



5-1995

Lakeshore Mental Health Institute - The Chota Building Lobby: A Case Study of Perceived Image

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To the Graduate Council:

I am submitting herewith a thesis written by Patricia J. Milan entitled "Lakeshore Mental Health Institute - The Chota Building Lobby: A Case Study of Perceived Image." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Architecture.

Josette Rabun, Major Professor

We have read this thesis and recommend its acceptance:

Carl Dyer, Stanley Rabun

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

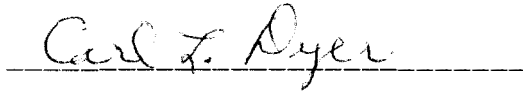
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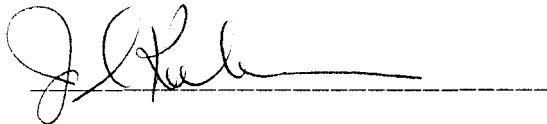
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Dr. Josette Rabun, Major Professor

We have read this thesis and
recommend its acceptance:





Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

**Lakeshore Mental Health Institute - The Chota
Building Lobby: A Case Study of Perceived Image**

A Thesis
Presented for the
Master of Science
Degree

The University of Tennessee, Knoxville

Patricia J. Milan
May 1995

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ACKNOWLEDGEMENTS

I would like to thank and express my sincere appreciation to my major professor, Dr. Josette Rabun, for her guidance, patience, and continual encouragement. I would also like to give a big thanks to the committee members, Dr. Carl Dyer and Stanley Rabun, for their assistance,
input and support.

Many thanks to all those at Lakeshore Mental Health Institute, especially to Lee Thomas, Ellen Adcock, and the recreational staff for the many inconveniences they endured to assist me.

I would also like to thank those who spared the time to participate in this study, and Don Broach for his much needed assistance in the data analysis.

Special thanks goes to my family and many friends who supported and encouraged me when I thought I would never finish. My sincere thanks to you all.

ABSTRACT

The community image of mental institutions has long been a negative one. Although many studies have examined the effect of the interior physical environment on patients in mental institutions, very little has been done to explore the effect of the interior environment of mental hospitals on public opinion. This case study was designed to determine if the physical environment plays a significant role in how various people of the community perceive Lakeshore Chota building lobby, and how their opinion may differ from viewing the existing lobby and then a 1" = 1'0" scale model of the lobby renovated. The opinions of three subject groups, mental health organization members, design professionals, and the layperson were taken through the use of two questionnaires. Fifty-four subjects were asked to view the existing lobby and fill out the first questionnaire. They were then taken to view the scale model of the lobby and fill out the second questionnaire. An analysis of variance with three variables, one between factor (subjects) and two repeated factors (environment & dimension) was used to evaluate any differences between subjects, the two environments and seven dimensions within each environment. The results indicated that all subjects preferred the modeled environment. The mental health volunteers were the least critical, the laypeople were in the middle, and the designers were the most critical. All the dimensions were statistically different between the two environments, but the means indicated that the window treatments and the flooring were most

likely the most significant. Ninety-six percent of subjects agreed that the interior space of a facility affected their opinion of the healthcare of a facility. Although the results from this case study can not be generalized for all mental health facility, it does contribute to a research base for a better understanding of community members' opinions towards mental health facilities.

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CHAPTER I

INTRODUCTION

Statement of the Problem

The mentally ill have long been considered not capable of maintaining a place in society with "normal people". They were often removed, locked away from society, and treated like one of societies' criminals. In the past, mental institutions were placed at a distance from communities in literally institutional and confined buildings designed to house patients, not to help them recover from their sickness. The buildings at these mental institutions were barren of light, color, texture, or visual warmth (Grob, 1973). Although society is beginning to change its perception of mental illness and accepting it as an illness like other medical problems, it appears that society still has not changed its image of the cold, stark environment of the interiors of these institutional buildings. Presently, reform is occurring in the United States with health care needs, and mental illness care will also be part of these changes. With the past social concept of the mentally ill and the facilities in which they should inhabit, a social problem exists in the ability to prompt change and understanding of mental health institutions. If the public is presented an interior environment that represented the 'asylum' as a place of comfort, security, and hominess for the mentally ill patient, then perhaps their perception would change to a positive one. "Family members are less apprehensive about admitting a loved one to a mental health unit if the environment is residential, cheerful, and

comfortable. Family and friends visit more frequently and experience less anxiety in that type of setting (Malkin, 1992)." By utilizing interior design to reflect a place of security, comfort and hominess, then the first small step will be taken to improve the image of state mental institutions.

This study was designed to determine if the physical environment plays a significant role in how various people of the community perceive mental health facilities and how their perceptions may differ. The study examined the attitudes of members of mental health organizations, design professionals, and the layperson towards an existing lobby and their attitudes towards a 3-dimensional model representing a possible renovation of the lobby at Lakeshore Mental Institute - Chota Building. By reviewing the attitudes towards the present physical environment, and then reviewing the attitudes towards the renovated environment, an idea of how an improved physical setting can alter peoples' perceptions of mental health facilities can begin to be studied.

Review of Literature

The related literature includes the history of mental health facilities and their social image, the history of Lakeshore Mental Health Institute and their attempts to alter public perception, and the role of the physical environment to mental health institutes.

History of Mental Institutions

England built the first mental asylum in London in the thirteenth century, and others soon followed in other western countries. Despite the merciful intent of the founders of these hospitals, the conditions were horrible. "Violent patients were exhibited to the public for a fee and the harmless ones were sent onto the streets to beg. Beatings, chains, and other physical means of restraint were common" (A Long Way, 1976). In the eighteenth century, through the efforts Benjamin Franklin, the first hospital in America opened to mentally ill patients in Philadelphia. However, the first hospital to deal with mental patients exclusively was built in Williamsburg, Virginia, in 1773. Regardless of the good intentions of the pioneers in the field to help these people, the conditions were still less than ideal. Located away from the patient's home, the hospital was simply, less than adequate, custodial care (A Long Way, 1976). Many years passed before a concern for the treatment of illness was an issue. In 1946, President Truman signed Public Law 487 to help treat the mentally ill, not just give them shelter out of sight of society. "The purpose of this act was the improvement of the mental health of the people of the United States through the conducting of research... relating to the cause, diagnosis, and treatment of psychiatric disorders... and fostering such research activities... training personnel... and assisting states..." (A Long Way, 1976). This was the beginning of the deinstitutionalization movement that would remove many patients over the next forty years from institutions. "A movement began at this time to expand

the services beyond the state institutions - to move the services to the community and to take away the shame that went with "being crazy" (A Long Way, 1976). With this lack of understanding and fear that has surrounded mental illness, society maintained its image of the past understaffed and overcrowded hospitals.

Even though today there is still a certain stigma attached to a mental hospital, they do serve a necessary function in the community. Many patients cannot function in a free community and community based services do not meet their needs. L. Bachrach states "chronic mental patients, like patients who have other kinds of chronic illness, may even at times benefit from periods of hospitalization, either short-term or long-term, and that there are sometimes therapeutic advantages in their removal from the community. This is particularly true for those patients who exhibit a need for the safe haven or refuge, either temporary or permanent, that is implicit in the concept of asylum". (Bachrach, 1986, May). The system began with nothing but institutionalization. Over the years, society decided that mentally ill patients should be deinstitutionalized, and the state mental institution should be completely phased out. However, it is apparent that society needs both services in the community, and that there is a place for those patients that need structure and an institutional environment. With this in mind, the public perception of the role of state mental institutions should be a positive one because they serve as a place for those who need it. However, a positive opinion is not the usual

case. The community perception of state mental institutions is typically believed to be a negative one.

History of Lakeshore Mental Health Institute

Tennessee's Mental Health Institutes historically follow the pattern of other mental hospitals in the United States. The Tennessee Lunatic Asylum in Nashville, Tennessee opened in 1840 and soon became overcrowded creating the need for a hospital in east Tennessee. Hence, in 1886, the East Tennessee Hospital for the Insane opened at Lyons View near Knoxville; 47 men were transferred from Nashville and five days later 52 women made the same trip. The original hospital included a central building (presently the Administrative building) with wings to the east and the west with three wards in each. The original building could house up to 250 patients (Fitzgerald, 1976). Over the years, the state added many new buildings and programs, and the patient population grew to an all time high of 2,767 in 1964. In the 1960's many changes took place to move from an institutional type setting to deinstitutionalization. State mental hospitals became a part of the community. With these changes, attempts to alter the communities perception of the hospital were also undertaken. The name was changed to Eastern State Psychiatric Hospital (and again changed in 1978 to Lakeshore Mental Health Institute). The names of individual buildings were changed to less institutional names. The grounds were opened to the Knoxville Recreation Department and the front gates were removed. In 1964, Dr. Wachel, the superintendent,

said, "This is not a prison, and I make a lousy warden" (Fitzgerald, 1976). Although the hospital's efforts were strong, they took a step back with the scandal of 1971. The Knoxville legislator, Richard Kreig, made a midnight visit to the hospital with two news reporters. They published several articles over almost a year's time about the overcrowded and less than ideal conditions of the original old buildings. The result of this scandal was the resignation or firing of many hospital officials, plus a new superintendent was appointed. The new superintendent had the old wings of the original hospital and two other older buildings demolished. Then in 1973, the Chota building, a modern facility for the hospital opened. Chota presently acts as the admissions building and houses almost half of all the beds currently operating at Lakeshore. This building has the highest rate of traffic and the interior of this building is the most representative of Lakeshore to people visiting. By gathering data on the public opinion of the Chota building lobby at Lakeshore, this researcher and Lakeshore Mental Health Institute may gain an idea of how the interior plays a role in forming community perceptions of a mental institution.

Mental Institutions' Environments

The effects of interior environments on human behavior and the well-being of patients and staff in mental health facilities is well documented (Christenfeld, Wagner, Pastva, and Acrish, 1989; Corey, Wallace, Harris and Casey, 1986; Goffman, 1961; Malkins, 1992; Sommer, 1969). Researchers in mental health fields have speculated

for many years that the physical environment impacts treatment as well as the patient's perception of their environment (Brodsky and Platt, 1978; Corey, Wallace, Harris and Casey, 1986; Grob, 1966). J. Malkin (1992) notes that a common problem with patients in the past was "stimulus deprivation which was caused by bleak, colorless environment surrounding patients." Ann Sloan Devlin conducted a study to review staff perceptions of a psychiatric ward renovation utilizing a questionnaire for before and after effects. "Results indicate significant pre-post improvements in the ratings of day hall furnishings and plants" (Devlin, 1992). "Studies have demonstrated that modest changes in decor, furnishings, and even the arrangement of furniture can have a therapeutic effect" (Devlin, 1992). J. Malkin (1992) also brings to light another important element about image. She states, "hard architecture - bars on windows, concrete block walls, gloss paint, hard-surface floors, and indestructible, uncomfortable furniture - must destroy the patient's self-esteem "to learn that the staff of the treatment center holds such a low opinion of him and is so frightened of his actions" (Spivack, 1984, 88)." She also makes the point that, "architectural detailing, style of furnishings attention to housekeeping and maintenance, lighting, use of space (crowded or spacious), and color influence the viewer's perception of the occupants' status, societal worth, and prognosis for recovery (Malkin, J., 1992)." This again reinforces the long held image by society that mentally ill people are lesser beings by creating an environment which is appropriate for these patient's worth to the community. A. R. Foley and B. N. Lacy confirm the

importance of collaboration of psychiatry and architecture as well.

"In attempting to meet the total needs of the patient, care must be taken to avoid unnecessary separation from his community, whether it be in terms of geographic location, as has occurred in the past, or in the nature and design of his immediate physical surroundings"

(Foley, A. R. and Lacy, B. N., 1967). Foley and Lacy (1967) also concluded that "the critical issue is to program needs so that the psychiatrist avoids preconceived architectural solutions and so that the architect does not build into the facilities misconceptions of mental illness." As can be seen in Figure #1, which shows what is typically in a state mental health facility, the lobbies are often void of the many elements mentioned above for a sensitively designed space. Heavy metal framed furniture with vinyl upholstery, hard surfaced floors and walls, and very little color are often the norm (see Figure #1).

'Misconceptions of mental illness' and the environments in which the mentally ill inhabit are the issues of concern for this study. There is very little research on the layperson's, design professional's, or mental health community volunteer's perception or attitude of the mental institution's physical environment, and how these attitudes reflect the overall communities' image of the state mental institution.

Rationale

Even though there has been many changes in the medical field to help patients become part of the community with the deinstitutionalization movement which began in the sixties, the

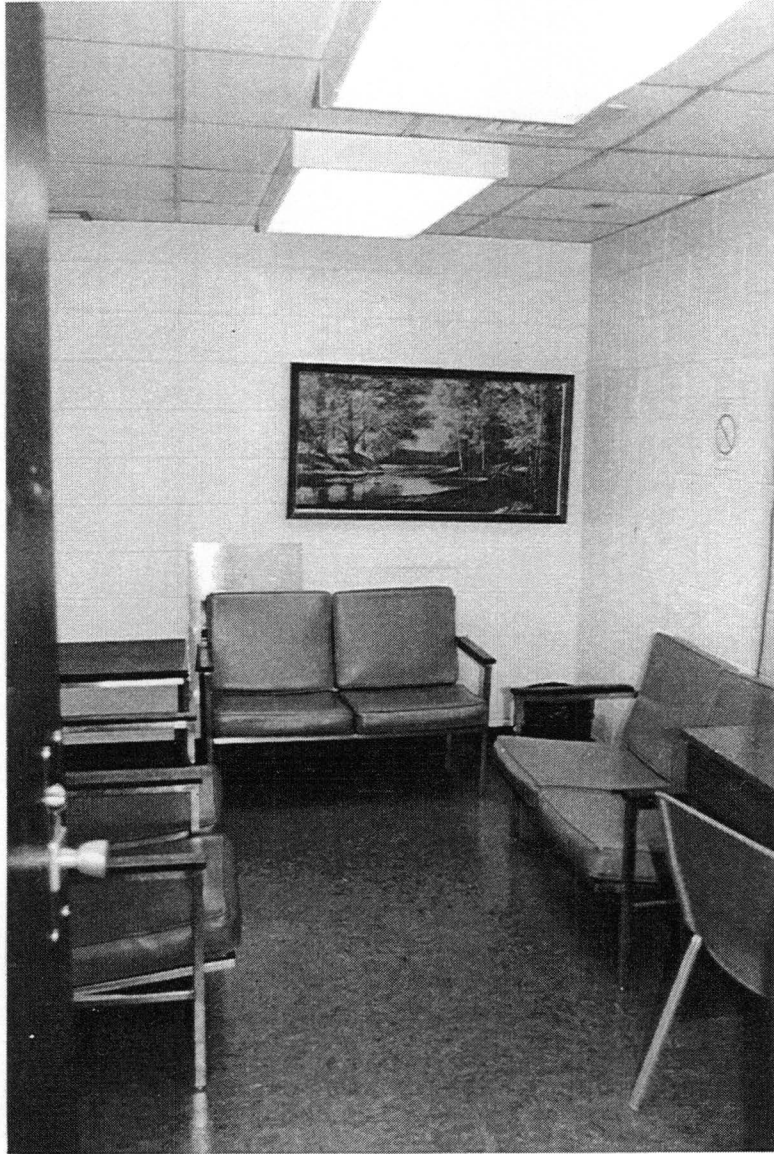


Figure #1 - *Existing typical state lobby* - This photo illustrates a typical state mental health facilities waiting or day room environment. Notice the metal furniture, the hard surface walls and floor and the lack of color.

community perceptions have not changed so quickly. A long standing image of what these facilities should look like is still apparent in society today, and the media continues to encourage the stereotype of the mentally ill as dangerous and deranged (Gallagher, 1987). Presently reform is occurring in the United States with health care needs, and it appears that mental illness care will also be part of these changes. However, mental health facilities will be the last in funding and consideration for change without a further research base. With the past social concept of the mentally ill and the facilities in which they should inhabit, a social problem exists in the ability to prompt change and understanding of mental health institutions. Although today there are many factors that influence and play a part in the publics' opinions of these institutions such as fear, misunderstanding, horror folk tales and old stories, that may very well have been true. One of the influencing factors that should not be over looked is the physical environment.

Research Questions

This study was designed to examine the attitudes of members of mental health organizations, design professionals, and the layperson towards an existing lobby and their attitudes towards a 1' = 1'0" scale model representing a possible renovation of the lobby at Lakeshore Mental Institute - Chota Building. The study tested the three subject groups opinions for seven dimensions in each environment for comparison: general opinion, color, flooring, window treatments, seating arrangement, furniture appearance, and lighting.

Research Questions:

1. Are designers or mental health professionals more critical than laypeople in their opinions about the two lobby environments, the existing and the modeled, at Lakeshore?
2. Do all the subjects find the renovated environment to be better, in general, than the existing lobby at Lakeshore?
3. Did any of the subject groups not find the renovated lobby to be significantly better than the existing Chota lobby at Lakeshore? Is there any difference of opinion between subject groups on which environment is considered better?
4. If the subjects like the renovated model better, than what dimensions are more significantly different from the modeled lobby to the existing Chota lobby?
5. Do people generally form their opinions about health care based on the appearance of an interior environment?
6. What do people notice the most or least in any interior environment among color, flooring, window treatments, seating arrangement, furniture, and lighting?

Hypotheses

H1: *The three subject groups will display similar attitudes across all dimensions and both environments.*

H2: *There is no interaction between environments across all subjects and across all dimensions.*

H3: *There is an interaction between the three subject groups and the two environments across all dimensions.*

H4: *There is no interaction between the seven dimensions and both environments across all subjects.*

Descriptive statistic means, rather than an ANOVA, were used to determine how subjects perceived health care based on environment, and how they ordered their opinions on what were important, in a general interior environment. Two questions of interest were:

Q1: *Do the majority of all subjects agree with the opinion that, the interior environment of a space affects their overall opinion of a health care facility?*

Q2: *In general, towards any interior environment, what do people consider the most important or least important dimension?*

Significance of the Study

This study indicated whether or not the physical environment affects the attitudes and perceptions of people in the community and what those attitudes are. The history behind state mental institutions and Lakeshore make it difficult to change the community perceptions of what mental institutions are and what they physically look like. Such findings suggest possible ways in which state mental institutions could improve their public relations through altering the physical environment.

It can be reasoned that a lack of substantial research on the effects of the physical environment on the image of the mental institute causes little change in the current state. With the aging population and changes in the United States health care system, change will become necessary. Therefore, the necessity for analyzing and collecting data on the physical setting as it impacts the social and psychological opinions of the community is pertinent. Although this case study was only one facility the possibility of giving a new community image to other facilities increases a great deal by contributing to the research base and incorporating up-to-date design ideas and concepts in mental health facilities.

CHAPTER II

METHODOLOGY

Sample Population

Subjects for this study were 54 adults, 18 years of age or older, and from three different population groups - design professionals, mental health community volunteers and professionals, and the layperson. The design professional was defined as someone with at least 3 years of college education in the fields of architecture or interior design. The mental health community volunteer is defined as persons involved with the Office of Community Services, Outreach, Friends of Lakeshore, Inc., Tennessee Alliance for the Mentally Ill (TAMI), Knoxville Alliance for the Mentally Ill (KAMI), or the Mental Health Association (MHA). The layperson is defined as individuals with limited exposure to the mentally ill, and have chosen professions in fields other than design or fields related to psychology. Twenty individuals were asked to participate in the study from each of the 3 population groups. Eighteen designers, nineteen mental health organization people, and seventeen laypeople participated. All subjects were required to sign an informed consent form as required by the University Human Subjects Committee, and only individuals who consented to their participation were included as subjects (see Appendix #A).

Measures and Procedures

The study utilized two questionnaires as the instruments for data collection, and the existing Chota lobby represented the existing finishes and furniture arrangements for the mental institution (see Appendix B). A 1"=1'0", 3-D scale model represented an improved interior environment of the lobby. The 3-D model design was limited to finishes and furniture within a reasonable budget affordable for a state renovation and range from low to mid-grade in price. The questionnaires asked the subjects' opinions on: mental institutions overall, the physical environment of the Lakeshore Chota building lobby, the improved modeled lobby, and the various dimensions within the environments (general view, colors, flooring, window treatments, seating arrangement, furniture, and lighting). The study involved a pilot check of the effectiveness of the questionnaires and the 3-D model with six subjects prior to administering to the final subjects. Some adjustments were made and the final questionnaires were established. Subjects were then scheduled for a time to meet within a period of three weeks. There were appointments with as few as one to as many as nine, but the majority of the groupings were three to five subjects at a time. The subjects were then asked to meet at Lakeshore Mental Health Institute on the administration building's entrance steps. Once subjects were gathered, they were given a clip board with the consent form and the two questionnaires. They were asked to sign the consent form and answer the first page of questionnaire #1 before seeing the Chota building lobby. Once this was complete, subjects were escorted to the Chota building lobby and

instructed of the four locations, indicated by numbers taped to the floor, in which they were to stand to answer the different sections of questionnaire #1 (see Appendix B). They were asked to disregard anyone that may be in the lobby at the time and try to answer the questions with as little distraction as possible. Upon completing questionnaire #1, subjects turned in the questionnaire with their consent form, and they were then escorted to the room where the model was set up. The subjects then waited two or three minutes for the model to be positioned for viewing and a light fixture plugged-in in preparation for the last portion, lighting, of questionnaire #2. Subjects were then instructed to move around the model and to "get down in it" to best visualize themselves where the numbered figures were placed. They were also told to stop when they got to the lighting section of the questionnaire and wait for everyone to get to that same point. The "ceiling" of a portion of the model was then placed on the model and subjects responded to those questions pertaining to lighting. After they completed the final questions, they turned in the clip boards and questionnaires. The entire process took approximately 30 minutes and all subjects were always escorted and instructed by the primary researcher.

The Questionnaires

The two questionnaires, as the instruments for this study, were designed by this researcher to ask specifically about the Chota building case study at Lakeshore, as well a few general questions about subject's opinions on interiors (see Appendix B). A Likert scale

was utilized for all questions, except the demographics, and responses ranged from 1 to 5 with: 1 = strongly agree, 2 = agree, 3 = uncertain, 4 = disagree, 5 = strongly disagree (Dane, 1990; Touliatos & Compton, 1988). The first page of questionnaire #1 asks seven general questions not to be compared. This portion of the questionnaire was designed for descriptive purposes and to answer two of the research questions. The 2nd page of questionnaire #1 begins the comparison sections. In both questionnaires, there were seven sections of questions which relate to seven different dimensions: general opinion, color, flooring, window treatments, seating arrangement, furniture, and lighting. The subjects were asked to stand in four different locations in the existing lobby or visualize themselves in four different locations for the model. The questions were basically the same for both the existing lobby and the model so that they could be statistically compared. The last section of questionnaire #2 asked demographical questions about the subjects for descriptive purposes. A pilot test, with six subjects, was ran for reliability, and all but a few sections had more than a 0.7 reliability coefficient. A few changes were made to those questions to improve the final data reliability of the questionnaires. The final reliability, with 54 subjects, was better than the pilot, but the general opinion sections and the color sections still resulted to be slightly less than 0.7 for the reliability coefficients.

The Scale Model

Although the Chota lobby was better than most state facilities, it was necessary to take into account many issues for re-designing it (see Figures #2 - #4) (see Appendix C). Although this study was mostly concerned with how the interior effected the public's image of the facility, the interior design itself had to meet the program need of the space. These needs included issues such as budget, safety, and maintenance. However, the biggest issue in the design was how to best serve the patient's needs. Although this space was technically considered a lobby and visiting area, its ultimate use was a day room for patients (see Figures #5 - 7). Some of the main patient uses of the room are: visit with friends and family, watch television, group activities with volunteer groups such as bingo and cards, relax and drink sodas or eat a snack from vending machines and wait for the dining room to open for meals. The reception desk/ entrance area is used for: employees to sign in and out, receptionist to monitor patients both inside lobby and outside in the entrance area, and direct visitors, police, and doctors to appropriate areas (see Figures #2 & #3).

The lobby was considered a high traffic area and anyone coming to this building must come through this space. The overall concept for the space was to create a more comfortable and aesthetic environment that is conducive to the many uses of the room.



Figure #2 - *Existing front entrance doors* - This is a view of the front entrance doors to the existing lobby; notice the draperies and their length.

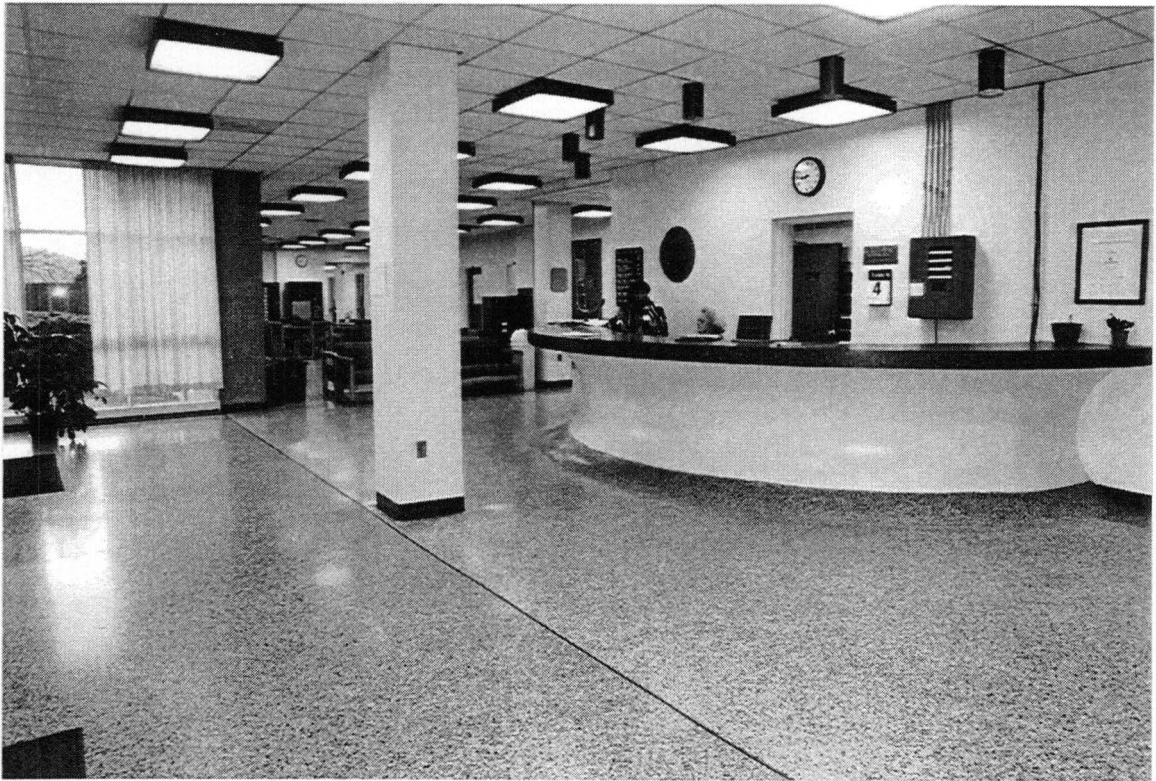


Figure #3 - *Existing lobby front desk* - This is the front desk where anyone coming to Lakeshore would ask for a patient or directions, and where all employees sign-in and out. The receptionists also monitors patients' activities through out the lobby. To the left is the seating area and the back of the television.



Figure #4 - *Existing lobby seating area: Photo #1* - This is the lobby seating area - notice the back of the television facing the reception desk and the box-like surface mounted light fixtures on the ceiling.



Figure #5 - *Existing lobby seating area: Photo #2* - This photo was taken while standing beside the television showing the lobby's seating area. Note the way the seating is placed against the wall and backed to the corridor in rows.



Figure #6 - *Existing lobby seating area: Photo #3* - This is the lobby viewed from the vending machine area. This end of the room has round activity tables for games and socializing.



Figure #7 - *Existing lobby seating area: Photo #4* - This photo shows the activity table area in the foreground and the TV area in the background. Notice the red and blue color scheme.

Therefore, the design for the 1" = 1'-0" scale model (see Figure #8), to achieve the program and design needs of the Chota lobby within the feasibility constraints, consisted of:

- changing the upholstery of the red chairs and loveseats to green
- adding carpet to designate the seating area
- changing window treatments to vertical blinds
- adding wall vinyl and a hand rail to the walls
- rearranging and removing some of the existing furniture
- changing the existing fixtures to 2x2 recessed fluorescent fixtures
- adding several large prints of nature scenes for wall decor
- adding five large silk trees throughout the lobby area

COLOR - The existing red and blue furniture was new and needed to be kept in the new design because of financial limitations, and maintenance ease was also extremely important (see Figure #7). This limited the color scheme to consist of either blues or reds. Therefore, a blue and green scheme was chosen and a few of the red chairs would only have to have new upholstery (see Figure #9). This was decided upon because the existing red and blue visually fought with each other and gave a sense of restlessness. "Our eyes are unwilling to accept the lack of contrast between the two colors of opposite temperatures. When two warm tones or two cool tones are juxtaposed, however, they form an acceptable analogous color palette (Ladau, Smith, & Place, 1989)." By combining neutral green, a color which is warm and cool at the same time, with the cool calming



Figure #8 - *Overview of the entire model* - This is an overview photo of the entire model. The length of the model base was 7 feet and the width was 3 feet. Note how the addition of carpet to the floor divides the circulation areas from the seating areas.



Figure #9 - *Modeled lobby seating area: Photo #1* - This photo of the scale model shows the renovated seating, with the new blue/ green color scheme, looking towards the existing location of the reception desk. Note the wall decor of nature scenes on the back wall and the use of plants to add to the feel of the outdoors in the space.

blues, a more restful and peaceful, yet warm atmosphere was achieved. If the blues were the only colors in the room, it would have felt much too cool and sterile. However, "green, the color of nature, is generally perceived as being tranquil, giving a feeling of security (Ladau, Smith, & Place, 1989)."

TRAFFIC PATTERNS/ FLOORING - It was important to visually separate the seating areas, from the corridors, and the reception desk (see Figures #8 & #9), (see Appendix C). The traffic problem was to be resolved by utilizing carpet in the seating area to give the impression of a separate area from the corridors. This also helped to give the seating area a more intimate feeling and less "out in the open" atmosphere. A level loop, synthetic backed, high gauge, solution dyed antimicrobial nylon carpet was selected for maintenance and cleanability.

WINDOW TREATMENTS - Vertical blinds were utilized because they require less maintenance than draperies, are less of a fire hazard, and contribute to a more contemporary interior (see Figures #2 & #10). The green inserts were chosen to work with the existing blue furniture and the overall blue/ green color scheme.

WALL TREATMENT - Wall vinyl was selected for durability, cleanability as well as the aesthetic appearance textured wall vinyl gives (see Figure #11). The texture softens the overall appearance of the room from the existing stark plain white walls, and the blue hue adds to the blue/ green color scheme (see Figure #4). The vinyl also has a Type II rating for durability and compliance with fire codes.



Figure #10 - *Modeled lobby seating area: Photo #2* - This photo of the model shows the television viewing seating group. The vertical blinds which would replace the existing draperies are also shown in this photo.



Figure #11 - *Modeled lobby seating area: Photo #3* - This photo shows the middle seating area for visiting and sitting alone. Notice the back walls which show the new wall vinyl and chair rail.

A durable PVC hand rail system was utilized to help protect walls (see Figure #12). It also visually breaks up the height of the walls and gives a more human scale to the space. The dark blue PVC enhances the color scheme, and the wood inset adds warmth as well as helps to continue the line of the existing wood rail along the window wall.

SEATING ARRANGEMENT - The arrangement of the furniture was selected to give variety for the many uses of the area in both a sociopetal and sociofugal way (see Appendix C). J. Malkin (1992) discusses a study by Spivack, Barton, and Mishkin that examined behavior patterns of spatially differentiated areas of mental health facility dayrooms. They found eight major behavioral events the patients participated, which seem to be relatively the same as Lakeshore. They were: talking, participating in games, passively watching others, reading, standing alone, lying on a sofa, sleeping in a sitting position, and sitting alone. The results of this study were considered in the arrangement of Lakeshore's furniture and three sub-areas were created with all areas visible from the reception desk (see Figure #13). By using less furniture, the three areas would also be less crowded and could better support the functions of the room and circulation. The round tables, for games and other social interaction, were placed at the end of the seating area closest to the reception desk, a seating area, for visiting and/or sitting alone, was placed in the center portion of the space (see Figure #14), and the television viewing area was placed on the far end of the room (see Figure #15). By relocating the television to the far end of the room,



Figure #12 - *Modeled lobby seating area: Photo #4* - This photo shows the new wall vinyl and chair rail which continues from the existing wood rail on the windows. One of the nature scene prints can be seen very well in this photo as well.



Figure #13 - *Modeled lobby's three sub-areas* - This photo shows the floor plan with three sub-areas: the television viewing area to the right, the visiting or sitting alone area in the middle, and the social activity area with tables on the left.



Figure #14 - *Modeled lobby's activity and sitting sub-areas* - The activity sub-area and the visiting or sitting alone sub-area are easily seen in this photo.



Figure #15 - *Modeled lobby's television sub-area* - The television sub-area is illustrated in this photo.

the television back does not face the main entrance area and become the focus of attention as someone enters the building (see Figure #4).

LIGHTING - The existing surface mount fixtures drew attention to the lighting and gave the appearance of boxes attached to the ceiling all in a row (see Figure #4). These fixtures were replaced with recessed 2x2 fluorescent parabolics placed so that they created a better overall coverage of light without being in equal rows on the ceiling (see Figure #16). This would draw less attention to the ceiling and give the lobby a more contemporary and cleaner appearance.

WALL DECOR AND PLANTS - The art work was selected to support the concept behind the color green by bringing nature in doors and giving a feeling of security and tranquillity (see Figures #9, #12 & #16). The realistic art work was also selected because some abstract or amorphous images might distress and disturb some patients. The prints would be covered in plexiglass and securely attached to the wall for safety. Six to eight foot tall trees in planters also bring the outdoors in and add to a more comfortable and visually pleasing environment. They also add human scale to the space.

All of these improvements were reasonable in cost, should be easy, or easier than the existing to clean and maintain, and would not be a safety threat to visitors or patients.

Design and Analyses

This study utilized an analysis of variance design. The dependent variable measured the respondent's attitude toward



Figure #16 - *Modeled lobby's new lighting fixtures* - This photo shows the new lighting with 2x2 recessed fixtures, the fixtures are staggered as well to keep them from looking as if they are in rows (compare with Figure #4). Bringing nature inside with the use of plants and the color green on the vertical blinds and chairs is also shown in this photo.

various design features. The study had three independent variables, one between (subject group) and two repeated measures (environment & dimension). Several questions could be answered by using the ANOVA procedure: 1) Was there a significant main effect for the between - subjects factor? 2) Was there a significant main effect for the with-in factors? and 3) Was there a significant interaction between any two of the factors (Huck, Cormier, Bounds, 1974, p. 107)? An alpha level of .05 was used to determine significance of results.

Post hoc tests employed, consisted of the Scheffe's test for the between subject factor, and t-tests for the within subject factors. Means were utilized for the descriptive and demographical data.

CHAPTER III

RESULTS

General

The study examined the attitudes of members of mental health organizations, design professionals, and the layperson towards the existing Lakeshore - Chota building lobby and their attitudes towards a 1' = 1'0" scale model representing a possible renovation of the lobby. The study tested the three subject groups opinions for seven dimensions in each environment: general view, color, flooring, window treatment, seating arrangement, furniture appearance, and lighting.

Hypotheses

Hypothesis #1: *The three subject groups will display similar attitudes across all dimensions and both environments.*

Are designers or mental health professionals more critical than laypeople in their opinions about the two lobby environments, the existing and the modeled, at Lakeshore? The ANOVA showed that there was a significant difference among subject groups, ($F=6.69$; $df=2, 50$; $p < .05$) (see Table 1) but did not indicate between which subject groups, therefore, a Scheffe's test was run. This indicated the difference was between the designers and the mental health volunteers (MHV) (see Table 2). The general opinion, window treatments, seating arrangement, furniture, and lighting in the

Table 1: The Analysis of Variance for between Subject Groups

DF	Sums of Square		Mean Square	F Value	Pr > F
Group	2	22.05	11.03	6.69	.0027
Error	50	82.41	1.65		

Table 2: Means for Among Subject Groups

Environment - Dimension	Laypeople	MHV	Designers	Dimen	Mean
R-G	2.40 (.71)	2.43 (.80)	2.09 (.43)	2.29 (.65)	
R-C	2.08 (.95)	2.28 (.76)	1.86 (.76)	2.08 (.82)	
R-F	1.99 (.75)	2.15 (.86)	1.59 (.46)	1.92 (.69)	
R-W	1.91 (.77)	1.91 (.77)	1.82 (.50)	1.88 (.68)	
R-A	2.54 (.83)	2.38 (.88)	2.07 (.69)	2.33 (.80)	
R-FU	2.61 (1.06)	2.49 (.99)	2.14 (.79)	2.42 (.95)	
R-L	2.44 (.89)	2.79 (.82)	2.18 (.72)	2.48 (.81)	
M-G	3.78 (.54)	4.20 (.65)	* 3.69 (.30)	3.90 (.50)	
M-C	3.90 (.45)	3.96 (.67)	3.75 (.73)	3.87 (.62)	
M-F	4.14 (.47)	4.28 (.55)	3.88 (.50)	4.11 (.51)	
M-W	4.19 (.39)	4.54 (.46)	* 4.04 (.64)	4.27 (.50)	
M-A	3.93 (.36)	4.32 (.53)	* 3.90 (.50)	4.06 (.46)	
M-FU	3.72 (.42)	3.86 (.79)	* 3.34 (.57)	3.65 (.59)	
M-L	3.85 (.37)	4.24 (.54)	* 3.69 (.54)	3.94 (.48)	
Group Mean	3.10	3.27	* 2.86	3.87	
Count (N)	17	19	17	53	

NOTE: F = 6.69; df = 2, 50; p < .05; * between two means implies significant difference as determined by Scheffe's test

R = real lobby environment
M = modeled lobby environment
G = General Opinion Dimension
C = Color Dimension
F = Flooring Dimension
W = Window Treatment Dimension
A = Seating Arrangement Dimension
FU = Furniture Dimension
L = Lighting Dimension

modeled environment were the dimensions that caused the overall significance. Upon reviewing the means for the subject group main effect, It was discovered that MHVs were significantly less critical than designers (or that designers are more critical than MHVs). However, the laypeoples' results typically fell in the middle and were not significantly different than the MHVs or design professionals.

Hypothesis #2: *There is no difference between the two environments across all subjects and across all dimensions.*

Do all the subjects find the renovated environment to be better, in general, than the existing lobby at Lakeshore? The environmental main effect proved to be statistically very significant upon running the ANOVA ($F = 425.61$; $df = 1, 50$; $p < .05$) (see Table 3). Basically, this indicates that all subjects in the study considered the modeled lobby interior to be significantly better than the existing lobby as the means show in Table 4 (see Table 4).

Table 3: The Analysis of Variance for between Environments

	DF	Sums of Square	Mean Square	F Value	Pr > F
Group	1	577.63	577.63	425.61	.0001
Error	50	67.86	1.36		

Table 4: Means and Standard Deviations for Between Environments

ENVIRONMENT	MEAN	SD
Existing/ Real	2.20	.82
Model	3.96	.62

Hypothesis #3: *There is no interaction between the three subject groups and the two environments across all dimensions.*

Is there any difference of opinion between subject groups on which environment is considered better? Since hypothesis #2 was rejected, it has already been determined that all subjects preferred the modeled lobby. However, this question is to determine if one subject group approved significantly more than another. The analysis of variance indicated that the mean values (see Table 5) for the existing lobby and the modeled lobby were similar and not significantly different per subject group ($F = 0.5104$; $df = 2, 50$; $p < .05$), as shown by the non-significances of the group interaction. Therefore, this hypothesis is accepted and we conclude that no interaction exists between the three subject groups for the two environments.

Table 5: Means and Standard Deviations for Between Groups by Environments

GROUP - ENVIRONMENT	MEAN	SD
Laypeople - Existing/ Real	2.28	.88
Laypeople - Model	3.93	.45
MHV's - Existing/ Real	2.35	.86
MHV's - Model	4.20	.63
Designers - Existing/ Real	1.97	.67
Designers - Model	3.71	.66

Note: $F = 0.5104$; $df = 2, 50$; $p < .05$

Hypothesis #4: *There is no interaction between the seven dimensions and both environments across all subjects.*

If the subjects like the renovated model better, then what dimensions are more significantly different from the modeled lobby to the existing Lakeshore Chota lobby? The analysis of variance indicated that a significant interaction took place between the dimensions effect and the environment factor ($F = 17.92$; $df = 2, 50$; $p < .05$). However, the question still remained, which dimensions were significantly different and which ones were not different. In other

words, which dimensions were a more noticeable improvement from the existing to the modeled lobby and which ones did not significantly effect the subject's opinion of the lobby. A post hoc test, consisting of multiple t-tests, revealed that the attitudes of the subjects were significantly better for all dimensions as one changed from the existing lobby to the modeled lobby. Therefore, to determine which were possibly more significant than another, the differences in the means of the real lobby and the model were considered (see Table 6).

The two dimensions with the highest difference can be seen in the window treatments and the flooring and the lowest differences can be seen in the furniture and the lighting. The other three dimensions, general, color, and seating arrangement, seem to fall in the middle range of differences. The significance of the environment by dimension interaction can best be observed in the Figure 17. From the table, one can easily see that both furniture and lighting have the least drastic difference and the window treatments and flooring have the most drastic difference (see Figure 17).

Descriptives

Question #1: *Do the majority of all subjects agree with the opinion that, the interior environment of a space effects their overall opinion of a health care facility?*

Do people generally form their opinions about health care based on the appearance of an interior environment? The question

**Table 6: Differences in the Means of the Environments
from the Interaction with the Dimensions**

ENVIRONMENT BY DEMINSION								
	Gen.	Color	Floor.	Wind.	St. Arr.	Furn.	Light.	
Model	3.90 (.50)	3.87 (.62)	4.11 (.51)	4.27 (.50)	4.06 (.46)	3.65 (.59)	3.94 (.48)	Mean SD
Real	2.29 (.65)	2.08 (.82)	1.92 (.69)	1.88 (.68)	2.33 (.80)	2.42 (.95)	2.48 (.81)	Mean SD
	1.61*	1.79*	2.19*	2.39*	1.73*	1.23*	1.46*	Mean Diff.

Note: $p < .05$; * indicates significantly different from zero at the .0001 level

Gen = General Opinion

Floor. = Flooring

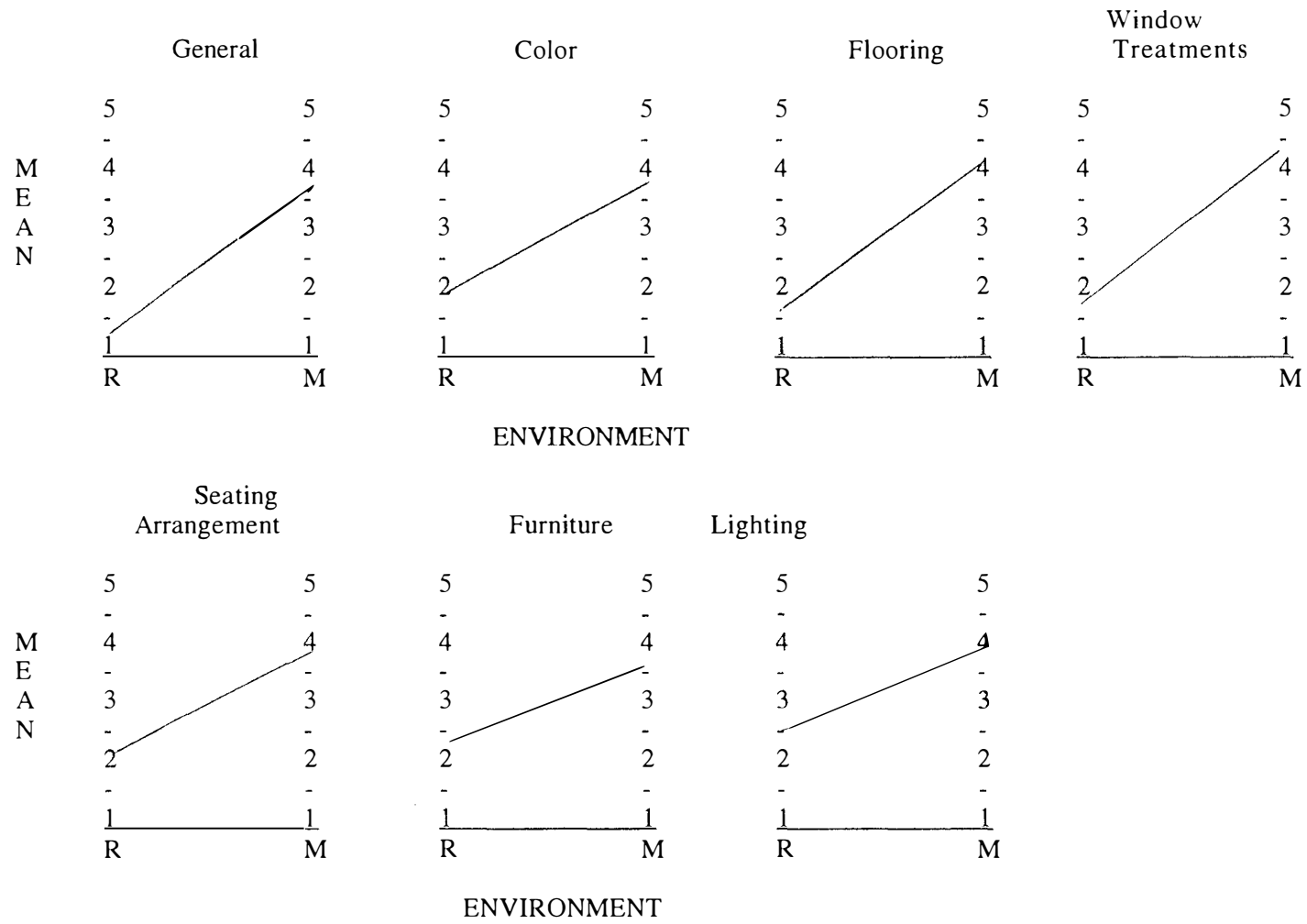
Wind. = Window Treatment

St. Arr. = Seating Arrangement

Furn. = Furniture

Light. = Lighting

Figure #17 - The dimensions' means by the two environments shown graphically



NOTE: F=6.69; df=2, 50; p< .05
 R = real lobby environment
 M = modeled lobby environment

was presented on the first questionnaire before going to the Chota building lobby. The question read, "The interior environment of a space effects my overall opinion of a health care facility." A Likert scale was used, and subjects were to give their opinion between strongly agree, agree, uncertain, disagree, and strongly disagree. The responses showed that 96% either agreed or strongly agreed to the question (see Table 7 & 8).

Table 7: Responses To Question: "The interior environment of a space effects my overall opinion of a health care facility."

NUMBER/ PERCENT OF RESPONSES	
	% Total
str. disagree	1 (1.9)
disagree	0 (0.0)
uncertain	1 (1.9)
agree	25 (46.3)
str. agree	27 (50.0)
TOTAL	54 (100.0)

Table 8: Contingency Table To Question: "The interior environment of a space effects my overall opinion of a health care facility."

	Agree	Disagree
Observed	52	2
Expected	27	27

Ho: The number of subjects agreeing = number of subjects disagreeing

Calculated Chi-square = 46.3; chi-square with 1 degree of freedom at $p < .05$ level = 3.84. Therefore it is concluded that the "agrees" differ significantly from the "disagrees".

Question #2: *In general, towards any interior environment, what do people consider the most important or least important dimension?*

What do people notice the most or least in any interior environment among color, flooring, window treatments, seating arrangement, furniture, and lighting? Subjects answered questions about what dimensions effected their first impression of an interior before subjects were escorted to the Chota building. A Likert scale was again used, and subjects were to give their opinion between strongly agree, agree, uncertain, disagree, and strongly disagree. The percentages, as shown in Table 9, show what dimensions the subjects consider most to least important to an interior. The order, from most important to least important, was determined to be as follows:

- 1) lighting, 2) furniture, 3) Color, 4) flooring, 5) window treatments, 6) seating arrangement.

Table 9: Responses and Percentages To Subject's First Impression of Interiors by Dimensions

NUMBER OF RESPONSES/ % OF RESPONSES BY DIMENSION						
	Color	Floor.	Wind.	St. Arr.	Furn.	Light.
strongly disagree	0 (0.0%)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
disagree	1 (1.9)	2 (3.7)	9 (16.7)	4 (7.4)	3 (5.6)	0 (0.0)
uncertain	5 (9.3)	9 (16.7)	16 (29.6)	10 (18.5)	5 (9.3)	2 (3.7)
agree	30 (55.6)	33 (61.1)	20 (37.0)	32 (59.3)	24 (44.4)	21 (38.9)
strongly agree	18 (33.3)	9 (16.7)	9 (16.7)	7 (13.0)	22 (40.7)	31 (57.4)
missing	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)
TOTAL	54 (100)	54 (100)	54 (100)	54 (100)	54 (100)	54 (100)

Note: Floor. = Flooring
Wind. = Window Treatment
St. Arr. = Seating Arrangement
Furn. = Furniture
Light. = Lighting

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Discussion

The history behind state mental institutions and Lakeshore make it difficult to change the community perceptions of what mental institutions are and what they physically look like. The findings of this study suggest possible ways in which state mental institutions could improve their public relations through altering the physical environment. This study indicated that the physical environment effects the attitudes and perceptions of people in the community and what some of those attitudes are towards Lakeshore. The following quote by J. Malkin states how the interior environment contributes to the image by society about mentally ill people and these patients' worth to the community. "Architectural detailing, style of furnishings attention to housekeeping and maintenance, lighting, use of space (crowded or spacious), and color influence the viewer's perception of the occupants' status, societal worth, and prognosis for recovery (Malkin, J., 1992)." With the aging population and changes in the United States health care system, change will become necessary to mental health facilities. As society moves into the twenty-first century, the need for sensitive and therapeutic mental healthcare facilities will continue to grow and how the community views them will play a critical part in their success. The social and psychological opinions of the community are pertinent to

moving the communities perception of mental health care facilities forward along side the medical field, which has made great strides forward with mental health care treatment. Although this case study was only one facility, the possibility of giving a new community image to other facilities increases a great deal by contributing to the research base and incorporating up-to-date design ideas and concepts in mental health facilities.

Conclusions

Several conclusions can be drawn from the hypotheses and questions explored in this study. The first being that the designers and the mental health volunteers were significantly different in their responses to the two environments (see Table 1 & Table 2). There could be two reasons for this response. One being that mental health volunteers have been around these environments, are more accepting of them, and less critical. The other conclusion that might be drawn is that designers are more critical. They are trained to view the built environment in an analytical manner and have strong opinions of what is and is not acceptable to them. It is this researchers opinion it is a combination of both conclusions. A possible supporting element to this reasoning is that the laypeoples' opinions fell in the middle. Although the ANOVA did not find the differences statistically significant, this might indicate that the average person is less critical than designers and more critical than mental health volunteers who are exposed to mental health facilities on a regular basis.

It is also interesting to find that all the subjects, across all dimensions, found the modeled environment to be significantly better than the existing lobby and none of the groups were significantly different among each other (Table 3 & Table 5). This indicated that all the subjects considered the existing lobby in need of improvement before they even saw the modeled version of the lobby. When the ANOVA results are also viewed in light of the response to the first question of Questionnaire #1, (The interior environment of a space effects my overall opinion of a health care facility; Table 8) where 96% of the subjects agreed or strongly agreed to this statement, it can be concluded that the subjects are probably considering the quality of the health care itself. This might indicate to Lakeshore that the first interior, the Chota building lobby, anyone sees, whether it be patients, visitors or employees, gives the impression that the hospital needs to be improved and lacks quality care.

If the subjects consider the overall interior in need of improvement, than which dimensions are more or less important in forming that opinion of Lakeshore's Chota building lobby? The window treatments and the flooring had the highest differences and the lowest differences were seen in the furniture and the lighting dimensions (see Table 7). The furniture would be the most obvious possibility for the lowest difference because the furniture in the model is the same as the existing furniture except for changing the red upholstery to green (see Figures #4 & #16). The low difference with the lighting was interesting because it was this researcher's

opinion that the lighting would have had a higher difference. There are several conclusions for these results. The questionnaire refers to the changes as 'lighting', however the changes were really only changes to the ceiling appearance. In other words, the quantity or quality of 'light' did not change, only the visual appearance of the ceiling changed. The modeled lighting was 2x2 fluorescents, the same as the existing, but they were recessed instead of surface mounted as in the existing (see Figures #5 & #16). The ceiling may often be referred to as the lighting in generic terms for the layperson, but it should have been stated more defined for this study. If the questionnaires had referred to these changes as the ceiling instead of as lighting a different result might have occurred. As well, it might be concluded that these results are a more accurate result for the evaluation of the ceiling. Subjects, other than designers, might not have considered the 'lighting' changes to be a dramatic difference because people typically do not take notice of the ceiling (Pile, 1988). However, it can be understood that subjects would consider the window treatments a major improvement because of the poor condition of the existing draperies which are very dated in appearance and 12" too short off the floor (see Figures #2 & #10). Furthermore the vertical blinds in the model, would appear to make a dramatic change in the interior of the Chota lobby to most anyone. The addition of carpet seemed to also make a dramatic influence on the subjects. This could be possibly attributed to the carpet "warming" and adding texture to the appearance of the lobby over the hard surface terrazzo that is existing currently. The other three

dimensions, general, color, and seating arrangement, seem to fall in the middle range of differences. The comparison of dimensions between the existing lobby and the modeled lobby only indicated the level of satisfaction or dissatisfaction of a particular dimension in these two environments and should not be presumed to be the case for other interiors. This should also indicate to Lakeshore that if they improved their window treatments and flooring they would probably significantly improve the visual image given by the Chota building's lobby.

However, the results of the dimensions ranking, before the subjects saw either environment, were in a different order of importance than the results of comparing the dimensions of the existing Lakeshore lobby to the modeled lobby (Table 10). The dimensions ranking, before the viewing of the lobby and model, represented what these subjects think they "notice" first or last in a typical interior. Lighting was considered to be the first dimension noticed, people do notice lighting but typically not the ceiling. This might explain the difference between the results of these preliminary questions to the results of the Chota lobby evaluation results. This might be explained by the fact that without light nothing else is visible, and lighting can change the appearance of all other factors (Pile, 1988). The order of the rest of the dimensions is fairly predictable and not out of the ordinary. Furniture and color were second and third, then flooring was fourth. The furniture ranked as second and color as third was not surprising and is probably what people typically think of as an important part of an

interior environment. The flooring being ranked fourth, because most peoples' eyes are cast slightly downward and forward when they enter an interior space, was a little surprising. Window treatments were fifth and the seating arrangement was sixth. These ranking results are most likely not a good indication of what dimensions subjects really consider more or less important because of the wording of the questions which do not specify a type of interior. Subjects could have been visualizing anything. As well, the use of a Likert scale did not give the subjects a chance to actually order the dimensions themselves; they could only agree or disagree with the question.

Although the results from this study can only be generalized to this population and to Lakeshore, they suggest that these respondents view interior environments as a significant part of how they form their opinions about a mental health care facility. Therefore, it can be concluded that possibly many older facilities could improve their image through interior renovation and design. It can be concluded that the importance of various individual dimensions of an interior will vary from interior to interior. It can not be generalized that one particular dimension is the most important one for improvement to a renovation for every interior environment.

There were a few issues that would have possibly improved this study, if they had been feasible. The first being the change from a full scale existing lobby with activity, to a crafted 1" -1'-0" three dimensional scale model. This might have created some confusion

and difficulty for subjects to visualize what the renovation would truly look like if completed. As well, some subjects had a problem with bending down to get an eye level view of the model and only viewed the model from a standing position. However, actually initiating the changes for a before and after study was not a possibility because of both financial and time constraints.

The changes which Lakeshore had already made between the time the study was initiated to the time that the data was collected may have been a second issue which influence the results. The lobby's appearance was significantly worse at the initiation of the project than from when the data was collected. Some of the changes to be made in the study leaked out among the staff and were implemented too soon. These included placing a television in the lobby, replacing the old furniture with new and using live plants in the space. The new furniture was very similar to the old, but in much better condition. The lobby, during the time of data collection, was already partially renovated causing a less dramatic change between the before and after results. It is believed by this researcher that the results would have been more dramatic if the lobby had been kept the same as when the study was initially implemented.

Another issue, which might have influenced subjects, was the time of day they participated. The existing lobby often had patients in it, sometimes many and sometimes only a few or none. The presents of patients may have made some subjects uncomfortable and distracted which in turn may have influenced their responses.

The natural light, or lack of natural light, from the windows may have also given the existing lobby a different appearance to those visiting during the day to those visiting in the evenings. The questionnaires' wording in regards to the use of the term lighting rather than the term ceiling might have resulted in different responses from the subjects as well. In addition, the season and the fact that the data was collected only over a three week period may have influenced responses.

Even though there were several possible data influences, this case study gave Lakeshore some valuable information on how their building's interior influences the community. Although the results from this case study can not be generalized for all mental health facilities, it does contribute to a research base to a better understanding of community members' opinions towards mental health facilities.

As society begins to change its perception of mental health facilities from the days when the mentally ill were treated like criminals, facility interiors must also change to represent the 'asylum' (a place of comfort, security, and hominess). Further study is needed in the area of mental health facilities' interiors and how they affect the community's image of mental health. Lakeshore's Chota building lobby was better than most state facilities; therefore, additional case studies in other facilities, both state and private, would be beneficial. It would also be interesting to determine if the community views state and private facilities differently. Further research, taking to the next step, into what the communities'

'attitudes' are, based on the communities 'opinions' towards an interior, would also add insight. In other words, if the community has the 'opinion' that the facility interior needs improvement then what is their 'attitude' towards the facility's health care, employees, and patients. Studies that included patients, employees and visitors would add to a better understanding of how the interior environment affects all people that come into contact with the space and what different opinions between the subject groups would result.

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APPENDICES

APPENDIX A
Informed Consent Form

INFORMED CONSENT: Lakeshore Mental Institute

Title

A case study of the perceived image by members of mental health organizations, design professionals, and the layperson of the interior physical environment at Lakeshore Mental Health Institute Chota Building Lobby.

Objective

It is hoped that the data from these questionnaires will provide information on what elements in the physical environment of a lobby will influence the opinions of community members towards Mental Institutes. This information could provide some predictors to how state mental institutes are designed in the future. With this in mind, your voluntary participation in this research is greatly appreciated.

Procedures

Once you agree to participate, you will meet the investigator at Lakeshore Mental Institute for about 30 minutes to fill out two questionnaires concerning the lobby and it's interior elements for example - carpet, furniture arrangements, and paint colors. You will be asked to look at the different elements of the interior and simply give your opinion. A 3-dimensional model of the same lobby will be used to assist you with the second questionnaire. The investigator will be available at the site to assist with questions and to give directions. There will be no personal questions. However, all answers to questions will remain anonymous, there will be no penalty if you choose to refuse or withdraw from the study at any time, and you may request to review the completed results of the project if you wish. For further information, please contact Patricia Milan at 4619 Sunflower Rd. #119, Knoxville, TN. 37909 or the University of Tennessee Interior Design Dept.

I hereby authorize my responses and information as being accurate and valid to the best of my knowledge, and allow them to be included in this research project and any subsequent publication.

Respondent's Signature

Date

Investigator's Signature

Date

APPENDIX B
Questionnaires #1 & #2

Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

The interior environment of a space effects my overall opinion of a health care facility.	1	2	3	4	5
My first impression of a space is affected by the <u>overall colors</u> of an interior.	1	2	3	4	5
My first impression of a space is affected by the <u>window treatments</u> of an interior.	1	2	3	4	5
My first impression of a space is affected by the <u>floor materials</u> of an interior.	1	2	3	4	5
My first impression of a space is affected by the <u>seating arrangement</u> of an interior.	1	2	3	4	5
My first impression of a space is affected by the <u>furniture</u> of an interior.	1	2	3	4	5
My first impression of a space is affected by the <u>lighting</u> of an interior.	1	2	3	4	5

Please answer the following questions while standing on the X marked #1. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

This lobby looks like a typical mental health facilities' lobby.

1 2 3 4 5

This interior is a
pleasing environment.

1 2 3 4 5

This interior has the image of a caring environment for the mentally ill.

1 2 3 4 5

This lobby's interior has an institutional appearance.

1 2 3 4 5

This lobby's colors add to the overall attractiveness of the lobby.

1 2 3 4 5

This lobby's colors have an institutional appearance.

1 2 3 4 5

The wall color is monotonous.

1 2 3 4 5

Please answer the following questions while standing on the X marked #2 and focus your attention on the floor of the lobby. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

This flooring helps the seating area to function as a separate space from the circulation areas

1 2 3 4 5

This flooring adds to the overall attractiveness of the lobby.

1 2 3 4 5

This flooring has an institutional appearance.

1 2 3 4 5

This flooring enhances the overall interior environment.

1 2 3 4 5

This flooring is monotonous.

1 2 3 4 5

Please answer the following questions while standing on the X marked #3 in the lobby and face the windows. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

These draperies add to the overall attractiveness of the lobby.	1	2	3	4	5
---	---	---	---	---	---

These draperies have an institutional appearance.	1	2	3	4	5
---	---	---	---	---	---

These draperies enhances the overall interior environment.	1	2	3	4	5
---	---	---	---	---	---

These draperies are monotonous.

Please answer the following questions while standing on the X marked #4. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

The seating arrangement looks comfortable for a lobby.

The seating arrangement has an institutional appearance.	1	2	3	4	5
--	---	---	---	---	---

The seating arrangement enhances the overall interior environment.	1	2	3	4	5
--	---	---	---	---	---

The seating arrangement looks monotonous.	1	2	3	4	5
---	---	---	---	---	---

	1	2	3	4	5
The furniture contributes to the overall attractiveness of the lobby.					

The furniture has an institutional appearance.

	1	2	3	4	5
--	---	---	---	---	---

The furniture enhances the overall interior environment.	1	2	3	4	5
--	---	---	---	---	---

The furniture looks monotonous.

	1	2	3	4	5
--	---	---	---	---	---

The furniture looks comfortable. 1 2 3 4 5

	1	2	3	4	5
The lighting contributes to the overall attractiveness of the lobby.					

The lighting has an institutional appearance. 1 2 3 4 5

The lighting enhances the overall interior environment.	1	2	3	4	5
The lighting looks monotonous.	1	2	3	4	5
The lighting is distracting.	1	2	3	4	5

Please return this questionnaire and proceed to questionnaire #2. Thank you for your participation on this portion of the study.

Please answer the following questions while visualizing yourself as the human figure #1. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

This lobby looks like a typical mental health facilities' lobby.	1	2	3	4	5
This interior is a pleasing environment.	1	2	3	4	5
This interior has the image of a caring environment for the mentally ill.	1	2	3	4	5
This lobby's interior has an institutional appearance.	1	2	3	4	5
This lobby's colors add to the overall attractiveness of the lobby.	1	2	3	4	5
This lobby's colors have an institutional appearance.	1	2	3	4	5
The wall color is monotonous.	1	2	3	4	5

Please answer the following questions while visualizing yourself as the human figure #2. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

The carpeting helps the seating area to function as a separate space from the circulation areas	1	2	3	4	5
This flooring and carpet add to the overall attractiveness of the lobby.	1	2	3	4	5
This flooring and carpet have an institutional appearance.	1	2	3	4	5
This flooring and carpet enhance the overall interior environment.	1	2	3	4	5
This flooring and carpet are monotonous.	1	2	3	4	5

Please answer the following questions while visualizing yourself as the human figure #3. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

	1	2	3	4	5
These vertical blinds add to the overall attractiveness of the lobby.					

These vertical blinds have an institutional appearance. 1 2 3 4 5

These vertical blinds enhance the overall interior environment.

These vertical blinds are monotonous. 1 2 3 4 5

Please answer the following questions while visualizing yourself as the human figure #4. Circle the number that is appropriate for how you feel using the following key.

1 = strongly agree 2 = agree 3 = uncertain 4 = disagree 5 = strongly disagree

The seating arrangement looks comfortable for a lobby.	1	2	3	4	5
--	---	---	---	---	---

The seating arrangement has an institutional appearance.	1	2	3	4	5
--	---	---	---	---	---

The seating arrangement enhances the overall interior environment.	1	2	3	4	5
--	---	---	---	---	---

The seating arrangement looks monotonous.	1	2	3	4	5
---	---	---	---	---	---

The furniture contributes to the overall attractiveness of the lobby.	1	2	3	4	5

The furniture has an institutional appearance. 1 2 3 4 5

The furniture enhances the overall interior environment.	1	2	3	4	5
--	---	---	---	---	---

The furniture looks monotonous.

	1	2	3	4	5
--	---	---	---	---	---

The furniture appears to be comfortable.	1	2	3	4	5
--	---	---	---	---	---

	1	2	3	4	5
The lighting contributes to the overall attractiveness of the lobby.					

The lighting has an institutional appearance. 1 2 3 4 5

	1	2	3	4	5
The lighting enhances the overall interior environment.					

The lighting looks monotonous. 1 2 3 4 5

The lighting is distracting. 1 2 3 4 5

What is your ethnic background?

☐ White ☐ African American ☐ Asian ☐ Hispanic ☐ Other

What is your gender?

☐ Male ☐ Female

What is your profession? _____

What is your marital status?

☐ Single ☐ Married

If you are married, what is your spoused profession? _____

What is your approximate income range?

☐ 15,000 or less ☐ 16,000 to 25,000 ☐ 26,000 to 35,000
☐ 36,000 to 45,000 ☐ 46,000 to 55,000 ☐ 56,000 and over

What is your age?

☐ 18 - 24 ☐ 35 - 39 ☐ 50 - 54
☐ 25 - 29 ☐ 40 - 44 ☐ 55 - 64
☐ 30 - 34 ☐ 45 - 49 ☐ 65 & over

Are you involved with a mental health organization?

☐ Yes ☐ No

If you answered yes to the above question, which organization?

Have you had any formal interior design or architectural education?

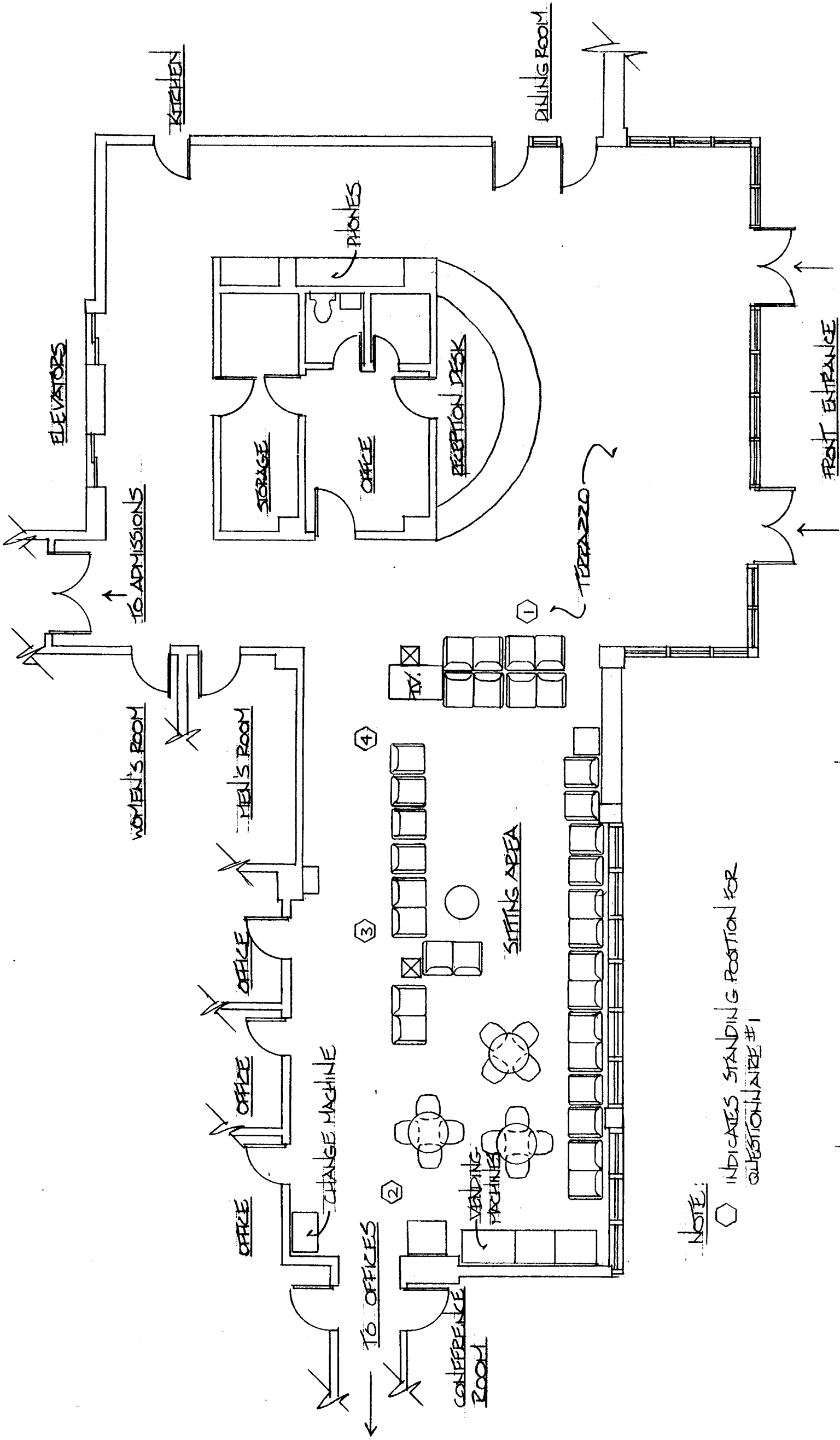
☐ Yes ☐ No

If you answered yes to the above question:

How many years? _____

Your cooperation for this study is greatly appreciated. THANK YOU!

APPENDIX C
Floor Plans

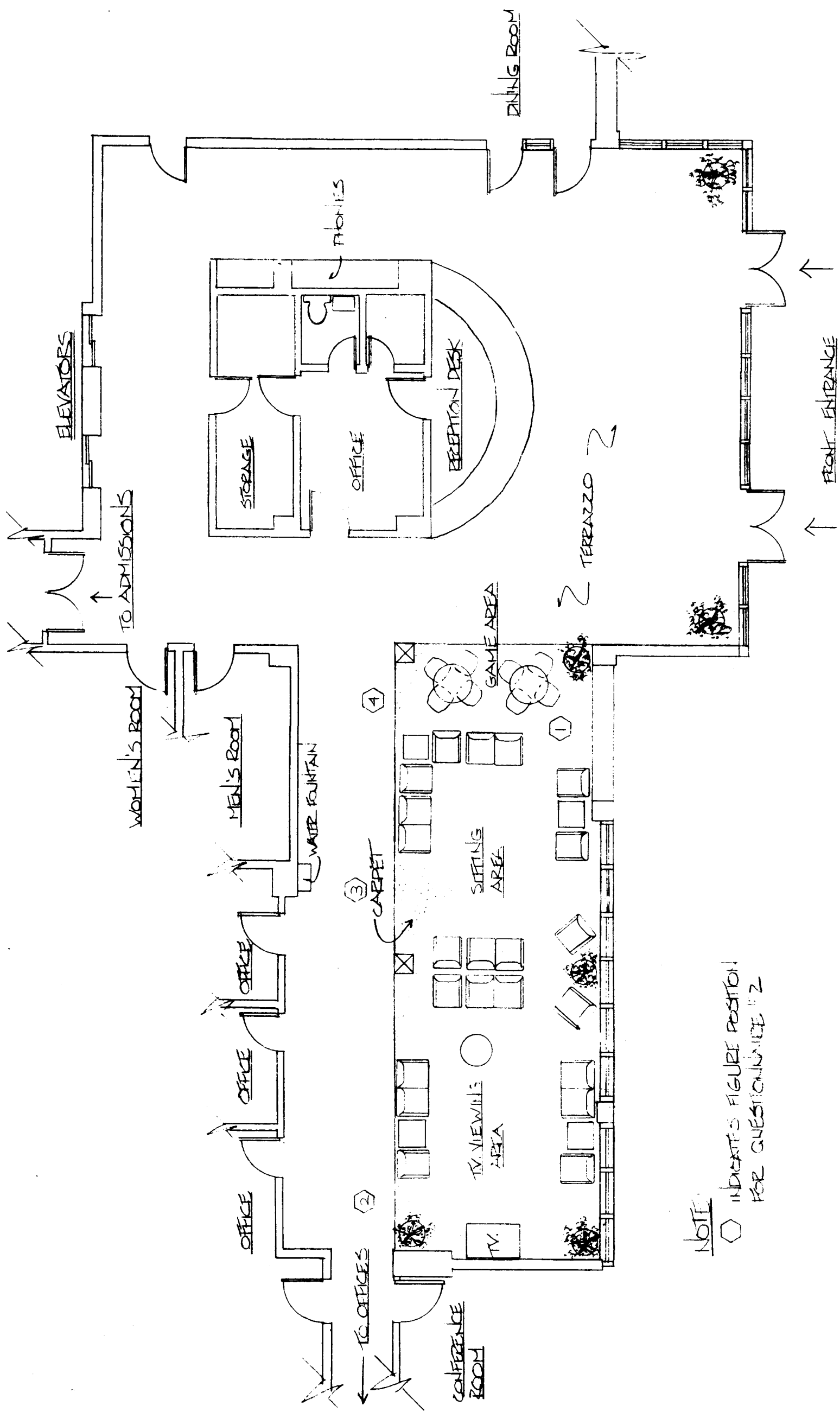


NOTE:
 ○ INDICATES STANDING POSITION FOR QUESTIONNAIRE #1

EXISTING LOBBY FLOOR PLAN

SCALE: 1/8" = 1'-0"





NOTE

○ INDICATES FIGURE POSITION
FOR QUESTION NUMBER "2"

MODELED LOBBY FLOOR PLAN

SCALE: 1/8" = 1'-0"



APPENDIX D
Human Subjects Form A



Research Administration
Compliances

Grants & Contracts

Research Advancement

404 Andy Holt Tower

Knoxville, Tennessee 37996-0140

(615) 974-3466

FAX (615) 974-2805

06/22/94

CRP #: 4460 A

Title: A case study of the perceived image by members of mental health

Milan, Patricia J.

TRID

4619 Sunflower Rd. #119

Knoxville, TN 37909

Rabun, Dr. Josette

TRID

230 Jessie Harris Bldg.

Campus

The project listed above has been certified exempt from review by the Committee on Research Participation and is approved.

This certification is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #2).

Responsibilities of the investigator during the conduct of this project include the following:

1. Prior approval from the Coordinator of Compliances must be obtained before any changes in the project are instituted.
2. Submission of a Form D at 12-month intervals attesting to the current status of the project (project is still in effect, changes in the project, project is terminated).

We wish you success in your research endeavors.

Sincerely,

Edith M. Szathmary
Coordinator of Compliances

cc: Dr. Nancy Fair
230 Jessie Harris Bldg.

Attachment: Form A



FORM A

(This form is federallyauditable and MUST BE TYPED.) Certification of Exemption from Review by Full Committee
for Research Involving Human SubjectsCRP # 4460-A
Date received in ORA JUN 02 1994

- A. PRINCIPAL INVESTIGATOR(s) and/or CO-PI(s): (For student projects, list both the student and the advisor.)
 Patricia J. Milan Dr. Josette Rabun (Committee Chair)
- B. DEPARTMENT:
 Textiles, Retailing and Interior Design
- C. COMPLETE MAILING ADDRESS AND PHONE NUMBER OF PI(s) and CO-PI(s):
 Patricia J. Milan Josette Rabun P. Milan Ph# 584-4636
 4619 Sunflower Rd. #119 TRID Dept. J. Rabun Ph# 974-6603
 Knoxville, TN 37909 230 Jessie Harris Bldg.
 Knoxville, TN 37996
- D. TITLE OF PROJECT:
 A case study of the perceived image by members of mental health organizations, design professionals and the layperson of the interior physical environment at Lakeshore Mental Health Institute - Chota Building
- E. EXTERNAL FUNDING AGENCY AND ID NUMBER (if applicable):
 Lobby
 Dept. of Mental Health & Mental Retardation/ State TN Ct#33910039
- F. GRANT SUBMISSION DEADLINE (if applicable):
 N/A
- G. STARTING DATE: Upon certification by Coordinator of Compliances. (NO RESEARCH MAY BE INITIATED UNTIL CERTIFICATION IS GRANTED.)
 March 1, 1994
- H. ESTIMATED COMPLETION DATE (Include all aspects of research and final write-up.):
 December 1, 1994
 I. Objective(s) of Project (Use additional page, if needed.):
 see attached

II. Subjects (Use additional page, if needed.):
 see attached

III. Methods or Procedures (Use additional page, if needed.):
 see attached

IV. CATEGORY(s) FOR EXEMPT RESEARCH PER 45 CFR 46 (see reverse side for categories): 3

CERTIFICATION: The research described herein is in compliance with 45 CFR 46 101(b) and presents subjects with no more than minimal risk as defined by applicable regulations.

Principal Investigator	<u>PATRICIA J. MILAN</u>	<u>Patricia J. Milan</u>	<u>3/22/94</u>
Name		Signature	Date
Advisor	<u>JOSETTE H. RABUN</u>	<u>Josette H. Rabun</u>	<u>3/24/94</u>
Name		Signature	Date
Dept. Review Comm. Chair	<u>ALTON J. DELONG</u>	<u>Alton J. DeLong</u>	<u>5/31/94</u>
Name		Signature	Date
Dept. Head	<u>NANCY FAIR</u>	<u>Nancy Fair</u>	<u>5/31/94</u>
Name		Signature	Date
APPROVED:	Edith M. Szathmary	<u>Edith M. Szathmary</u>	<u>6-22-94</u>
Coordinator of Compliances		Signature	Date
Office of Research Administration			

Rev. 10/90

Objectives of Project

To identify the communities opinion of the physical environment of the lobby at Lakeshore Mental Institute, Chota Building and determine what design elements might influence those opinions through the use of a survey/questionnaire.

Subjects

The subjects will be adult participants randomly selected from a list who agree to participate upon request. The approximately 50 to 75 subjects will be design professionals, members of organizations which support the improvement of mental institutions, and the layperson. Each subject will be asked to take about 30 minutes to come and fill out a questionnaire at the Chota building at Lakeshore Mental Institute. All participants will be asked to sign a consent form. Absolutely no patients will be surveyed, observed, or interviewed.

Methods or Procedures

Once subjects agree to participate they will be asked to meet the investigator at Lakeshore for about 30 minutes to fill out two questionnaires concerning their opinions of the Chota building lobby and what elements would influence their opinions of the space, for example - carpet, furniture arrangements, and paint colors. The subjects will then be asked to fill out a second questionnaire in a separate room on their opinions of a 3-dimensional model of the existing lobby with different finishes and seating arrangements. The investigator will be available at the site to assist with questions and to give directions, and she will have a checklist of subjects names who agreed to participate to enable her to determine who has and has not participated. However, there will not be a request for the subject's name on the questionnaire and they will be dropped in a drop box once they are filled out. The subjects will only be associated with the project through the list of subjects that agreed to participate

and their consent forms; the responses of the individual subjects will be anonymous. Subjects will only be asked to disclose their opinions about the physical environment. There will be no personal questions, no penalty for refusal or withdrawal from the study, and all participants can request to review the completed results of the project if they wish. Original questionnaires and participant list will be kept by the investigator, and a copy of the final project will be kept in the Textiles, Retailing, and Interior Design department's resource room.

APPENDIX E
Demographic Characteristics of all Subjects

DEMOGRAPHICS

Characteristics	Number	Percent N=54	Valid Percent
Racial Origin			
White	52	96.3	96.3
African American	<u>2</u>	<u>3.7</u>	<u>3.7</u>
	54	100.0	100.0
Gender			
Male	13	24.1	24.1
Female	<u>41</u>	<u>75.9</u>	<u>75.9</u>
	54	100.0	100.0
Profession			
Architecture/ Design	7	13.0	13.0
Sales/ Business Mgt.	9	16.7	16.7
Mental Health/ Social Work	10	18.5	18.5
Manufacturing/ Industrial	0	0.0	0.0
Service Oriented Business	1	1.9	1.9
Student	19	35.2	35.2
Retired/ Homemaker	2	11.1	11.1
Administration/CEO	<u>2</u>	<u>3.7</u>	<u>3.7</u>
	54	100.0	100.0
Marital Status			
Single	37	68.5	68.5
Married	<u>17</u>	<u>31.5</u>	<u>31.5</u>
	54	100.0	100.0
Spouse Profession			
No Spouse	37	68.5	68.5
Architecture/ Design	1	1.9	1.9
Sales/ Business Mgt.	7	13.0	13.0
Mental Health/ Social Work	1	1.9	1.9
Manufacturing/ Industrial	1	1.9	1.9
Service Oriented Business	2	3.7	3.7
Student	2	3.7	3.7
Retired/ Homemaker	1	1.9	1.9
Administration/CEO	<u>2</u>	<u>3.7</u>	<u>3.7</u>
	54	100.0	100.0

Income			
15,000 & below	21	38.9	38.9
16,000 to 25,000	12	22.2	22.2
26,000 to 35,000	9	16.7	16.7
36,000 to 45,000	4	7.4	7.4
46,000 to 55,000	3	5.6	5.6
56,000 & over	<u>5</u>	<u>9.3</u>	<u>9.3</u>
	54	100.0	100.0
Age			
18 - 24	21	38.9	38.9
25 - 29	7	13.0	13.0
30 - 34	9	16.7	16.7
35 - 39	2	3.7	3.7
40 - 44	3	5.6	5.6
45 - 49	4	7.4	7.4
50 - 54	2	3.7	3.7
55 - 64	1	1.9	1.9
65 & over	<u>5</u>	<u>9.3</u>	<u>9.3</u>
	54	100.0	100.0
Involved with a Mental Health Organization?			
Yes	19	35.2	35.2
No	<u>35</u>	<u>64.8</u>	<u>64.8</u>
	54	100.0	100.0
Type of Mental Health Organization?			
No Involvement with an Org.	35	64.8	64.8
Friends of Lakeshore	5	9.3	9.3
Outreach	8	14.8	14.8
Alliance for the Mentally Ill	4	7.4	7.4
Mental Health Assoc. of Knoxville	<u>2</u>	<u>3.7</u>	<u>3.7</u>
	54	100.0	100.0
Formal Interior Design or Architectural education?			
Yes	18	33.3	33.3
No	<u>36</u>	<u>66.7</u>	<u>66.7</u>
	54	100.0	100.0
How many years of Interior Design or Architectural education?			
0	36	66.7	66.7
4	9	16.7	16.7
5	4	7.4	7.4
6	1	1.9	1.9
7	1	1.9	1.9
8	2	3.7	3.7
9	<u>1</u>	<u>1.9</u>	<u>1.9</u>
	54	100.0	100.0

APPENDIX F
Frequency Data from Questionnaires #1 & #2

GOP1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	3	1	1.9	1.9	3.7
	4	25	46.3	46.3	50.0
	5	27	50.0	50.0	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

GOP2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	5	9.3	9.3	11.1
	4	30	55.6	55.6	66.7
	5	18	33.3	33.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

GOP3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	9	16.7	16.7	16.7
	3	16	29.6	29.6	46.3
	4	20	37.0	37.0	83.3
	5	9	16.7	16.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

GOP4

Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent
		1	1	1.9	1.9	1.9
		2	2	3.7	3.7	5.6
		3	9	16.7	16.7	22.2
		4	33	61.1	61.1	83.3
		5	9	16.7	16.7	100.0
		Total	54	100.0	100.0	
Valid cases	54	Missing cases	0			

GOP5

Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent
		2	4	7.4	7.5	7.5
		3	10	18.5	18.9	26.4
		4	32	59.3	60.4	86.8
		5	7	13.0	13.2	100.0
		0	1	1.9	Missing	
		Total	54	100.0	100.0	
Valid cases	53	Missing cases	1			

GOP6

Value Label		Value	Frequency	Percent	Valid Percent	Cum Percent
		2	3	5.6	5.6	5.6
		3	5	9.3	9.3	14.8
		4	24	44.4	44.4	59.3
		5	22	40.7	40.7	100.0
		Total	54	100.0	100.0	
Valid cases	54	Missing cases	0			

GOP7

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3	2	3.7	3.7	3.7
	4	21	38.9	38.9	42.6
	5	31	57.4	57.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RG1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	22.2	22.2	22.2
	2	20	37.0	37.0	59.3
	3	16	29.6	29.6	88.9
	4	6	11.1	11.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RG2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	24.1	24.1	24.1
	2	23	42.6	42.6	66.7
	3	8	14.8	14.8	81.5
	4	8	14.8	14.8	96.3
	5	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RG3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	11.1	11.1	11.1
	2	22	40.7	40.7	51.9
	3	11	20.4	20.4	72.2
	4	12	22.2	22.2	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RG4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	25	46.3	46.3	46.3
	2	20	37.0	37.0	83.3
	3	2	3.7	3.7	87.0
	4	6	11.1	11.1	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RC1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	24.1	24.1	24.1
	2	26	48.1	48.1	72.2
	3	7	13.0	13.0	85.2
	4	5	9.3	9.3	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RC2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	18	33.3	33.3	33.3
	2	19	35.2	35.2	68.5
	3	9	16.7	16.7	85.2
	4	7	13.0	13.0	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RC3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	25	46.3	46.3	46.3
	2	18	33.3	33.3	79.6
	3	6	11.1	11.1	90.7
	4	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RF1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	25	46.3	46.3	46.3
	2	16	29.6	29.6	75.9
	3	5	9.3	9.3	85.2
	4	3	5.6	5.6	90.7
	5	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RF2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	22	40.7	40.7	40.7
	2	20	37.0	37.0	77.8
	3	6	11.1	11.1	88.9
	4	4	7.4	7.4	96.3
	5	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

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RF3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	35	64.8	64.8	64.8
	2	15	27.8	27.8	92.6
	3	3	5.6	5.6	98.1
	4	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

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RF4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	24.1	24.1	24.1
	2	24	44.4	44.4	68.5
	3	7	13.0	13.0	81.5
	4	8	14.8	14.8	96.3
	5	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RF5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	31	57.4	57.4	57.4
	2	13	24.1	24.1	81.5
	3	2	3.7	3.7	85.2
	4	6	11.1	11.1	96.3
	5	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RW1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	14	25.9	25.9	25.9
	2	28	51.9	51.9	77.8
	3	6	11.1	11.1	88.9
	4	6	11.1	11.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RW2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	22	40.7	40.7	40.7
	2	21	38.9	38.9	79.6
	3	7	13.0	13.0	92.6
	4	4	7.4	7.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RW3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	17	31.5	31.5	31.5
	2	27	50.0	50.0	81.5
	3	7	13.0	13.0	94.4
	4	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RW4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	27	50.0	50.0	50.0
	2	20	37.0	37.0	87.0
	3	3	5.6	5.6	92.6
	4	3	5.6	5.6	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RA1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	11.1	11.1	11.1
	2	20	37.0	37.0	48.1
	3	10	18.5	18.5	66.7
	4	15	27.8	27.8	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RA2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	23	42.6	42.6	42.6
	2	22	40.7	40.7	83.3
	3	5	9.3	9.3	92.6
	4	3	5.6	5.6	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RA3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	22.2	22.2	22.2
	2	23	42.6	42.6	64.8
	3	10	18.5	18.5	83.3
	4	7	13.0	13.0	96.3
	5	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RA4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	14	25.9	25.9	25.9
	2	21	38.9	38.9	64.8
	3	8	14.8	14.8	79.6
	4	11	20.4	20.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RFU1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	11	20.4	20.4	20.4
	2	24	44.4	44.4	64.8
	3	5	9.3	9.3	74.1
	4	11	20.4	20.4	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RFU2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	23	42.6	42.6	42.6
	2	18	33.3	33.3	75.9
	3	7	13.0	13.0	88.9
	4	5	9.3	9.3	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RFU3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	11	20.4	20.4	20.4
	2	20	37.0	37.0	57.4
	3	8	14.8	14.8	72.2
	4	12	22.2	22.2	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RFU4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	15	27.8	27.8	27.8
	2	20	37.0	37.0	64.8
	3	9	16.7	16.7	81.5
	4	10	18.5	18.5	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RFU5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	22.2	22.6	22.6
	2	12	22.2	22.6	45.3
	3	4	7.4	7.5	52.8
	4	22	40.7	41.5	94.3
	5	3	5.6	5.7	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

RL1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	24.1	24.1	24.1
	2	19	35.2	35.2	59.3
	3	5	9.3	9.3	68.5
	4	13	24.1	24.1	92.6
	5	4	7.4	7.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RL2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	17	31.5	31.5	31.5
	2	24	44.4	44.4	75.9
	3	6	11.1	11.1	87.0
	4	6	11.1	11.1	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RL3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	11	20.4	20.8	20.8
	2	21	38.9	39.6	60.4
	3	8	14.8	15.1	75.5
	4	10	18.5	18.9	94.3
	5	3	5.6	5.7	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

RL4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	19	35.2	35.2	35.2
	2	22	40.7	40.7	75.9
	3	5	9.3	9.3	85.2
	4	7	13.0	13.0	98.1
	5	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

RL5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	7	13.0	13.0	13.0
	2	11	20.4	20.4	33.3
	3	6	11.1	11.1	44.4
	4	25	46.3	46.3	90.7
	5	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MG1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	8	14.8	14.8	18.5
	3	14	25.9	25.9	44.4
	4	22	40.7	40.7	85.2
	5	8	14.8	14.8	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MG2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	4	35	64.8	64.8	64.8
	5	19	35.2	35.2	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MG3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	4	7.4	7.4	9.3
	4	29	53.7	53.7	63.0
	5	20	37.0	37.0	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MG4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	9	16.7	16.7	20.4
	3	12	22.2	22.2	42.6
	4	24	44.4	44.4	87.0
	5	7	13.0	13.0	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MC1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	4	31	57.4	57.4	59.3
	5	22	40.7	40.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MC2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	9	16.7	16.7	20.4
	3	11	20.4	20.4	40.7
	4	26	48.1	48.1	88.9
	5	6	11.1	11.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MC3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	3	5.6	5.6	5.6
	2	4	7.4	7.4	13.0
	3	5	9.3	9.3	22.2
	4	33	61.1	61.1	83.3
	5	9	16.7	16.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MF1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	4	14	25.9	25.9	25.9
	5	40	74.1	74.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MF2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	3	3	5.6	5.6	7.4
	4	26	48.1	48.1	55.6
	5	24	44.4	44.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MF3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	2	13	24.1	24.1	25.9
	3	16	29.6	29.6	55.6
	4	18	33.3	33.3	88.9
	5	6	11.1	11.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MF4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	3	5.6	5.6	7.4
	4	30	55.6	55.6	63.0
	5	20	37.0	37.0	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MF5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	5	9.3	9.3	9.3
	3	6	11.1	11.1	20.4
	4	32	59.3	59.3	79.6
	5	11	20.4	20.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MW1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3	1	1.9	1.9	1.9
	4	20	37.0	37.7	39.6
	5	32	59.3	60.4	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

MW2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	2	4	7.4	7.5	9.4
	3	9	16.7	17.0	26.4
	4	25	46.3	47.2	73.6
	5	14	25.9	26.4	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

MW3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	4	26	48.1	49.1	50.9
	5	26	48.1	49.1	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

MW4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	3	5.6	5.7	7.5
	4	36	66.7	67.9	75.5
	5	13	24.1	24.5	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

MA1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3	1	1.9	1.9	1.9
	4	28	51.9	51.9	53.7
	5	25	46.3	46.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MA2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	8	14.8	14.8	18.5
	3	10	18.5	18.5	37.0
	4	29	53.7	53.7	90.7
	5	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MA3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	1	1.9	1.9	3.7
	4	40	74.1	74.1	77.8
	5	12	22.2	22.2	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MA4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	2	3.7	3.7	3.7
	3	4	7.4	7.4	11.1
	4	36	66.7	66.7	77.8
	5	12	22.2	22.2	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MFU1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	2	3	5.6	5.6	7.4
	3	7	13.0	13.0	20.4
	4	31	57.4	57.4	77.8
	5	12	22.2	22.2	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MFU2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	20	37.0	37.0	40.7
	3	9	16.7	16.7	57.4
	4	20	37.0	37.0	94.4
	5	3	5.6	5.6	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MFU3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	4	7.4	7.4	7.4
	3	3	5.6	5.6	13.0
	4	38	70.4	70.4	83.3
	5	9	16.7	16.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MFU4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	2	11	20.4	20.4	22.2
	3	6	11.1	11.1	33.3
	4	32	59.3	59.3	92.6
	5	4	7.4	7.4	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MFU5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	3.7	3.7	3.7
	2	2	3.7	3.7	7.4
	3	9	16.7	16.7	24.1
	4	34	63.0	63.0	87.0
	5	7	13.0	13.0	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

ML1

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	2	3.7	3.7	3.7
	3	4	7.4	7.4	11.1
	4	27	50.0	50.0	61.1
	5	21	38.9	38.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

ML2

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	15	27.8	27.8	27.8
	3	10	18.5	18.5	46.3
	4	23	42.6	42.6	88.9
	5	6	11.1	11.1	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

ML3

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	1	1.9	1.9	1.9
	3	5	9.3	9.3	11.1
	4	33	61.1	61.1	72.2
	5	15	27.8	27.8	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

ML4

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	8	14.8	15.4	15.4
	3	3	5.6	5.8	21.2
	4	36	66.7	69.2	90.4
	5	5	9.3	9.6	100.0
	0	2	3.7	Missing	
	Total	54	100.0	100.0	
Valid cases	52	Missing cases	2		

ML5

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	1.9	1.9	1.9
	2	1	1.9	1.9	3.8
	3	3	5.6	5.7	9.4
	4	31	57.4	58.5	67.9
	5	17	31.5	32.1	100.0
	0	1	1.9	Missing	
	Total	54	100.0	100.0	
Valid cases	53	Missing cases	1		

ETHNIC

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	52	96.3	96.3	96.3
	2	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

GENDER

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	24.1	24.1	24.1
	2	41	75.9	75.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

PROF

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	7	13.0	13.0	13.0
	2	9	16.7	16.7	29.6
	3	10	18.5	18.5	48.1
	5	1	1.9	1.9	50.0
	6	19	35.2	35.2	85.2
	7	6	11.1	11.1	96.3
	9	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MAR

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	37	68.5	68.5	68.5
	2	17	31.5	31.5	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

SPPROF

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	37	68.5	68.5	68.5
	1	1	1.9	1.9	70.4
	2	7	13.0	13.0	83.3
	3	1	1.9	1.9	85.2
	4	1	1.9	1.9	87.0
	5	2	3.7	3.7	90.7
	6	2	3.7	3.7	94.4
	7	1	1.9	1.9	96.3
	9	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

INCOME

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	21	38.9	38.9	38.9
	2	12	22.2	22.2	61.1
	3	9	16.7	16.7	77.8
	4	4	7.4	7.4	85.2
	5	3	5.6	5.6	90.7
	6	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

AGE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	21	38.9	38.9	38.9
	2	7	13.0	13.0	51.9
	3	9	16.7	16.7	68.5
	4	2	3.7	3.7	72.2
	5	3	5.6	5.6	77.8
	6	4	7.4	7.4	85.2
	7	2	3.7	3.7	88.9
	8	1	1.9	1.9	90.7
	9	5	9.3	9.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MHLTHORG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	19	35.2	35.2	35.2
	2	35	64.8	64.8	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

MHO

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	35	64.8	64.8	64.8
	1	5	9.3	9.3	74.1
	2	8	14.8	14.8	88.9
	3	4	7.4	7.4	96.3
	4	2	3.7	3.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

IDARCH

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	18	33.3	33.3	33.3
	2	36	66.7	66.7	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

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YRS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	36	66.7	66.7	66.7
	4	9	16.7	16.7	83.3
	5	4	7.4	7.4	90.7
	6	1	1.9	1.9	92.6
	7	1	1.9	1.9	94.4
	8	2	3.7	3.7	98.1
	9	1	1.9	1.9	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

DATE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	102694	3	5.6	5.6	5.6
	102794	8	14.8	14.8	20.4
	103094	2	3.7	3.7	24.1
	103194	3	5.6	5.6	29.6
	110294	6	11.1	11.1	40.7
	110394	14	25.9	25.9	66.7
	110794	12	22.2	22.2	88.9
	111094	5	9.3	9.3	98.1
	111194	1	1.9	1.9	100.0
	Total	54	100.0	100.0	

Valid cases 54 Missing cases 0

TIME

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	200	1	1.9	1.9	1.9
	330	2	3.7	3.7	5.6
	340	2	3.7	3.7	9.3
	500	2	3.7	3.7	13.0
	530	11	20.4	20.4	33.3
	600	10	18.5	18.5	51.9
	730	8	14.8	14.8	66.7
	1000	7	13.0	13.0	79.6
	1010	1	1.9	1.9	81.5
	1130	2	3.7	3.7	85.2
	1140	2	3.7	3.7	88.9
	1150	2	3.7	3.7	92.6
	1200	1	1.9	1.9	94.4
	1215	2	3.7	3.7	98.1
	1220	1	1.9	1.9	100.0
	Total	54	100.0	100.0	

Valid cases 54 Missing cases 0

GROUP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	17	31.5	31.5	31.5
	2.00	19	35.2	35.2	66.7
	3.00	18	33.3	33.3	100.0
	Total	54	100.0	100.0	
Valid cases	54	Missing cases	0		

APPENDIX G
Grant Contract Between Lakeshore and
The University of Tennessee



STATE OF TENNESSEE
DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION

ALLTOMENT CODE 339.10
COST CENTER _____
OBJECT CODE _____

CONTRACT NUMBER _____
RFS NUMBER 910089

CONTRACT
BETWEEN THE
DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION
STATE OF TENNESSEE
AND
THE UNIVERSITY OF TENNESSEE

This Contract, by and between the State of Tennessee, Department of the Department of Mental Health and Mental Retardation, hereinafter referred to as the State and the University of Tennessee, hereinafter referred to as the Contractor is for the provision of interior design trainee services to Lakeshore Mental Health Institute, hereinafter referred to as Lakeshore, as further defined in the "SCOPE OF SERVICES", below.

A. SCOPE OF SERVICES:

The Contractor will provide the services of one interior design trainee to Lakeshore Mental Health Institute. The trainee shall investigate the community image of Lakeshore based on aspects of the interior physical environment.

1. The existing conditions and opinions of the lobby and cafeteria in the Chota building will be evaluated through observations, interviews, and questionnaires.
2. A plan for renovation of these spaces will be designed.
3. Prototypes of a patient's floor, lobby areas, cafeterias, and the physical therapy area will be designed.

B. PAYMENT TERMS AND CONDITIONS:

1. The Contractor shall be compensated based upon the unit rates as follows:

<u>JOB TITLE</u>	<u>PARTICIPANT MONTH</u>
Interior design Trainee	\$400.10

2. The Unit Rates in Paragraph 1 of this Section, shall constitute the entire compensation due the Contractor for the Service and all of

5. The Payment of an invoice by the State shall not prejudice the State's right to object to or question any invoice or matter in relation thereto. Such payment by the State shall neither be construed as acceptance of any part of the work or service provided nor as an approval of any of the costs invoiced therein. Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment theretofore made which are determined by the State, on the basis of audits conducted in accordance with the terms of this contract, not to constitute allowable costs. Any payment shall be reduced for over-payments, or increased for under-payments on subsequent invoices.

8. The Contractor shall complete and sign an "Authorization Agreement for Automatic Deposits (ACH Credits) Form". This form shall be provided to the Contractor by the State. Once this form has been completed and submitted to the State by the Contractor, all payments to the Contractor, under this or any other contract the Contractor has with the State, shall be made through the State's Automated Clearing House wire transfer system. The Contractor shall not commence work or invoice the State for services¹ until he has completed this form and submitted it to the State. The debit entries to correct errors authorized by the "Authorization Agreement for Automatic Deposits Form" shall be limited to those errors detected prior to the effective date of the credit entry. The remittance advice shall note that a correcting entry was made. All corrections shall be made within two

1.0 (1) Pursuant to Tennessee Code Annotated, Section 9-4-602, the State of Tennessee is not to issue warrants for payments to persons who are in default to the State until such arrearage are paid. If applicable to the Contractor, the Contractor agrees that, should such an arrearage exist during the term of this contract, the State shall have the right to deduct from payments due and owing to the Contractor any and all amounts as are necessary to satisfy the arrearage.

(2) Should a dispute arise concerning payments due and owing to the Contractor under this contract, the State reserves the right to withhold said disputed amounts pending final resolution of the dispute.

INITIAL
[]
UNIT OF
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banking days of the effective date of the original transaction. All other errors detected at a later date shall take the form of a refund, or in some instances, a credit memo if additional payments are to be made.

C. TERM:

1. This Contract shall be effective for a period of ten months, commencing on October 1, 1993 and shall end on July 31, 1994. The State shall have no obligation for services rendered by the Contractor which are not performed within the specified period.

D. STANDARD TERMS AND CONDITIONS:

1. The State is not bound by this Contract until it is approved by the appropriate State officials as indicated on the signature page of this Contract.

2. This Contract may be modified only by a written amendment which has been executed and approved by the appropriate parties as indicated on the signature page of this Contract.

3. The State may terminate the Contract by giving the Contractor at least ninety (90) days written notice before the effective termination date. The Contractor shall be entitled to receive equitable compensation for satisfactory authorized services completed as of termination date.

4. If the Contractor fails to properly perform its obligations under this Contract or violates any terms of this Contract, the State shall have the right to immediately terminate the Contract and withhold payments in excess of fair compensation for completed services. ~~The Contractor shall not be relieved of liability to the State for damages sustained by virtue of any breach of this Contract by the Contractor.~~

5. The Contractor shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of State.

E. SPECIAL TERMS AND CONDITIONS:

1. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, these special terms and conditions shall control.

2. The Contractor agrees to the following conditions and terms:
 - 2.1. The Contractor will assign prospective clinical interior design student with respect to the mutual interests and needs of the students and the State. The trainee assigned will be in good health and in good standing with the Contractor when he/she is assigned and will be required to attend an orientation program provided by the State and to sign a statement of understanding regarding the rights and responsibilities of Student-trainees prior to the scheduled placement at the State facility.
 - 2.2. The Contractor will inform and have the trainee acknowledge that the patients at the State facility may be dangerous to themselves and to others, that the State will not be responsible for any injury to them or damage to their property caused by a patient unless negligently caused by the facility or its' employees, and to instruct the trainee to exercise caution while on the grounds of the facility. (EXHIBIT 01)
 - 2.3. The Contractor shall insure that the trainee who participates in the program carry whatever liability insurance that is required by the Contractor. All parties agree and understand and the student shall be informed that he/she is in no way to be considered a State of Tennessee employee and is not covered by any insurance provided by the State of Tennessee or the facility.
3. The State agrees to the following conditions and terms:
 - 3.1. The State will inform the trainee of the facilities strict standards of confidentiality of information and records regarding patients in accordance with the Tennessee statutes concerning confidentiality, compliance with which is necessary to the trainee's continued participation in the program.
 - 3.2. The State will inform the trainee of the facilities rules and regulations and that obeying such rules and regulations while on the State property is necessary to the trainee's continued participation in the program.
4. Both parties agree to the following conditions and terms:
 - 4.1. Except for emergency situations, the State facility will not provide health care services for the trainee or faculty of the Contractor.. The trainee and faculty will be responsible for cost of emergency medical treatment.
 - 4.2. The State facility shall not be responsible for providing transportation to the facility.
 - 4.3. It is mutually understood that any courtesy appointments to the faculty or staff by either the Contractor or the State


facility shall be without entitlement of the individual to compensation or benefits from the appointing authority.

4.4. Any individual who participates in the placement shall be treated as a trainee who has no expectation of receiving compensation or future employment from the State.

4.5. It is understood that all discoveries and inventions made or conceived in the performance of work on this project will be the property of the University of Tennessee.

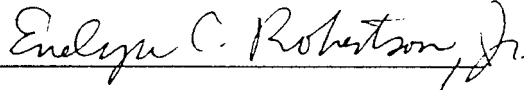
IN WITNESS WHEREOF, the parties have in person or by their duly authorized representative(s) set their signatures.

CONTRACTOR:
UNIVERSITY OF TENNESSEE



DATE: NOV 16 1993

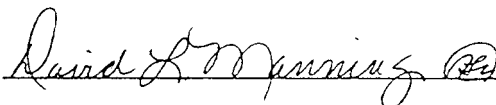
DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDEATION



DATE: 11-23-93

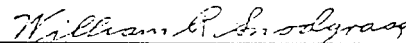
Evelyn C. Robertson, Jr., Commissioner

APPROVED:



DATE: 12-2-93

David L. Manning, Commissioner
Department of Finance and Administration



DATE: 12-1-93

William R. Snodgrass
Comptroller of the Treasury

EXHIBIT 01

STATEMENT OF UNDERSTANDING OF STUDENT-TRAINEE'S
RIGHT AND RESPONSIBILITIES

While participating in clinical training in the Interior Design Program at Lakeshore Mental Health Institute, I acknowledge the risk of accident or injury inherent in working at Lakeshore Mental Health Institute (the Institute) and that the Institute, the State and the University of Tennessee (the University) will not be responsible for any personal injury to me or damage to my property, unless negligently caused by instrumentalities in the exclusive control of the Institute, its employees, or the University.

Furthermore, I acknowledge that any claims for personal injury or property damage resulting from the negligence of the Institute or its employees shall be submitted to the Claims Commission for the State of Tennessee in accordance with T. C. A., Section 9-8-207, et seq., as amended. I acknowledge that damages recoverable against the Institute, the State of Tennessee, and the University shall be limited to claims paid by the Claims Commission.

I agree to abide by the regulations, policies and procedures of the Institute while on the grounds. I acknowledge that the clinical experience in the Interior design Program does not create an employee/employee or independent contractor relationship with the Institute, and that I will not receive, accept, or claim entitlement to any wages, benefits or any other form of compensation from the Institute.

I have been informed and acknowledge that the patients at the Institute may be dangerous to myself and others, that the Institute will not be responsible for any injury to me or damage to my property caused by a patient unless it resulted because of negligence by the Institute or its employees.

Palmira J. Miller 1/3/99
Student Signature Date

Parent or Guardian Signature (if the student is under 18) Date

Lisa D. Stanley
Witness Signature

University of Tennessee, College of Human Ecology
Textiles, Retailing & Interior Design Department

VITA

I was born in Roanoke, Virginia, on November 16, 1965, to George and Dorothy Milan. I attended Norhside High School in Roanoke and graduated in 1984. I then attended Virginia Polytechnic Institute and State University, better known as Virginia Tech, from the Fall of 1984 to the Spring of 1988. I graduated with a Bachelor of Sciences degree in Interior Design and moved back to my home town of Roanoke. As an in-house designer, I worked for two and a half years for Krisch Hotels, Incorporated, a hotel management company. In the Spring of 1990, I successfully completed the NCIDQ exam to become a certified Interior Designer. I then moved to Knoxville, Tennessee to further my education in Interior Design. In May of 1995, I completed the requirements for a Master's of Science degree with a minor in Architecture from the University of Tennessee, Knoxville. I taught as a graduate teaching associate in the Interior Design Department between the Fall of 1990 and the Spring of 1993 at the University of Tennessee. During the time of completing my Master's degree, I also worked as the Director of Interior Design for Designers Alliance, Incorporated a Knoxville architectural firm. With the inception of Tennessee licensing, in January 1994, the State of Tennessee awarded my license to practice Interior Design within the State. My professional memberships include: ASID, and IDEC.