CHILDREN'S ACTIVITIES IN HEALTH CARE WAITING ROOM ENVIRONMENTS: A PHENOMENOLOGICAL INVESTIGATION

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CHILDREN'S ACTIVITIES IN HEALTH CARE WAITING ROOM ENVIRONMENTS: A PHENOMENOLOGICAL INVESTIGATION

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The purpose of this study was two-fold: to develop an understanding of what children do in health care waiting room environments and to explore phenomenology as a design-research methodology. Data was collected through observations of children's activities in five waiting room settings. Observations revealed that children in health-care waiting room environments consistently exhibit certain desires: to manipulate and modify their environments, to experience enclosure and privacy in hiding places and to satisfy conflicting urges for exploration and novelty versus safety and familiarity. Interaction with people such as guardians and other children was also found to be important. From the data, a basic conceptual model was developed, and patterns were generated for designing more supportive waiting room environments for children. Merits and limitations of phenomenology as a design-research methodology are also discussed.

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Introduction and Statement of Purpose

One type of interior space that health care facility designers are often called upon to design is waiting rooms. Typically these waiting rooms consist of a maximum number of seats, a couple of magazine racks and perhaps a TV. While designing for the "typical" adult population, children's needs are often overlooked, except for perhaps a scaled-down table and chairs in the corner. Yet children brought into the health care environment are often expected to wait quietly for long periods of times for a doctor's appointment or while adults visit with hopitalized family members or friends.

We know that waiting room experiences may be uncomfortable and frustrating for adults "due, primarily, to [the waiting period's] excessive length, the anxieties of the participants, and the lack of involving activities during the wait" (Thompson and Stanford, 1981, p. 136). For children, whose coping skills are usually less developed than adults', the experience of waiting may be even more unpleasant. The generic design prescription described above is generally presumed to be adequate and appropriate for the users. But is it? Do these spaces provide the appropriate physical components for helping people cope with the activity of waiting? Conceivably, the waiting experience could be improved by better design and planning of the waiting room environment.

Before making arbitrary decisions about the needs of children in these settings, it is necessary to understand how they actually interact with the physical resources that

exist. What elements tend to be preferred and which are avoided? How long do certain elements command a child's attention? Are furnishings used as intended or are they otherwise manipulated by a child? What conversations and interactions with other individuals occur? How do children experience the waiting room environment? Can their experience of using the waiting room be made better? A review of recent research reveals that only a few useful studies exist which address these questions. The purpose of this study, therefore, is to begin to explore the nature of what children do in health care waiting rooms.

The focus is narrowed to children's use of health care waiting rooms for two reasons. First, children possess less developed coping mechanisms than adults to adjust to their environment. Lawton's "environmental-docility hypothesis" suggests that a resource-rich environment may compensate for the reduced competence of vulnerable groups such as children, elderly and handicapped people (Becker, 1981, p. 47), so that resource-rich waiting rooms may help children cope with that experience. Second, there is a need for additional research in general for children in health care settings. Bernheimer (1986) states that "a major need in children's health research is descriptive data and the events that occur in these settings" (p. 228). Understanding how children use waiting rooms may be valuable in providing more supportive environments that could compensate for less developed coping skills and resultant stress.

Data for this study was collected through observations of children in several waiting rooms and then qualitatively analyzed for recurrent themes, as well as variations, resulting in a heightened awareness of the phenomenon of being in a

waiting room. Studying peoples' lived experiences through observation and/or interviews, as proposed for this study, includes a category of qualitative research known as "phenomenology," and it is this approach that has guided this research. From the data, recommendations are then made for designing more supportive and satisfying hospital waiting room environments for children.

Although a literature review was conducted of existing child-waiting room research, it was not the intent of this study to test hypotheses suggested by the literature, but instead to develop a broader base from which to gain greater insight into the wide range of activities and interactions which occur when children are in a waiting room environment. To accomplish this in a phenomenological study the researcher is required to observe the experience without preconceived notions or expectations to better understand the essence of the phenomena as they are experienced. Therefore, hypotheses and theories that have been developed through previous research must be temporarily set aside. This process is referred to as "bracketing" and will be further explained in the Methodology chapter.

The "Review of Literature" which follows summarizes research related to children's activities in the physical environment, how waiting rooms are different from other environments, and how children experience the health care waiting room environment. The "Methodology" section follows, describing the purpose and design of this study, with a brief explanation of phenomenology as a methodology. In the "Results" section, recurrent themes from the observations are summarized and the five waiting rooms observed during the study are compared. Finally, in the "Discussion" section, theoretical and practical implications of the study are described,

including a discussion of the limitations and merits of phenomenology, limitations of the study itself are considered, and suggestions for further research are made.

Chapter 2: Review of Literature

Introduction

Three fundamental questions addressing how children experience the environmental features of hospital waiting rooms were utilized to organize the literature review: 1) What are children's activities in the physical environment? 2) How are waiting rooms different from other environments?, and 3) How do children experience the features of health care waiting rooms? These questions will organize the following discussion of relevant research.

What Are Children's Activities in the Physical Environment?

A number of studies have been published about children's activities and preferences within the physical environment. Four recurring major themes which are found in the literature are: (1) children's needs for privacy and hiding places, (2) their need to manipulate and control their environment, (3) the environment's evocation of mixed emotions of serenity and excitement, and (4) a preference for outdoor and natural spaces.

An extensive research project investigating children's activities and preferences in their outdoor physical environment, conducted by geographer Roger Hart (1979), is the study most relevant to the question "What are children's activities in the physical environment?" It was also the primary inspiration for this study. Because of the tremendous scope of the findings of Hart's research, his methodologies and most pertinent findings will be discussed here as an introduction to the subject of children's

activities and preferences in the physical environment.

In the monograph Children's Experience of Place, Hart (1979) describes his research as a participant observer among a small ecological group of children in a New England town. During this time, he relied on a "largely naturalistic and descriptive approach. . . to ground research as much as possible in observations of children in the field" (p. 9). He refers to his investigative technique as "an eclectic-ecological-field approach" (p. 9) in which he attempts to describe the environment as it is experienced by a child. He bases his selection of this methodology on a lack of previous research in the area from which to make predictions, and a desire to understand the child's experience in a holistic manner, rather than in the isolated and out-of-context incidences of experimental research. He discusses the occasional temptation to pursue various hypotheses that arose during the course of his research, but resisted these "premature avenues" in order to maintain the more holistic, descriptive purpose of his study.

For almost two years Hart collected data from participant observations, interviews, maps, children's drawings and models, and photographs. From this wealth of data he summarized his findings, several of which are listed here.

1. Children spend a lot of time alone, quietly resting, often near sand or water (p. 334).
2. Children build places for themselves which are often simple, but through imagination become "houses" and "forts" (p. 334). This "imagination" that children employ tends to retreat about age 12 (p. 343).
3. Boys tend to emphasize structure, while girls tend to emphasize

interior detail. Hart suggests that this might be explained by the different role expectations of boys and girls (p. 335). Parents appear to use physical objects as "tools" in preparation of children for particular roles in society, using the environment as an "instrument of socialization" (p. 345).

4. Children's spatial behavior is influenced by a complex set of dynamic forces which lie within the physical environment, within the rules of parents and others, and within the child's own mind (p. 80).
5. Children experience conflicting urges for the safety of familiar places and the excitement of unexplored spaces (p. 340). Hart suggests that the "primary force lies within each child in the form of desire to explore and come to know the larger environment," (p. 336) with fear acting as a deterrant.
6. Children exhibit a strong desire to manipulate the physical environment throughout childhood (p. 343). Hart observed that an important quality of the environment for children is its "suitability for modification by them" (p. 349). He suggests creating environments in which children may find or create their own settings for play.
7. Hiding places and lookout places are "two environmental qualities valued by children" (p. 334). They serve as places of retreat and allow the child to explore his relationship with the environment.

Hart's findings are validated by the tremendous amount of time, quantity and quality of observations, and detailed documentation from which they were developed. They are given further credibility by the findings of other researchers, among them Claire Cooper Marcus.

Marcus (1978) found a number of themes parallel to Hart's when she studied the

autobiographical accounts of the favorite childhood places of architectural and landscape students'. Marcus did a simple content analysis of 50 of these environmental autobiographies and discovered two major themes that occurred in the remembered places: the significance of outdoor environments (only three of the 50 cited totally interior places) and the need for hiding places. Some of these "favorite childhood places" included, for example, an old shack totally surrounded by greenery where the writer could "sneak away" for "secret business" (p. 38); a brick wall around the base of a tree where the writer played house, but "only when I was alone . . . that was my secret game" (p. 41); and a secret cave that "could be damp and cold and frightening or provide a secure hiding place" (p. 42).

In analyzing these common themes, Marcus notes that hiding places apparently serve a number of functions for children such as privacy, manipulation (control), and evocation of mixed emotions of serenity and excitement. Again, these concepts reflect many of Hart's findings. The above excerpts from the autobiographies are typical of the recurring privacy theme. In addition to this privacy aspect, Marcus relates preferences for environmental manipulation. She explains that the "hiding place is that corner of the environment that they personally are able to build, maintain and modify" (p. 41). One student recalls building a fort with his friends out of left-over building materials. In a benevolent gesture, his father built them a better one of more permanent materials. The children abandoned it for their old fort, "where we could easily and continually manipulate our play environment" (p. 41). Marcus suggests that these structures represent our first attempts to create something outside ourselves.

In the description of the secret cave, we see that hiding places also present

"mixed emotions of serenity and excitement. . . The combination of a place of security and a place of daring is curious, but perhaps fulfills the duality we all secretly seek -- of feeling safe, sheltered, and private, yet at the same time wanting to be stimulated by excitement (and fear is definitely one form of excitement" (p. 42). This statement clearly corroborates Hart's thesis regarding the conflicting urges to explore yet to seek safe, familiar places.

The preference for outdoor spaces as described in Marcus' research affirms the major focus of Hart's study: children value the outdoors and the opportunity it affords them for exploration. This preference for natural environments also has been confirmed by other researchers, among them Bunting (1984), who found that pastoralism is clearly more highly endorsed by children than urbanism (p. 174); Filipovitch, Juliar and Ross (1981), whose analysis of children's drawings led them to the conclusion that seventh- and twelfth-graders' drawings "draw heavily on nature space" (p. 261); and Kaplan and Kaplan (1982), who in their summary of a collection of articles on preferred environments, state that "these preferences include both informational properties and particular contents --such as elements of natural environments" (p. ix).

Like Hart and Marcus, other researchers also report children's preferences for hiding places. When Gramza (1970), gave four-year-olds a choice between playboxes with one opening and playboxes with multiple openings, he found that more than 90 percent of the four-year-olds tested preferred boxes with only one opening. The researcher suggests that feelings of escape, fantasy play ("pretend") and visual and tactile stimuli related to "encapsulation" may be responsible for their

preference.

The strong desire by children to manipulate and modify their environment as suggested by Hart and Marcus has been the subject of others' research as well. Smith (1974) found that when 36 to 57 month old children were given only large scale equipment to play with in a play yard, they used their imaginations to create new "spaces" from familiar objects; for instance, toychests were transformed into houses, trains, dancing platforms and other unexpected combinations.

Similarly, provision of such flexible elements to allow manipulation and modification is the basis of the development of "Adventure Playgrounds." Three different playground types (traditional, contemporary, and adventure) were studied by Hayward, Rothenberg and Easley (1976) through behavior mapping methodologies, behavior setting records and interviews with children. They concluded that the ambiguity of adventure playgrounds made them more preferable to children. The important difference they noted between the built and adventure playgrounds was that built playgrounds were permanent and static, while at the adventure playground the form was created by the children and was only as permanent as they chose it to be.

Nicholson (1971) discusses the relevance of this philosophy of control and manipulability in his "Theory of Loose Parts" which he defines as such: "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (p. 30). According to Nicholson, environments that fail do so because they are "clean, static, and impossible to play around with" (p.30).

In a more universal context, Proshansky, Ittleson and Rivlin (1976) discuss the concept of "maximizing freedom of choice." They propose that "in any situational context, the individual attempts to organize his physical environment so that it *maximizes* his freedom of choice" (p. 172). When planning environments, they advocate broadening the available possibilities open to the user, allowing that person to make choices and manipulate the variables to best serve his or her needs.

A third and final theme of research that runs parallel with Hart's and Marcus' observations deals with the conflicting desires for familiarity and mystery. This theme is discussed by Kaplan and Kaplan in their book Humanscape: Environments for People (1982). Related articles included in their book include D.O. Hebb's "Altruism and the need for excitement" and Stephen Kaplan's own "Attention and fascination: The search for cognitive clarity." Kaplan presents the case that making sense and involvement are both necessary components of a person's experience with the environment. He states: "Making sense without involvement characterizes the boredom with the familiar; involvement without making sense is the essence of being lost" (p. 89). The challenge for the child lies between the experiences of being bored and being totally lost.

In his article, Hebb theorizes that "boredom is a state in which the subject seeks a higher level of excitement. . . and the avoidance of boredom is the most important factor in human behavior" (p. 118). He describes research done with sensory deprivation as evidence that mental function and personality deteriorate without the normal stimulation of a varied environment. Based on these and other articles, Kaplan and Kaplan conclude, as did Hart, that "a tension exists between

understanding and finding things yet to be understood, between comfort in certainty and thrill in uncertainty" (p. 82).

In summarizing what children do in the physical environment, the research demonstrates that children tend to prefer outdoor spaces and natural environments. They like to find and build hiding places for purposes of fantasy and privacy, and they balance the need for safety of known, familiar places with the need for excitement and variety. Like adults, they seek out spaces with "loose parts" that they can manipulate and control to satisfy their individual needs.

How Are Health CareWaiting Rooms Different From Other Environments?

The second fundamental question organizing the literature review is specific to the setting of waiting rooms. Schwartz (1975) addresses the question of how waiting rooms are different from other environments. Schwartz discusses the forfeit of control which occurs in a waiting room environment: loss of control of how time is spent, loss of control of the amount of social interaction or privacy, and lack of control of the types and quality of environmental supports available. The result of this forfeit of control may result in anxiety and apprehension for the waiter since he or she cannot bring about closure to this unbalanced state. Closure must be initiated by the server. In the hospital setting this is usually the doctor. According to Schwartz, this subservient posture can be minimized if attractive and convenient waiting room accommodations are provided. In Schwartz's study, these accommodations were in terms of beauty, comfort, beverages offered, and personal escorting of the waiter by the server (p. 151).

In a study of radiation treatment centers, Conway, Zeisel, Welch, Clayton and Heinig (1977) explored through observation, annotated drawings and interviews the psychological effects on patients of treatment center design. Based on their data, the researchers made several recommendations for the design of waiting rooms for patients and their companions which might be generalizable to other types of waiting rooms. Most of these recommendations are related to the issue of maximizing freedom of choice, thus minimizing anxiety and apprehension. For example, planning for both sociopetal and sociofugal seating arrangements allows the user the options of social interaction or privacy. The terms "sociopetal" and "sociofugal" were coined by Humphrey Osmond to describe, respectively, spaces that tend to bring people together and spaces that tend to keep people apart (Hall, 1969).

Providing moveable furniture to allow those waiting the flexibility of rearranging according to personal social needs was also recommended. In apparent agreement with Schwartz's supposition that cessation of active contact with the external world is a source of distress, they suggest furnishing clocks and phones "to permit patients and companions to deal with other aspects of their lives" and to "relate to the world outside the treatment center" (p. 25). Schwartz proposes that diversions such as music or reading material may help reestablish this connection (p. 169). Toys, coloring books or children's stories might be comparable diversions for children.

An unpublished study from the University of Utah reported by Carpman, Grant and Simmons (1986) focused on the waiting area size, activities and the environmental features necessary to support these activities. Data collected through observations of patient and visitor behavior indicated, as did the research of Schwartz

and Zeisel, that waiting rooms should provide as many environmental supports for as many different activities as possible. Suggested examples were specially designed areas for children and separate, more quiet reading areas away from circulation paths. Carpman, et al., also report the finding that visitors prefer glass walls to solid walls between waiting areas and hallways, as glass provides both privacy (safety) and a view to activity (excitement).

These articles have dealt primarily with adults' waiting room experiences. Whether _children_ experience stress as a result of waiting does not appear in the literature, though a number of studies allude to stress in children caused by hospitalization (Berner, 1976; Clatworthy, 1981; Stravrakakis, 1982). More relevant, perhaps, is a study by Bernheimer (1984), where interviews and participant observation were utilized to understand the experiences of _well_ children receiving routine health care. She found that even though the setting was benign and supportive, children exhibited "compliant, nonverbal, and passively apprehensive [behaviors], suggesting that the routine physical examination was stressful" (p. 229). Most researchers conclude that medically related procedures, and the associated environments, create some degree of stress in children.

From the literature it appears that waiting rooms differ from other environments in the amount of stress associated with the waiting experience. For both adults and children, stress might be related to the anticipated medical exam or treatment or the individual's lack of control while in the waiting room. Waiting rooms are usually unfamiliar spaces which seldom provide children much opportunity for exploration. For adults in waiting rooms, control of time and environmental supports is forfeited,

requiring different coping strategies than in other settings. The extent to which this is true for children has not yet been explored.

How Do Children Experience the Features of Health Care Waiting Room Environments?

Although this part of the literature review is concerned primarily with the experience of the well child in waiting rooms, a study by Spivak, Barton and Mishkin (1984) of retarded and disturbed children is of interest because it repeats common themes of manipulation and exploration of spaces. Researchers observed these children in 67 discrete settings to determine the children's setting preferences. Three major dimensions were most highly rated: 1) settings that offered the opportunity to explore and manipulate the environment, 2) those that were novel and non-routine, and 3) settings which were occupied by adults. These dimensions may provide useful insight into the design of health facilities for all types of children, making these concepts more universal in scope.

Studies specific to children in hospital waiting rooms have concen- trated mainly on the need for children's play areas and supervised play therapy. In one study conducted to learn more about the way in which children and parents use their waiting time in an emergency department waiting room, Alcock, Goodman, McGrath, Park, and Cappelli (1985) utilized behavioral checklists and observation techniques to record the waiting behaviors of 625 waiting children and adults in two different hospitals. Children at one hospital (a children's hospital) were randomly assigned to either an experimental group which received child life intervention (i.e., supervised

play therapy) or to a control group which did not. None of the children at the second hospital, a general hospital, received child life intervention. The children's hospital environment was child-oriented, with an aquarium, reading material, children's furniture and "diversional wall-decor" (p. 178). The environment at the general hospital was adult- oriented, and children's books and play materials were limited.

The researchers observed the most exploratory and positive behavior (based on their rating scale) in the experimental group with child-life intervention, but noted that even without child-life intervention, children were more involved in activities in the child-oriented waiting room than the adult-oriented one. The authors suggest that "familiar and age-appropriate materials and furnishings convey the message to children that it is an 'OK' place for children" (p. 178). Parenthetically, it was also noted by the authors that the average waiting time for children and parents in all three groups averaged nearly 90 minutes.

Williams and Powell (1980) conducted a similar study, hypothesizing that a supervised play program at a pediatric ambulatory care clinic "would cause an increase in positive responses in the outpatients and a decrease in their negative responses" (p. 15). Their methodology consisted of observations of positive responses (parent-child interaction, constructive play behavior) and negative responses (crying, screaming, nail-biting, lack of parent-child interaction, etc.) of children and adults over a two week period. The first week was a control week where the clinic's standard toys (limited in number and kind) and furniture were available; the second week was an experimental week, where a cart of numerous selected toys and a play table with chairs were added to the waiting area. Toys for the experimental

group included a variety of art craft materials, blocks, beads, dolls, dishes, books, toy telephones, play medical center supplies and handpuppets. In addition, a play director was present during the experimental week.

While analysis of the observed responses supported the hypothesis, the researchers questioned whether the selected toys alone would have produced a similarly significant change in positive and negative responses or if the intervention of a play director contributed significantly to the behavioral changes. To test this possibility, they conducted a second study. This time, toys were made available to both groups, but the play director was available only to the experimental group.

The researchers observed significantly more negative responses than positive ones for the control group (no play director) but only considerably fewer negative responses for the experimental group, concluding that: "1) the behavioral changes were not caused by the selected toys alone, and 2) the original hypothesis [that a supervised play program would cause an increase in positive responses and a decrease in negative responses] was still supported" (p. 17). Although the statistics show that there were more negative responses when toys were available in the second experiment than when toys were unavailable in the first experiment, the researchers do not explore this aspect. One might hypothesize from the data that no toys are better than some toys. This would require further investigation.

In a four-year study, Clatworthy (1981) utilized the Missouri Children's Picture Series (MCPS) to test whether therapeutic play altered the anxiety behavior of 114 five- to twelve-year olds in two different hospital settings. The MCPS consists of 238 cards with line drawings of children participating in various activities, which the

subjects separate into activities that look like fun and those that don't look like fun. Scores were then calculated which rated eight different concepts such as conformity, masculinity-femininity, maturity and so forth. Materials used for play were "conducive to hospital and family play: . . . dolls, puppets, and storytelling. . . crayons, paints or fingerpaints . . . and clay, punching bags and cars" (p. 110). Clatworthy's analysis of data obtained from the MCPS demonstrated that "therapeutic play did affect the emotional reponse of children to hospitalization" (p. 111).

In a survey to determine users' response to a newly established hospital playroom, Engleman (1970) found "overwhelming support" from parents, physicians, nurses and medical students. The playroom, developed as a type of babysitting service at a pediatric outpatient clinic, was furnished with toys, clothes, equipment, and supplies to "encourage creativity, curiosity and spontaneity" (p. 48). In addition, it was supervised by play directors. Responses to the survey described the playroom as "a positive and growth-producing experiment for the child," "a valuable social experiment that reduces a child's anxiety," " an incentive for patients to keep their appointments" (p. 50), and a laboratory where children's behaviors can be observed by students and professionals. According to the article, negative comments pertained primarily to too much noise and the need for more space. The study appears to be based solely on survey responses of adults, with only four captioned photographs illustrating how children actually used the space.

An article by Jessee, Strickland, Leeper and Hudson (1986) promotes the provision of nature experiences for hospitalized children. Based on other outdoor and nature programs that had been implemented in non-hospital settings, the researchers

developed a program of planned nature-based playroom and in-room activities for a children's hospital in Alabama. The physical environment was planned to include plants, terrariums, plastic boxes with fiddler crabs, trays full of nature objects with magnifying lenses available, records with nature sounds such as birds, frogs and rain, bulletin boards with nature scenes, and a cross-section of a tree-trunk so children could count the growth rings. Activities involving planting, painting, and collages were also planned.

Although the nature program was actually put into use, the article does not discuss the children's use of and responses to the nature experiences; it is not known from the article whether any post-occupancy evaluation occurred or to what extent the program met the children's needs. The success of the program is only presumed by the authors who, without any supporting data, conclude that "this holistic approach allows children to focus on topics outside themselves that have real meaning and are not artificial or contrived. A variety of nature experiences gives the greatest opportunity to find the particular medium of expression that will allow the individual child to maintain a more normal level of emotional stability" (p. 57). It is difficult to determine how this conclusion was drawn.

Although a number of other articles related to children in health care environments make statements which parallel the findings of Hart and other researchers, they present no empirical data to support their assertions. Olds (1978) prescribes that "Experiences in pediatric environments affect three psychological needs of children, parents and staff: the need to feel comfortable, the need to feel in control of one's self, and the need to be purposely active" (p. 111). Piserchia, Bragg

and Alvarez (1982) suggest that "Creating a 'responsive' environment for play, one that is both diverse, complex and incorporates materials that are 'manipulable,' 'buildable,' and that encourage sociodramatic play" (p. 137) can familiarize the hospital environment for children. While several of these concepts have appeared repetitively in the literature, these authors do not present evidence to substantiate their postulates.

In summarizing what children do in hospital waiting room environments, the majority of the published studies show that children would play and interact more and exhibit other positive behaviors in waiting rooms if appropriate toys and supervision were available. The literature seems to advocate waiting room settings that provide features more suitable to the needs and preferences of children: references to nature, hiding places, a mix of familiar things and stimulating ones, and manipulable pieces that can be modified by the child to his or her satisfaction.

Studies such as Hart's and Marcus' have utilized qualitative research to attempt to understand how the child perceives the physical environment. Studies have been done which explored specific variables within health care waiting room settings. While all of these studies are useful in developing various assumptions about suitable environments for children, none have yet explored a child's holistic experience of waiting room environments. A holistic approach, which examines collectively those factors which constitute the man-environment relationship, is useful in trying to understand the experience from a broad, general perspective. There is not yet sufficient groundwork from which to make predictions about children's waiting room experiences. To try to isolate variables or take particular incidences out of

context at this stage would be premature. Therefore, this study will attempt to look at the larger framework of the child's health care waiting room experience in order to provide greater insight into the needs of children in such spaces.

Chapter 3: Methodology

Purpose of Study

The purpose of this study was to observe and describe the activities of children in health care waiting room environments and to analyze that data for common or thematic experiences in order to gain further understanding of how children attend to their lives within these settings. As evidenced by the review of literature, additional exploratory research is needed in this area. To continue this exploratory research, this study was designed to conduct a qualitative, holistic exploration of a particular phenomenon; to "illumine the everyday world of experience with its meanings intact" (Barritt, Beekman, Bleeker and Mulderij, 1985, p.21) rather than to "force reality into a preconceived structure" (Bogdan and Taylor, 1975, p. 12).

While there exist a number of qualitative research methods which utilize interviews, participant observation, and document analysis, the method of applied phenomenology, or the study of experience, differs because the experience, or phenomenon, is approached with no preconceived hypotheses. The phenomena are examined as they are encountered by the people involved in the experience, in a holistic approach, rather than investigated as single, isolated variables. In phenomenological research, unlike scientific research, procedures such as random sampling and controlled observation schedules are not employed. Instead, data collection relies on observation and description of

experiences as they occur in the "real world." As a methodology, phenomenology values "enlargement rather than reduction, generosity rather than economy, complexity rather than simplicity, the lens rather than the hammer" (Psathas, 1973, p. 181). Following is a brief discussion of the phenomenological method.

Phenomenology

Phenomenology has its roots in a relatively recent philosophical movement which has subsequently developed many offshoots. Edmund Husserl (1971), one of phenomenology's earliest proponents, suggests that the primary goal of phenomenology is to understand the meaning of things by going "to the things themselves". Similarly, Seamon calls phenomenology a "window to establish a general descriptive science of the essential nature of things and human existence" (1987, p. 16). Many argue that phenomenology is an alternative to conventional positivist science. Others suggest that, rather than an alternative, it is the necessary first step which "marks out the terrain in broad exploratory terms rather than utilizing the more precise and rigorous instruments of more traditional scientific methods" (Seamon, 1987, p. 20).

In using the phenomenological approach, the investigator describes the lived experience by observing and recording phenomena (objects and events) as they appear. As in any type of investigation of human behavior, findings are subjective, based on both the subjects' willingness and ability to reveal their intentions and motivations; and the observor's perspective. Because of this,

some researchers express concern about the "reliability" and "validity" of the phenomenological method.

According to Seamon (1987), "The only workable phenomenological test of validity is corroboration, criticism, and clarification by phenomenologists and other interested parties. . . ultimately, phenomenological study is grounded in clear, qualitative awareness arising from interest, sensitivity and sincerity. . . Phenomenology's best means for clarity and correctness lies in a continual process of critique, clarification, and correction" (p. 16). The sincerity of the investigator, the amount of time spent in the setting and continuous data analysis are crucial to assuring that the research method is valid. Oiler (1982) asserts that phenomenology is valid if the "findings are recognized to be true by those who live the experience" (p. 81). The judgement is with the reader.

Phenomenology as a research methodology can also be shown to be reliable. Phenomenology uses simple instruments; the eyes, ears, and senses; to observe phenomena and describe them in human language, "the instrument for expressing shared worlds of subjective experience." (Barritt, et al, 1985, p. 27) In phenomenological research, the investigator is essentially a recorder. He describes what he has observed in order to communicate this data to others. While the researcher's interpretation may tend to "subjectify" the observation, if previous biases are recognized, explained, and then set aside, then the "measurements" of the phenomena should be as accurate and useful as humanly possible. Conducting pilot observations can help test any changes over time.

A few of the basic concepts of phenomenology which guide the methodology are explained here:

1.) It attempts to study the human experience as it is lived (Merleau- Ponty, 1962), seeking the "essence" of ordinary, everyday experiences in the "lifeworld."

2.) It relies on intuition, common sense and sensitive seeing to understand the phenomena being studied.

3.) It investigates and describes all phenomena -- "to understand data in the experience under study from the [perceived] perspective of participants in the experience" (Omery, 1983, p. 50) -- but does not attempt to explain or control it.

4.) The researcher must have no preconceived expectations. He must approach the phenomena naively and observe without prejudice. All preconceived notions are suspended in a process defined as "bracketing."

5.) "It uses specific examples of behavior, experience and meaning to render descriptive generalizations, [or essences] about the world and human living" (Seamon, 1987, p. 16), relying on language to guide the reader through the experience.

As mentioned previously, there are a number of phenomenological methodologies which can be used by researchers. Among them are participant observation, transcribing interviews with people who have experienced the

studied phenomena studied, describing a researcher's own recorded experiences, and studying secondary texts and documents related to the phenomena. Seamon (1987) points out that concept and method are inseparable in phenomenology. The type of methods results from what one wants to learn about the qualities of the particular phenomena. Due to the difficulties inherent in interviewing children, participant observation was the method chosen to study this phenomenon. As the famous child-researcher Piaget (Singer & Revenson, 1978) has demonstrated, we can learn about children through observations and these observed consistencies can serve as a framework for understanding behavior.

Research Design

Issues central to study.

In conducting the observations the investigator was the research tool; seeing and listening were the primary instruments used for determining the activities of children in the waiting room environment. The intensity of a child's attention to particular aspects of the space was determined by careful observation of the child's expressions, both verbal and facial, particularly as revealed by eye focus.

From these observations, descriptions of children's activities were recorded in field notes. Interpretive and analytical comments during the investigation were kept distinct and separate from field notes by enclosing them in parentheses. A conscious effort was made to describe what was observed accurately and

without bias.

To provide a focus for the research, certain thematic issues central to an applied phenomenological approach were developed. According to Hall (1977), such thematic issues entail "the various concerns and objectives of individuals, their perceptions of others and the other's motives, the externalities which they take into account, and other externalities which they ignore" (p.272). Thematic issues considered during the observations of this study were developed from questions formulated by Thompson and Stanford (1981, p. 145):

- How do children respond to the setting?
- What attracts them?
- What repels them?
- Does the environment pique their curiosity or arouse their anxiety?
- What [or who] is responsible for these actions?
- What stimuli are available for children?

Sites

The observations took place in five outpatient clinic waiting rooms at four different medical facilities in a midwestern university town: 1) a child health clinic within a university hospital, 2) a child health clinic associated with a university but in a satellite facility, 3) a child health clinic associated with a county hospital, 4) a women's health clinic specializing in obstetric and gynecological care in an

office building, and 5) a university-associated family-practice clinic in a satellite facility which had recently installed a play-pit area for children.

The five sites were selected because pilot observations showed them to consistently have a high population of children, and because the variations in physical layout and furnishings suggested a basis for possible comparison and contrast in data analysis. To assist in understanding how children perceive these spaces, photographs were taken of each of the waiting rooms at both child and adult levels. Selected photographs are provided here, along with descriptions of the five waiting rooms and the code names assigned to them. The remainder of the photographs as well as floorplans of the five waiting rooms, appear in Appendix A.02.

1) Child health clinic within a university hospital (Bead Toy Room): Approximately 528 square feet. This waiting room was a cul-de-sac located at the end of a corridor. The outside corridor wall featured floor to ceiling windows with a view of a courtyard area. Furniture consisted of a number of adult-scaled chairs formed in two U-shaped arrangements and two round occasional tables holding old issues of adult magazines. Outside of this arrangement in a corridor were four plastic stacking children's chairs around a round children's table. On one wall was a drinking fountain mounted at adult height with a stepping stool nearby. An aquarium with a few small fish occupied the opposite wall, and there were several hanging plants and three pieces of artwork hung at standing adult eye level. Occasionally, one toy would be available: a wire sculpture with brightly colored wooden beads that could be pushed along the wire. Most days it wasn't there. [I later learned that the toy had "disappeared."] Sometimes there was a container of crayons and individual sheets of paper which had been obtained by parents' request from the reception desk.

Figure 1. Illustration of "Bead Toy" design.

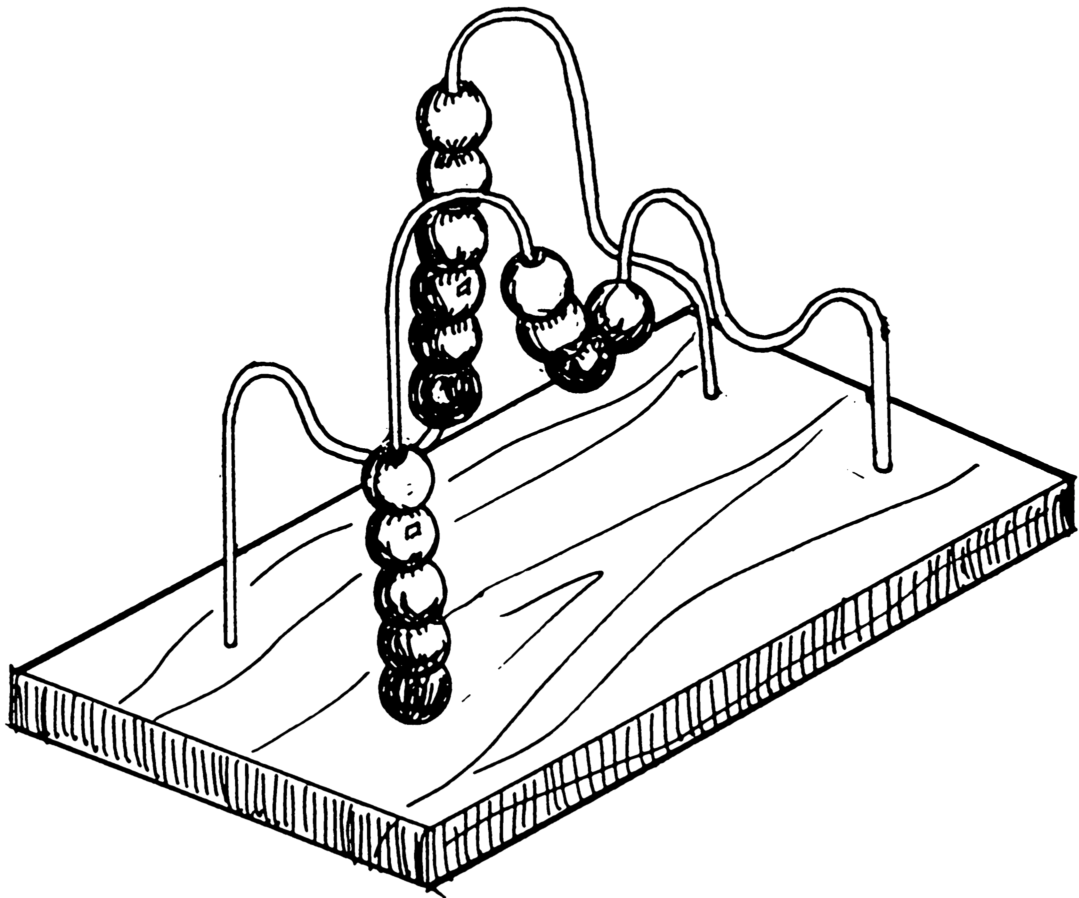


Figure 2. Photograph of children's table and chairs in Bead Toy Room.

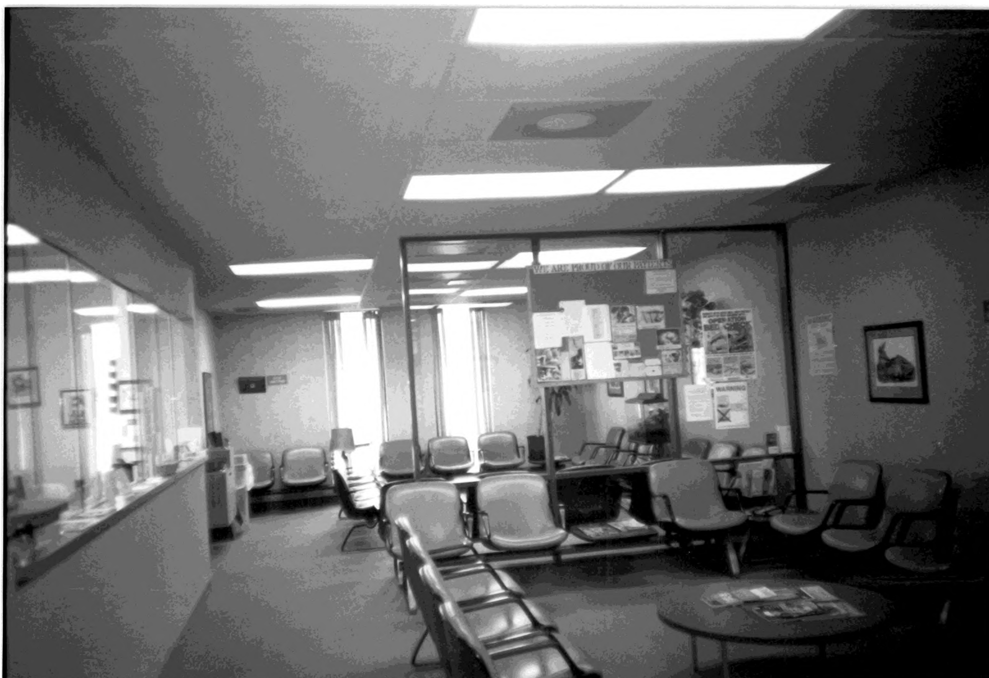
Figure 3. Photograph of aquarium and seating area in Bead Toy Room.

2) University child health clinic in satellite facility (Playhouse Room):
Approximately 400 square feet. A fairly large open space opening off the side of the entry/reception area. Windows with blinds that were normally closed were located on one wall. A door to the outside was at the far end of the room, and miscellaneous doors to the exam rooms, offices, and children's bathrooms were located on other walls. Furnishings consisted of adult chairs around the perimeter of the room, some occasional tables, one rectangular children's table with two wood-framed non-stackable chairs in the center, a large vinyl-covered-foam playground (steps and slide) in one corner, and a Little Tykes playhouse against one wall. Additionally, there were a number of children's toys and books on a shelf next to the playhouse. The only picture was of a rocking horse, hung at standing adult eye-level.

Figure 4. Photograph ofchildren's area (playhouse and foam playground) Playhouse Room.

3) County hospital child health clinic in satellite facility (Sick Side/Well Side Room): Approximately 480 square feet. This room was separated from the rest of the building by glass doors. Its interior space was partitioned into two sections by a glass wall: one side for well children and one side for sick children. Both sections had U-shaped arrangements of adult chairs and end tables. The "well-side" had a large aquarium with large colorful fish while the "sick-side" had a terrarium of artificial plants. One wall of the sick side was windows to the outside. Two drinking fountains, one at adult height and one at child height, were also available on the sick-side. Portable children's equipment included a plastic slide (which when turned over became a rocker) and a plastic picnic table with attached seats. These were often moved back and forth by children between the two rooms. Both sides had an assortment of children's books and magazines. The well-side had a large bulletin board mounted at adult height with posters and announcements tacked on it. Artwork consisted of several photographs of wildlife, mounted slightly below standing adult height.

Figure 5. Photograph from entryway to Sick Side/Well Side waiting room.



4) Women's health clinic (Corner Table Room): Approximately 320 square feet. The waiting room was a square space with entrance and reception desk on one wall and high windows on the opposite wall. Furniture consisted of traditional residential-styled chairs and loveseats arranged in informal groupings. One corner of the room had a small children's table with child-sized wooden stools. Stacked on the table were several children's books, and in a crate next to it were several small children's toys. Artwork was adult-oriented country prints and stitchery, hung at mostly at standing adult eye level, though two pieces were placed at standing grade-schooler's height.

Figure 6. Photograph of children's corner with table, stools and toys in Corner Table Room.

5) University family practice clinic in satellite facility (Playpit Room): Approximately 432 square feet. Similar in size to the university child health clinic housed in the same facility, this waiting room had only one window to the outside, next to a custom designed playpit for children. Carpeted steps led up to the pit, which was lined inside with vinyl- covered foam pads. Fencing in the play area were a variety of materials: one side was a short wall with plexiglas windows of different geometric shapes which allowed eye contact between children and their guardians, one side was a window to the outside protected by a low partition, the adjacent wall was of unbreakable mirror, and the fourth side was the slide/stair entrance and exit from the pit. Outside the play pit was a low shelf unit with miscellaneous children's toys and books and a children's wooden table and chair set. The remainder of the seating was adult-scaled. Artwork was adult-oriented and mounted at adult eye level.

Figures 7. Photograph of children's waiting area and playpit in the Playpit Room.

Observations in the five waiting rooms initially concentrated only on children's interactions with various aspects of the physical environment. For purposes of this study, the physical environment was considered to consist of the actual structural elements of a space (floors, walls, windows, doors, ceilings), the fixed and movable furniture and equipment, fabrics and finishes, accessories and amenities such as aquariums, artwork, magazines and toys, and the descriptors of these elements, such as size and color. To the extent discernible by observation, children's awareness of or reaction to such ambient features as temperature, lighting, noise and smells were also recorded.

Role of observer.

The observor was a 31-year old female. Because there were a number of other people typically present in the waiting rooms, children's activities were not apparently disturbed or affected by the presence of a stranger during the observation process. It was unnecessary, therefore, to disguise the researcher's presence or explain it to those being observed. The positioning of the observer in the room was dependent on the availability of seats. Every attempt was made to observe from an unobtrusive location that permitted a view of all areas where activities were occurring.

Subjects.

For the purposes of this study, the group "children" is defined as subjects from toddler age (excluding "babes-in-arms") to pre-adolescent who were

present during times of observations within the waiting rooms. This age range permitted concentration on children who were old enough to move about the space on two feet somewhat independently (i.e., not crawling), but who were not old enough to be left in a waiting room environment unattended. Approximate age was judged from physical size, appearance, behaviors and other characteristics which could be ascertained by observation. Data concerning exact age was not considered essential for this exploratory study, as the research interest is in the broad category of "children." Almost all children observed were of pre-school or grade-school age.

As the research developed, social interaction with adults and other children was also discovered to be an important issue, and observations of such interaction were noted in addition to interaction with the physcial environment.

Time schedule.

Due to the reflective nature of phenomenology, which requires continuous regressive evaluation, an advance decision about the number of observations required to obtain sufficient data for analysis was not possible. Conclusion of data collection followed Lindesmith's (1968) concept of "negative evidence", which suggests ceasing data collection when continued observations fail to present any new or contradictory data or evidence to the thematic issues which have been developed.

The data collection was conducted during the months of October, November and December in one-hour increments during a five week period. These

observations totaled approximately 25 hours of observation among the five different waiting room environments. All sites were observed at more than one time of the day to provide a fuller picture of daily activities less affected by time. A one month pilot study in a number of different waiting room spaces was conducted to familiarize the investigator with the nature of children's activities in waiting room spaces as well as observation and data recording techniques.

Data Analysis

Data analysis during the investigation was ongoing. This continuous analysis, referred to as "drawing back" (Lofland and Lofland, 1984) or "recursive analysis" (Borman, LeCompte and Goetz, 1986) was employed to ensure that "discontinuities, contradictions, and other puzzling features of the data will be further assessed in the field" (Bernheimer, 1986, p. 224). Such cyclic patterns allowed unexpected findings or variances from the common themes to be integrated into the study rather than ignored or tossed out as "loose ends" or interference. Although these questions and comments were kept distinct from the actual observed data, when appropriate they will be presented to assist in the final analysis.

Procedures for formal analysis are suggested by a number of sources, primarily Barritt, et al., (1985) and Borman, LeCompte and Goetz (1986), but also including Bernheimer (1986), Bogdan and Taylor (1975), Oiler (1982), and Omery (1983). The analysis that follows is a systematic multi-leveled process, starting with the item level of analysis in which phenomena (the activities of

children in waiting rooms) are described. In the next level, the pattern level, items are grouped and linkages or similar essences among them are defined. Finally, meanings and patterns are examined and discussed.

Chapter 4: Results

Themes

After the researcher determined that no new patterns were emerging from the observations of children's activities, the field notes were reviewed and analyzed for recurrent themes and variations. First, each description was interpreted for its important elements or essences, then these are compared with one another to make a list of shared themes. Short excerpts from the field notes, illustrating how these common patterns were categorized, can be found in Appendix A.03.

Table 1 illustrates the eleven themes that occurred most frequently. The themes in Table 1 are listed in order from the most often occurring to least often. While frequency is not necessarily the most relevant indicator of the importance of certain activities, it provides a framework from which to discuss the observations. In the discussion that follows the table, examples of the various activities will help define the various themes.

Table 1

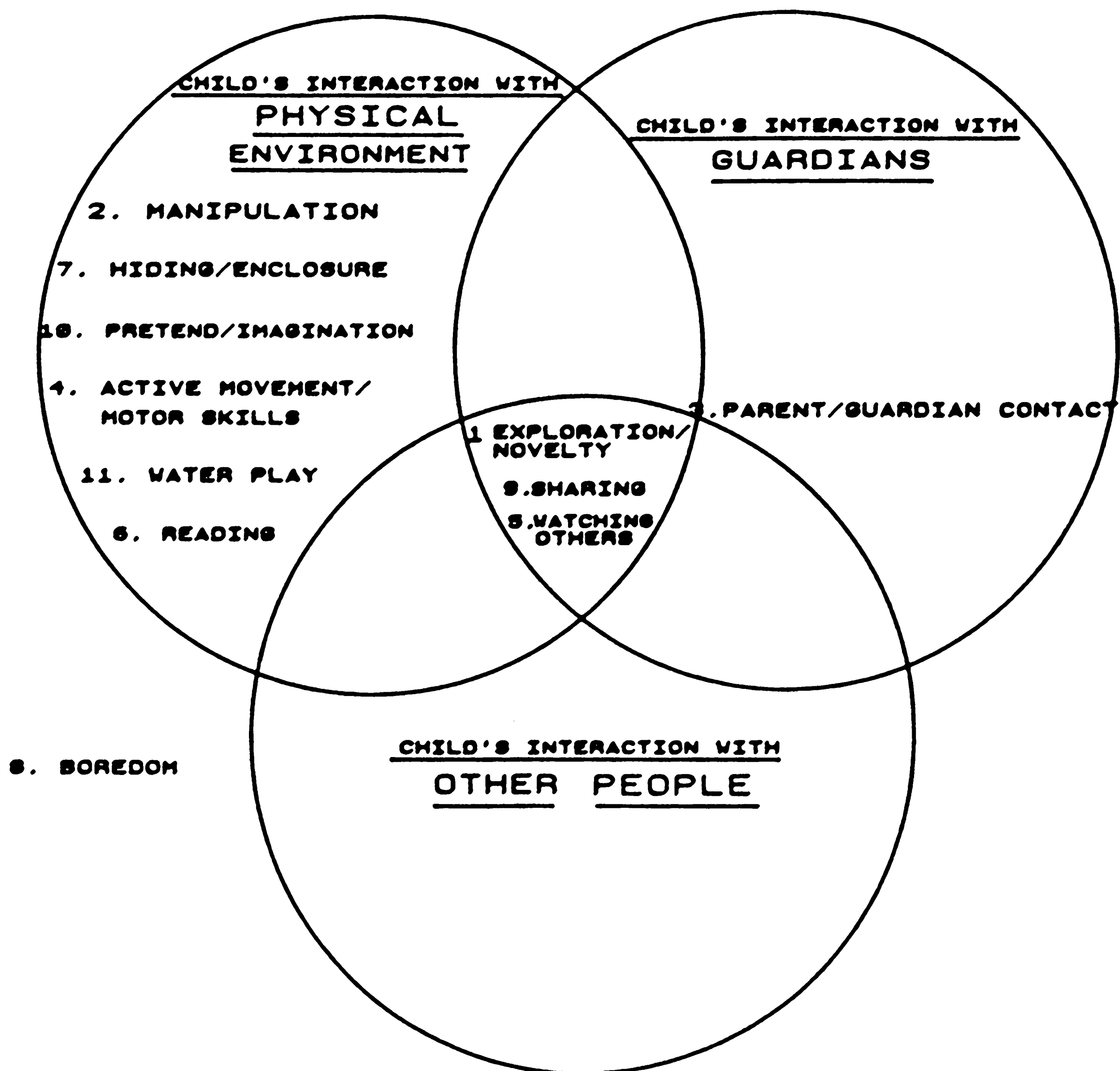
Frequency of Thematic Activities Observed

Activity	N
1. Exploration/Novelty (New experiences)	37
2. Manipulation of the physical environment	23
3. Parent/Guardian interaction with children	23
4. Active Movement/Motor Skills	22
5. Watching/Meeting Others(Children)	17
6. Reading	13
7. Hiding/Enclosure	13
8. Boredom (No interaction)	9
9. Sharing with others	5
10. Pretend/Imagination	5
11. Water Play (Drinking fountains/sinks)	4

Assignment of a specific activity type to a category was generally based on the _spirit_ of the child's attention. For example, while two different children may have played with the same toy helicopter, one may have picked it up because it was a novelty item to him and was exploring it for the first time, while another may have been familiar with the toy but was interested in spinning the propellor around and around (manipulation). Many activities fell into more than one category; therefore some overlapping exists. It could also be argued that hiding and water play should be classified as specific types of exploration activities, but because they occurred so frequently they have been categorized separately.

The conceptual model in Figure 8 shows how these eleven themes can be further reduced to three basic categories of children's interactions with health care waiting room environments: 1) the physical environment, as previously defined, 2) guardians, and 3) other people, particularly children.

Figure 8. Conceptual model illustrating the three basic categories and eleven basic themes.



Children's interaction with the physical environment.

The six major activities that were observed that fall into the category "Children's interaction with the physical environment" are exploration/novelty, manipulation, active movement, hiding, reading and water play. These were activities which required some interaction with some element of the physical environment, such as toys, chairs, or books, in order to occur. Examples of these activities as observed in the waiting rooms will be discussed here.

Immediately upon entering a space, children began to explore it. It was common for children to stand or sit near their guardian upon entering, investigating the space visually until they felt familiar enough to explore it physically. Toys or books that were brought from home were often abandoned as soon as other "novel" activities were discovered. Fish aquariums, present in two of the waiting rooms, were a popular novelty that encouraged exploration and elicited comments from children such as "Oh! Look at the fish!", "I want to see the fish!", "Fish! Fish! Fish!" and "They call it a catfish 'cuz it's got whiskers." One child could not resist sticking his fingers in the water when he thought no one was looking. Children were drawn to the tank by the movement and color of the fish as well as the bubbling sound from the filter. In this respect the tank with the larger and more colorful fish was more successful in attracting and maintaining the interest of the children.

Another recurring theme was that of manipulation. Whether in the form of stacking blocks and knocking them down, spinning the propellors on a toy helicopter, pushing colored beads along a curving twisted wire, or moving

furniture around to suit their purposes, children capitalized on the opportunity to operate and control various pieces of the environment. The bead toy was especially popular, perhaps because it was both novel and manipulable. Another popular activity within this theme was to stack or rearrange the child-size chairs or stools that were present in all of the waiting rooms. Because their scale allowed them to be easily moved, children utilized them for stepping stools at drinking fountains, formed them into lines as train cars, and stacked them as high as arms could reach.

When appropriate space or equipment was available, most children took advantage of the opportunity for active movement and the use of their large motor skills. Slides in three of the waiting rooms were in continual use, as children experimented with sliding down backwards or on their stomachs, or climbing up the slides. One child commented, "The climbing part is more fun!" When such equipment was not available, children utilized chairs and tables as playground equipment, and when guardians would allow it, ran around imaginary racetracks in the waiting rooms.

One of the most fascinating recurring activities to observe was the creation of hiding places. One of the waiting rooms had a commercially manufactured playhouse which provided a ready-made hiding place. Children were observed to enter the house and close all the doors and windows, providing an escape from the outside world. One boy called out to his father, "Dad, you can't get us because we're in the window and you're too big." The receptionist in this waiting room said the playhouse was a favorite with the children. But even without

ready-made hiding places, children sought them out, creating enclosures by climbing under tables and inside shelves and closets. One girl used her coat to create a tent over an end table, then crawled under to settle out of sight beneath it. A child, barely beyond crawling age, pushed all of the books off a lower shelf and then crawled into the shelf himself. Other hiding activities that were observed were a game of hide and seek between siblings and jumping out of a hiding place to scare a mother.

Not all children were inclined to be active. The most popular passive activity, other than simply sitting and watching, was <u>reading or looking at books</u> and magazines. This occurred more often at the waiting rooms that provided child-oriented reading materials, particularly where large scale play equipment was not available. At the hospital-based waiting room where only adult magazines were available, children would leaf through these, looking at pictures, or ask guardians to look at them with them, but usually lost interest sooner than children who were "reading" children's materials. In one waiting room a bulletin board that had a number of posters and signs tacked on it drew attention from some of the older children.

Three of the waiting rooms had sources of water available: two had drinking fountains within the space, one had a child's restroom adjacent to the space. Though in most cases the children used these fixtures for the purpose intended, it was not uncommon for children to be observed splashing in the water, filling squirt bottles or simply watching the water flow.

Children's interactions with guardians.

While it is difficult to assess the importance of the relationship between children and their guardians from observations alone, it was apparent that the interaction was an essential part of a child's experience in the waiting room setting. Attention from or interaction with the guardian, such as reading stories, cuddling, and talking was often sought by children. When this attention was present, children rarely appeared bored. The activity level of a child appeared often to be dependent on the expectations of the guardian. In many cases, children who sat passively in adult chairs without toys or books were instructed by the adult to do so. Instructions or suggestions from the guardian often influenced initial orientation of the children's activities: "Go play with the toys," "Do you want to color?", "Let's sit at this little table." Even when involved in activities away from the guardian, awareness and dependence on their presence was apparent. In one case, a boy informed his mother of each new activity in which he was embarking : "Mom, I'm going in the house to talk," "Mom, I'm going to read a book." Another child, hiding in the playhouse, periodically peeked out the window to make sure his mother was still there.

In one extreme example, the "spirit" of the guardian appeared to influence the activities of the children, even though the guardian was not physically present. The following excerpts from the field notes illustrate this point.

> "2 girls, approximately 4, sit on floor, coats on, near table - just watching - not playing - like 2 dogs told to "stay."
>
> [2 other girls] play in play area on slide squealing with delight. They are

enjoying the opportunity for physical exercise [gross motor skills] -running up stairs, sliding down slide on stomach or bottom - climbing up slide - (there is a lot of space to run - yet it can be supervised by adults.)

[The first] 2 little girls are very quiet - one points to the play area and looks at the other - like "do you think we could?" the other shrugs and shakes her head no. They crawl next to the table, then slowly climb onto the adult chairs."

This example serves to illustrate that availability of physical resources for children's use cannot be assumed to be the only factors affecting what children do within an environment.

Children's interactions with other people.

People, particularly other children, appear to be a notable distraction for children as a source of action, movement, and sound. Children typically tended to smile at babies and mimick behaviors of older children. For example, a child was observed using the same toy after the first child was finished playing with it although other toys were available. In another setting, a child got himself a drink of water after watching another child get one. For some children, watching other children play seemed to be vicariously experienced, as they sat safely with their guardians but experienced the exploration of the environment by observing others. Particularly when children became bored, a new child entering the space sparked interest. One boy who had been playing a game with his mother stood and moved to a chair closer to a girl who had just entered the room. He sat with chin in hand just watching her.

While some children were content to watch others, others initiated social contact, resulting in shared playing. Playing together occurred more often with the large scale equipment (playhouse, slide, playpit) than with small individual toys, although children were observed sharing the bead toy.

During one particularly touching observation, children in the waiting room appeared disturbed by the presence of a child whose features were wrinkled and frail like an old woman's. The children walked up and openly stared at this unusual creature, unrestrained in their curiosity about this novelty, though they were unsure how to react. Finally, when one mother walked up to the guardian and said "Isn't she precious. What's wrong with her?" and the guardian explained that something was wrong with her liver, the children seemed to relax and accept the old-woman-child's presence.

No interaction - boredom.

Some children grew restless and bored while waiting. This seemed to occur when there was no interaction with the physical environment, guardians or other people. As shown in the conceptual model in Figure 8, boredom might be considered a variation of the other themes, or the antithesis of being aroused or attentive. Boredom was evidenced by actions such as staring into space or scanning the room for something to do, fidgeting, or more destructive behavior such as kicking tables, making threats and pushing magazines off tables. For purposes of this study, observations of children who were simply sitting passively were not included in the "Boredom" category, only those who

appeared to be searching for something to do.

Phenomena to which children did not attend.

It is also important to note features of the environment to which children did not appear to attend. Children were not observed to pay much attention to the aesthetic decor of the environment. Unless it was pointed out by adults, artwork (even when "child-oriented") was not a focal point for children. The height at which the artwork was hung may have been a reason for this because with one exception it was all hung at standing adult level.

Children did not appear to be attracted by lighting levels or types, nor by the outdoors as seen through windows and doors. From observations it could not be determined to what extent children experienced color or texture in the waiting room environments, although some children were observed rubbing chair upholstery fabric or the smooth glass of the fishtanks.

No comments were heard related to color of the room, and only once did a child state that he preferred one color of chair over another. No children were observed sleeping. Although there were no observations of children attending to these phenomena in this study, it does not imply that they do not or would not occur at another time or place.

Comparison of Children's Activities in Health Care Waiting Room Environments

The conceptual model presented in Figure 8 can be used at this point to

illustrate some of the similarities and differences between the five waiting room environments. Major contrasts will be summarized here.

It became obvious that several of the waiting rooms had focal points that not only allowed children to become involved with the physical environment but also provided a stage for interaction with guardians and other children. Examples of these focal elements include the playpit, the playhouse and the large fish aquarium. As enveloping structures, both the playpit and playhouse provided opportunity for exploration and hiding while still allowing visual contact with guardians and other children through the windows and openings. The size of these structures allowed several children to use them simultaneously, encouraging social interaction. The fish aquarium was a novelty that generated considerable conversation between children and adults.

The three waiting rooms that contained these elements were also rich in other resources for exploration such as the foam playground, slides, books and magazines and various toys. The opportunities for interaction with the physical environment were many, but the spaces also allowed for quiet, passive activities. Expressions of boredom were rarely observed in these spaces. Children appeared involved and contented.

In contrast, the children in the university hospital clinic waiting room often appeared to be searching for something to do. The only resource available for sharing was the bead toy, though its size and availability did not really encourage that. This waiting room, in contrast to the other more resource-rich environments, seemed to generate a greater number of incidences of

people-watching and what might be considered inappropriate or unacceptable activities. The lack of environmental supports resulted in greater improvization by the children: playing in the drinking fountain, hiding behind trash receptacles and using the children's chairs for stacking and climbing. Racing around the room or up and down the hall in wild abandon was more common in this space, as was throwing things such as magazines. These actions may have been due to a lack of physical resources in the space to satisfy the physical needs of the children. Again and again children were observed leaning chin-in-hand against the large expanse of table top, gazing around the room for something to do; wanting to become involved in the environment.

It should also be noted that time of wait did not seem to be a major factor in the activities of children. Occasional waits of longer than 30 minutes were observed, but in most cases the child's waiting time at all sites was less than 15 minutes.

In the Introduction to this thesis, it was observed that many waiting rooms furnish only a small table and chairs to accommodate children. It became apparent, through observations, that such a generic prescription is <u>not</u> sufficient to fulfill a child's varied needs. Waiting room design for children should provide for a range of activities, maximizing their freedom of choice in the environment.

Figure 9. Conceptual Model Used to Illustrate Activity Patterns in the Bead Toy Room.

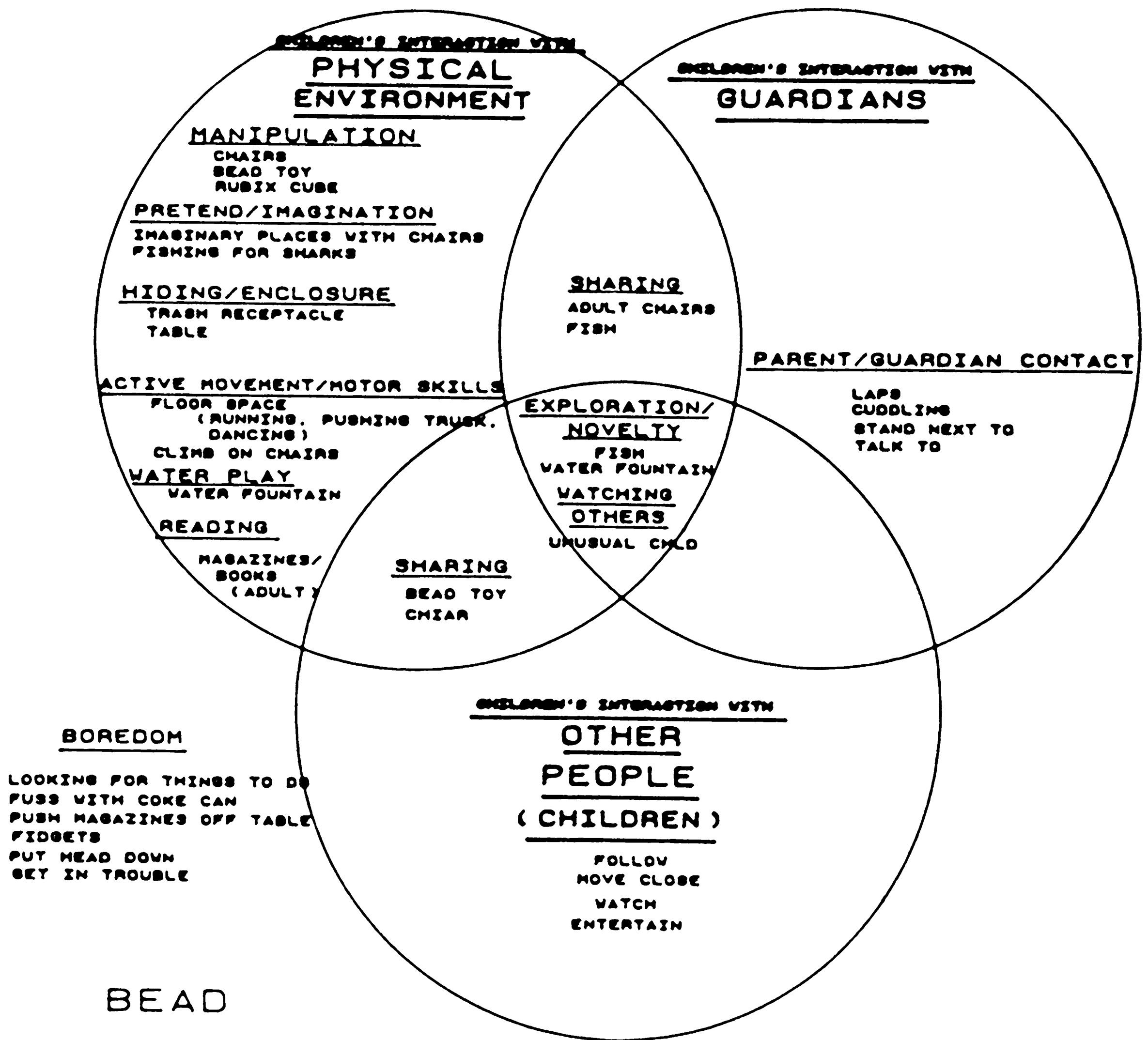


Figure 10. Conceptual Model Used to Illustrate Activity Patterns in the Playhouse Room.

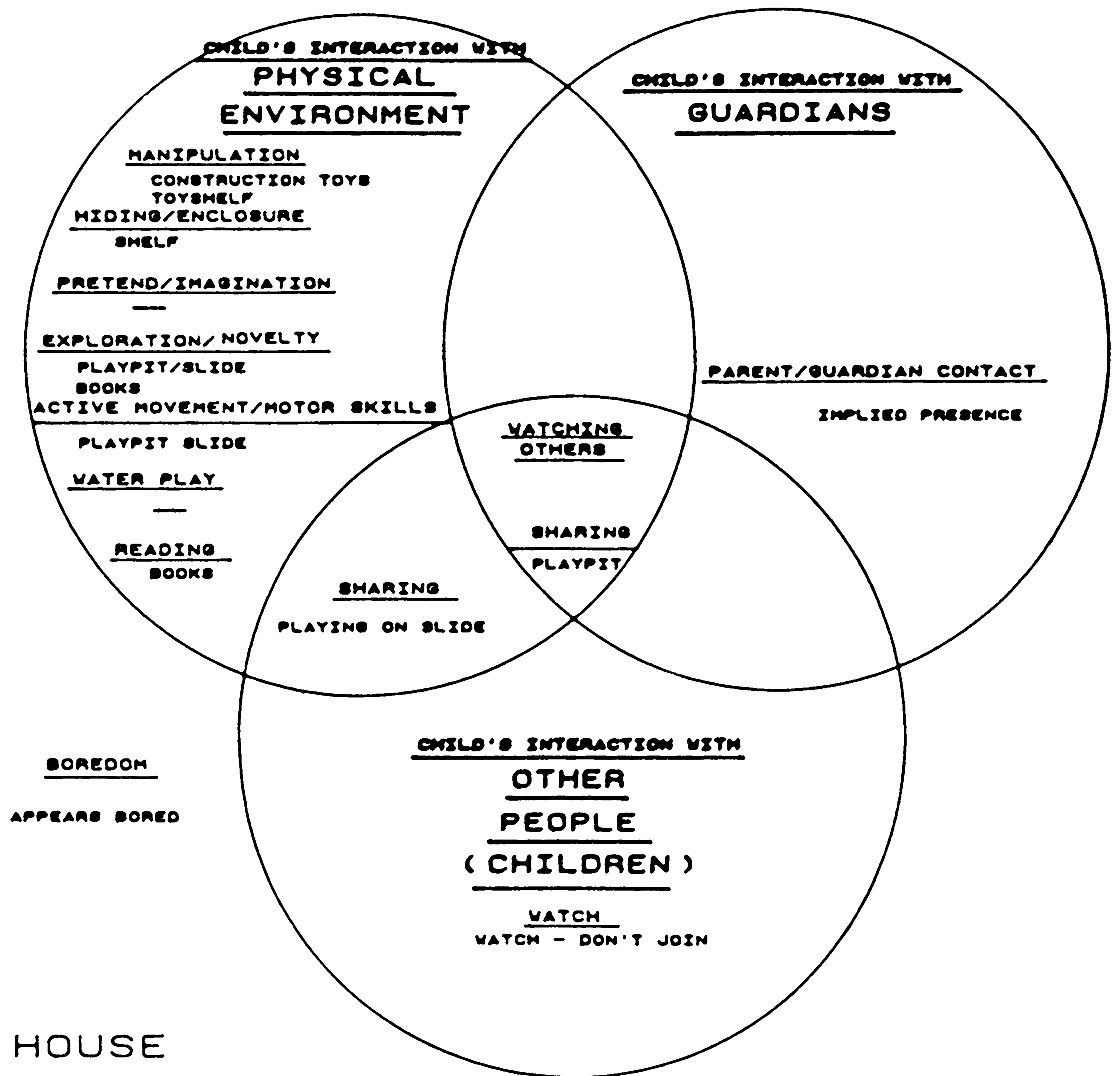


Figure 11. Conceptual Model Used to Illustrate Activity Patterns in the Sick Side/Well Side Room.

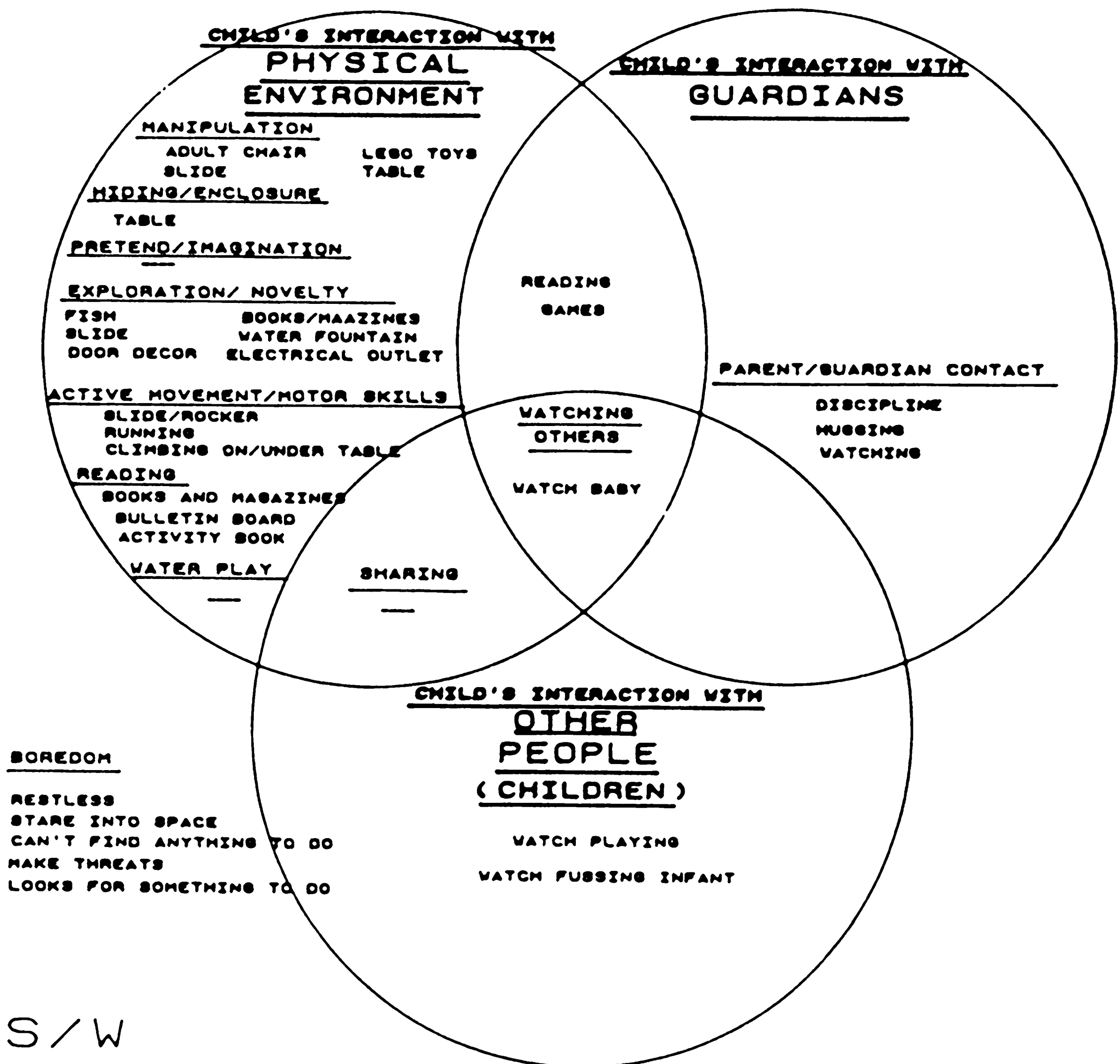


Figure 12. Conceptual Model Used to Illustrate Activity Patterns in the Corner Table Room.

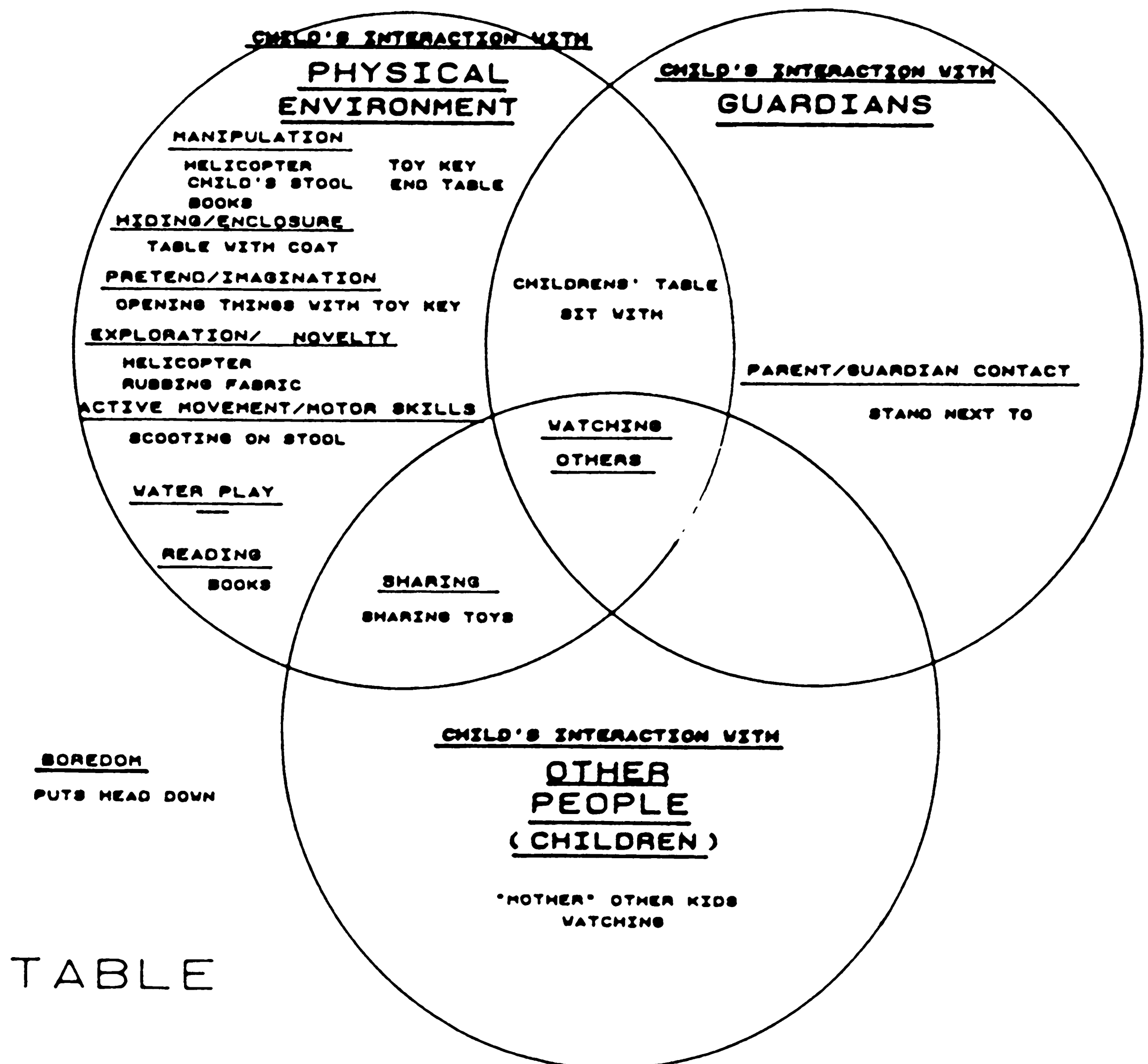
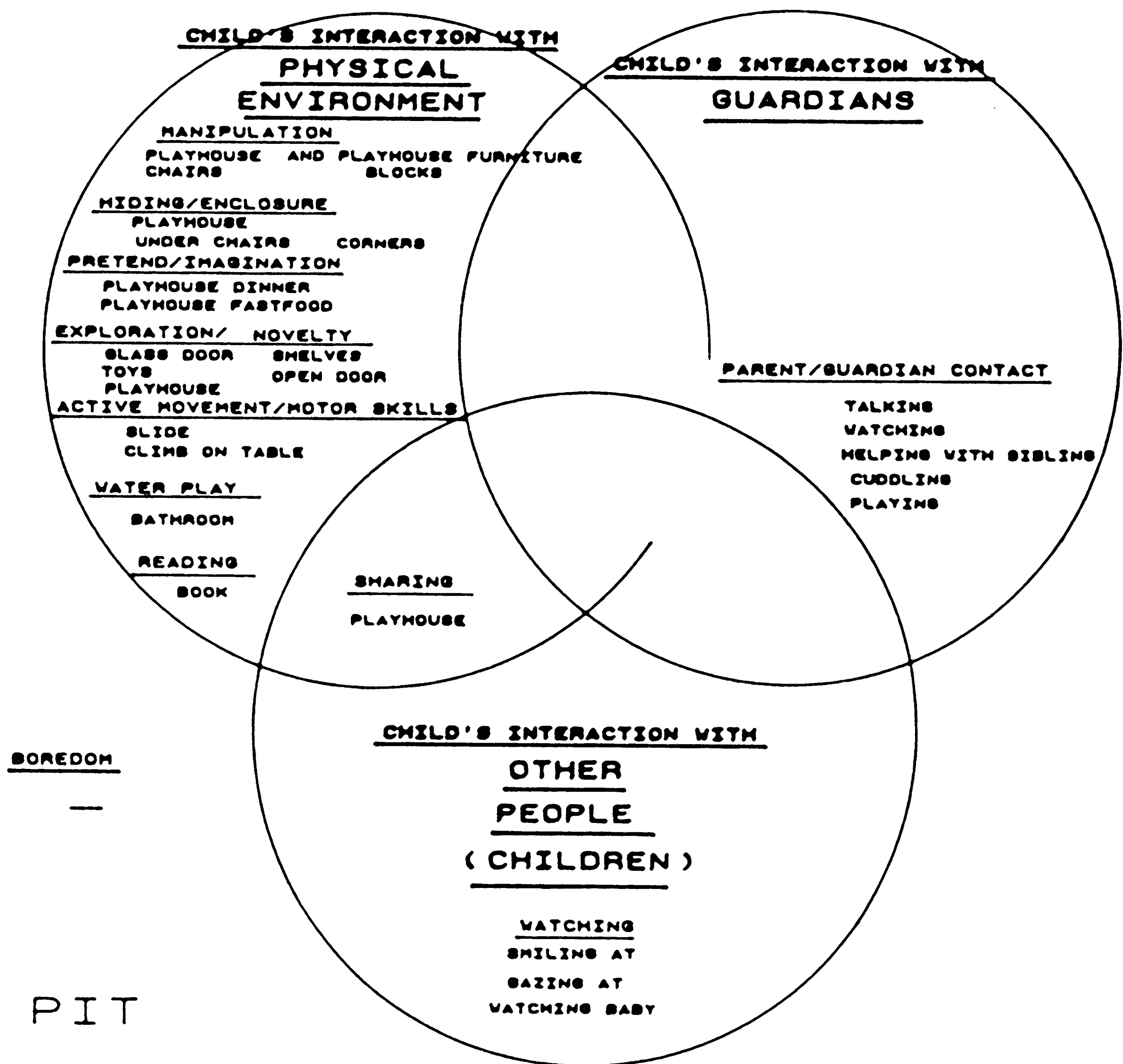


Figure 13. Conceptual Model Used to Illustrate Activity Patterns in the Playpit Room.



Chapter 5: Discussion

In this chapter the results are summarized, including a discussion of some of the merits and limitations of phenomenology as a methodology. The major themes drawn from this research will then be related to the theories proposed by previous researchers. Based on the findings of this investigation, recommendations are presented for the design of health care waiting rooms for children's use. There is a discussion of the limitations of this research, and finally, suggestions for further research are made.

Summary of Results

Observations of children in health care waiting room environments revealed that children consistently exhibit certain desires: to manipulate and modify their environments, to experience enclosure and privacy in hiding places and to satisfy conflicting urges for exploration and novelty versus safety and familiarity. Interaction with people such as guardians and other children is also an important part of the waiting room experience. Certain physical elements within waiting room settings seem to encourage or discourage such interaction. These findings will be compared with those of previous researchers in the section entitled "Theoretical Implications".

In addition to the data provided by the study, the research afforded the opportunity to examine the limitations and merits of phenomenology as a research method for the study of people in environmental settings. Probably the

greatest limitation of phenomenology is that it relies on the accurate observation and recording of the phenomena. It is often difficult to translate what is observed into a clear and vivid description; it becomes bound in language. There are also difficulties in developing a focus. Beginning the research with no preconceived ideas or notions leaves the arena wide open for exploration. Only after several periods of observation do certain patterns emerge on which the researcher can begin to concentrate. Even then, the complexity of the activities taking place forces the observor to overlook some phenomena while recording others. Important insights may be lost.

Also, because phenomenology "marks out a research terrain in broad, exploratory terms" (Seamon, 1987, p. 20), it tends to raise more questions than it answers. As a method of developing groundwork for future research, however, this may be considered an asset rather than a limitation. In fact, this researcher found the merits of the phenomenology method to outnumber its limitations. Listed below are the most notable.

1. Phenomenology provides new insights and awareness into a particular area of inquiry because one is looking at the "everyday" or "life-world" from a different perspective. By bracketing previous notions and biases, one is able to examine a phenomena with a fresh and open-minded viewpoint.

2. The researcher develops skills both in careful observation and in clear, vivid writing in order to communicate his or her findings to others, requiring a considerable amount of examination and reflection.

3. Because phenomenology looks at the broad underlying structures while also describing idiosynchratic details, it provides a richness of data which is useful in understanding the phenomena being studied, as well as providing a data base for further research.

4. As a methodology, phenomenology is not technical nor difficult to learn (though some practice is required to understand how to do it). Its results can be readily reviewed and understood by laypeople. Thus, it could serve to bridge the communication gap between design researchers and design practitioners, leading to more data available for critique, comparison and utilization.

Theoretical Implications of Results

The findings of this study tend to support the major themes developed in previous research, as discussed in the review of literature. This research corroborated the work of Hart (1979), Marcus (1978) and others that indicated that children value hiding places, desire to manipulate and modify their environment, and have diametric needs for both serenity/security and excitement/ exploration.

Observations in this study also tend to support previous research related to health care waiting room environments. As Alcock, et al., (1985) and Williams and Powell (1980) hypothesized, children tended to display more positive behaviors and play more when appropriate toys were available. The activities of children as discussed in the summary of results also indicate that children were more involved in their environments when a mix of familiar and stimulating age-appropriate things were available.

Osmund's concept of sociopetal versus sociofugal space was also demonstrated by the apparent importance of certain physical elements, such as the playhouse and playpit which encouraged interaction and sharing among children. The lack of such physical features inhibited exploration and resulted in more "watching" and fewer interactive activities.

One theme which often appeared in the literature but was not observed in this study was children's preference for outdoor spaces and natural environments. There may be a number of explanations for this. Most probable is that children were not given a choice between being outdoors and being in the waiting room. Realizing that their presence inside was only temporary may have pacified their preference for being outdoors. Or there may have been a sufficient number of activities in the waiting room to keep their attention focused inside. At any rate, few children were observed peering longingly out windows or asking to go outside. Even in the waiting room which displayed wildlife photographs and nature scenes, the only child observed to notice them was encouraged to do so by his guardian. One might suggest, however, that the popularity of the fish aquariums was due, in part, to their associations with "nature".

Another issue raised in the literature that did not surface in this study was the amount of stress, anxiety, and apprehension experienced by children in health care waiting rooms. During observations, some children would cry when called back to an exam room, or fuss and fidget in their seats while waiting, but it was difficult to gauge the source or focus of their stress through observation alone. Because these expressions of discomfort did not follow any recognizable

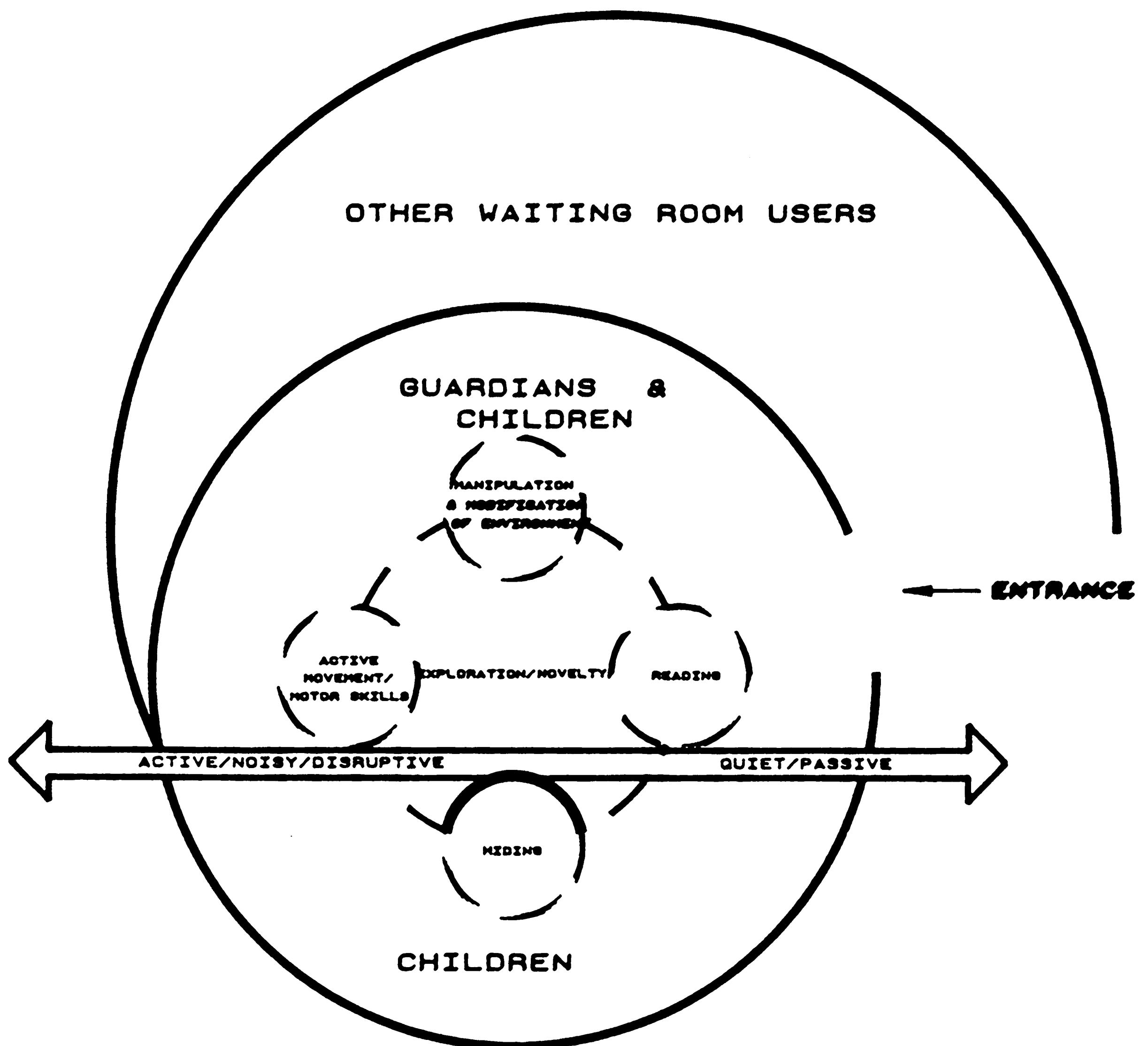
pattern, the association between physical environment and stress is not recognized in this research.

Practical Implications of Results

The schematic diagram presented in Figure 14 was developed from the initial conceptual model by determining those characteristics of the waiting rooms which seemed to generate the most positive responses from children and combining them with the theoretical implications of previous research. From this model, recommendations can be made for health care waiting room designs that will be more compatible with the needs of the child-aged user. This schematic diagram format is useful for developing such a program because it resembles the type of model most designers are familiar with in the programming process.

This model, or schematic diagram, will be used to generate a number of patterns or design elements in the manner of Christopher Alexander, et al. in A Pattern Language (1977). For each theme or pattern, program requirements will be discussed, followed by examples of how the need was satisfied in existing spaces or by suggestions for physical features that might encourage a particular activity, resulting in more supportive waiting room environments.

Figure 14. A schematic diagram developed from the conceptual model used as a programming tool.



1. Provide opportunities for safe exploration and novel experiences (an "Exploration Station") that would enrich the child's experience there and also allow social interaction between children, guardians and other children.

This study, as well as previous research, demonstrated that children have a desire to explore new things to better understand the world around them. Providing a centralized location for such activity, whether a playpit or playhouse or some other form, makes this feature the focal point of the room, thereby creating a sociopetal atmosphere, a space that tends to bring people together. A configuration which would also allow important visual contact between child and guardian will satisfy the child's conflicting needs to explore and to feel safe.

If this exploration station is also designed to encourage opportunities for manipulation, active movement, hiding and reading, it provides a self-contained children's environment.

2. Provide a mix of novel and familiar items for both passive and active activities throughout the space which enables children to learn and develop and avoid the frustration of waiting and boredom.

Such items may be experienced by the child in a number of ways: tactily, visually, audibly and kineticly by providing a waiting room rich in such resources.

As discussed previously in the "Results" section, aquariums of suitable size and stability satisfy many of these sensory conditions and proved to be quite entertaining. Artwork or other wall decor may help carry out a particular visual

theme or satisfy adults' needs but unless it is novel and hung at a child's eye level it appears to be of little interest to the chidren.The bead toy, books and puzzles provided the novel/familiar mix in the waiting rooms observed.

It should be noted that easily cleaned and disinfected items and equipment are necessary in health care environments.

3. Provide a range of seating sizes and types for various activities to further social and physical interaction with guardians, and others if desired. Seating should enable children and adults of various sizes and age ranges to sit together in relaxed and comfortable positions for conversation, reading and games, or physical contact.

To maximize the users' freedom of choice, a zone should also be provided for those children or adults who do not wish to be involved in children's activities or prefer more passive, quiet activities.

Solutions might include providing a mix of moveable adult-scaled and children's chairs or modular nesting cube-type seats, or constructing built-in carpeted or cushioned platforms of varying seat heights.

4. Accommodate children's need to manipulate their environment by providing materials which allow children flexibility and opportunities to make decisions, for example, stackable children's chairs, blocks, and moveable equipment and toys with movable parts.

Such materials should be readily accessible to children but at the same time

should be safe for play without constant adult supervision.

5. Provide safe space or equipment for large motor skills for controlled exercising.

Preferably, this "active zone" would be located within some type of cul-de-sac configuration which limits active movement to a supervised area. This could be achieved by furniture arrangement as well as architectural features of the space. Since corridors and open spaces tend to encourage unbridled sport, such spaces that are not intended for exploration by children should be made unaccessible to children.

Safety and suitability of play equipment should be considered for a wide range of ages. Provide rounded or soft edges and handrails and avoid extreme heights and steep inclines.

Slides and stairs scaled to child-size were favorite sources for exercising in several of the waiting rooms observed. Hop-scotch squares or a race-track design could be defined by different colored floor materials (preferably carpet for acoustics and softness under foot) to designate "OK" places for chidren to exercise.

6. Provide opportunities to create hiding spaces which satisfy the conflicting desires for enclosed, private, novel environments on one hand and safe, familiar ones on the other.

Partitions or space dividers may be located within the waiting room for this

purpose, utilizing materials that enable two-way visibility between children and guardians, while still allowing physical separation, thus providing for the child's needs for both security and independence.

Children could create their own hiding spaces if appropriate materials were provided, such as tables with blankets or sturdy boxes. In the manner of "Adventure Playgrounds," creativity and manipulation would thus be encouraged. Unbreakable plexiglas or grillwork could be incorporated to allow simultaneous physical separation and two-way visibility.

Again, it is important that all such furniture and materials be sturdy, as children will climb in, on, over and under it. Since closets or partitions also provide good hiding places, they should be closed off in a manner that discourages exploration if they are not intended for children's use.

<u>7. Locate drinking fountains within a space where adult supervision is possible to minimize potential accidents.</u>

Children enjoyed the independence of getting their own drink from a child-height fountain, but were often tempted to play in the water. Drinking fountains at adult height tempted children to try to lift smaller siblings for a drink, or to use chairs to climb on to help themselves. Near accidents resulting from these activities were observed several times. If drinking fountains are provided, proximity to areas supervised by guardians is recommended.

<u>8. Provide interesting activities and play opportunities appropriate for a range of</u>

ages to accomodate the variety of factors that shape children, such as age, upbringing, culture, socio-economic conditions and the life experiences they bring with them.

9. If television viewing is a desired activity, designate a specific area in the space for the set which does not interfere with the quiet activities such as reading or the more active and interactive activities such as exploration and manipulation.

No televisions were present in any of the five waiting rooms of this study but observations in these spaces indicated that when appropriate play equipment was available children appeared satisfied and capable of entertaining themselves. In the waiting room setting it may be difficult to control TV programming, unless a VCR is provided with child-oriented tapes. Unsupervised television watching tends to discourage children from using their imaginations to explore, modify and socialize within their environment. Other types of stimuli should be made available in the waiting room setting. Televisions should be a last resort measure when space is unavailable for any other children's activities.

It should also be noted that the attitudes of the health care organization's administration and staff may also affect what happens in the waiting room setting. Discussions with some of the facilities' administrators revealed that anticipated costs and concerns of theft and vandalism prevented them from making improvements for children that had been requested by the staff or

guests. At other facilities the desire to lure business in the competitive health care marketplace had resulted in new resources for children to their waiting rooms.

A simple lack of information regarding the importance of the physical environment to the user may also prevent administrations from making needed improvements. Research such as this which is presented in layman's language may be useful in helping them to understand user needs.

Limitations of the Research

This study examined the activities of a selected number of children in a small number of waiting room settings in one city during a relatively short period of time. Although the findings did reflect many of the universal childhood activities which have been defined in the literature, generalizations based on this study alone should not be assumed regarding other waiting rooms in other locations or even the same waiting rooms at different times. Certainly the phenomena observed in this study do not include all possible activities in which children may engage in health care waiting rooms.

Another limitation is that the reader must depend on the skills of the researcher in describing the spirit of the activities observed. While videotaping the activities may capture more of the activity, the presence of a camera or the difficulties in concealing one, may create additional problems. Therefore, the ability of the investigator to accurately observe record and describe the activities affects both the reliability and validity of the study.

Simply counting the number of times various themes occurs does not best express the essence of the data, because such frequencies may vary according to the number of children in a given room or the ability of a researcher to record all the activities of all the children at a particular time. An incident that occurs only once may carry more importance than one that is observed many times. Additional evaluation of the data or further research is necessary to understand those types of variances. As previously indicated, the study yielded such a richness of data that it was not possible to explore all phenomena observed.

Suggestions for Further Research

There are a number of avenues for further research which result from this phenomenological investigation. The most obvious is to continue phenomenological observations in other waiting room settings and to compare findings to see if commonalities exist among similar environments. Different forms of phenomenology could be utilized; for example, children's drawn, written or verbal accounts of their waiting room experiences could be interpreted for common themes. One could also conduct phenomenological studies in environments other than waiting rooms to compare children's activities in different settings. Interviewing adults about their remembered waiting room experiences or thoughts about their own children's experiences would provide a different perspective on the phenomena.

Another possible direction of research would be to conduct post-occupancy evaluations on designed waiting room spaces that have utilized some of the

design recommendations derived from research. Comparing children's responses to a number of such environments would be useful in planning more satisfying waiting rooms for children. The study discussed in the review of literature in which researchers provided a nature-based playroom for children with terrariums and recorded natural sounds and so forth would have been much more valuable to other designers and researchers if some type of post-occupancy evaluation had been done to explore the reaction of its users, the children.

Also, more traditional forms of research could evolve from this groundwork. Observations in this study revealed that children tend to manipulate small-scaled chairs for a variety of purposes. Future research may investigate in greater detail whether children have a preference for one type of chair over another. Or, using questions relative to the themes developed in this study, formal questionnaires or interviews could be developed to administer to guardians, seeking their reactions to the waiting room design and their children's reactions to it.

Hypotheses drawn from this study which could be further explored are:

1. The observed children's activities which comprise the eleven basic themes are universal and would be observed in other waiting room settings.
2. The observed children's activities which comprise the eleven basic themes are universal and would be observed in other cultures.

3. Further observations will reveal other activities that may yield additional themes.
4. Waiting rooms that incorporate design elements that provide opportunities for children to satisfy these desires will be preferred by children over waiting rooms without such considerations.
5. Parents and guardians will be more satisfied with waiting room environments that recognize children's needs than with those that do not recognize children's needs.

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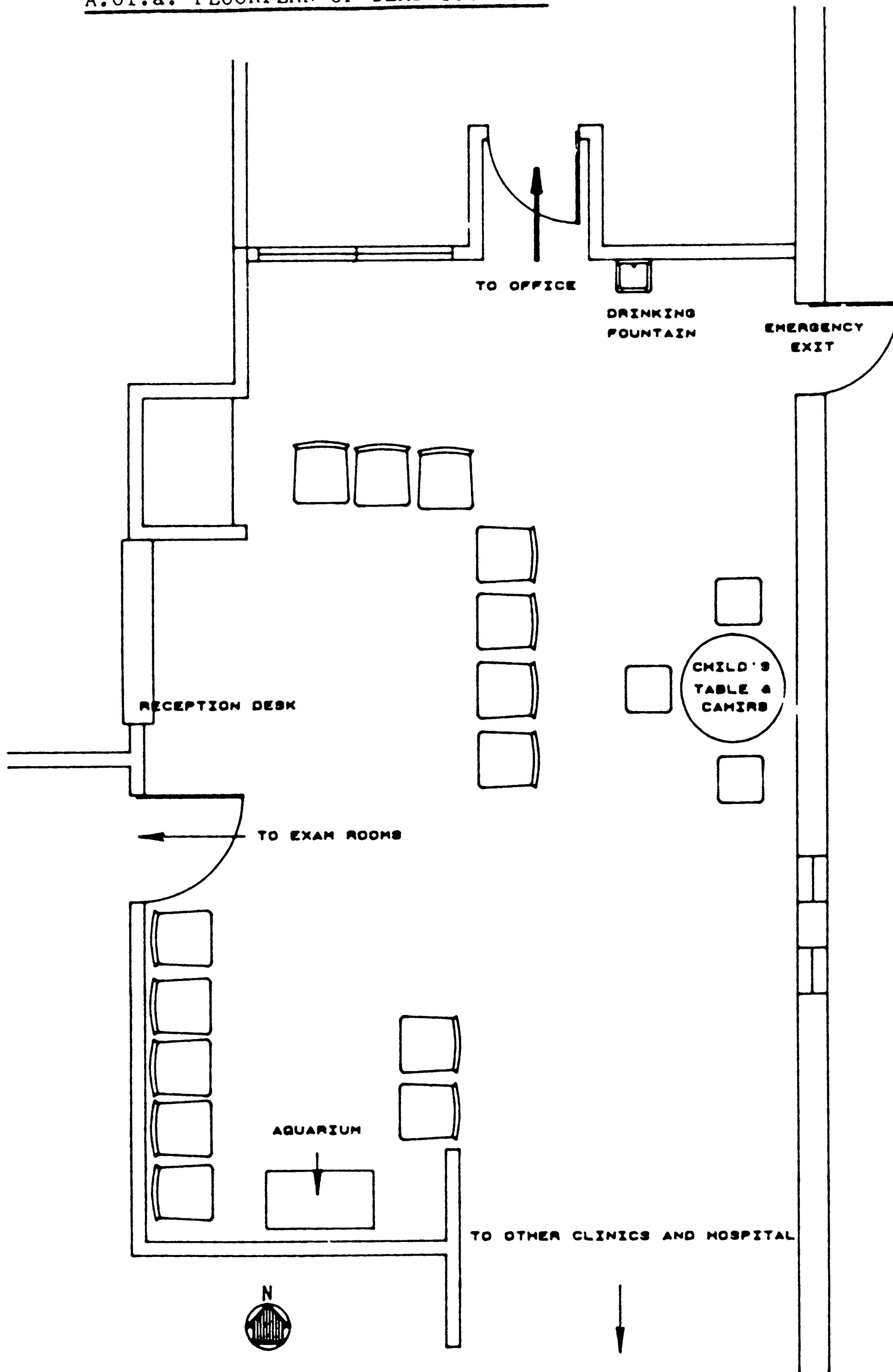
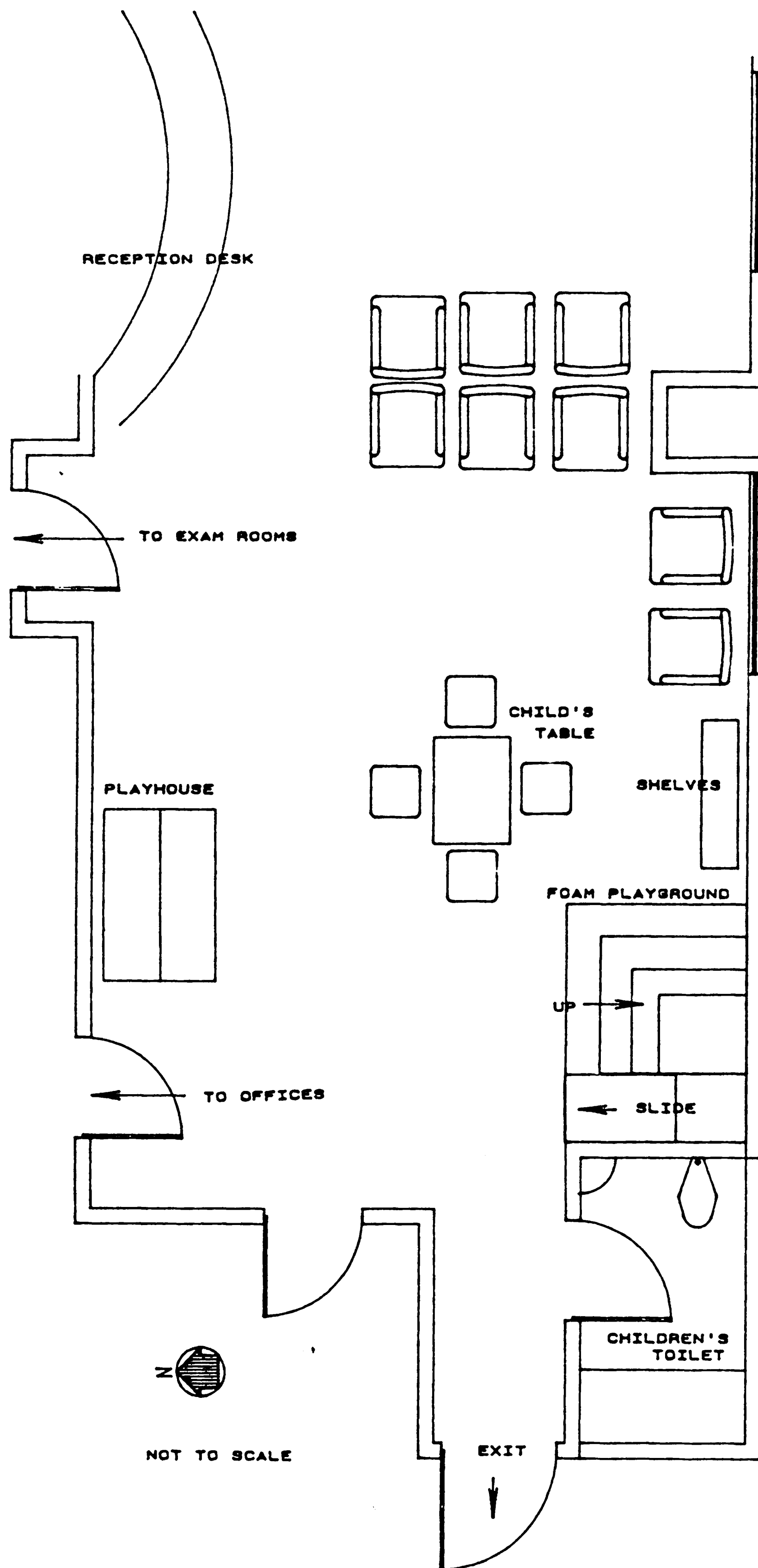
APPENDIX

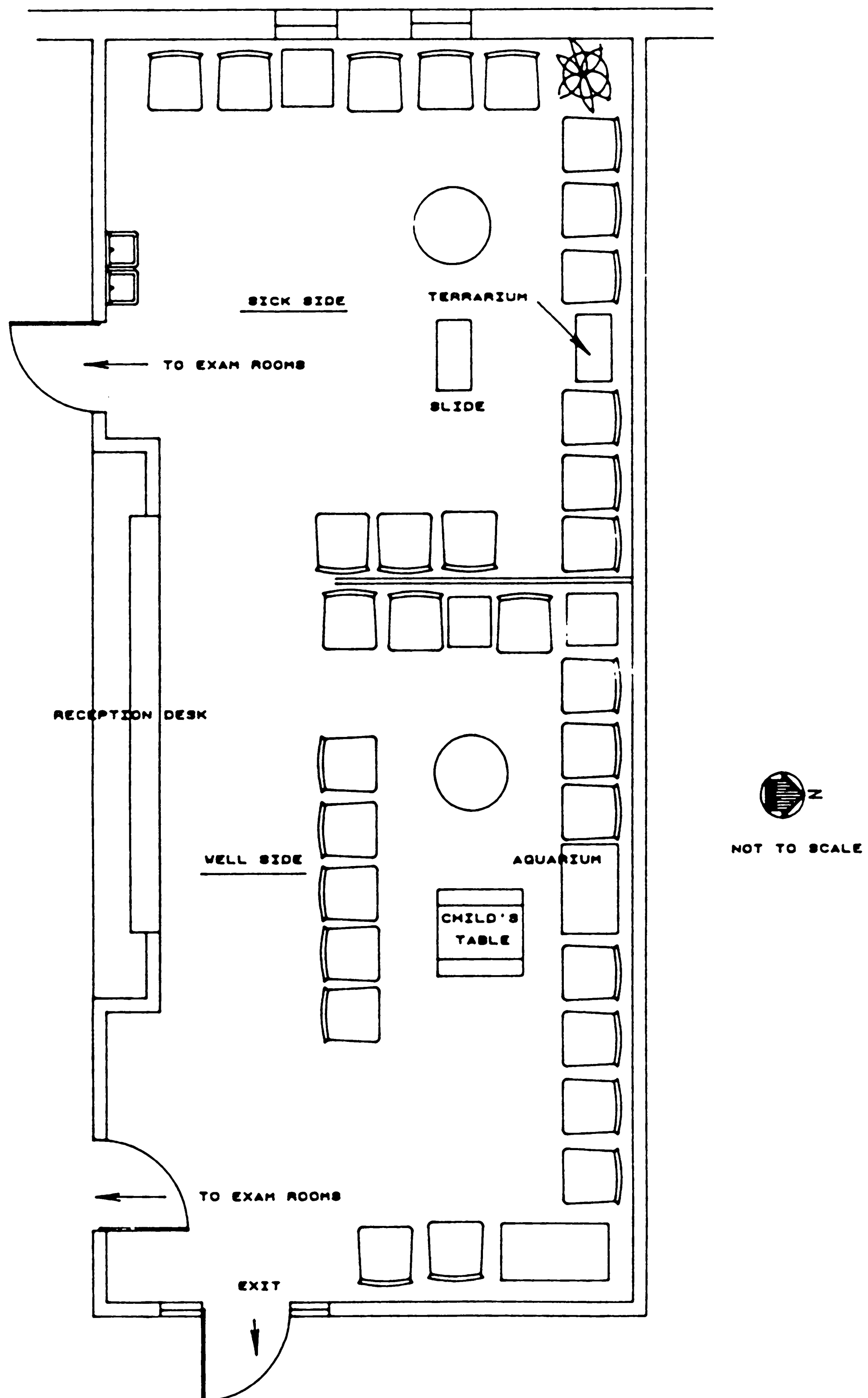
A.01.a. FLOORPLAN OF BEAD TOY ROOM



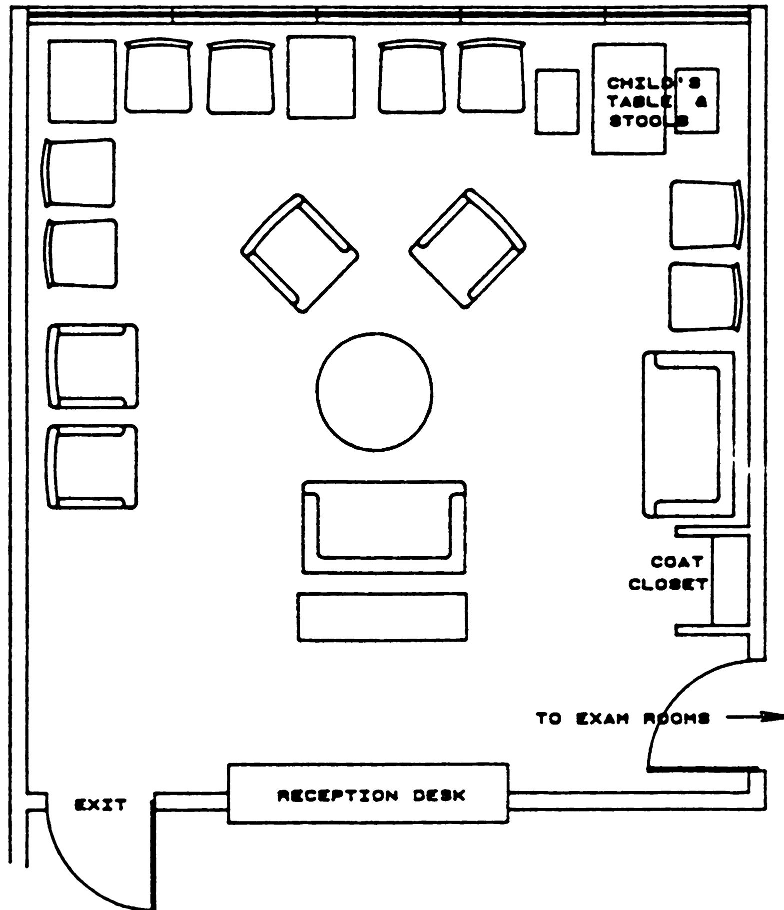
A.01.b. FLOORPLAN OF PLAYHOUSE ROOM



A.01.c. FLOORPLAN OF SICK SIDE/WELL SIDE ROOM

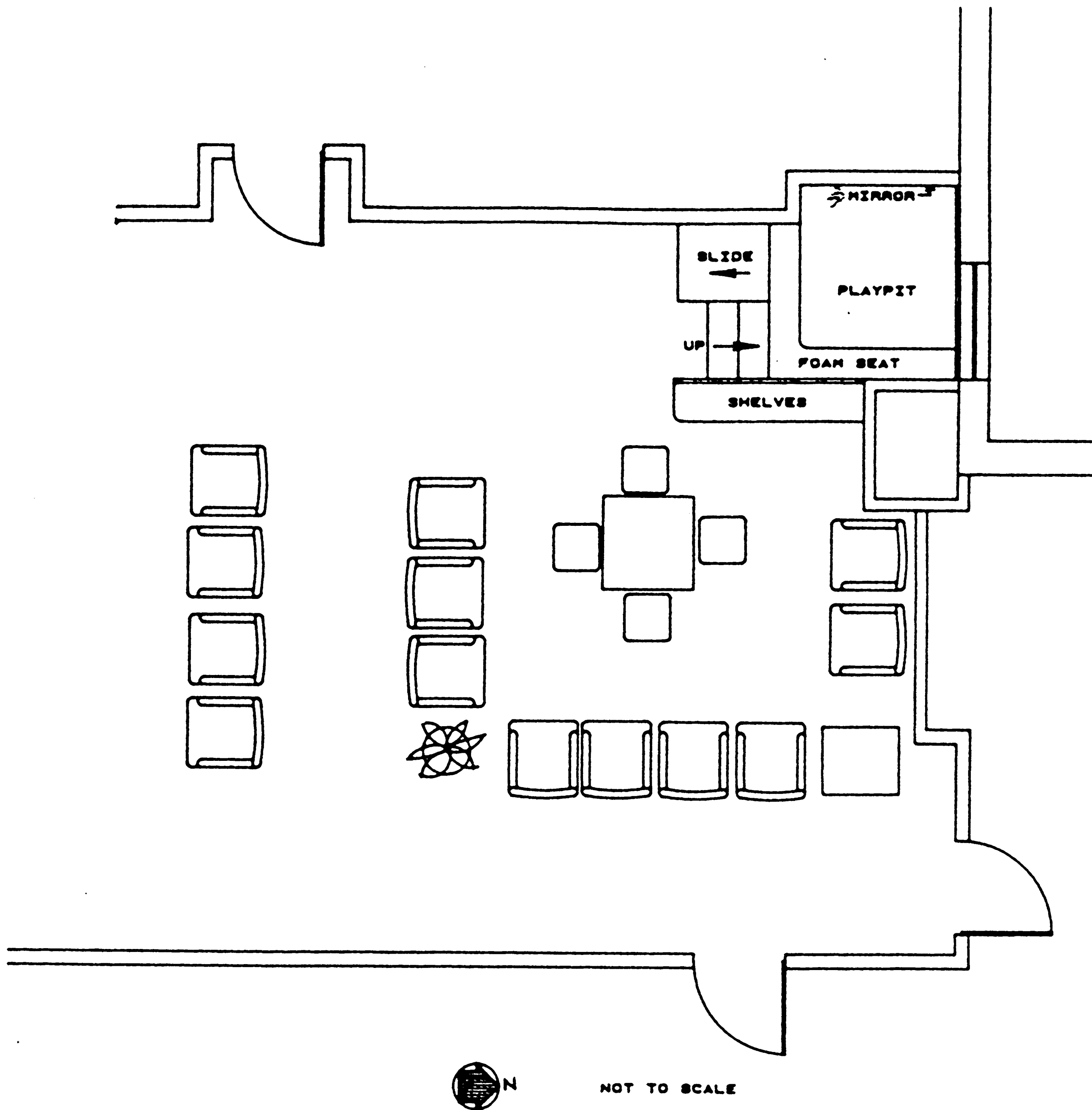


A.01.d. CORNER TABLE ROOM



NOT TO SCALE

A.01.e.PLAYPIT ROOM



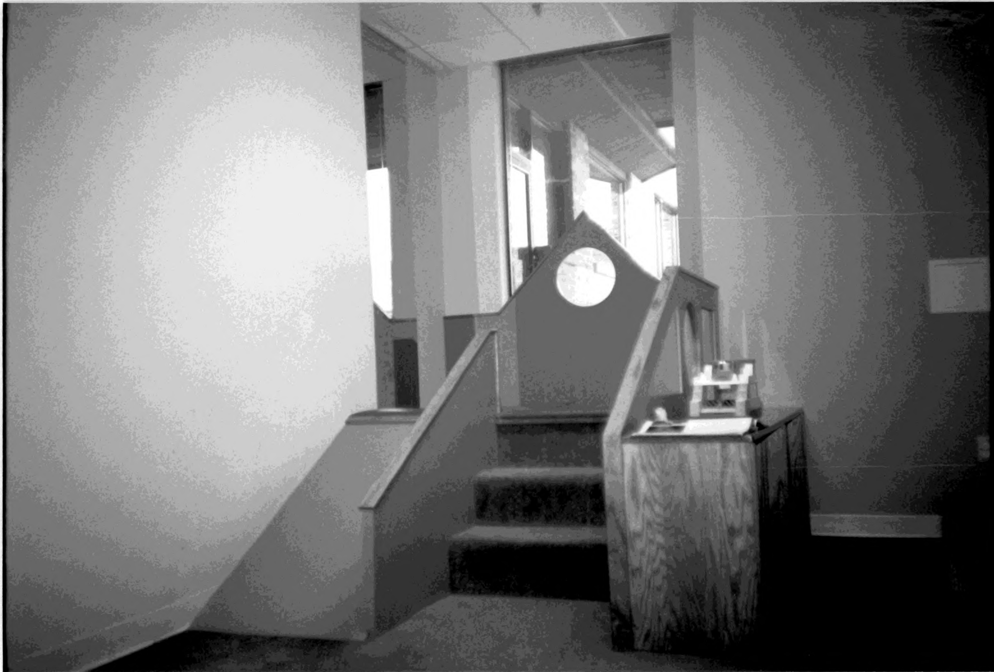
A.02.a. PHOTOGRAPHS OF BEAD TOY ROOM

A.02.b. PHOTOGRAPHS OF PLAYHOUSE ROOM

A.02.c. PHOTOGRAPHS OF SICK SIDE/WELL SIDE ROOM

A.02.d. PHOTOGRAPHS OF CORNER TABLE ROOM

A.02.e. PHOTOGRAPHS OF PLAYPIT ROOM



A.03 Analysis of Field Notes (Excerpts)

NOVELTY/EXPLORATION

10/16 GMFP Girl 5 or 6 comes in with mom, runs to little table, then to shelf with toys. . . she climbs slowly into play pit - laughs at mirror, peeks out window, slides down slide. Talks on phone, goes back to play pit - calls to mom to come in

11/6 BHC Girl: "Oh! Look at the big fish!"

11/6 GMCH Girl 4? runs to look out glass door

11/6 GMCH Little boy (2) oblivious to toys on floor. Walks on them to get to other areas of attraction. He says, "There are too many toys here."

11/6 GMCH Girl, 4, stands, finger in mouth, scoping out the possibilities and looking rather awed.

11/6 GMCH 3 [unrelated] children crowd into [play]house

11/6 GMFP boy hesitantly slides down slide, goes back up the stairs to play in pit

11/6 GMFP Mother has brought toy car from home but baby is more interested in books [of waiting room]

11/6 UMC5 Unsupervised boy (7) sticks fingers in water [of aquarium]

11/6 UMC5 Run to fish tank, 3 peering in at once

11/6 UMC5 Several children. . . stare without inhibition or embarrassment at the unusual face [of a child]

12/7 UMC5 2-year old boy plays with water fountain - not drinking, just watching H_2O run

12/7 UMC5 Girl looks for a second at the fish, then turns and stands and observes the surroundings, checking it out

12/7 UMC5 After check-in, the girl, 2, spots the aquarium. "I want to see fish!" - mother lets her down to go see. After fish (just a few seconds) she wants to run to table

12/7 UMC5 Girl has brought her own doll, but abandons it for these new toys

12/7 UMC5 Older boy, 10, enters with father - wanders over to fish - looks bored but watches them for a few minutes

12/7 WHA He [boy, 4] spies the helicopter, stands next to mother, spinning blades

12/7 BHC Three kids from one family, 8,7,6? - all looking at books and magazines. Some brief attention to aquarium

12/8 GMCH Little toddler (1) fascinated by [play]house, but approaches slowly. Once inside, peeks out at mother who is sitting a distance away. It is all new to him - he examines everything with his eyes and fingers

12/8 GMCH Baby crawls to toy shelves, pulls herself up to grab toy. She continues to scan the room for new adventures while she holds the current conquest in her hands.

12/8 GMCH Open door to clinic attracts boy - he heads through it. Parents jump up to retrieve him.

12/8 BHC Girl (3-4) carries in large teddy bear, sits it in a chair, goes and stands in front of slide

12/8 BHC Both [boys] have dolls with them, but they are abandoned on the table.

12/8 BHC After deciding slide is too small, boy climbs on chair, peers through glass at baby on other side

12/17 WHA 4-year old stands on floor, lays head on chair seat, rubs

the fabric

12/17	BHC	2 2-year olds come in - a boy and a girl. As they strip off their coats they head right for the fish. After identifying a few. . .
12/17	BHC	Another boy, 6-7, enters, goes to the fish. Tells his mother "they call it a catfish cuz it has whiskers"
12/17	BHC	He goes to fish for a while. Is tall enough to see top. wonders how to get inside. Watches them for about 2 minutes, wanders to drinking fountain
12/17	BHC	2-year old girl insists on seeing fish before she leaves. "Fish are the big attraction" says her mother. Girl cries when she has to leave. "Fish! Fish! Fish! No!" Screams. Lays or floor and has a tantrum
12/18	BHC	4-year old boy is rocking slide - gets on and rocks over backwards and is stuck. It scares him and he goes to coffee table to read magazines
12/18	BHC	4-year old: "Hey! Look at that big candy cane on the door!"
12/18	BHC	One-year old tries to stick finger in outlet. There is no child-proof cover on it
12/18	BHC	An older boy is sitting on the bench of the Little Tykes table, watching fish . . .
12/18	BHC	Momentarily, all attention is focused on a fussing infant
12/18	UHC5	2 kids from down the hall look briefly at fish, run back down hall
12/18	GMCH	Boy, 2, comes in with dad. "I go in house" and toddles off to the [play]house
12/18	GMCH	Another boy (2-3) goes in house . . .closes the door and shutters. . . Goes in. Comes out.

Variation:

12/17 BHC Older brother plays with Lego toys from home

MANIPULATION

10/23 BHC One boy (1-1/2) relishes sitting in the adult chair, attempting to mold his small body parts to the adult postures he had observed - stretching his arms to fit on the armrests, scooting his bottom against the back of the seat, his legs sticking straight out in front of him

11/6 GMCH After peeking behind the playhouse, older girl (8-9) wants her dad to move the house away from the wall. He says no.

11/6 GMFP Boy, 6, entertains self putting "construction toys" together

11/6 GMFP 1-year old pulls all books off bottom shelf -- crawls in

11/6 UMC5 Girl left alone at table moves chairs - making up imaginary places

11/6 UMC5 Playing game combining bead toy and Rubix cube - stands on stack chair

11/6 UMC5 Plays a game with chairs - puts one on the table, rearranges the others

12/7 UMC5 Boy, 6, and girl, 2, sit at table and play with bead toy, making humming noises as they move beads.

12/7 WHA He [boy, 4] spies the helicopter, stands next to mother, spinning blades

12/8 GMCH Girl moves kids' chairs around. Pinches her finger.

12/8 GMCH Big boy stacks blocks - then throws toy to knock them down

12/8 GMCH Older boy figures out how fold-up table in playhouse works - calls his sister to "Come eat dinner!"

12/8 BHC When mother directs [girl, 6] to the "sick" side, [the girl] pushes the slide over there. She climbs up it, jumps off it, props it up against the Little Tykes table -- in short, uses it for everything but a slide. . . in spite of her mother's repeated "Don'ts"

12/8 UMC5 2 remaining kids are oblivious to the stack chairs that are tipped over on the floor below them - they are thoroughly engrossed in the movement/action of the beads and they race them, make motor noises. Older boy steps back to sit down, suddenly discovers his chair is tipped

12/8 UMC5 Girl climbs up on table - mom says get down. She says "I can't reach these if I don't." Mom makes her get down anyway.

12/17 WHA Two-year old is scooting (sliding) around room on wooden child's bench (stool)

12/17 BHC The boy goes to the "sick" room and gets the slide, pushes it in [to the "well" room.] Then gets the Little Tykes table.

12/17 BHC His older brother turns the slide upside down and rocks on it (Falls several times as it over-rocks)

12/17 BHC . . . boy who is building with Lego toys. . .

12/18 BHC One boy, about 6, moves slide around

12/18 WHC She stacks all the books neatly on the kids table. . .

12/18 WHC [She] finds a plastic key and sets to work looking for things to "open". She discovers an end table with a drawer and puts the key inside.

12/18 UMC5 Of the 2 older kids (5 and 8) both have gone immediately to the bead game and played with it till called into clinic

<u>PARENT/GUARDIAN CONTACT</u>

10/16 GMFP Mom sits at kids' table to play with little girl. . .she climbs

slowly into play pit. . . calls to mom to come in

11/6	GMCH	Aware of mother's presence. Tells her what he's doing. "I'm going in the [play]house to talk. . ."
11/6	UMC5	2 sitting on sofa with mother
12/7	UMC5	Goes back to sit with guardian
12/7	UMC5	Mother shows fish [in aquarium] to girl
12/7	UMC5	Little boy sits on his mother's lap - they play a game
12/7	UMC5	She [girl, 2] wants to run to table but mother says "No, I want to hold you."
12/7	WHA	Boy, 4, sits down all bundled up with hat, coat, scarf. His mother shows him the [kids'] table
12/7	BHC	Mother retrieves [younger boy], disciplines him, makes him sit in a chair
12/8	GMCH	Once inside [the playhouse], [the toddler]peeks out at mother who is sitting a distance away.
12/8	GMCH	One father holds girl (2-3) - she watches other children play - crawls to seat next to father, smiles at other children in waiting room
12/8	GMCH	Boy, 4-5, help mom with 2-week old baby. Sits next to her in adult chair - after filling bottle with formula he contentedly eats a snack
12/8	GMCH	[Baby] checks parents' location from time to time.
12/8	WHA	[Girl 2] stands quietly next to guardian and infant in car seat -- it appears they are waiting for her mother who is being seen by the doctor. She apparently knows she won't be here long - pays no attention to toy corner or other aspects of physical surroundings -- watches door for appearance of her mother.

12/8 UMC5 When [the older boy] leaves, the younger boy, 4, goes to the adult chairs where his father is seated, sits next to him

12/17 BHC A 3-year old boy and 8-year old brother come in with Mom. She holds 3-year old and points to fish. He stands next to her looking, but doesn't go to tank. 3-year old cuddles in her lap while older brother plays with Lego toys from home

12/18 BHC After the 7-8 year old is done with the slide, he sits with his mother in an adult chair

12/18 BHC 4 of the parents are holding their children - cuddling, some are reading to them

12/18 BHC Reading magazines with mom

12/18 BHC Doing finger games with guardian

12/18 BHC One boy just sits next to his mother in adult chiar watching other kids

12/18 GMCH [Boy, 2] comes back [from playhouse] and wants blanket. Curls up in dad's lap.

12/18 GMCH Another boy (2-3) goes in house - pretends it's a fast food restaurant. "You want a hamburger?" he says to his dad.

Variation:

10/16 GMFP 2 black girls, about 4 years old, sit on floor, coats on, near table - just watching - not playing - like 2 dogs told to "stay". . . one points to the play area and looks at the other, like "do you think we could?" The other shrugs and shakes her head no. (In absence of guardian)

ACTIVE MOVEMENT/MOTOR SKILLS

10/16 GMFP 1 black girl, 1 white girl play in play area on slide, squealing with delight. They are enjoying the opportunity for

physical exercise - running up stairs, sliding down the slide on stomach or bottom - climbing up slide.

11/6	BHC	"All right!" Boy 4-5 runs to slide. "I want to play on something Mom!"
11/6	GMCH	2 kids try to slide down foam slide and climb on foam steps
11/6	GMFP	Older boy experimenting with ways to slide down slide - backwards, on stomach, etc.
12/7	BHC	Younger boy chases girl into other room - pushes her on the floor
12/7	BHC	Girl is playing on slide in other room
12/8	GMCH	Boy runs up and down foam slide
12/8	GMCH	[Baby] climbs up on children's table! Parents do not seem afraid that she will fall
12/8	BHC	Another girl runs over and slides down the slide - runs around, does it again - falls and starts crying.
12/8	BHC	[the girl] pushes the slide over there. She climbs up it, jumps off it, props it up against the Little Tykes table
12/8	BHC	First comment of boy (3) as he walks in the door: "Where's the slide?" He and his brother (2) race over to it. One boy plays on slide . . .
12/8	UMC5	The boy, 4, steps on to a stack chair, walks across seats of 4 chairs, jumps down. Goes back to father, gets in chair, gets down. . . skips back. . . hides behind trash receptacle to scare mother and brother as they come down hall. . . comes back at full run - -pushes toy truck. Hides again - in doorway
12/8	UMC5	[Boy] races around waiting room, pushing toy truck in front of him. Finds a pull-toy and drags it around - more as an excuse to run than interest in the toy itself. Tests his

father who has told him not to run -- he walks very fast instead.

12/8	UMC5	The 2 siblings get up and dance on the floor a little while in front of the chairs.
12/17	WHA	Two-year old is scooting (sliding) around room on wooden child's bench-stool
12/17	WHA	2- and 5-year olds have made several rambling trips around waiting room. . .neither one stays in one place very long. . . both run around furniture in waiting room, one is singing, the other falls down . . .now she is "galloping" around the waiting room. Asks daddy for a drink -- runs down hall (outside waiting room) to water fountain
12/17	BHC	After 2 or 3 clumsy trips down the slide, the girl (2) falls off and hurts herself.
12/17	BHC	One [boy], about 3, lays on his belly on the coffee table, scooting across it. Climbs on it, stands on it, till Mom comes to get him. He climbs on the Little Tykes table instead.
12/17	BHC	His older brother turns the slide upside down and rocks on it (Falls several times as it over-rocks)
12/18	BHC	4-year old boy is rocking slide - gets on and rocks over backwards and is stuck. It scares him and he goes to coffee table to read magazines
12/18	BHC	One boy, about 6, moves slide around - crawls under coffee table, comes out (when mother says no) climbs on slide, tries different stunts
12/18	BHC	After the 7-8 year old is done with the slide. . . a girl, 5, gets on, rocks in it (she is not experimenting, she has done this or seen this done before)

Variation:

11/6 GMCH Mother is encouraging child to slide down slide

WATCHING OTHER KIDS

10/16 GMFP 2 black girls, about 4 years old, sit on floor, coats on, near table - just watching - not playing - like 2 dogs told to "stay". . . one points to the play area and looks at the other, like "do you think we could?" The other shrugs and shakes her head no.

11/6 UMC5 Oriental girl follows little black girl who has taken book away from table

12/7 UMC5 When little girl first comes in, [the boy] moved over to a seat near the fish, watching her

12/8 GMCH Girl sits in adult chair, sucks thumb, watches brother

12/8 GMCH One father holds girl (2-3) - she watches other children play - crawls to seat next to father, smiles at other children in waiting room

12/8 GMCH Little one-year old girl crawls on floor to toys scattered in front of playhouse. Experiences them tactilely while gazing around the room at people.

12/8 GMCH [Boy, 4-5] watches the baby in the playhouse

12/8 BHC After deciding slide is too small, boy climbs on chair, peers through glass at baby on other side

12/8 UMC5 A little baby (less than 1 year old) crawls over to [the 2 kids] - stands up at their chair and watches them - they mutually entertain each other

12/8 UMC5 [the 4-year old] watches a new boy playing with the bead toy out of the corner of his eye

12/8 UMC5 [when sister won't let him play with bead toy] he just

stands and watches with his hands behind his back

12/17 WHA One 5-year old girl is very motherly. Talks to the other kids, makes sure they share, etc. Occasionally she crawls into adult chair, leans over back to watch

12/17 WHA Older girl watches activities of other people, including women at reception desk

12/17 BHC . . . the center of attention now is watching the boy who is building with Lego toys - he has an audience who are dying to play too, but their mother says no

12/17 BHC Older girl, about 10-11, comes in with grandfather, sits next to him in adult chair. Just watches other kids, slouched in chair

12/18 BHC Momentarily, all attention is focused on a fussing infant

12/18 BHC One boy just sits next to his mother in adult chair watching other kids

READING/LOOKING AT BOOKS OR MAGAZINES

11/6 GMFP Boy, 6, sitting quietly on floor near shelves reading a book. No guardian in sight.

11/6 UMC5 3 kids at table looking at books

12/7 BHC Three kids from one family, 8,7,6? - all looking at books and magazines

12/7 BHC One reads bulletin board

12/8 BHC Other [boy] gets book and sits at Little Tykes table

12/8 UMC5 [The 2 siblings] look at a magazine. (They aren't old enough to read)

12/17 WHA Younger girl "reads" story (making up her own)

12/17	BHC	[Boy, 6-7] sits down with an activity book
12/17	BHC	Except for a girl who is reading. . .
12/18	BHC	. . . he goes to coffee table to read magazines
12/18	BHC	The older kid gets up to read the posters tacked on the bulletin board
12/18	BHC	Reading magazines with mom
12/18	GMCH	[Boy, 2] gets down, goes to shelves, gets book. Called into clinic.

<u>HIDING/ENCLOSURE</u>

11/6	GMCH	3 [unrelated] children crowd into the house
11/6	GMCH	"Dad? You can't get us because we're in the window [of the playhouse] and you're too big!"
11/6	GMFP	1-year old pulls all books off bottom shelf -- crawls in
11/6	UMC5	One [of the kids] crawls under the table
12/8	GMCH	Playing hide and seek. (2-3 year old girl and 7-year old boy) Boy hides under chairs, behind corners, etc. When girl finds him, she giggles, then goes into children's bathroom
12/8	GMCH	[Little one-year-old girl] abandowns toys, crawls into playhouse
12/8	UMC5	[Boy, 4] hides behind trash receptacle to scare mother and brother as they come down hall
12/18	BHC	One boy, about 6. . . crawls under coffee table, comes out (when mother says no)
12/18	WHC	Suddenly and idea hits her and she begins creating a space under the table. She drapes her coat down over the edge, stacking books on it [to keep it from sliding off]. The little

stools form the sides. She places the toy phone inside and crawls in. After much fussing and adjusting she's happy - giggles to her dad. . . then she finds that the end table has a shelf on the bottom - she crawls under the table on the shelf and peeks out

12/18 GMCH Boy, 2, comes in with dad. "I go in house" and toddles off to the [play]house

12/18 GMCH Another boy (2-3) goes in house . . .closes the door and shutters. . . Goes in. Comes out.

BOREDOM

11/6 GMFP Though boy appears bored, he is managing to entertain himself

11/6 UMC5 Kids look around for things to do - they sit around the kids table looking for things to do. One crawls under table. They get up. walk around, get into trouble. . .Run to fish tank. . .

12/7 UMC5 Fusses with a Coke can, pushes magazines off coffee table

12/7 UMC5 Older boy, 10, enters with father - wanders over to fish - looks bored but watches them for a few minutes

12/7 BHC After waiting a while, 2 boys (of family of 3) start getting restless. They get up, move around. One reads bulletin board, one stares into space into direction of reception desk. He watches fish, sliding hand along glass. [tactile]

12/7 BHC He is a hyper boy, can't find anything to do, makes threats, kicks table, puts feet in chair

12/8 UMC5 When [the older boy] leaves, the younger boy, 4, goes to the adult chairs where his father is seated, sits next to him. Fidgets. Goes back to bead toy. . .

12/17 BHC Lots of kids now - they've all moved to sick waiting. They all sit on the perimeter and look for something to do

12/18 WHC She stacks all the books neatly on the kids table, then puts her head down on it. Suddenly an idea hits her . . .

SHARING

11/6 GMCH 3 unrelated children crowd into [play]house

12/7 UMC5 Boy, 6, and girl, 2, sit at able and play with bead toy, making humming noises as they move beads.

12/8 UMC5 4 kids at table (2 on table) - all playing with wire-bead toy. More than one can play - each can "have" a wire of beads

12/8 UMC5 Meanwhile, 2 kids in Clinic 4 share an adult chair, singing and talking to each other.

12/18 WHC A girl 5-6 has been playing with a baby girl - sharing toys, rolling a ball to her, etc. When the baby leaves, the 5-year old looks sadly at her father. "There's no one to play with."

Variation:

12/8 UMC5 [Girl, 6] won't let boy who has been here play with toy at same time

12/8 UMC5 The 4-year old's brother, 7, comes to play with [the bead toy], she won't let him - syas "No, I'm making something." he just stands and watches with his hands behind his back. Then he just reaches in and starts playing with it.

PRETEND/IMAGINATION

11/6 UMC5 Girl left alone at table moves chairs - making up imaginary places

12/8 GMCH Older boy figures out how fold-up table in playhouse works - calls his sister to "Come eat dinner!"

12/8 UMC5 The 4-year old uses the pull toy as a fish-line, reeling in a "shark"

12/18 WHC [She] finds a plastic key and sets to work looking for things to "open". She discovers an end table with a drawer and puts the key inside.

12/18 GMCH Another boy (2-3) goes in house - pretends it's a fast food restaurant. "You want a hamburger?" he says to his dad.

WATER PLAY

11/6 UMC5 1 playing in water fountain, using step stool

11/6 UMC5 Unsupervised boy, 7, sticks finger in water [of aquarium]

12/8 GMCH [2-3 year old girl] then goes into children's bathroom, tries to play with water

12/8 UMC5 Climbs on step stool, gets drink, begins playing with water until scolded by father

A.04 Comparison of Waiting Rooms by Themes

THEME:	UMC5	GMCH	BHC	WHA	GMFP
Explor./Novelty	fish. unusual child. H20 ftn.	glass door. toys. playhouse. shelves. open door.	fish. books/ mags. baby on other side of wall. H20 ftn. slide. door decor. elect. outlet. fussing infant.	helicopter. rubs fabric.	playpit/ slide. books.

	UMC5	GMCH	BHC	WHA	GMFP
Manipulation –	chairs. bead toy. Rubix cube. table.	move playhs. chairs. blocks. furn in playhs.	adult chair. slide. table. Lego toys (fr. home).	helicopter. child's stool. books. toy key. end table.	cnstr toys. toyshelf.

	UMC5	GMCH	BHC	WHA	GMFP
PARENT/ GUARDIAN CONTACT	Sitting on sofa. Sitting on chair. Show fish. Sit on lap. Play game. Stand next to. Cuddle.	Talking. Watching. Help w/ sibling. Cuddling. Playing.	Discipline. Cuddling. Reading. Games. Watching.	Kids' table. Stand next to. Sit with.	Playpit. Implied presence.

	UMC5	GMCH	BHC	WHA	GMFP
ACTIVE MOVE-MENT/MOTOR SKILLS	climb on kids' chairs. climb on adult chairs. running. push truck. dancing.	slide. climb on table.	slide/ rocker. running. climb on/ under table.	scooting on stool.	playpit/ slide.

	UMC5	GMCH	BHC	WHA	GMFP
WATCHING OTHER KIDS	Follow. Move close. Watch. Mutually entert-tain. Watch playing.	Watch brother. Smile at children. Gaze from floor. Watch baby in playhs.	Watch baby thru glass. Watch playing. Watch fussing infant.	"Mother" other kids. Watch.	Watch - don't join.
SHARING	Bead toy. Share chair - singing.	Playhouse.		Sharing toys.	
NOT SHARING.	Bead toy.				

	UMC5	GMCH	BHC	WHA	GMFP
READING/ LOOKING AT BOOKS & MAGS.	Book. Adult mag.	Book.	Books & mags. Bulletin board. Activity book.	Book.	Book.

	UMC5	GMCH	BHC	WHA	GMFP
HIDING/ ENCLOSURE	Under table. Behind trash recept.	Playhouse. Under chairs. Corners.	Table.	Table/ coat.	Shelf.

	UMC5	GMCH	BHC	WHA	GMFP
BOREDOM	Look for things to do. Get in trouble. Fussing. Push mags. off table. Looks bored. Fidgets.	Look for	Restless. Stare into space. Can't find anything to do. Makes threats. something to do.	Puts head down.	Appears bored.

	UMC5	GMCH	BHC	WHA	GMFP
PRETEND/ IMAGINATION	Imaginary places w/ chrs. Fishing for sharks	Playhouse dinner Playhouse fast food.		Opening things w/toy key.	

	UMC5	GMCH	BHC	WHA	GMFP
WATER PLAY	H20 ftn. Fish tank.	Bathroom.			

VITA
CHRISTINA R. MANN

Christina Mann was born [redacted] in Cedar Rapids, Iowa where she received her education and graduated from high school in 1973. She received a B.A. with Honors in 1977 in Home Economics (emphasis in Design and Housing) from the University of Iowa in Iowa City, Iowa. She practiced health care design for five years at the Universtiy of Iowa Hospitals and Clinics, two years at HBE Corporation in St. Louis and three years at the University of Missouri Hospital and Clinics in Columbia, Missouri. She has also done free-lance design for a number of restaurant and office projects.

She was an instructor of interior design studio and lecture courses in the University of Missouri's Housing and Interior Design department and also has conducted workshops (A.S.I.D.'s STEP II program) for pre-professionals preparing to take the interior design qualifying exam. She completed her Master of Science degree at the University of Missouri-Columbia in 1988.

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