriptions derived from the data. Data were described in terms of absolute and relative values. Descriptions of absolute values address similarities and differences in numerical values of the means. Descriptions of relative values address the rank order of means within each subject group. More detailed descriptions of absolute and relative means may be found on pages 93 and 94.

Comparisons of Patients on Two Low Violence Units. Responses of patients on Juniper 4 (LV-1) are compared with those of patients on Juniper 10 (LV-2) on the graph in Figure 5. Press profiles for the two groups were found to be essentially homomorphic. Patients on the two units had similar absolute means for practical orientation, autonomy, order and organization, program clarity, anger and aggression, and spontaneity. Patients on the two units had dissimilar means for the category of involvement. Relative rank of means for the two groups were similar for the categories of practical orientation, order and organization, support, program clarity, control, anger and aggression, spontaneity, and personal problem orientation. No subscale met the criteria for being considered relatively dissimilar.

Patients on the two low violence units were found to have seven categories of press with absolute means higher than 50 percent of the possible range. Of these seven press categories, the categories of
Figure 5. Psychosocial climate profiles for patients on two wards: Juniper 4, the ward with lowest violence, and Juniper 10, the second lowest violence ward.
practical orientation, order and organization, and program clarity met both the criteria for being considered absolutely similar and the criteria for being considered similar in relative rank of means. Practical orientation was the category of greatest press on both units. The three press categories with means falling below 50 percent of the possible range were the same for the two units; and were the categories of anger and aggression, personal problem orientation, and spontaneity. Of the three, anger and aggression and spontaneity were both absolutely and relatively similar.

**Comparisons of Patients on Two High Violence Units.** Responses of patients on Juniper 8 (HV-1) and Cholla (HV-2) are compared in Figure 6. There were no similar absolute means for the two patient groups. Dissimilar absolute means were found for the categories of autonomy, anger and aggression, practical orientation, personal problem orientation, support, program clarity, and involvement. Comparisons of relative ranks of means show that the subscales of control, anger and aggression, practical orientation, support, order and organization, program clarity, and involvement met the criteria for being considered of similar rank. The subscales of autonomy and spontaneity were dissimilar in rank, according to the criteria.

Means for patients on the highest violence unit were all higher than 50 percent of the possible range. Only two means of patients on the second highest violence unit were above 50 percent of the possible range; eight subscale means were below 50 percent of the possible range. Data show that the patient groups on the two high violence wards experienced dissimilar press, according to criteria based upon absolute
Figure 6. Psychosocial climate profiles for patients on two wards: Juniper 8, the ward with highest violence, and Cholla, the second highest violence ward.
mean values; but that they experienced similar press, according to criteria based upon relative rank of means. Seven subscales were of similar rank for the two groups, two met the criteria for being of dissimilar rank, and one did not meet the criteria for being considered either similar or dissimilar.

Control ranked as the category of greatest press for patients on both high violence units. Anger and aggression was the category of second greatest press (rank 9) for patients on Cholla (HV-2), and third greatest press (rank 8) for patients on Juniper 8 (HV-1). Practical orientation was rank 7 for patients on Juniper 8, and 7.5 for patients on Cholla. The only press category that was both absolutely and relatively dissimilar for patients on the two high violence units was autonomy, which was the category of second greatest press for patients on Juniper 8 (HV-1) and the category of least press for patients on Cholla (HV-2).

Comparisons of Patients on the Lowest Violence Ward With Patients on the Highest Violence Ward. Responses of patients on Juniper 4 (LV-1) and Juniper 8 (HV-1) are compared in Figure 7. Similarities in absolute means were found in the categories of practical orientation, order and organization, support, program clarity, and involvement. Patients on the two units were found to have dissimilar absolute means for autonomy, control, anger and aggression, and personal problem orientation. Relative rank of means were similar for the subscales of practical orientation, autonomy, support, program clarity, and spontaneity. Dissimilarly ranking means were found for the control subscale.
Figure 7. Psychosocial climate profiles of patients on two wards: Juniper 4, the ward with lowest violence, and Juniper 8, the ward with highest violence.
Seven means of patients on the lowest violence ward were above 50 percent of the possible range. All ten means of patients on the highest violence ward were above 50 percent of the possible range. Subscales that were both absolutely and relatively similar for the two patient groups were practical orientation, support, and program clarity. The subscale of control was both absolutely and relatively dissimilar for patients on the two wards.

Comparisons of Patients on the Lowest Violence Ward With Patients on the Second Highest Violence Ward. Responses of patients on Juniper 4 (LV-1) and patients on Cholla (HV-2) are compared in Figure 8. Similarities in absolute means occur in the areas of personal problem orientation and spontaneity. Dissimilar absolute means were found for the categories of practical orientation, autonomy, order and organization, support, and control. Comparisons of relative ranks of means show that patients on the two units had similar press toward practical orientation, order and organization, program clarity, involvement, and personal problem orientation. Dissimilarly ranking means were found for autonomy, control, and anger and aggression subscales.

Seven subscales for Juniper 4 (LV-1) patients had means higher than 50, compared to two subscales for Cholla (HV-2) patients that had means higher than 50. The only subscale that was both absolutely and relatively similar for patients on the two wards was personal problem orientation. Two subscales were found to be both absolutely and relatively dissimilar: autonomy and control.
Figure 8. Psychosocial climate profiles of patients on two wards: Juniper 4, the ward with lowest violence, and Cholla, the second highest violence ward.
Conclusions. Profiles of relationships among components of the perceived psychosocial environments on the two low violence wards were very similar. Six press categories met the criteria for being considered absolutely similar; eight met the criteria for being considered relatively similar. On both units, seven of the variables had means that were higher than 50 percent of the possible range. Of these, the categories of practical orientation, order and organization, and program clarity had both absolutely and relatively similar means. Practical orientation was the category of greatest press on both units. The three press categories with means falling below a mean of 50 were the same for both units, and were anger and aggression, personal problem orientation, and spontaneity. Of the three, anger and aggression and spontaneity were both absolutely and relatively similar, according to the descriptive criteria.

Profiles of relationships among components of the perceived psychosocial environments on the two high violence wards showed that there were no absolutely similar subscale means. There were, however, seven means with relatively similar ranks. Means for patients on the highest violence unit were all higher than 50 percent of the possible range. Only two means of patients on the second highest violence unit were above 50 percent of the possible range. The findings may indicate that the types of press that were stressed on the two units were generally similar; however, the degree of press toward the variables was dissimilar. Control was the category of greatest press for patients on both high violence units. Anger and aggression was the category of second greatest press on one of the units, and third greatest press on
Profiles of relationships among components of the perceived psychosocial environment on the lowest violence ward were compared with components on each of the higher violence wards. Seven subscale means of patients on the lowest violence unit were above 50 percent of the possible range, compared to ten subscale means of patients on the highest violence unit, and two subscale means of patients on the second highest violence unit. Control was both absolutely and relatively higher on both high violence units, than it was on the low violence unit. Anger and aggression met the descriptive criteria for being considered absolutely higher on the highest violence unit than on the low violence unit. It met the criteria for being relatively higher on the second highest violence unit, than on the lowest violence unit. Press toward autonomy was absolutely higher for patients on the highest violence unit, than for patients on the lowest violence unit. Press toward autonomy was absolutely and relatively lower for patients on the second highest violence unit, than for patients on the lowest violence unit.

Comparisons were made between the lowest violence unit and the two high violence units to determine whether any subscales were absolutely and relatively similar. No subscale that was absolutely and relatively similar on the low violence ward and one high violence ward was also absolutely and relatively similar on the low violence ward and the other high violence ward. One high violence ward (Juniper 8, HV-1) was absolutely and relatively similar to the low violence ward in practical orientation, support, and program clarity. The other high
violence ward (Cholla, HV-2) was similar to the low violence ward in the amount of press toward personal problem orientation.

Examination of the data without strict adherence to the criteria generally used for considering means absolutely and relatively similar or dissimilar allowed certain interesting trends to emerge. Absolute means for the control and spontaneity subscales showed consistent, though sometimes slight increases with increasing increments of violence across the four wards. Relative rank of means for the personal problem orientation subscale also showed a consistent, though sometimes slight trend toward greater press with increasing increments of violence across the four wards. Absolute means for anger and aggression fell into a clear dichotomy, with the two lower violence units clearly experiencing less press toward this variable than the two higher violence units. Relative means for order and organization were markedly different at the two ends of the spectrum. Patients on the lowest violence unit experienced much more press toward this variable than did patients on the highest violence unit. The two units in the middle of the spectrum, HV-2 and LV-2, experienced similar relative press toward the variable. This press was at about the midpoint of the relative press experienced on the lowest violence unit and the highest violence unit.

Summary. Data provided a basis for a description of components (subscale factors) of the patients' perceived psychosocial environments, and profiles of relationships among components, on: (a) low violence wards, and (b) high violence wards.
Profiles of relationships among components of the perceived psychosocial environments on the two low violence wards were very similar. On both units, seven variables had means that were higher than 50 percent of the possible range. Of these, the categories of practical orientation, order and organization, and program clarity had both absolutely and relatively similar means. Practical orientation was the category of greatest press on both units. The three press categories with means falling below a mean of 50 were the same for both units, and were anger and aggression, personal problem orientation, and spontaneity.

Profiles of relationships among components of the perceived psychosocial environments on the two high violence wards showed that there were no absolutely similar subscale means. There were, however, seven means with relatively similar ranks. On the highest violence unit, patient subscale score means were all above 50 percent of the possible range. On the second highest violence unit only two patient subscale score means were above 50 percent of the possible range. Control was the category of greatest press for patients on both high violence units. Press toward anger and aggression was also high. Practical orientation was the category of fourth greatest press on both units.

Profiles of relationships among components of the perceived psychosocial environment on the lowest violence ward were compared with components on each of the higher violence wards. Control was both absolutely and relatively higher on both high violence units, than it was on the low violence unit. When criteria were relaxed, there was an indication that spontaneity, personal problem orientation, and anger and
aggression were higher on higher violence units; while press toward order and organization was lower.

Comparison of Profiles of Staff Groups

Data provided the basis for a description of components (sub-scale factors) of the staff's perceived psychosocial environments, and comparison of relationships among components, on: (a) low violence wards, and (b) high violence wards. This section presents descriptions derived from the data. Data were described in terms of absolute and relative values. Descriptions of absolute values addresses similarities and differences in numerical values of the means. Descriptions of relative values address the rank order of means within each subject group. More detailed descriptions of absolute and relative means may be found on pages 93 and 94.

Comparisons of Staff on Two Low Violence Units. Responses of staff on Juniper 4 (LV-1) are compared with those of staff on Juniper 10 (LV-2) on the graph in Figure 9. Staff on the two units had similar absolute means for involvement, support, anger and aggression, order and organization, personal problem orientation, and control. No means met the criteria for being considered absolutely dissimilar. Relative ranks of means for the two groups were similar for the categories of spontaneity, autonomy, anger and aggression, practical orientation, order and organization, personal problem orientation, and control. No subscale met the criteria for being considered relatively dissimilar.

Staff on the two low violence wards were found to have eight categories of press with absolute means higher than 50 percent of the
Figure 9. Psychosocial climate profiles for staff on two wards: Juniper 4, the ward with lowest violence, and Juniper 10, the second lowest violence ward.
possible range. Of these eight categories, the categories of anger and aggression and order and organization met both the criteria for being considered absolutely similar and the criteria for being considered similar in relative rank of means. The two press categories with means falling below 50 percent of the possible range were the same for both units, and were personal problem orientation and control. These two subscales met the criteria for being considered absolutely similar, and the criteria for being considered relatively similar.

**Comparisons of Staff on Two High Violence Units.** Responses of staff on Juniper 8 (HV-1) and Cholla (HV-2) are compared in Figure 10. There were no similar absolute means for the two staff groups. Dissimilar absolute means were found for the categories of support, program clarity, practical orientation, order and organization, and anger and aggression. Comparison of relative ranks of means shows that the subscales of program clarity, involvement, practical orientation, spontaneity, autonomy, order and organization, control, and personal problem orientation were similar. The subscale of anger and aggression had a relatively dissimilar rank of means.

Eight means for staff on the highest violence unit were above 50 percent of the possible range. Four means for staff on the second highest violence unit were above a mean of 50. Data show that staff groups on the two high violence wards experienced dissimilar press, according to criteria based upon absolute mean values; but that they experienced similar press, according to criteria based upon relative rank of means. Eight subscales were of similar rank for the two groups, one met the criteria for being of dissimilar rank, and one did not meet
Figure 10. Psychosocial climate profiles for staff on two wards: Juniper 8, the highest violence ward, and Cholla, the ward with second highest violence.
the criteria for being considered either similar or dissimilar. On both of the high violence units, the categories of least press for staff were personal problem orientation and control. Anger and aggression was the category of greatest press for staff on Cholla (HV-2), and the third from least press for staff on Juniper 8 (HV-1). Anger and aggression was the only subscale that met the criteria for being considered both relatively and absolutely dissimilar for staff on the two high violence wards.

Comparisons of Staff on the Lowest Violence Ward With Staff on the Highest Violence Ward. Responses of staff on Juniper 4 (LV-1) and Juniper 8 (HV-1) are compared in Figure 11. Staff on the two units had similar absolute means for involvement, spontaneity, autonomy, practical orientation, and order and organization. No means met the criteria for being considered absolutely dissimilar. Relative ranks of means were similar for the two groups for the categories of involvement, support, spontaneity, autonomy, practical orientation, order and organization, personal problem orientation, and control. No subscale met the criteria for being considered relatively dissimilar.

Staff on Juniper 4 (LV-1) and Juniper 8 (HV-1) had eight means that were above 50 percent of the possible range. Five of these eight means were both absolutely and relatively similar: involvement, spontaneity, autonomy, practical orientation, and order and organization. The two means below 50 percent of the possible range were for the same subscales: personal problem orientation and control. These subscales were relatively similar between wards, but did not meet the criteria for being considered either absolutely similar or dissimilar.
Figure 11. Psychosocial climate profiles of staff on two wards: Juniper 8, the highest violence ward, and Juniper 4, the lowest violence ward
Comparisons of Staff on the Lowest Violence Ward With Staff on the Second Highest Violence Ward. Responses of staff on Juniper 4 (LV-1) and Cholla (HV-2) are compared in Figure 12. Staff on the two wards had similar absolute means for the control subscale. Dissimilar absolute means were found for the categories of support, practical orientation, program clarity, and order and organization. Comparisons of relative ranks of means show similarities for the categories of involvement, support, spontaneity, practical orientation, clarity, order and organization, personal problem orientation, control, and autonomy. No subscale met the criteria for being considered relatively dissimilar.

Eight subscales of Juniper 4 (LV-1) staff had means higher than 50 percent of the possible range. Four subscales of Cholla (HV-2) staff had means higher than a mean of 50. Involvement was the category of greatest or second greatest press for the units. Personal problem orientation and control were the categories of least press on both units. Control had both absolutely and relatively similar means for the two wards.

Conclusions

Compared profiles of relationships among components of the perceived psychosocial environments of staff on the two low violence wards were more similar than were compared profiles of staff on the two high violence wards. Comparisons made of the two low violence wards showed that six press categories met the criteria for being considered absolutely similar, and seven met the criteria for being considered relatively similar. No subscale met the criteria for being considered
Figure 12. Psychosocial climate profiles of staff on two wards: Juniper 4, the ward with lowest violence, and Cholla, the ward with second highest violence.
either absolutely or relatively dissimilar. On both low violence units, eight staff variables had means that were above 50 percent of the possible range. Of these eight categories, the variables of anger and aggression and order and organization were both absolutely and relatively similar. The two press categories with means falling below 50 percent of the possible range were the same for both units, and were personal problem orientation and control. These two subscales met the criteria for having absolutely and relatively similar means.

Comparisons of profiles of the perceived psychosocial environment on the two high violence wards showed that there were no subscales with absolutely similar means. Five absolute means met the criteria for being considered absolutely dissimilar. Relative rank of means for staff on the two high violence wards were similar for eight press categories. One subscale, anger and aggression, met the criteria for being considered relatively dissimilar on the two units. Eight means for staff on the highest violence unit were above 50 percent of the possible range. Four means for staff on the second highest violence unit were above 50 percent of the possible range. On both high violence units, the categories of personal problem orientation and control contributed the least press in the staff's psychosocial environments. Anger and aggression was absolutely and relatively dissimilar for staff on the high violence units. On one unit, it was the category of greatest press, on the other third from least press.

Profiles of relationships among components of the perceived psychosocial environment on the lowest violence ward were compared with components on each of the higher violence wards. On the lowest
violence unit, and on the highest violence unit, eight subscale means were above 50 percent of the possible range. No press category that was absolutely and relatively similar for staff on the lowest violence ward and staff on one high violence ward was also similar for staff on the lowest violence ward and staff on the other high violence ward. Staff on the lowest and highest violence units had absolutely and relatively similar means for involvement, spontaneity, autonomy, practical orientation, and order and organization. Staff on the lowest violence unit and staff on the second highest violence unit had similar absolute and relative means for the control subscale.

Data were examined without strict adherence to the criteria generally used for considering means absolutely and relatively similar or dissimilar. No consistent trends were found that corresponded to increasing rates of violence across the four wards. A dichotomy was found, showing lower absolute means for personal problem orientation for staff on high violence wards than for the staff on low violence wards. Relative means for support were similarly high for staff at the two ends of the spectrum, and were lower for staff on the LV-2 and HV-2 wards.

**Summary**

Data provided a basis for a description of components (subscale factors) of the staff's perceived psychosocial environments, and profiles of relationships among components, on: (a) low violence wards, and (b) high violence wards.
Compared profiles of relationships among components of the perceived psychosocial environments of staff on the two low violence wards were more similar than were compared profiles of staff on the two high violence wards. Comparisons made of the two low violence wards showed that six press categories met the criteria for being considered absolutely similar, and seven met the criteria for being considered relatively similar. Four subscales were both absolutely and relatively similar. In contrast, comparisons made of the two high violence wards showed no press categories that were absolutely similar, and eight that were relatively similar. No categories were both absolutely and relatively similar. On the low violence units, no press category was both absolutely and relatively dissimilar. Anger and aggression was absolutely and relatively dissimilar for staff on the high violence wards.

A closer similarity in psychosocial environmental press was found for compared profiles of the highest and lowest violence units, than for compared profiles of the two low violence units. Comparisons of the staff's profiles on the highest and lowest violence units showed that five press categories were both absolutely and relatively similar, versus four such categories for the two low violence wards. Press categories absolutely and relatively similar for staff on the two low violence wards were in general not the same as the categories absolutely and relatively similar for staff on compared lowest violence-highest violence wards. On the low violence wards, anger and aggression, order and organization, personal problem orientation, and control were absolutely and relatively similar. Means for anger and aggression and
order and organization were above 50 percent of the possible range, and were categories of moderate to moderately high press. Means for personal problem orientation and control were below 50 percent of the possible range, and were the categories of least press for these units. Comparisons of the lowest violence ward and the highest violence ward showed that press categories of involvement, spontaneity, autonomy, practical orientation, and order and organization were relatively and absolutely similar. Means for all of these subscales fell above 50 percent of the possible range.
CHAPTER 5

STATISTICAL ANALYSIS OF DATA

Data were analyzed statistically to determine: (1) significant differences between patient-staff perceptions of environment on high violence wards, as compared to patient-staff perceptions obtained on low violence wards; (2) significant differences in subscale factors and profiles for patients on high violence wards, as compared to low violence wards; and, (3) significant differences in subscale factors and profiles of staff on high violence wards, as compared to low violence wards.

Scores for each of the ten subscales of the SAS or WAS were computed separately for each subject. Data obtained were then combined to form eight groups, representing either patients or staff on each of the four units where the study was conducted. A group mean was computed for each of the ten SAS or WAS subscales; also, two other measures of central tendency, the median and mode, were determined. Measures of variation utilized for this study were the range and the standard deviation. Table 10 presents measures obtained from data of patients and staff on Juniper 4 (LV-1); Table 11 presents measures for subjects on Juniper 10 (LV-2); Table 12 presents measures of Juniper 8 (HV-1) data; and Table 13 presents measures of Cholla (HV-2) subject data.

T-tests were performed upon paired patient and staff mean scores, for each subscale, for each ward. Juniper 4 (LV-1) staff and
Table 10. Juniper 4 (LV-1) WAS and SAS subscale results

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patients were found to have differences significant at the .02 level on both the control and the spontaneity subscales. Juniper 10 (LV-2) patients and staff were found to have a difference significant at the .01 level for spontaneity. On both Juniper 4 (LV-1) and Juniper 10 (LV-2), press toward control was greater for patients; while press toward spontaneity was greater for staff. Juniper 8 (HV-1) staff and patients were found to have a difference significant at the .02 level for personal problem orientation, and a difference significant at the .01 level for control. Juniper 8 (HV-1) staff experienced less press toward both personal problem orientation and control than was experienced by patients on the ward. Finally, Cholla (HV-2) patients and staff showed a difference significant at the .02 level for autonomy; and a difference significant at less than the .001 level for control. Patients on Cholla (HV-2) experienced less press toward involvement and autonomy, and greater press toward control, than was experienced by staff on the ward.

T-tests were also performed by pairing subscore of patients on the ward reporting no violence (Juniper 4), with those of patients on a ward reporting high violence (Cholla). Cholla (HV-2) rather than Juniper 8 (HV-1), was chosen for this comparison because of the small patient sample obtained on Juniper 8. Subscores of patients on Juniper 4 (LV-1), when compared with those of patients on Cholla (HV-2) showed a difference significant at the .001 level for autonomy; a difference significant at the .01 level for practical orientation; a difference significant at the .02 level for support; a difference significant at the .03 level for order and organization; and a difference significant at the .05 level for control. Patients on Juniper 4 (LV-1) experienced greater press toward
autonomy, practical orientation, support, and order and organization, than did patients on Cholla (HV-2). Patients on Cholla (HV-2) experienced greater press toward control than was experienced by Juniper 4 (LV-1) patients.

T-tests performed by pairing subscores of staff on Juniper 4 (LV-1) with staff subscores from Cholla (HV-2) showed a difference significant at the .01 level for program clarity; differences significant at the .02 level for support and for order and organization; a difference significant at the .03 level for practical orientation; and a difference significant at the .05 level for spontaneity. Staff on Juniper 4 (LV-1) experienced greater press toward each of these subscales than was experienced by staff on Cholla (HV-2).

The Pearson r was utilized to determine the level of correlation between: (1) length of employment in a psychiatric facility and the number of times attacked by patients; (2) the number of times staff had been attacked by patients and the number of times that they had been attacked by persons other than patients; and, (3) the age of the staff member and the number of attacks made upon him by patients. No level of correlation was found at a greater than .3 level.

In summary, patients on the two low violence units were found to experience significantly less press toward spontaneity than did the nursing staff working on their units. Nursing staff working on the two low violence units experienced significantly less press toward control than did the patients on these units. On the two high violence units, also, staff experienced significantly less press toward control than did their patients. On one high violence unit it was also found that
patients experienced significantly greater press toward personal problem orientation than was experienced by their nursing staff. On the other high violence unit, staff experienced significantly greater press toward involvement and autonomy than was experienced by their patients. Results of statistical analysis showed that patients on a low violence unit experienced significantly greater press toward autonomy, practical orientation, support, and order and organization, than did patients on a high violence ward. Patients on a high violence ward experienced significantly greater press toward control, than did patients on a low violence ward. Statistical analysis showed that staff on a low violence ward experienced significantly greater press toward program clarity, support, order and organization, practical orientation, and spontaneity, than did staff on a high violence ward.
CHAPTER 6

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the research, followed by a discussion, conclusions, and recommendations based upon the findings.

Summary

The major purpose of the study was to collect data describing psychosocial environmental qualities which are found on psychiatric inpatient units where there is a low incidence of violence. The study sought to answer the following questions: (1) What, if any, differences exist between types of environmental press experienced by hospitalized psychiatric patients, and types of environmental press experienced by their nursing staff? (2) Are the differences found between staff and patients on high violence wards similar to the differences found between staff and patients on low violence wards? (3) Which of the ten factors of environmental press studied were different on wards with high violence rates, as compared to wards with low violence rates?

The study was a descriptive survey. Patients and nursing staff on four inpatient units at Arizona State Hospital were given questionnaires (scales) designed to yield interval data characterizing their perceptions of the psychosocial environment on their ward. The Ward Atmosphere Scale was used to assess patients' perceived psychosocial press from staff. The Supervisory Atmosphere Scale was used to
assess staff perceived psychosocial press from administration. Demo-
graphic data were also collected from participants. Data obtained from
patients and staff on the two wards with high patient violence rates
were compared and contrasted with data obtained from patients and staff
on the two wards with low patient violence rates.

The sample was a nonprobability convenience sample. Persons
who were on the wards when the study was conducted were invited to
participate, if they met the selection criteria. For patients, the
criteria were: (1) 18 years old or over; (2) had been a patient on
the ward for 48 hours or more; (3) not mentally retarded; (4) not
diagnosed as having an organic brain syndrome; (5) understood English;
and, (6) legally competent. Both committed and noncommitted patients
were invited to participate. Staff met the selection criteria if:
(1) they were either an R.N., an L.P.N., or a psychiatric technician
(behavioral health series personnel); (2) they had worked on the unit
for two weeks or more; (3) they did not hold an administrative position,
I.e., did not have the ability to hire and fire, institute disciplinary
action, or make formal evaluations of staff performance.

Demographic Data

Thirty-three patients participated in the study; 23 were male,
nine were female, and one did not specify sex. The patient sample was
about 21 percent of the patient population on the four wards. Sixty-
seven staff participated; 32 were male, and 35 were female. The staff
sample was about 64 percent of the nonadministrative staff population
on the four wards. The ages of subjects ranged from 18 to over 50 years
old. Sixty-four percent of the patients sampled either did not finish
high school or had no education after high school. About 12 percent of the staff sample had not finished high school or had no education after high school. The length of patients' current hospitalizations ranged from two to 338 weeks. Patient participants who were on higher violence units had a longer mean length of stay than had patient participants who were on lower violence units. Patient's length of stay on the units where the study was conducted ranged from 48 hours to 7-1/2 weeks.

Variance in staff's length of employment in a job related to psychiatry was two months to 20 years. About half of the staff had worked less than five years; three-fourths had worked less than nine years. Staff working on the highest violence unit had less mean work experience than had staff working on the other three units. Staff reported a total of 847 patient attacks for their combined years of working in psychiatry. Staff working over 12 years reported a lower mean attack rate per year, than did less experienced staff. Data, however, failed to show an overall trend toward a decrease in number of attacks with increased increments of work experience.

Data on age of staff compared to number of patient attacks they reported showed that comparable percentages of persons in each age category reported having been attacked. Those staff in the 29 through 39 age group who were attacked, however, reported a much higher mean of attacks per person, than did staff in other age groups. Data further showed that staff who chose to work on the behavioral management unit, when staff were regrouped during the recent hospital reorganization, were also those who reported the highest mean for
patient attacks during their working experience. Staff reported a total of 168 attacks made upon them by non-patients during their combined lifetimes. Participants working on the behavioral management unit reported attacks whose mean was three times that of the means of subjects working on the social rehabilitation units.

**Data Derived from Responses to Questionnaires**

The Ward Atmosphere Scale (WAS), developed by Rudolf Moos and copyrighted by Consulting Psychologists' Press, was used to test the 33 patients in the sample. The Supervisory Atmosphere Scale (SAS), developed by the researcher from the Ward Atmosphere Scale, was used to test the 67 staff in the sample. The WAS and SAS were composed of subscales which measured press toward ten variables of the psychosocial environment: involvement, support, spontaneity, autonomy, practical orientation, personal problem orientation, anger and aggression, order and organization, program clarity, and control.

The ten categories of environmental press may be conceptualized as equating to regions of the psychological environment which were described by Lewin. According to Lewin, a person's behavior is a function of regions of the psychological environment, plus characteristics of his person. Following this construct, violent behavior may be conceptualized as arising from a person's psychological environment and aspects of his person. The psychosocial environment created by nursing administration, plus perceptual-motor and inner-personal qualities of the staff's person, influence staff's behavior. This behavior becomes an aspect of the patient's psychological environment,
and interacts with aspects of the patient's person to influence his behavior.

The study sought to compare and contrast variables of the psychosocial environments of patients and staff on wards where there was a high incidence of violent behavior, with psychosocial environments of patients and staff on wards where there was a low incidence of patient violence. Data were analyzed descriptively; also, t-tests were performed for statistical analysis of data. Results of all t-tests which showed differences significant at a level of .05 or less were reported.

Data were analyzed to determine what, if any, differences exist between types of environmental press experienced by hospitalized psychiatric patients, and types of environmental press experienced by their nursing staff. Descriptive results showed, on all wards where the study was conducted, patients' perceived press toward control within their psychosocial niches was greater than staff's perceived press toward control within their psychosocial niches. T-tests showed that press toward control was significantly different for patients, as compared to staff, on all wards.

Data were next analyzed to determine if differences found between staff and patients on high violence wards were similar to differences found between staff and patients on low violence wards. Descriptive analysis showed that patients and their nursing staff on high violence wards perceived similar, moderately high press toward spontaneity; but patients and their nursing staff on low violence wards perceived dissimilar press toward spontaneity. Staff on low
violence wards perceived high press toward the variable; patients perceived low press toward the variable. T-tests showed significantly different press for staff, as compared to patients, on the two low violence wards for the spontaneity subscale.

Descriptive results showed that patients and their nursing staff on low violence wards had similar, rather high press toward autonomy. Patients and their nursing staff within each of the two high violence wards had dissimilar press toward autonomy; however, the direction of dissimilar press was different for each of the wards. T-tests showed a significant difference in autonomy for patients and staff on one high violence ward.

T-tests showed statistically different perceptions of personal problem orientation between patients and staff on the highest violence ward. Patients experienced greater press toward this variable than did staff. On the other high violence unit, staff experienced significantly greater press toward involvement than was experienced by patients. Data for these two subscales failed to meet the descriptive criteria for being considered similar or dissimilar, for comparisons across the four wards.

Data were next analyzed to determine which of the ten factors of environmental press studied were different on wards with high violence rates, as compared to wards with low violence rates. T-tests were performed by pairing subscores of staff on the ward reporting no violence with those of staff on a high violence unit; also, by pairing subscores of patients on the ward reporting no violence with those
of patients on a high violence ward. For these tests, the ward with the second highest violence rate was used, due to the small sample size of patients on the highest violence ward.

Staff on the low violence ward were found to have statistically different (greater) press toward practical orientation, support, order and organization, spontaneity, and program clarity, than had staff on the high violence ward. Patients on the low violence ward were found to have statistically different (greater) press toward practical orientation, support, order and organization, and autonomy; as well as statistically different (less) press toward control, than had patients on the high violence unit.

Profiles of relationships among components of the perceived psychosocial environments of staff on the two low violence wards were more similar than were profiles of relationships among components of staff on the two high violence wards. Profiles of patients on the two low violence wards were also more similar than were profiles of patients on the two high violence wards.

On both low violence units, staff means for eight subscales were above 50 percent of the possible range. Eight subscale means for staff on the highest violence unit were also above 50 percent of the possible range. Four means of staff on the second highest violence unit (behavioral control) were above 50 percent of the possible range. Staff on all units experienced least press toward personal problem orientation and control. For staff on the behavioral control unit, other means below 50 percent of the possible range were
support, program clarity, practical orientation, and order and organization.

On both low violence units, patients means for seven subscales were above 50 percent of the possible range. Practical orientation was the category of greatest press on both units. The three press categories with means falling below 50 percent of the possible range were the same for both units, and were anger and aggression, personal problem orientation, and spontaneity. On the highest violence unit, patient means for all subscales were above 50 percent of the possible range. Only two subscale means of patients on the second highest violence unit (behavioral control) were above 50 percent of the possible range. Control was the category of greatest press for patients on both high violence units. Press toward expression of anger and aggression was also high. Practical orientation was the category of fourth greatest press on both units.

Discussion

Demographic data showed that the problem of patient violence is of considerable importance. The 67 staff who participated in the study reported having been attacked by patients a total of 847 times during their combined careers. Though the reported figure may seem unrealistically high, other data collected at the hospital indicate that the figure is quite feasible. Eighteen reported attacks on other patients, staff, or self occurred on the four wards during the month preceding the study. If the attack rate were to remain stable throughout the year, a total of 216 attacks would occur each year on these four units.
The problem of violence is not an isolated one, affecting only the hospital where the study was conducted. Published reports of Armstrong (1978), Bach-y-Rita and associates (1971), Lion, Madden and Christopher (1976), Lion and Pasternak (1973), Kutash and associates (1978), Weaver and associates (1978); Campbell and Mawson (1978), Donnelly (1977), De Felippo (1976), and Coffey (1972a,b), attest to the widespread problem of patient violence.

Following Lewin's paradigm, violent behavior may be conceptualized as arising out of the interaction of the person and the person's psychological environment. The major focus of the research reported here was directed toward understanding aspects of the psychosocial environment which were different on high and low violence wards. Relatively little was done toward determining characteristics of the person. The study would have been strengthened if qualities of the person of those tested had been more clearly ascertained.

Despite the relatively minor focus upon the person, certain data were obtained which merit discussion. The persons of patients on the four wards where the study was conducted were similar, in that they were all diagnosed as being in need of psychiatric help. They were also similar in not being diagnosed as having an organic brain syndrome, nor mental retardation. Patients on each of the wards were dissimilar, however, in their ability to manipulate the environment in ways which met their needs without creating aversive consequences for themselves. Following Lewin's theory, as described by Hall and Lindzey (1970), patients on low violence units were better able to reduce disequilibrium through use of adaptive processes, such as: (1) performing an
appropriate action in the psychological environment which brought goal satisfaction; (2) performing a substitute action; or, (3) relieving tension by purely imaginary means. The ability of these patients to achieve goal satisfaction was reflected by their high scores on the Arizona State Hospital Ward Evaluation Scale (see Appendix A).

Patients on the high violence units had difficulties in manipulating the environment in ways which brought about goal satisfaction, or were only able to bring about goal satisfaction by means which co-commitmently brought about aversive consequences. It is probable that maladaptive processes of both the perceptual-motor zone and inner-personal zone of their persons contributed to the disfunction of patients on the two high violence wards. Data collected, and observations made, during administration of questionnaires, indicate, however, that the major pathological component for patients on Juniper 8 (HV-1) was probably disfunction of the perceptual-motor zone; while the major pathological component of patients on Cholla (HV-2) was probably disfunction of the inner-personal zone. Patients on Juniper 8 had a low ability to perform environmental manipulations which would bring about goal satisfaction, according to their low scores on the Arizona State Hospital Ward Evaluation Scale (see Appendix A). Though data were not collected on patient diagnoses, patients on Juniper 8 who answered the questionnaires exhibited behaviors compatible with diagnoses of schizophrenia and depression. A requirement for admission to Cholla (HV-2) was a history of violent or other antisocial behavior. Some of the patients had been sentenced for crimes; others awaited trial. Though
patients on the unit were not rated on the Arizona State Hospital Ward Evaluation Scale, their behaviors during the time that the research was conducted showed a much higher level of functioning than was displayed by patients on Juniper 8. During questionnaire administration, patients on Cholla did not verbalize bizarre thought patterns, nor display strange mannerisms, and they did not exhibit severe psychomotor retardation. Though unconfirmed by diagnostic data, it would seem probable that many patients on Cholla have underlying personality disorders.

Certain data were also obtained which somewhat illuminate personal qualities of staff working on high violence units. Staff working on the highest violence unit (Juniper 8) had less mean work experience than had staff working on the other three units. Staff working on the behavioral management unit (Cholla: HV-2) reported the highest mean of patient attacks made upon them during their work experience; and also reported attacks made upon them by non-patients whose mean was three times that of subjects working on other units. The dynamics of the situation are curious: during the recent hospital reorganization, staff were allowed to choose the unit where they wished to work. Staff who had been attacked the greatest number of times chose to work on a unit that was, by definition, composed of patients who were prone toward violence.

Psychosocial environments will now be discussed in the context of behavior and the person. Staff on lower violence wards tended to have more work experience and a history of fewer times attacked than staff working on one or the other of the high violence units.
Staff on the two low violence wards experienced significantly greater press from administration toward practical orientation, support, order and organization, spontaneity, and program clarity, than was experienced by staff on the behavioral control unit (HV-2). Behavior of the staff, arising out of the interaction of their person and their psychosocial environment, tended to create an environment for patients with significantly greater press toward practical orientation, support, and order and organization than was experienced by patients on the behavioral control unit (HV-2). Press toward expression of anger and aggression was lower for patients on the low violence wards, than for those on the high violence wards. Press toward spontaneity was similar to that experienced by patients on the behavioral control ward. For patients on the low violence units, press toward spontaneity was significantly lower than the press toward spontaneity that was experienced by their nursing staffs.

The patient's behavior arose out of the psychosocial environment created by staff, in interaction with aspects of the patient's person. The attributes of the person of patients on low violence wards included a relatively high ability to attain satisfaction from the environment without aversive consequences. Qualities of the person plus those of the psychosocial environment interacted in a way which promoted non-violent patient behavior.

The findings which have been described above are presented in the model in Figure 13. The figure uses Lewin's mathematical constructs: \( B = f(E + P) \). Behavior (B) is a function (f) of the environment (E) plus the person (P). The model may be conceptualized as being in
Figure 13. Life space and behavior on low violence wards

Key:  B = behavior
     f = function
     E = environment
     P = person
equilibrium: changes in either the environment or the person would be expected to change the resultant behavior. For instance, Shah has stated that nearly all people can be induced to engage in violent behavior, depending upon the setting, situation, and factors present (Armstrong, 1978). Decreased press toward support in the patients' environment might cause increased disruptive behaviors. Harry Stack Sullivan observed that schizophrenic patients exhibit more psychotic behaviors in wards staffed by unsympathetic people (Fromm-Reichmann, 1946). Decreased practical orientation and order and organization might also promote violence. Reynolds has stated that staff significantly help many patients by labeling situations and by helping them to react appropriately (Armstrong, 1978).

Nursing administration's creation of a staff environment high in practical orientation, support, and order and organization on the two low violence units was mirrored by staff's creation of press toward the same variables in the patients' environments. The findings are reminiscent of reports of Binder (1976) and Weaver and associates (1978), who used interventions with staff which were parallel in many respects to the behaviors that staff were expected to use with patients.

Psychosocial environments on the higher violence wards may be compared and contrasted with those of the lower violence wards, using data from the research. Staff on the highest violence ward (Juniper 8) tended to have less work experience than staff on the other wards. Psychosocial press from administration was very similar to that found on the low violence wards: staff experienced significantly greater press toward practical orientation, support, order and organization,
and program clarity than was experienced by staff on the behavioral control unit (Cholla:HV-2). Press toward spontaneity was also high. Behavior of the staff, arising out of the interaction of their person and their psychosocial environment, tended to create an environment for patients in which there was high press toward all ten environmental variables. The greatest press perceived by patients was toward control; next greatest was press toward autonomy; then press toward expression of anger and aggression. Patients perceived similarly high press toward practical orientation and personal problem orientation. Involvement was the category of least press for patients on Juniper 8 (HV-1).

The patients' behavior arose out of the psychosocial environment created by staff, in interaction with aspects of the patients' person. An aspect of the person of patients on the highest violence unit was compromise in perceptual-motor function. The behavior arising out of the interaction of person and environment was a high rate of patient violence.

The findings which have been described are presented according to Lewin's mathematical construct in Figure 14. As was the case in Figure 13, the model presented in Figure 14 may be conceptualized as being in equilibrium. Changes in environment or the person would be expected to change the behavior. Comparison of Figure 13 and Figure 14 shows that press from administration was essentially the same for staff on the two low violence and highest violence ward. The person of staff on the highest violence ward was different, however. This change in the equation of staff would be expected to result in
Figure 14. Life space and behavior on Juniper 8 (HV-1)

Key:  
B = behavior  
f = function  
E = environment  
P = person
different staff behaviors. These changed behaviors created different press in the patients' environment than was found in the patients' environment on the low violence wards. The high press for all environmental variables may be the result of the staff's commendable desire to help the patients improve. The profiles show a lack of discrimination in selection of treatments, however.

Results showed that patients perceived almost equal press toward practical orientation and personal problem orientation. According to Moos (1974), these subscales are linked to two of the major psychotherapeutic treatment orientations, and are analogous to action and insight psychotherapies. Another ambiguity was apparent in the similarly high press for patients to exhibit both control and autonomy. Campbell and Mawson (1978) have stated a belief that, for some patients, freedom leads to insecurity which increases patients' violent behavior. On the other hand, Moos (1974) has stated that high press toward control may be catabolic, i.e., destructive. The high press toward autonomy and control for patients on Juniper 8 should be evaluated, and press toward one or the other of the variables should be decreased.

Lack of ideological consistency and arguments over permissiveness versus control are not unique to staff on Juniper 8 (HV-1). Strauss and associates found that these conflicts are frequent among staff employed in psychiatric institutions (Strauss and associates, 1964). Disruptive patient behavior has been linked to such conflicts (Stanton and Schwartz, 1954; Caudill, 1958). It may be expected that ambiguities are especially difficult for patients with compromised perceptual-motor function. According to Reynolds, staff may
significantly help these kinds of patients to avoid violent behavior by labeling situations which may lead to physiological arousal, and by telling the patient what action is appropriate (Armstrong, 1978). Reynolds' advice would seem to suggest that selectively high press toward support, order and organization, and program clarity, along with high practical orientation, would be most helpful for these patients.

Administrative intervention may help to decrease patient violence on Juniper 8. The psychosocial profile for staff on the unit shows that there is already high press toward practical orientation and order and organization; nevertheless, a selective increase in press toward these variables should help inexperienced staff develop ideological consistency and a focused clinical application of therapeutic principles.

The psychosocial environments and persons of staff and patients on the behavioral management ward (Cholla:HV-2) were found to be different from those of staff and patients on the highest violence ward (Juniper 8) and the two low violence wards (Juniper 4 and Juniper 10). Cholla staff reported a higher mean number of attacks by patients than did staff on any other ward. In addition, the mean of attacks made upon Cholla staff by persons other than patients was three times higher than that reported by staff who worked on other units. During the recent hospital reorganization, when staff were allowed to choose the unit where they wished to work, these staff who had been frequently attacked during the past chose to work on a ward populated by patients considered dangerous.
Staff on Cholla (HV-2) perceived that the greatest press from administration was toward expression of anger and aggression. Other subscales with means higher than 50 percent of the possible range were involvement, autonomy, and spontaneity. All other means fell below 50 percent of the possible range. Staff on Cholla had significantly less press toward practical orientation, support, order and organization, spontaneity, and program clarity, than was experienced by staff on the low violence units. Behavior of the staff, arising out of the interaction of their person and their psychosocial environment, tended to create an environment for patients which was high in press toward expression of anger and aggression and control. All other subscale means for patients were below 50 percent of the possible range.

Patients on Cholla had significantly lower press toward practical orientation than was experienced by patients on the two low violence wards, and the other high violence ward. Press toward autonomy, support, and order and organization were also significantly lower.

The patients' behavior arose out of the psychosocial environment created by staff in interaction with aspects of the patients' person. Patients on Cholla had a history of violent or other antisocial behavior. Some had been convicted of crimes; others awaited trial. An aspect of these patients was compromise of the inner-personal zone of their person. Qualities of the person plus those of the psychosocial environment interacted in a way which promoted violent behavior. The findings which have been described are presented according to Lewin's mathematical model in Figure 15. Changes in
Figure 15. Life space and behavior on Cholla (HV-2)

Key:  
B = behavior  
f = function  
E = environment  
P = person
environment or the person, according to the conceptualization, would change the resultant behavior.

According to Moos (1974), the subscales of order and organization, program clarity, and control assess system maintenance dimensions. Profiles of patients on Cholla indicate that the system was maintained primarily through control, i.e., restrictions. High press toward control within treatment programs has been found to be somewhat catabolic (destructive) (Moos, 1974).

The subscales of involvement, support, and spontaneity measure relationship dimensions (Moos, 1974). Staff on Cholla showed moderately high press toward involvement and spontaneity, as compared to other subscale means of staff and patients on the ward. Patients were found to have low press toward all relationship dimensions. Restructuring the patient treatment program to increase press toward relationship dimensions may help to decrease violence on the ward. According to Reynolds, patients on criminal wards frequently have the misperception that humans are nothing but objects. Reynolds believes that these patients benefit from the cognitive dissonance created when those around them fail to provide consensual validation for this view (Armstrong, 1978). Lion and associates (1976) have found that staff avoidance significantly contributes to continuing the cycle of violent behavior in some patients. Administrative behaviors which increase staff's perceptions of support may help staff to increase support and other relationship dimensions within the patients' psychosocial environment.

The last four subscales; autonomy, practical orientation, personal problem orientation, and anger and aggression, measure
philosophical aspects of programs (Moos, 1974). Staff on Cholla had moderately high press toward autonomy, relative to other subscale means for staff and patients on the ward. Patients on Cholla had significantly lower press toward practical orientation than had patients on the other three wards in the study. Both patients and staff on Cholla had high press toward expression of anger and aggression.

Many professional staff believe that it is beneficial to openly express angry feelings (Moos, 1974). Bach-y-Rita and associates (1971) have recommended that violent patients be treated with psychotherapeutic interventions which teach them to express anger verbally. Research conducted by Moos (1974) indicates, however, that the main effects of emphasis on expression of anger and aggression within treatment environments are catabolic, i.e., destructive.

The outcome of treatments designed to teach verbal expression of anger may be influenced by other factors of the psychosocial environment. It would, for example, be safer to express such feelings within the context of a supportive environment. It would also be important for there to be sufficient order and organization and program clarity for the outcome of such verbal expressions to be fairly certain. High patient violence on Cholla may be, in part, due to the lack of press toward support, order and organization, and program clarity within the psychosocial environments of patients and staff. Increase in these variables may create a structure which can contain verbalized expressions of hostility, without allowing their escalation into physical violence.
The finding that patients on Cholla had significantly lower press toward practical orientation than had patients on the other three wards is important in light of findings reported by Bach-y-Rita and associates. Violent patients in these researchers' sample experienced a usual state of feeling useless, impotent, and unable to change the environment (Bach-y-Rita and associates, 1971). Increase in patients' press toward practical orientations may help them to learn skills necessary for goal attainment, producing positive effects which may carry over after hospitalization.

Administrative behaviors may significantly decrease the rate of violence on Cholla. Factors which serve to constellation violent behavior on the unit are: staff who have frequently been the object of violence in the past; patients who have a history of violent behavior; low press in the staff's environment toward practical orientation, support, order and organization, and program clarity; high press in the staff's environment toward expression of anger and aggression, moderate press toward autonomy and spontaneity; low press in the patients' environment toward practical orientation, support, order and organization and program clarity; and high press in the patients' environment toward expression of anger and aggression and control.

Administration may intervene in all of these factors except in the type of patient that is admitted to the ward. Staff may be screened by questionnaires and psychological evaluations, to eliminate applicants who have personal investments in becoming engaged in violent situations. Staff's press toward anger and aggression, autonomy, and spontaneity may be tempered with increased press toward practical
orientation, support, order and organization and program clarity. The content of administration's increased press for staff practical orientation and order and organization may include teaching staff methods of increasing press in the patients' environment, toward the variables of practical orientation, support, order and organization, and autonomy, along with methods of assessing appropriate situations in which patients may be encouraged to verbally express anger and aggression.

Conclusions

Management styles of psychiatric nursing administrators effect the type of milieu created by staff. The nursing administrator can help to create a safe milieu by careful selection of staff; by helping new staff to create consistent, unambiguous treatment programs; and by fostering support, practical orientation, order and organization and program clarity within the psychosocial environment of the staff.

Recommendations

1. Nursing administrators of psychiatric treatment programs should seek to become aware of the ways in which their management styles effect the type of milieu created by staff.

2. The nursing administrator can help to create a safe milieu by careful selection of staff; by helping new staff to create consistent, unambiguous treatment programs; and by fostering support, practical orientation, order and organization and program clarity within the psychosocial environment of the staff.
3. Studies should be conducted to determine psychological characteristics of attacker and victim on psychiatric wards. Phenomenological antecedents and sequelae of attacks should be studied.

4. Further studies of psychosocial environmental press of patients and staff on high and low violence wards should be conducted. Recommendations for alterations in research design include:

A. Changes in the Ward Atmosphere Scale.

   (1) The scale should be rewritten to make questions more concrete.

   (2) The words "emphasis" and "emphasize" should be deleted, since they are not understood by many patients.

   (3) The short version of the questionnaire should be used.

   (4) The researcher should request that Consulting Psychologists' Press send questionnaires other than those printed in minute pale blue ink; and that less confusing answer sheets be supplied.

B. Changes in selection of the setting for the study.

   (1) An effort should be made to find high violence wards, as well as low violence wards, which have diagnostically similar patient populations.

   (2) The study should be conducted in treatment settings which have been stable for some time.

   (3) Baseline data for incidence of patient violence on each of the wards should be based upon reports filed during six months preceding the study.
C. Changes in selection of subjects.

(1) The Ward Evaluation Scale (see Appendix A) should be used to screen patient subjects. Patients rating below 25 should not be included in the sample.

(2) From among subjects who meet selection criteria, a random sample should be drawn.

D. Changes in definitions and descriptions.

(1) The demographic data form for staff should include an explicit definition of what constitutes an attack.

(2) Data should be collected on patients to provide more information about qualities of their persons.

(3) Additional data should be collected on staff to provide more information about qualities of their persons.
APPENDIX A

ARIZONA STATE HOSPITAL WARD EVALUATION SCALE

Date_________________ Ward_______ Patient's Name________________

Please circle the number of the most accurate statement based on behavior of the past 2 weeks.

A. Doing Things for Oneself

1. Unable or unwilling to take care of himself physically.
2. Unable or unwilling to make decisions, plans, appointments, etc. for himself.
3. Able to make decisions, plans, appointments, etc., for himself, but fails to complete them.
4. Able and willing to make decisions, plans, appointments, etc. for himself and completes such things.

B. Conversation

1. Does not talk at all (or most of his conversation is unrealistic).
2. Speaks only to answer questions or talks mainly about just one subject (usually realistically).
3. Talks about several or more subjects.
4. Talks about a great variety of subjects, almost always realistically.

C. Relationships with Other Patients on the Ward

1. Shows hostility to all other patients.
2. Avoids or shows hostility to most of them.
3. Gets along all right with most patients.
4. Acts friendly with almost all patients.

D. Consistency of Acceptable Behavior on the Ward

1. Behaves consistently in an unacceptable way.
2. Shows extreme changes from acceptable to unacceptable behavior.
3. Shows changes in behavior, but they are not extreme ones.
4. Generally consistent behavior at an acceptable level.
E. **Personal Appearance and Dress**

1. Dirty, sloppy or bizarrely dressed.
2. Clean and decently dressed, but just barely.
3. Makes some attempt at neat appearance, but the result is not up to community standards.
4. As neat and clean as would be expected of a person living outside the hospital.

F. **Off-Ward Work**

1. Always refuses, or is unable to do any work.
2. Very often tries to get out of work.
3. Occasionally tries to get out of work.
4. Never tries to get out of work.

G. **Interest in Leaving the Hospital**

1. No apparent interest in leaving the hospital.
2. Some interest in leaving the hospital, but is not doing much to improve himself.
3. Some interest in leaving the hospital, and is trying to do a little to improve himself.
4. Great interest in leaving the hospital and is trying his best to improve himself.

H. **Personal Behavior on the Ward**

1. Sometimes attacks people or destroys property.
2. Sometimes instigates trouble, embarrasses or annoys people (verbally abusive, seductive, unladylike poses, etc.).
3. Sometimes acts "odd" but doesn't instigate trouble, embarrass, or annoy others.
4. Behaves, with few exceptions, in ways that would be acceptable for a person living outside the hospital.

I. **Authority of Ward Personnel**

1. Ignores or by-passes legitimate authority of employees as much as possible, or complies, vegetable-like, with any orders.
2. Occasionally ignores or by-passes legitimate authority of employees or depends too much on employees for direction.
3. Abides by legitimate authority of employees, but grudgingly.
4. Accepts legitimate authority of employees in as good faith and as good naturedly as a person living outside the hospital.
J. Ward Work Routines

1. Refuses to do regularly assigned ward chores.
2. Must be constantly reminded of his chores.
3. Routinely carries out assigned chores.
4. Takes some initiative in doing extra chores not assigned to anyone.

K. Posturing or Gesturing

1. Very often displays extremely unnatural postures or gestures.
2. Occasionally displays extremely unnatural postures or gestures.
3. Displays unnatural postures or gestures, but they are not extreme ones.
4. Displays, with few exceptions, gestures or postures which would be acceptable for a person living outside the hospital.

L. Use of Finances

1. Unable to make simple change or understand money system.
2. Understands money system but spends unrealistically.
3. Generally understands money system and spends realistically, but usually needs some assistance.
4. Manages budget and finances independently.

M. Mobility Skills

1. Unable to follow directions and gets lost on hospital grounds.
2. Able to find way around hospital grounds.
3. With assistance can follow directions and go to various places in the city without getting lost.
4. Drives or uses bus system effectively without assistance.

N. Time Management

1. Unable to manage time.
2. Occasionally manages time but needs much assistance.
3. Attends structured activities of day but unable to initiate or plan activities for free time.
4. Able to structure own time, with a good balance between work, recreation and rest.

O. Adequacy of Participation/Rehabilitation Programs

1. Unable or unwilling to participate.
2. Participation is hardly worthwhile.
3. Participation is somewhat worthwhile.
4. Participation is very worthwhile.

Comments

(Evaluate any changes in the patient, positive or negative, during the past two weeks.)
APPENDIX B

ARIZONA STATE HOSPITAL SECLUSION AND RESTRAINT PROCEDURE

Division of Behavioral Health Services General Administrative Procedures

Procedure Number 2531.1 SECLUSION AND/OR RESTRAINT

1. Purpose: The purpose of the procedure is to establish uniform guidelines for the application of seclusion and/or restraint.

2. Policy:
   a. A patient undergoing evaluation or treatment shall not be subjected to seclusion or mechanical or pharmacological restraints except in case of emergency for the safety of the person or others or as part of a written plan for the treatment of the patient, prepared by staff members responsible for the patient's care and treatment.

   b. The use of seclusion and/or restraint shall only be made by the superintendent or the clinical treatment team designee(s). The usage shall be based upon good cause, as noted below, and must be entered upon the patient's clinical record with an explanation thereof.

   c. The procedure of Nursing Service D.O.M. 2531.1 shall be the guide for patient care and protection while in seclusion and/or restraint.

3. Instructions:
   a. Seclusion and/or restraint as an Emergency Measure.

      (1) When a patient's behavior is an immediate danger to self or others, the treatment team staff may seclude and/or restrain in order to prevent injury.

170
(2) If the seclusion and/or restraint period exceeds one hour, the team must hold a treatment team meeting within the next hour. They will evaluate the patient's behavior, antecedent events, and the alternatives to and consequences of seclusion and/or restraint.

(3) If the team physician decides that the use of seclusion and/or restraint is necessary beyond one hour, the physician will write the order on the Physician's Order Sheet. The order will include the date, beginning time, and the time of expiration, which must not exceed 24 hours. The time period begins when the patient enters seclusion and/or is restrained.

(4) If the team decides there is a need for continued seclusion and/or restraint at the expiration time, the team physician will re-evaluate the patient and, should the physician approve renewal, write new orders. At any time prior to the 24-hour limit the patient shall be released if there is no current observable evidence or substantiation of dangerous behavior, or if so warranted by physical problems or other considerations. A physician must be notified if at any time during the seclusion and/or restraint medical services are needed.

(5) The incident report (Form CL-19, rev. 3-77) will be completed in triplicate as soon as possible, in all cases of seclusion and/or restraint as an emergency measure, by the person most familiar with the behavior problems leading to the use of seclusion and/or restraint.

b. Seclusion and/or Restraint as a Planned and Non-Emergency Part of the Patient's Treatment Program.

(1) When all other means have been exhausted, the treatment team may decide that a patient can learn behaviors not dangerous to self or others as a result of the use of seclusion and/or restraint. The case coordinator will develop a rationale and special instructions describing in specific behavior terms the inappropriate actions for which the patient will be placed in non-emergency seclusion and/or restraint.
A full explanation of antecedent behaviors and the expected behavioral consequences of the plan must be stated. The rationale and special instructions shall become a planned part of the patient's individualized treatment program.

(2) These instructions will be in effect on the date approved by the team and will be signed by the case coordinator, the team physician, and the team leader. At the end of thirty days, the patient will be re-evaluated and the instructions made current, if there is to be a renewal.

(3) These instructions will be placed in the chart for use by those treating the patient.

4. Definitions:
   a. SECLUSION:
      (1) Seclusion is the confining of a patient within a specific area of the hospital, usually a locked room from which the patient cannot leave unless released by a staff member.
   b. RESTRAINT:
      (1) Restraint is the limitation of movement of a patient by means of pharmacological agents or a mechanical device applied to the patient's body. The term restraint in this regulation and procedure does not include:

         1. Therapeutic medications
         2. Mechanical restraints applied solely for the purpose of preventing a patient's escape during transportation on or off the hospital grounds.
         3. Soft restraints used to prevent injury to the physically disabled, or
         4. "Lock Up" and related procedures as used on Maximum Security of the Behavior Management Unit.
c. TREATMENT TEAM:

(1) Those members of a treatment team available to participate in a decision at the time seclusion and/or restraint for a patient appears necessary.

Approved:

R. ROBERTSON KENNER, M.D.
CHIEF, BUREAU OF PROGRAM OPERATIONS

Date July 24, 1978

RRK:EED:1c
APPENDIX C

PATIENT QUESTIONNAIRE

WARD ATMOSPHERE SCALE FORM R
Rudolf H. Moos, Ph.D.

Directions: There are 100 short statements in this booklet. They are statements about wards. Please decide which statements are true for your ward and which are not. Circle True when you think the statement is true or mostly true for your ward. Circle False when you think the statement is false or mostly false for your ward. Do not put your name on the paper. If you have any questions, please ask them at any time. Thank you very much for your help.

1. Patients put a lot of energy into what they do around here. True False
2. Doctors have very little time to encourage patients. True False
3. Patients tend to hide their feelings from one another. True False
4. The staff act on patient suggestions. True False
5. New treatment approaches are often tried on this ward. True False
6. Patients hardly ever discuss their sexual lives. True False
7. Patients often gripe. True False
8. Patients' activities are carefully planned. True False
9. The patients know when doctors will be on the ward. True False
10. The staff very rarely punish patients by restricting them. True False
11. This is a lively ward. True False
12. The staff know what the patients want. True False

174
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<table>
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<tr>
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<tbody>
<tr>
<td>13.</td>
<td>Patients say anything they want to the doctors.</td>
<td>True  False</td>
</tr>
<tr>
<td>14.</td>
<td>Very few patients have any responsibility on the ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>15.</td>
<td>There is very little emphasis on making patients more practical.</td>
<td>True  False</td>
</tr>
<tr>
<td>16.</td>
<td>Patients tell each other about their personal problems.</td>
<td>True  False</td>
</tr>
<tr>
<td>17.</td>
<td>Patients often criticize or joke about the ward staff.</td>
<td>True  False</td>
</tr>
<tr>
<td>18.</td>
<td>This is a very well organized ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>19.</td>
<td>Doctors don't explain what treatment is about to patients.</td>
<td>True  False</td>
</tr>
<tr>
<td>20.</td>
<td>Patients may interrupt a doctor when he is talking.</td>
<td>True  False</td>
</tr>
<tr>
<td>21.</td>
<td>The patients are proud of this ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>22.</td>
<td>Staff are interested in following up patients once they leave the hospital.</td>
<td>True  False</td>
</tr>
<tr>
<td>23.</td>
<td>It is hard to tell how patients are feeling on this ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>24.</td>
<td>Patients are expected to take leadership on this ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>25.</td>
<td>Patients are encouraged to plan for the future.</td>
<td>True  False</td>
</tr>
<tr>
<td>26.</td>
<td>Personal problems are openly talked about.</td>
<td>True  False</td>
</tr>
<tr>
<td>27.</td>
<td>Patients on this ward rarely argue.</td>
<td>True  False</td>
</tr>
<tr>
<td>28.</td>
<td>The staff makes sure that the ward is always neat.</td>
<td>True  False</td>
</tr>
<tr>
<td>29.</td>
<td>If a patient's medicine is changed, a nurse or doctor always tells him why.</td>
<td>True  False</td>
</tr>
<tr>
<td>30.</td>
<td>Patients who break the ward rules are punished for it.</td>
<td>True  False</td>
</tr>
<tr>
<td>31.</td>
<td>There is very little group spirit on this ward.</td>
<td>True  False</td>
</tr>
<tr>
<td>32.</td>
<td>Nurses have very little time to encourage patients.</td>
<td>True  False</td>
</tr>
</tbody>
</table>
33. Patients are careful about what they say when staff are around. True False
34. Patients here are encouraged to be independent. True False
35. There is very little emphasis on what patients will be doing after they leave. True False
36. Patients are expected to share their personal problems with each other. True False
37. Staff sometimes argue with each other. True False
38. The ward sometimes gets very messy. True False
39. Ward rules are clearly understood by the patients. True False
40. If a patient argues with another patient, he will get into trouble with the staff. True False
41. Nobody ever volunteers around here. True False
42. Doctors spend more time with some patients than with others. True False
43. Patients set up their own activities without being prodded by staff. True False
44. Patients can leave the ward whenever they want to. True False
45. There is very little emphasis on making plans for getting out of the hospital. True False
46. Patients talk very little about their pasts. True False
47. Patients sometimes play practical jokes on each other. True False
48. Most patients follow a regular schedule each day. True False
49. Patients never know when a doctor will ask to see them. True False
50. Staff don't order the patients around. True False
51. Patients are pretty busy all of the time. True False
52. The healthier patients on this ward help take care of the less healthy ones. True False
53. When patients disagree with each other, they keep it to themselves.  True  False
54. Patients can wear what they want.  True  False
55. This ward emphasizes training for new kinds of jobs.  True  False
56. Patients are rarely asked personal questions by the staff.  True  False
57. It's hard to get people to argue around here.  True  False
58. Many patients look messy.  True  False
59. On this ward everyone knows who's in charge.  True  False
60. Once a schedule is arranged for a patient, the patient must follow it.  True  False
61. The ward has very few social activities.  True  False
62. Patients rarely help each other.  True  False
63. It's O.K. to act crazy around here.  True  False
64. There is no patient government on this ward.  True  False
65. Most patients are more concerned with the past than with the future.  True  False
66. Staff are mainly interested in learning about patient's feelings.  True  False
67. Staff never start arguments in group meetings.  True  False
68. Things are sometimes very disorganized around here.  True  False
69. If a patient breaks a rule, he knows what will happen to him.  True  False
70. Patients can call nursing staff by their first name.  True  False
71. Very few things around here ever get people excited.  True  False
72. The ward staff help new patients get acquainted on the ward.  True  False
73. Patients tend to hide their feelings from the staff.  True  False
74. Patients can leave the ward without saying where they are going.  True  False
75. Patients are encouraged to learn new ways of doing things. True False
76. The patients rarely talk about their personal problems with other patients. True False
77. On this ward staff think it is a healthy thing to argue. True False
78. The staff set an example for neatness and orderliness. True False
79. People are always changing their minds here. True False
80. Patients will be transferred from this ward if they don't obey the rules. True False
81. Discussions are pretty interesting on this ward. True False
82. Doctors sometimes don't show up for appointments. True False
83. Patients are encouraged to show their feelings. True False
84. Staff rarely give in to patient pressure. True False
85. Staff care more about how patients feel than about their practical problems. True False
86. Staff strongly encourage patients to talk about their pasts. True False
87. Patients here rarely become angry. True False
88. Patients are rarely kept waiting when they have appointments with staff. True False
89. Patients never know when they will be transferred from this ward. True False
90. It's not safe for patients to discuss their personal problems around here. True False
91. Patients often do things together on weekends. True False
92. Staff go out of their way to help patients. True False
93. The ward always stays just about the same. True False
94. The staff discourage criticism. True False
95. Patients must make plans before leaving the hospital. True False
96. It's hard to get a group together for card games or other activities. True False

97. A lot of patients just seem to be passing time on the ward. True False

98. The day room is often messy. True False

99. Staff tell patients when they are getting better. True False

100. It's a good idea to let the doctor know that he is boss. True False

THANK YOU FOR YOUR HELP WITH THIS STUDY.
APPENDIX D

STAFF QUESTIONNAIRE

SUPERVISORY ATMOSPHERE SCALE by Lucy Sikes

DIRECTIONS: There are 100 short statements in this booklet. They are statements about work environments in psychiatric hospitals. Please decide which statements are true for your job and which are not. Circle True when you think the statement is true or mostly true for your job. Circle False when you think the statement is false or mostly false for your job. Do not put your name on the paper. If you have any questions, please ask them at any time. Thank you very much for your help.

1. Staff put a lot of energy into what they do around here. True False

2. The nursing supervisor for this unit has very little time to encourage staff. True False

3. Staff tend to hide their feelings from one another. True False

4. The interdisciplinary team acts on nursing staff members' suggestions. True False

5. New supervisory practices are often tried on this ward. True False

6. Staff hardly ever discuss their home lives with the charge nurse. True False

7. Staff often gripe. True False

8. Staff duties are carefully planned. True False

9. The staff knows when the nursing supervisor will be on the ward. True False

10. Staff here are very rarely placed on disciplinary probation. True False

11. This is a lively ward. True False
12. The charge nurse knows what her staff wants.  True  False
13. Staff say anything they want to the nursing supervisor. True  False
14. Very few staff have any responsibility on the ward. True  False
15. There is very little emphasis on making staff more practical. True  False
16. Staff tell each other about their personal problems. True  False
17. Staff often criticize or joke about the people in charge. True  False
18. This is a very well organized ward. True  False
19. Those in charge don't explain hospital policies to the staff. True  False
20. Staff may interrupt when a doctor or nursing supervisor is talking. True  False
21. The staff are proud of this ward. True  False
22. The charge nurse is interested in the problems and joys experienced by the staff in their lives outside of the hospital. True  False
23. It is hard to tell how staff are feeling on this ward. True  False
24. Staff are expected to take leadership on the ward. True  False
25. Staff are encouraged to plan personal objectives for their job performance which will both meet organizational needs, and meet the staff member's needs for professional growth. True  False
26. When a staff member has a personal problem, the whole staff talks openly about the concern. True  False
27. Staff on this ward rarely argue. True  False
28. The charge nurses make sure that the nurses' station and other rooms reserved for staff are always neat. True  False
29. If a staff member's duties are changed, someone always tells him why. True  False
30. When staff members break the rules they are disciplined for it. True  False
31. There is very little cohesion (group spirit) among staff on this ward. True False
32. Charge nurses have very little time to encourage staff. True False
33. Staff are careful about what they say when the charge nurse is around. True False
34. Staff here are encouraged to be independent. True False
35. It is difficult for staff members to determine how to go about getting a promotion. True False
36. Staff are expected to share their personal problems with each other. True False
37. Charge nurses sometimes argue with each other. True False
38. The ward sometimes gets very messy. True False
39. Rules governing the conduct of staff are clearly understood by the staff. True False
40. When one staff member disagrees with another staff member, the charge nurse steps in and decides the matter. True False
41. Nobody ever volunteers around here. True False
42. The charge nurse spends more time with some staff members than with others. True False
43. Staff plan their own work duties without being prodded by the charge nurse. True False
44. Staff can arrange their own breaks and lunch times. True False
45. It is hard to figure out what to do to get a raise in pay. True False
46. Staff talk very little about their pasts. True False
47. Staff sometimes play practical jokes on each other. True False
48. Most staff follow a regular work routine each day. True False
49. Staff never know when the nursing supervisor will ask to see them. True False
50. The charge nurse doesn't order the staff around. True False
51. Staff are pretty busy all of the time. True False
52. The experienced staff on this ward help staff who are having difficulties fitting in.  True False
53. When staff members disagree with each other they keep it to themselves. True False
54. Staff can wear what they want. True False
55. This ward offers staff good learning opportunities. True False
56. Staff are rarely asked personal questions by the charge nurse. True False
57. It's hard to get the staff here to express conflicting opinions. True False
58. Many staff members look messy. True False
59. On this ward, each staff member knows who is in charge of him. True False
60. Once duties are assigned to a staff member, the staff member must follow them closely. True False
61. The staff usually ignores staff member's birthdays, weddings, and babies' births. True False
62. Staff rarely help each other. True False
63. It's o.k. to be yourself around here. True False
64. There is no staff in-put in the supervisory practices on this ward. True False
65. Most staff would rather do a thing the way it's always been done, instead of finding a better way. True False
66. The charge nurse is mainly interested in learning about the staff's feelings. True False
67. The charge nurse, nursing supervisor, and doctors never openly disagree in staff meetings. True False
68. Things are sometimes very disorganized around here. True False
69. If a staff member breaks a rule, he knows what will happen to him. True False
70. Staff call the nursing supervisor by her first name. True False
71. Very few things around here ever get people excited. True False
72. The charge nurse helps new staff get acquainted with other staff. True False

73. Staff tend to hide their feelings from the charge nurse. True False

74. Staff are free to come and go without having to explain their actions. True False

75. The charge nurse or nursing supervisor gives clear, practical help to staff members who are in danger of being fired for poor performance. True False

76. Staff rarely talk about their personal problems with other staff. True False

77. On this ward, the people in charge think it is a healthy thing for staff to openly voice disagreements. True False

78. The people in charge set an example for neatness and orderliness. True False

79. People in charge are always changing their minds about what they want from staff. True False

80. Staff will be fired if they don't obey the rules. True False

81. Discussions are pretty interesting among staff on this ward. True False

82. The doctor and nursing supervisor sometimes don't show up for meetings they are scheduled to attend. True False

83. Staff are encouraged to show their feelings. True False

84. The charge nurse rarely gives in to staff pressure. True False

85. The charge nurse cares more about how the staff feels than about their practical problems. True False

86. The charge nurse encourages staff members to tell one another about personal problems which may be interfering with their work performance. True False

87. Members of the staff rarely become angry. True False

88. Staff are almost never kept waiting when they have appointments with the people in charge. True False

89. The work schedule is switched around so much that staff members can't make plans for their off duty time. True False
90. It's not safe for a staff member to let anyone know that he is having problems in understanding his job. True False
91. Staff often do things together on weekends. True False
92. The charge nurse goes out of her way to help staff. True False
93. The ward always stays just about the same. True False
94. The charge nurse discourages criticism. True False
95. Staff are expected to have reasons for using a particular therapeutic approach with a patient. True False
96. It's hard to get staff organized enough to carry through on projects. True False
97. A lot of staff just seem to be passing time on the ward. True False
98. It's hard to find things when you need to use them. True False
99. The charge nurse tells staff when they are doing a good job. True False
100. It's a good idea to let the charge nurse know that she is the boss. True False

THANK YOU FOR YOUR HELP WITH THIS STUDY.
APPENDIX E

STAFF DISCLAIMER STATEMENT

To the Staff at Arizona State Hospital:

This questionnaire is part of a research study entitled, "Staff and Patient Perceptions of Psychosocial Environmental Press on Psychiatric Wards with High and Low Patient Violence." The therapeutic environment created by staff is an extremely important aspect of the care that hospitalized psychiatric patients receive. The researcher believes that many of the differences found in various treatment programs are due to aspects of the nursing leadership which affect staff while they are developing the treatment environment. Little is known about ways in which various leadership principles affect psychiatric treatment teams, and, indirectly, affect patients. It is believed that information obtained in this study will provide a better understanding of this relationship, by studying staff perceptions of leadership principles which affect their work environment in wards where there is frequent display of patient violence, as compared to wards with low patient violence.

The results of the study will be used for a master's thesis, and may also be published in professional journals. It is expected that the results will be useful in developing leadership principles which will be of benefit to both staff and patients in psychiatric hospitals. Results of the anonymous grouped data and conclusions drawn will be given to the administrators and staff of this hospital, to provide feedback on programs now in effect.

Your participation in this study is completely voluntary. The completion of this questionnaire will require approximately 20 minutes of your time. There will be no costs, no benefits, and no risks to you from your participation in the study. You may withdraw from completing the questionnaire at any time, and you may refuse to answer any questions without incurring any ill will. Your completion or non-completion of the questionnaire will in no way affect your job. Completion of the questionnaire indicates that you have willingly consented to participate in this study. Be assured that all questionnaires are anonymous and all information will be kept confidential. Your responses will be grouped with the responses of other staff members to provide the information sought. There is no record of your participation in the study.

Thank you for your help in this study. The success of the project depends upon your participation, and I believe that you will find it
interesting. You and other staff members will receive a summary of the results of the study upon completion of analysis of the data.

If you have any questions about the research project, the consent statement, or the questionnaire, please ask them at any time.

Lucy Sikes  
c/o Master's Program  
College of Nursing  
University of Arizona  
Tucson, Arizona
APPENDIX F

STAFF DEMOGRAPHIC DATA FORM

STAFF DEMOGRAPHIC DATA: Please answer the following questions about yourself.

1. I am a [ ] male [ ] female. (Please circle answer).

2. On my last birthday I was: [ ] 18 to 28
   [ ] 29 to 39
   [ ] 40 to 50
   [ ] over 50

3. My job category is: [ ] R.N.
   [ ] L.P.N.
   [ ] Behavioral Health Series Personnel

4. I have worked in this hospital for [ ] (how long?).

5. I have had a job related to psychiatry for [ ] (how long?).

6. Did you finish high school? (please circle) [ ] yes [ ] no.

7. How many years of education have you had after high school? [ ]

8. While I have had this job, I have been attacked by a patient [ ] (how many times?).

9. During my lifetime, I have been attacked by a patient [ ] (how many times?).

10. During my lifetime, I have been attacked by persons other than patients [ ] (how many times?).
APPENDIX G

PATIENT DISCLAIMER STATEMENT

To the Patients at Arizona State Hospital:

I am a student at The University of Arizona in Tucson. I am working on my Master of Science Degree in Nursing.

I am interested in learning more about psychiatric hospitals. I want to learn about wards where patients hurt staff and other patients. I also want to learn about wards where people don't get hurt. I think there are differences in these wards. This may be why people get hurt.

I will write a book about what I learn. The book will be my master's thesis. It will be titled, "Staff and Patient Perceptions of Psychosocial Environmental Press on Psychiatric Wards With High and Low Patient Violence." I will also write about what I learn for a magazine. By doing this, I hope that I can help psychiatric patients.

To learn about psychiatric hospitals, I need the help of patients. I have a list of sentences about psychiatric wards. You can tell me which are true for the ward where you are now.

Your name will not be put on the paper. No one will know who helped and who did not help. I will put everyone's answers together so that no one can be pointed out. People working at this hospital will be told what groups of patients say. They will not know what you have said.

It will take you about 20 minutes to help me. It will not cost you anything. The study will not hurt you. It will not help you. You do not have to do the study. It's O.K. if you start the study and do not finish it. You do not have to do anything that you do not want to do.

Your doctor will treat you in the same way, whether you do the study or not. The staff will be the same toward you, whether you do the study or not. There is no danger to you.

I will ask you to look at sentences and then to circle true or false. You do not have to do this if you don't want to. If you circle answers, you are saying that it's O.K. for me to use your answers. I will put your answers together with other patients' answers. No one will know what you said.

You may ask questions at any time.
Thank you for your help in this study. I think you will like it. I will write to you and tell you about the group’s answers, if you want. If you would like for me to do this, please send a post card with your name and address to: Lucy Sikes, c/o Master’s Program, College of Nursing, University of Arizona, Tucson, Arizona.
APPENDIX H

PATIENT DEMOGRAPHIC DATA FORM

PATIENT DEMOGRAPHIC DATA: Please answer the following questions about yourself.

1. I am a    male    female. (Please circle answer).

2. On my last birthday I was:  18 to 28
   (Please circle age group which applies)  29 to 39
   40 to 50
   over 50

3. I have been a patient at this hospital for _________ (length of time for this admission).

4. I have been a patient on this ward for _________ (length of time for this admission).

5. Did you graduate from high school?   yes   no   (Please circle).

6. How many years of education did you complete after high school?____
## APPENDIX I

### SCORING KEY FOR WARD ATMOSPHERE SCALE

AND SUPERVISORY ATMOSPHERE SCALE

<table>
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<tr>
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**Practical Orientation**

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**Anger and Aggression**

**Personal Problem Orientation**

**Order and Organization**
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