

~~PERSONALIZATION IN UNIVERSITY DORMITORY ROOMS~~

by

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I. INTRODUCTION

STATEMENT OF PURPOSE

College education should make its contribution to the development of the individual not only in the mind but also in the field that includes cooperation, personality and attitudes - essential factors in the art of living.

Living experiences have often been identified by educators as having a strong effect on learning experiences. Few can doubt the impact of campus living on students dormitory living is an important part of every college student life. Although most college dormitories may provide a clean, safe, and well-maintained environment, they often fail to provide a living experience which recognizes the student's mental and emotional needs. Thus, students have often complained that dormitory does not allow them to carry out their activities comfortably and conveniently, nor does it recognize their preferences or values (Van der Ryn and Silverstein, 1967).

Although there has been much research about college dormitory physical design, very little work has been completed on the relationship between dormitory environment and resident's behavior, especially on how students personalize their rooms. However, for many college students, dormitory living is probably a new experience, devoid of immediate parental presence, and a place where

they can more or less freely impose their own values on the environment. In a survey involving 738 students living in six college dormitories located on two college campuses. Becker (1977) found almost 75% of all students personalized their rooms in some way. However, since students often have so strong desire to personalize and manipulate their intimate environment, it is necessary that we further our understanding in this area.

This study investigated the ways in which dormitory students personalize and decorate their rooms at Kansas State University. It is hoped that the research furthers the understanding of personalization and will be valuable in making programmatic and design recommendations for future residence halls.

MEANING OF PERSONALIZATION

Many studies have indicated that animals mark their territorial boundaries by scent, secretion, excretion or other means (Carpenter, 1958; Hediger, 1950). These markers effectively discourage unwanted intruders and differentiate space according to individual and group ownership. It is known that humans also have similiar marking behavior: building fences, hedges, gates, or using nameplates. Unlike animals, people not only use these symbols to identify a place with an owner, but to incorporate their self-expressive function. Through personalization, they can convey their values, notions of beauty, status, creativity,

or skill as well as mark territories.

Personalization provides a sense of control, and reinforces self-identity while communicating values to others, enabling social ties to develop (Kinney, Stephens, McNeer, and Murphy, 1984). It can be defined as any modification or addition to any environment by or for that environment's occupant. Personalization, unlike folk art or "people's art", can be traced to a particular individual or group (Becker, 1977).

By the above definition someone who hires others to decorate his or her place is still using personalization. The essential criterion is that the individual or group inhabiting the environment controls the decisions affecting the changes (Becker, 1977).

In taking the house as a symbol of self, Cooper (1971) has said:

The furniture we install, the way we arrange it, the pictures we hang, the plants we buy and tend, all are expressions of our images of ourselves, all are messages about ourselves that we want to convey back to ourselves, and to the few intimates that we invite into this, our house.

Personalization sets the stage for interaction (Goffman, 1963). By providing information about the individual to those within the territory, the occupant can influence the type of interaction that occurs and can indicate roles, behaviors, and topics as appropriate or inappropriate (Becker, 1977).

Personalization, or the discretionary modification of one's living space (Becker, 1977), serves two major

functions. First, personalizing one's environment gives a sense of control through exercising choice. This control is reflected in feelings of competence and mastery (Becker, 1977). Second, personalization reinforces self-identity while at the same time communicating one's values and lifestyle to others. This may facilitate the establishment of social ties (Altman, 1980).

REVIEW OF LITERATURE

Conceptual Framework

No single theory or conceptual framework exists to explain why people seem to engage in personalization. Four factors are most often considered as the personalizing motivations, and each will be discussed here:

Modification

In general, people have a strong desire to modify their personal environment. Especially when they find that their physical environment does not accommodate something they want to do, they change it. In other words, they become designers (Zeisel, 1981). According to Becker's (1977) study, three central reasons emerged for changing one's room: to make it less sterile and prettier, to make it more functional, and to make it reflect oneself more. These three objectives are not mutually exclusive. Building

a bookshelf can be functional, but quality craftsmanship and a selection of fine wood may simultaneously make the room less sterile and more reflective of one's own skills and values.

Decoration is one of the most important modifying behaviors. Through decorating the proximate physical environment, people can communicate their values to others and seeing how others react to it. For college students, the bedroom, used as a social and study as well as sleeping area, is probably the most accurate reflection of one's values and self-image. A study of student needs in Kansas State University housing (published by the Office for University Planning, 1971) stated that students consider it to be very important to be able to create their own environments. This need for decorative freedom as a means of expressing individuality should be considered in the initial design of a residential unit so that the "self decoration" idea can be fully developed.

Complexity

Considerable work has been carried out on behavioral responses to stimuli varying in complexity. Jones (1964) found that subjects in a sensory isolation study had a greater preference for the more complex stimuli that were presented to them. Jones (1966) corroborated these findings in an extended series of experiments. Joachim Wohlwill (1970) has drawn on the experimental work done by Berlyne

and others on stimulus seeking, stimulus exploration, and the complexity of environmental stimuli to explain reactions to different environmental configurations. Paralleling early studies done with children, Wohlwill found that responses to photographic slides of the physical environment vary as a function of the judged complexity of these scenes. Wohlwill related the linear relationship between the amount of voluntary exploratory activity and the stimuli complexity, and the fact that evaluative or affective responses reach an optimal value at a low or intermediate level of complexity, to Berlyne's distinction between exploratory activity directed at information seeking and that directed at affective arousal.

Becker (1977) also stated that residents' desire to personalize their living environment, which increases its complexity and stimulates "exploratory" behavior, may be an expression of their own need for certain levels of environmental complexity. This may be particularly true in drab and uniform dormitory rooms or motel-like apartment buildings.

Possession

Possessive behavior is behavior in which people always use specific environmental objects or spaces to perform specific work to achieve a specific purpose, and does not necessarily oppose intruders (Chen, 1979). This behavior includes the uses of environmental props: objects

(such as books, furniture, equipment or other personal items), spaces or the arrangement of objects in spaces (Chen, 1979).

In one series of studies, Sommer and Becker (1969) observed that the presence of an occupant in a room near a public canteen lessened use of the space by others. Barefoot, Hoople, and McClay (1973) found similar results, with people less often using a drinking fountain when a confederate sat nearby. In a more direct analysis, Sommer and Becker (1969) found that more personal markers, such as a sweater or jacket draped over a chair, were more effective protectors of space than less personal markers, such as library books. Recently, Becker (1973) confirmed these findings and also observed that the number of markers made a difference, with people reporting more reluctance to sit at a table with many versus a few books.

On the other hand, expected length of possession may also affect the perceived importance of improving the living environment through personalization. Edney (1972) found that long-term residents of homes had more elaborate marking devices, such as fences, hedges, and signs, compared with short-term residents.

Dominance

Mehrabian and Russell (1974) stated that an individual's feeling of dominance in a situation is based on the extent to which he or she feels unrestricted or free

to act in a variety of ways. This feeling can be hampered by settings that limit the forms of behavior and enhanced by settings that facilitate a greater variety of behaviors. For instance, an individual has greater freedom, and therefore a feeling of dominance, in his own territory (e.g., listening to music at home relative to doing so in a concert hall or reading the same book in his office rather than in a library). A kitchen or an office that is well stocked with a variety of tools facilitates more behaviors (and enhances a feeling of dominance) than one that is only sparsely equipped. Flexible interior decorations, such as movable room partitions, adjustable levels of lighting, or movable furniture allow many arrangements suited to a greater variety of activities. Thus, relative to others that are fixed and difficult to change, such flexible arrangements are conducive to a feeling of dominance.

Consequences and Functions of Personalization

In one of the few systematic studies focusing directly on personalization, Hansen (1974) found that among male college freshmen living in joint occupancy in dormitory rooms that most personalization involved nonintimate forms of decoration, such as abstract decoration and objects related to entertainment and personal interest. These students seemed to be trying to create an atmosphere that was socially acceptable, functional, and visually stimulating. In another study of

students' decorating behavior in dormitory rooms, Hansen and Altman (1976) used seven categories of personalization (personal relationships, values, abstract, reference, entertainment, personal interest, and gross/total space) to examine how dormitory residents personalized their living spaces, and how decorating changed over time. They found that a large proportion of students decorated their living spaces soon after arriving on campus, and practically all students did some decorating by the time they had lived in their rooms for several weeks. In general, by the end of the quarter (a) more people decorated in all categories; (b) the most popular categories in terms of number of people who used them were abstract, reference, personal interest, and entertainment items; (c) the smallest proportion of people decorated in personal relationships and value areas; (d) the overall volume of wall space covered by decorations had increased, especially in the personal interest and abstract categories; (e) few students used decorations which portrayed personal relationships, such as pictures of families and girl friends, or values such as political and religious material. In addition, very few students decorated with handcrafted or homemade items; commercially produced products were more widespread.

Another finding in this study was that students who eventually dropped out of school decorated their rooms less than those who stayed in school. These findings pertained to the overall amount of personalizing, and volume of

personal relationship and personal interest items. They also decorated less in all other categories, although the results were not statistically significant. Thus, decorating may be a long-term predictor of dropout rates, since the personalizing data were collected near the end of the first quarter in school, and the dropout data were collected at the end of the school year, two quarters later. Furthermore, these results fit nicely with other research, demonstrating that territorial behavior is a forecaster of eventual group viability. Altman and Haythorn (1967) and Altman, Taylor, and Wheeler (1971) reported that members of socially isolated groups who set down territorial boundaries between group members early in their experience together were better functioning groups than those who did not. Thus, as has been stated often, territorial behavior, and its associated processes of marking and personalizing, may well contribute to viable group functioning.

Similar to results reported by Hansen and Altman, in a study of "Personalization of private spaces in congregate housing for older people", Kinney, Stephens, McNeer, and Murphy (1984) also indicated systematic variation between personal characteristics and the amount and type of personalization in which people engaged. In identifying factors that must make a place feel like home, almost three-fourths identified environmental factors (e.g., possessions, a pleasant view), while the remaining

residents identified personal or social factors. Thus, for these residents of congregate housing, environmental factors were important in making a place feel homelike.

Contrary to the stereotypical view of women as being more socially oriented, more males than females identified social factors as important in making a place homelike. In contrast, women tended to identify environmental factors; in particular, personal possessions. Although age did not predict the amount of personalization engaged in by residents, older residents tended to have fewer empty spaces and more decorative possessions than younger residents, which may reflect an accumulation of possessions during their lifetimes.

Kinney and her colleagues reported over half of the residents' favorite decorations were photographs of family members and paintings or prints. This differs from Hansen and Altmans' reports of few intimate possessions displayed by college students residing in residence. The difference might be attributed to the fact that Hansen and Altmans' subjects resided in double-occupancy rooms, where the display of intimate objects might be inhibited. In addition, the temporary basis of dormitory living versus the more permanent basis of congregate living may also have been a contributing factor. Further, these findings might be due to older persons' greater accumulation of, or stronger feelings for, such intimate possessions.

Van der Ryn and Silverstein (1967), in a study of

university dorms at Berkeley, were told by the students they interviewed that they could not decorate their rooms according to their tastes. Regulations prohibited taping things to the walls, to prevent damage to the paint, and the one small bulletin board area that was provided was both too small and inconveniently located behind the door. They also found that students did not arrange the furniture in their rooms according to the functional pattern administrators had imagined. Women, they noted, tended to arrange their furniture symmetrically, whereas men did not. Female students preferred to place beds so that the head is near a corner and male students do not. All students in multiple-occupancy rooms preferred to arrange their desks out of the line of sight of other desks in the room, and generally up against a wall, to reduce the incidence of visual distractions by the movements of others. Students would occasionally move dressers or introduce free-standing screens to further the visual privacy desired for studying or sleeping. None of these options was available in dorms where furniture was built in, or where regulations prohibited moving of furniture.

In another behavioral study in a college dormitory, Eigenbrod (1969) examined relationship between social-group compatibility, personalization, and territoriality with identity, security, academic achievement, disciplinary differences, satisfaction with room, and satisfaction with roommates. He divided 208 volunteer undergraduates, 81

males and 127 females, into groups. One of the groups had complete freedom to manipulate their environments (rooms), including unlimited use of tape on the walls, the use of safe appliances, and the freedom to add or remove furniture and to rearrange it. The other group lived with more restrictive rules. Subjects' self-reports were used to measure identity and security. Greater freedom to personalize and modify the dormitory room was not significantly related to identity, security, or academic achievement, but it was significantly related to satisfaction with the residence hall and satisfaction with the roommate. Other consequences of the increased freedom included less damage to the hall, fewer disciplinary referrals, improved relationships between residents and advisers, establishment of more group cooperation and identity, more creative decoration of rooms, decoration of lounge, and better student maintenance of dorms.

The above literature review suggests both the type and amount of personalization would be influenced by several factors, such as gender, room location, flexibility of furniture, and management policies, etc.. Some of them are very important that they are worth reexamining in this study. Furthermore, a systematic attempt will also be made to explore the relationship between students' personalization and some other factors which have rarely been mentioned by researchers, such as student's cultural background, number of persons residing in room, and the

physical features of room. All of these factors will be divided into three categories and discussed in the next chapter.

II. OBJECTIVES AND SETTINGS

RESEARCH OBJECTIVES

The specific objectives of this thesis are (1) to explore the personalizing behavior existing among the residents of dormitories (2) to identify the effects of personal, temporal, and environmental factors on residents' personalization (3) to formulate some recommendations for designing future dormitory room.

RESEARCH QUESTIONS

In order to pursue those objectives listed above, a sequence of efforts were made in this study to examine and identify the following questions:

How many dormitory residents personalize their rooms?

First, this study examined the percentage of dormitory students who personalized their rooms. Personalization here was defined as any modification of one's environment. Modification may range from decorating the walls to building sleeping lofts and room partitions. Therefore, as long as students had changed any original status in the room, even just hanged a picture on the wall, they had engaged in personalization.

What are the major reasons for engaging in personalization?

In general, four central reasons emerged for changing one's room: to make it more attractive (complexity), to make it more functional (dominance), to make it more "one's own place" (possession), and to make it more private (modification). Although these four objectives are not mutually exclusive, this research still identified which was the chief motive for students engaging in room personalization. In addition, the research tried to establish if there were other motives to personalize.

Which are the most common types of personalization?

The types of personalization were divided into four categories:

1. Furniture Rearrangement/Addition:

modifying the arrangement of furniture provided by the residence hall and adding any furniture in the room

2. Personal Items Addition:

adding any one's own personal items (excluding daily necessities) such as carpet, bedspread, plants, etc.

3. Wall Decoration:

hanging posters, photographs, maps, etc., on the wall

4. Wall Painting:

changing the original color of one's room wall

The percentage of students who engaged in each category was examined in this question and presented with a

statistical table.

How much have the residents personalized their rooms?

The amount of personalization was measured in the four respective categories according to the types of personalization.

The amount of furniture rearrangement/addition was assessed by counting the total pieces of furniture moved and added. For the amount of personal items, the amount was determined by the number of categories of articles.

The photographs were used as a tool to determine the amount of wall decoration engaged in by subjects. A clear plastic grid was placed over each 3.5 x 5 inch photograph to divide it into 117 (9 x 13) equally sized blocks. The amount of wall decoration was based on the number of blocks covered by students' decorative materials.

As regards the amount of wall painting, for statistical analysis sake, a symbolic code (1,0) was used to separately stand for the residents of two groups, those who had painted their room walls and those who hadn't.

What are the relationships between personalization and satisfaction, socialization, and time?

After measuring the amount of every category, a further examination was made to understand if there was any relationship between the amount of personalization and the following dependent variables:

1. The level of satisfaction with one's room
2. The degree of social contact with neighbors
3. The use of one's own room for social activities
4. Expected length of dormitory living
5. Daily time spent in residence room

POSSIBLE VARIABLES INFLUENCING PERSONALIZATION

Several factors were thought as possible variables to influence students' personalizing behavior. In this study, three categories of these factors were examined:

Personal Characteristics

1. Gender
males vs. females
2. Class Level
graduate students vs. undergraduate students
3. Background
 - a. cultural background
country: American students vs. international students
 - b. urban/rural background
town size: big city vs. small town

Temporal Characteristics

1. The Length of Dormitory Living
new arrivals vs. long term residents

Environmental Characteristics

1. Number of Persons Residing in Room
2. Flexibility of Furniture Arrangement

3. The Physical Features of the Room

THE SETTINGS

Basically, there are four groups of dormitories at Kansas State University. Each group consists of two to four halls. Figure 1 identifies the dormitories on campus, including those selected for the study. Because the halls are similiar in characteristics and shapes within each group, only one hall was chosen as a representative to study in each group.

Group I is composed of the oldest dormitories on this campus, which are Van Zile (1926), Boyd (1951), and Putnam Hall (1952). All of them are low rise with a structure of native limestone surrounded by large shade trees and green lawns. Because Van Zile is already closed and Boyd only serves for female residents, Putnam Hall was selected as a setting for this study in Group I.

In contrast to Group I, the buildings of Group II are more modern. All of them are highrise and built with steel frame and a limestone brick facade. These dorms have undergraduate occupancy and are the most populated on campus, with over 600 students in each hall. In this group, Moore Hall is the only coed dormitory with two types of rooms (single, double rooms), which could meet the needs of this study. For this reason, it was selected as an appropriate setting to study.

Group III contains two halls - Marlatt and Goodnow.

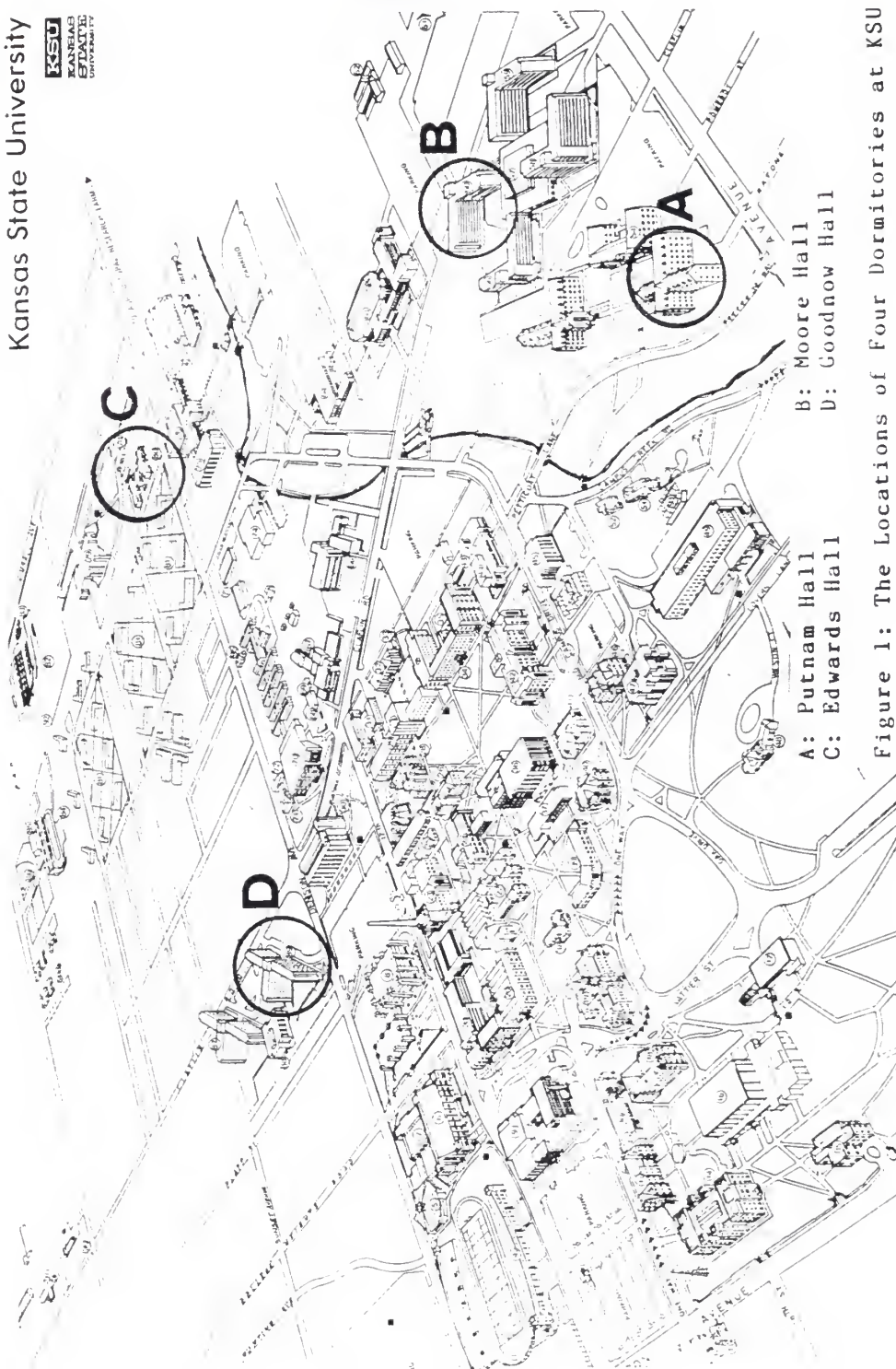


Figure 1: The Locations of Four Dormitories at KSU

Both are located on the western edge of the campus. The designs of these two halls are identical with three wings each. Because Marlatt Hall is an all-male hall, Goodnow Hall was chosen as the representative of this group.

In addition to the three groups of already discussed, Edwards Hall is another dormitory for single students. It has been specifically designated for graduate and upperclass students. Because most of the foreign students are graduate students on K-State campus, there is a high percentage of foreign students living in this hall. Therefore, Edwards was an ideal setting to study the difference of personalizing behavior between international and American students.

General characteristics of Putnam, Moore, Edwards, and Goodnow Halls are presented in the Table 1.

Table 1
DESCRIPTORS OF FOUR RESIDENCE HALLS

	Putnam	Moore	Edwards	Goodnow
Gender Occupancy	M/F	M/F	M/F	M/F
Hall Size	Small	Large	Small	Large
Persons per Room	1/2/3	1/2	2	2
Number of Wings	2	2	4	3
Number of Floors	4	9	3	6
Floor Population	73	69	72	102
Wing Population	28	34	18	34
Total Population	225	646	192	632

III. METHODS AND PROCEDURES

A range of methods and procedures were used to deal with the questions and assumptions in chapter II. Those methods were used in a sequential order during the 1988 fall semester, beginning with the initial data collection and culminating in a questionnaire administered to the residents of four residence halls on the KSU campus.

INITIAL DATA COLLECTION

Prior to any formal contact with residents, preliminary information about KSU residence halls was collected. Because all of the dormitories at K-State are under the administration of the Department of Housing, information collection including dormitory histories, descriptions, and floor plans was conducted at this department.

Some informal interviews were also conducted with students who were or had previously been residents of the residence halls. Through these conversations, preliminary ideas about dormitory students' personalizing behavior were obtained.

FORMAL DATA COLLECTION

Three instruments were used in the formal data collection - furniture maps, photographs, and questionnaires. At KSU, an academic semester consists of seventeen

weeks. In order to give new arrivals enough time to personalize their rooms, the data were collected during the eleventh and twelfth week of the 1988 fall semester.

Sample

The total number of subjects was 200 students, equally selected from the residents of Putnam, Moore, Edwards, and Goodnow Halls (50 students, 25 males and 25 females, in each hall). Within this stratification, students were selected randomly. All subjects were first sent letters requesting their assistance. In this letter, the purpose and procedures of this study were briefly explained, the subjects were told that the information they provided would be kept confidential, and their permission was sought to administer the following processes — furniture map, photographic documentation, and questionnaire.

Furniture Map

As stated previously, rearranging furniture is one of the important personalizing behaviors. Because the interviewees generally have little knowledge in the architectural field, it is difficult to get much information concerning students' rearrangement of their furniture through interview or questionnaire. Therefore, copies of unfurnished room plans were prepared in advance and the furniture pieces in each room were drawn by the

researcher in their appropriate locations on room plans.

These furniture maps were not only used to increase accuracy and efficiency of recording furniture locations, but also were used to identify the most popular arrangement of furniture.

Photographic Documentation

In addition to furniture maps, permission also was asked to take photographs of residents' rooms. The wall area photographed was approximately the same in the rooms of each hall. This series of photographs provided a complete documentation of students' rooms as well as a systematic record of how these rooms were personalized by residents. Each room was photographed with both black and white print film and color slides. The prints were used to analyze the amount of wall decoration and verify the furniture maps, while the color slides provided additional detailed information. Permission to use specific photographs for illustration was obtained separately from the subject involved.

Questionnaire

A questionnaire was used to assess personalization among residents. The questions to be asked of students fell into two groups: those concerning the students themselves and those concerning their personalizing behavior. The first group consisted of residents' background information,

such as sex, class level, and home state. The second group consisted the type and amount of personalization and the students' evaluations of their rooms.

Careful attention was given to the organization of the questionnaire to maximize the interest and involvement of the respondents. Besides, the questionnaire was pretested using a small sample of residents of a dormitory not sampled for the thesis.

STATISTICAL METHODS OF ANALYSES

In this study, selected statistical methods were applied:

1. to examine the research questions through descriptive analyses
2. to identify the relationship between the amount of personalization and five dependent variables.
3. to test for differences in types of personalization attributable to personal, temporal, and environmental characteristics.

Descriptive Analyses

Based on the data gathered from questionnaires and photographs, descriptive statistical methods (tabular methods and numerical measures) were used to summarize the results of the research questions in terms of number of residents who personalized rooms, major reasons for making personalization, most common types of personalization and

amount of personalization in rooms.

Multiple Regression Analyses

Multiple regression analyses were used to examine the relationship between the amount of personalization (including four categories — furniture rearrangement/ addition, personal items addition, wall decoration, and wall painting) and five dependent variables: the level of satisfaction with one's room, the degree of social contact with neighbors, the use of one's own room for social activities, expected length of dormitory living, and daily time spent in residence room.

Inferences About Means with Two Populations and Analyses of Variance

Since there are four different dormitories included in the research, the analyses controlled for the amount of opportunity for personalization among four halls. After standardizing these data, inferences about means with two populations were used to test for differences in types of personalization attributable to selected personal (gender, class level, cultural background, rural/urban background), and temporal (the length of dormitory living) factors. Furthermore, in order to examine the differences of residents' personalization attributable to different environments (residence halls), analyses of variance used data not standardized across halls.

In summary, three major statistical analyses were applied to the data resulting from the survey — multiple regression, inferences about means with two populations and analyses of variance. The first method was used to assess the relationship between the amount of personalization and the five dependent variables. The remainder were used to test for significant differences in personalization between males and females, undergraduate and graduate students, international and American students, and new arrivals and long term residents.

IV. RESULTS AND DISCUSSION

This chapter analyzes the data collected from the questionnaires, photographs, and furniture maps. Analyses begin with a description of respondents' characteristics. Analyses addressing each of the research questions are then analyzed in sequence, and accompanied by the discussion and interpretation of these results.

CHARACTERISTICS OF THE SAMPLE

The number of respondents in the sample for this study was proposed to be two hundred students. Since three residents who were interviewed initially refused to have pictures taken of their rooms, the information they offered was not used, and three more residents were added to the sample so that a total of two hundred subjects could be maintained.

Within this sample, one hundred males and one hundred females were equally selected from four dormitories. As Table 2 shows, 16% of them were graduate students. Thirty-four (17%) were international students, including ten Chinese, four Koreans, four Hondurans, and the remainder from other countries, such as Japan, Greece, Pakistan, and Sudan.

Thirty-three (17%) respondents reported that they had been living in their rooms for more than one semester. In other words, 83% of the subjects were new arrivals (living

in their rooms less than one semester). Almost half (45%) reported that their home towns were big cities (more than 100,000 pop.), while fifty-four (27%) came from small towns (less than 10,000 pop.).

Table 2

COMPARISON OF DEMOGRAPHIC DATA IN FOUR DORMITORIES

Variable	Putnam	Moore	Edwards	Goodnow	Total
Male/ Female	25/25	25/25	25/25	25/25	100/100
Graduate/ Undergraduate	1/49	1/49	28/22	1/49	31/169
International/ American Student	6/44	2/48	23/27	3/47	34/166
Small Town/ Big City ^a	13/24	17/20	8/28	16/17	54/89
Long-term/New Resident	6/44	8/42	5/45	14/36	33/167
One/Two/Three- person Room	3/31/16	1/49/0	2/48/0	3/47/0	9/175/16

^aThe remainder are from mid-size cities.

Most of the respondents (87.5%) lived in double rooms. Only nine (4.5%) lived alone, and sixteen (8%) indicated that they shared rooms with two roommates. All those living in three-person rooms resided in one dormitory.

A detailed cross tabulation of demographic data is shown in Table 3. Some particular data are worth noting in this table: very few graduate or international students came from small towns, no small town residents or graduate

students lived in three-person rooms, and most American students (94.6%) were undergraduate students in this sample.

Table 3

DATA CROSS TABULATED BY DEMOGRAPHIC VARIABLES

	M	F	G	Ug	I	A	R	U	L	N	S	D	T
M	100		16	84	24	76	25	52	22	78	2	86	12
F		100	15	85	10	90	29	37	11	89	7	89	4
G			31		22	9	2	23	5	26	2	29	0
Ug				169	12	157	52	66	28	141	7	146	16
I					34		1	28	7	27	1	29	4
A						166	53	61	26	140	8	146	12
R							54		14	40	3	51	0
U								89	16	73	3	73	13
L									33		5	25	3
N										167	4	150	13
S											9		
D												175	
T													16

M:males

F:females

G:graduate students

Ug:undergraduates

I:international students

A:American students

R:residents from small towns

U:residents from big cities

L:long-term residents

N:new arrivals

S:one-person room D:two-person room T:three-person room

DISTRIBUTIONS OF PERSONALIZATION

This section summarizes the results of four research questions mentioned in Chapter Two. Analyses addressing each of these questions is presented in turn.

Number of Residents Who Personalized Rooms

As Table 4 shows, among all respondents, only one indicated that he did nothing to personalize his room. Almost all of the residents (99.5%) had at least engaged in some personalization of their rooms, which demonstrates that personalization is quite commonplace among dormitory students. The percentage of residents engaging in personalization found in this research is considerably higher than the range of 75% reported by Becker in 1977. The multiple measures (questionnaire, photograph, furniture map) this study used to identify resident's personalization, compared with only one question in the questionnaire used by Becker, might contribute to the discrepancy.

Table 4
NUMBER OF RESIDENTS WHO PERSONALIZED ROOMS
IN DIFFERENT WAYS^a

Dorm.	N	Number of types of personalization used					
		0	1	2	3	4	5
Putnam	50	0	0	3	18	29	0
Moore	50	0	1	10	15	24	0
Edwards	50	1	3	11	17	18	0
Goodnow	50	0	0	4	15	26	5
Total	200	1	4	28	65	97	5
Percentage		0.5%	2%	14%	32.5%	48.5%	2.5%

^a Five ways - furniture rearrangement, furniture addition, personal items addition, wall decoration, and wall painting are included in this table.

According to Table 4, over 97% of the students used

two or more ways, and 48.5% of all the residents used the mode of four ways to make room more personal. Only 2.5%, however, indicated that they employed all five ways.

In order to understand if there are significant differences among the average number of ways residents of the four dormitories personalized their rooms, an analysis of variance was used in Table 5.

Table 5
COMPARISON OF AVERAGE WAYS FOR THE
RESIDENTS OF FOUR DORMITORIES PERSONALIZED THEIR ROOMS

Putnam		Moore		Edwards		Goodnow		F
N= 50		50		50		50		
\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.	6.80*
3.52	0.61	3.24	0.85	2.96	1.01	3.64	0.78	

* $p < 0.01$

Table 5 indicates that the difference among four means is significant ($F=6.80$ which is larger than the critical value of 3.95 at the 0.01 level of significance). This finding indicates that the residents of Goodnow tended to use more varied ways ($\bar{X}=3.64$) for personalization, compared with those living in the other halls. Conversely, the residents of Edwards used the fewest ways ($\bar{X}=2.96$) among the four dormitories. However, from the standpoint of physical features, this finding is somewhat puzzling. Goodnow Hall has the greatest amount of fixed furnishings among the four halls, whereas Edwards not only has the most kinds of movable furniture, but also has the largest room

space among the four halls. Therefore, some of these differences might be explained by the residents' personal characteristics which will be analyzed in the later sections.

Major Reasons for Engaging in Personalization

In general, four central reasons were given for personalizing one's room: to make it more attractive, to make it more functional, to make it more "one's own place", and to make it more private. As Table 6 shows, of the four major reasons, "making the room more your own place" emerged as the strongest one in all dormitories. More than four-fifths of all residents (82.9%) considered it as a motive to have them personalize their rooms. The next most common reason was "making the room more attractive". A little over three-fifths (61.1%) reported that they personalized for this reason. Only 10.4% of residents attributed their personalization to making the room more private.

Table 6

PERCENTAGE OF STUDENTS' REASONS FOR MAKING PERSONALIZATION

Reason	Putnam N=49	Moore 49	Edwards 46	Goodnow 49	Mean 193
More Attractive	69.4	71.4	37.0	65.3	61.1%
More Functional	30.6	22.4	56.5	42.9	37.8%
More Your Own Place	83.7	91.8	67.4	87.8	82.9%
More Private	8.2	12.2	6.5	14.3	10.4%
Miscellaneous	4.1	4.1	2.2	10.2	5.2%

In addition to four major reasons, 5.2% of respondents mentioned some other reasons existed to have them engage in personalization. "Making the room look more like a home" and "making the room more spacious" were the most frequent additional reasons, while "making it enjoyable for other people" was mentioned by one resident.

In comparing the four dormitories, Edwards is the only hall with a different rank order of reasons (see Table 6). In this hall, the residents (56.5%) who considered "making it more functional" as a reason for personalization were more frequent than those (37.0%) who considered "making it more attractive" a reason. This distribution of reasons was different from respondents living in the other three dormitories. One possibility is that Edwards is not as well designed to meet the functional needs of students. Another possible explanation is that Edwards has a relatively high percentage of international students and the different cultural backgrounds are associated with varying reasons for personalization. A comparison (see Table 7) between international and American students' reasons for making personalization provided additional insight into this issue.

Table 7

COMPARISON OF PERCENTAGE REASONS FOR MAKING PERSONALIZATION
BETWEEN AMERICAN AND INTERNATIONAL STUDENTS^a

Variable	More Attractive	More Functional	More Your Own Place	More Private	Misc.
American (n=163)	66.9%	35.0%	85.9%	10.4%	6.1%
Foreign (n=30)	30.0%	53.3%	66.7%	10.0%	0%

^a The total sample size is not 200, because of missing data.

Through the above table, it was found that residents with different cultural backgrounds did have a noticeable difference in their motives. Unlike American students, International students indeed consider that "making the room more functional" frequently is more important than "making the room more attractive" in personalizing rooms. Otherwise, both types of students reported a similar rank order of reasons for personalization.

Another analysis compared the reasons reported by men and women. The results of this analysis are shown in Table 8.

Table 8

COMPARISON OF REASONS FOR MAKING PERSONALIZATION
BETWEEN MALES AND FEMALES^a

Variable	More Attractive	More Functional	More Your Own Place	More Private	Misc.
Male (n=95)	54.7%	34.7%	81.1%	6.3%	3.2%
Female (n=98)	67.3%	40.8%	84.7%	14.3%	7.1%

^a The total sample size is not 200, because of missing data.

It is worth noting that females have higher percentages than males for all reasons, although both of them have the same rank order. These finding suggests that female residents usually have more reasons to engage in personalization.

Most Common Types of Personalization

The types of personalization students used were divided into five categories. The first two categories were defined as modifying the original furniture arrangement and adding any personal furniture. The third category included adding personal items. "Personal items" here meant the articles which made people more comfortable, or would be added by personal preference. The daily necessities, such as clothes, books, or towels were not included. The fourth and fifth categories focused on decoration. Table 9 presents the number of residents engaging in each of the different types of personalization.

Table 9
NUMBER OF RESIDENTS ENGAGING IN
DIFFERENT TYPES OF PERSONALIZATION

Type	Putnam N=50	Moore 50	Edwards 50	Goodnow 50	Total 200
Furniture rearrangement	47	36	34	46	163
Furniture addition	32	25	20	32	109
Personal items addition	49	50	48	50	197
Wall decoration	48	49	46	49	192
Wall painting	0	2	0	5	7

According to Table 9, 98.5% of the residents reported adding personal items, demonstrating that it was the most popular type of personalization for dormitory students. Wall decoration was the next most common type, and a very high proportion of residents (96.0%) had decorated their room walls. The materials they used for decoration varied.

Table 10
PERCENTAGE OF THE MATERIALS RESIDENTS USED
FOR WALL DECORATION

Category	Putnam N=50	Moore 50	Edwards 50	Goodnow 50	Mean 200
Poster	96	98	52	96	86%
Calendar	56	66	62	64	62%
Photograph	62	62	50	70	61%
Academic schedules	26	42	42	46	39%
Drawing	34	34	14	34	29%
Map	28	8	30	14	20%
Painting	22	24	8	14	17%

Table 10 shows the distribution of the different materials used for decorative personalization. Within seven categories of decorative materials, posters were most frequently used by students (86% of the residents put one or more on their room walls). Calendars (62%) and photographs (61%) also were present fairly often, followed by academic schedules (39%), drawings (29%), maps (20%), and paintings (17%). An interesting finding in Table 10 is that compared with those living in the other dormitories,

the residents of Edwards seemed to have fewer preferences for using decorative-based materials, such as posters, drawings and paintings. No important differences were found in function-based materials, such as academic schedules, clendars and maps. This finding corresponds to their motives presented in Table 6, in which the residents of Edwards showed a tendency to want to make the room more functional rather than to make the room more attractive.

After adding personal objects and wall decoration, the next most frequent type of personalization was furniture rearrangement and addition. Most residents (81.5%) indicated that they had rearranged the furniture provided by dormitories, and the majority (54.5%) added their own furniture as well. A little surprising perhaps, is that only seven residents (3.5%) reported that they had painted walls of the room. In response to the question about the reason for painting room, one resident said to make the room look larger, while another said that the original paint was badly chipped. The rest expressed disliking of the original color. Most residents who didn't paint rooms indicated that the colors in their rooms were acceptable to them. Several others indicated that although they didn't like the color of the room, they didn't plan to paint the walls because it was too much work.

Amount of Personalization in Rooms

Table 11 shows the average amount of the four types of personalization found in each room. In this table, the

amount of furniture addition and rearrangement was assessed by counting the total pieces of furniture added or moved. For the amount of personal items, the amount was determined by the number of categories of articles. The amount of wall decoration was assessed by the percentage of the wall which the decorations covered, scored from photographs.

Table 11

MEAN AMOUNT OF FOUR TYPES OF PERSONALIZATION

Type	Putnam N=50	Moore 50	Edwards 50	Goodnow 50	Mean 200
Furniture rearrangement	2.54	1.56	1.22	1.70	1.76
Furniture addition	1.16	0.72	0.48	1.66	1.01
Personal items addition	5.64	5.96	3.72	6.94	5.57
Wall decoration	31.20	45.48	21.57	42.80	35.27

According to the means shown in the table, the residents rearranged and added an average of 1.76 and 1.01 pieces of furniture respectively. In addition, students added an average of 5.57 types of personal items, and 35.27% of the walls on the average were covered by their decorative materials

RELATIONSHIPS BETWEEN THE AMOUNT OF PERSONALIZATION AND FIVE OUTCOME VARIABLES

Five multiple regression analyses were conducted to examine the relationship between the amount of personalization and five dependent variables: the level of

satisfaction with one's room, the degree of social contact with neighbors, the use of one's own room for social activities, expected length of dormitory living, and daily time spent in residence room.

The amount of personalization included four categories: furniture rearrangement/addition, personal items addition, wall decoration, and wall painting. Since student's addition of furniture may result in rearrangement of the original furniture, furniture rearrangement and furniture addition here were combined so that these variables, represented a single predictor.

The scores for the dependent variables were obtained from questions 7, 8, 9, 17, 18 and 20 in the questionnaire. As shown on the questionnaire (see Appendix A), with exception of the question 7 and 8, these questions have a five point response format. A numerical scale of one to five was then applied to that response format with high scores reflecting high satisfaction with one's room, high frequency of contact with neighbors, high tendency to use one's own room for social interaction, and spending more hours in the room. The expected length of dormitory living referred to the number of semesters covered from the resident's second semester of living in the room until the student planned to move out of the room. All four of the personalization variables were required to enter into the regression model, although the order of entry was not fixed.

The results of all five regression analyses are displayed in Table 12. As Table 12 indicates, of the five regression analyses, three outcome variables - the level of satisfaction with one's room, the degree of social contact with neighbors, and the use of one's own room for social activities showed significant relationships with the amount of personalization.

Table 12
MULTIPLE REGRESSION ANALYSES FOR FIVE VARIABLES

Variable	Regression Coefficient (B Value)				
	SOR	DSC	UOR	DLD	TSR
Furniture	.052	.173	.099	.104	-.033
Personal Items	.068	.049	.163	.013	.020
Decoration	-.001	.008	.008	.005	.002
Painting	.071	-.386	-.054	.758	.786
Intercep	3.529	2.310	1.810	1.528	2.303
R-Square	.052	.165	.213	.032	.041
F	2.658*	9.661**	13.200**	1.602	2.071
d.f. = x,y	4,195	4,195	4,195	4,195	4,195
* p < 0.05	** p < 0.01				

SOR: level of satisfaction with one's room
DSC: degree of social contact with neighbors
UOR: use of one's own room for social activities
ELD: expected length of dormitory living
TSR: daily time spent in residence room

1. The Level of Satisfaction with One's Room

The data in Table 12 indicates a statistically significant relationship between the amount of personaliza-

tion and the level of satisfaction with one's room. The four variables accounted for a total of 5.2% of the variance in the level of satisfaction with one's room. The addition of different types of personal items accounted for 4.1% of the variance and seemed to be the only significant predictor, since the other three variables (accounting for the additional 1.0%) failed to enter the regression equation when a stepwise model was used. This finding suggests that residents with more categories of personal items tended to be more satisfied with their rooms. In addition, a Pearson Product Moment correlation coefficient ($r = 0.663$) identified in this study indicates a positive correlation between the satisfaction with one's room and one's dormitory. Therefore, many residents who engaged in more personalization in their rooms might be more satisfied with their residence halls as well as their individual rooms.

2. The Degree of Social Contact with Neighbors

The data in Table 12 also indicates a significant relationship between the amount of personalization and the degree of social contact with neighbors. The four variables accounted for a total of 16.5% of the variance in the degree of social contact with neighbors. Furniture rearrangement/addition accounted for the most variance (11.9%), while the amount of wall decoration was the other major predictor (accounting for an additional 3.9% of the

variance).

Personalization itself may be a kind of social communication. It may reinforce self-identity while at the same time communicating one's values and life-style to others. We can make judgements about a person from the choice of decorations, and the ways in which the furniture is arranged. Personalization may facilitate the establishment of social ties. The process of deciding what changes to make could be a social process with the potential for stimulating positive social interaction and a sense of community (Becker, 1977). These arguments help to explain the results of this study: the students with greater amounts of personalization, especially in terms of furniture arrangement and wall decoration, were more socially oriented.

3. The Use of One's Own Room for Social Activities

The data in Table 12 indicates that the resident who engaged in more personalization was more likely to use his or her own room for social interaction. In other words, the social activities were more likely held in the more personalized rooms. This analysis yielded the greatest amount of variance accounted for by personalization of the five regression analyses. The four personalization variables accounted for a total of 21.3% of the variance in the use of one's own room for social activities. Addition of personal items was the strongest predictor (16.2%),

followed by wall decoration (an additional 3.3%), and furniture rearrangement/addition (an additional 1.8%).

Steele (1973) suggests that the more dormitory students personalize their own rooms, through decorating, adding personal items, and rearranging or adding furniture, the more information they provide to others about themselves. Thus neighbors can then get information quickly and easily about some similarities and differences between themselves and the occupant of the room. This information can facilitate the formation of a relationship, since it provides more data about what realistic expectations the neighbors may have of the occupant, and it may stimulate the neighbors to disclose more information about themselves than they would if they were in the nonpersonalized rooms.

4. Expected Length of Dormitory Living

No statistical evidence indicated that a significant relationship existed between the amount of personalization and expected length of dormitory living ($F=1.602$, $p=0.18$). The four variables only accounted for a total of 3.2% of the variance. These data suggest that the role of expected length of residence didn't seem to influence residents' personalization.

5. Daily Time Spent in Residence Room

As the data in Table 12 shows, the relationship between the amount of personalization and daily time spent

in residence room was not significant ($F=2.071$, $p=0.09$). The four variables accounted for 4.1% of the variance, reflecting that the amount of personalization was not a good predictor of resident's daily time spent in the room.

It should be noted that the last two outcome variables which failed to show significant relationships with the amount of personalization both were related to time. These findings may suggest that temporal characteristic didn't play an important role for students' personalization; however, this hypothesis requires further study.

PERCEIVED IMPORTANCE OF PERSONALIZATION

Recent research by social psychologists has demonstrated that people's attitudes do affect their behavior (Kahle and Berman, 1979). Accordingly, in addition to analyzing the amount of residents' personalization, it is necessary to explore their attitudes toward personalization. The present study asked students how important they considered it to be able to personalize their rooms. Using a five point response format ranging from very important (5.00) to not important at all (1.00). 55.5% of the residents indicated it was "very important", while only 1.5% responded "not important at all". The mean score of all residents was 4.29 ($SD=0.97$). This score is high enough to suggest that being able to make

personalization is of considerable importance for dormitory students.

A further analysis explored the perceived importance of personalization to the population subgroups within the study. These findings of the tests for differences between the subgroups are shown in the following table.

Table 13
COMPARISON OF PERCEIVED IMPORTANCE OF PERSONALIZATION
BETWEEN EACH SET OF POPULATION SUBGROUPS^a

	\bar{X}	SD		\bar{X}	SD	Z
MALE (N=100)	4.07	1.10	vs. FEMALE (N=100)	4.51	0.76	-3.21**
LONG TERM (N=33)	4.12	1.17	vs. NEW ARRIVAL (N=167)	4.32	0.93	-0.93
FOREIGN (N=34)	3.32	1.24	vs. AMERICAN (N=166)	4.49	0.76	-5.28**
UNDERGRADUATE (N=31)	4.46	0.81	vs. GRADUATE (N=169)	3.35	1.23	4.86**
URBAN (N=89)	4.12	1.07	vs. RURAL (N=54)	4.48	0.84	-2.23*

** p < 0.01 * p < 0.05

^a score based on a scale ranging from "very important" (5.00) to "not important at all" (1.00)

As Table 13 demonstrates, with the exception of long term residents versus new arrivals, significant differences occurred between the other four sets of subgroups: men and women, American and international students, graduate and undergraduate students, and those with rural as against urban backgrounds. From the findings of this study, it

appears that females, Americans, and undergraduates perceived significant higher levels of importance for personalization than did males, international and graduate students. In addition, residents from small towns also seemed to consider personalization more important than did those from big cities, although the difference between these groups was not as great.

DIFFERENCES IN PERSONALIZATION ATTRIBUTABLE TO PERSONAL, TEMPORAL, AND ENVIRONMENTAL CHARACTERISTICS

Because several factors may influence students' personalizing behavior, the following series of analyses were used to test for differences in types of personalization attributable to selected personal (gender, class level, cultural background, rural/urban background), temporal (the length of dormitory living), and environmental (number of persons residing in room, flexibility of furniture arrangement) factors. The types of personalization are based on the categories identified in Chapter Two: furniture rearrangement and addition, addition of personal items and wall decoration. Since only seven residents painted their rooms, wall painting is not included in these analyses.

Personal Characteristics

Gender

When studying environment-related human behavior, gender frequently plays an important role. One analysis in this study explored the role of gender differences in dormitory students' personalization. Table 14 compares the average amount of three types of personalization between females and males.

Table 14
COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF
PERSONALIZATION BETWEEN FEMALES AND MALES

Type	FEMALE N= 100		MALE N= 100		Z
	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	2.98	1.72	3.36	2.45	-0.87
Personal items addition	6.23	2.24	4.90	2.47	3.99*
Wall decoration	36.30	25.28	34.23	25.14	0.58

* $p < 0.01$

Although females showed more interested in being able to personalize (see Table 13), no statistical evidence here indicates that any significant difference exists in the amount of furniture/addition and wall decoration between males and females. Neither the amount of furniture modification nor wall decoration varied significantly between men and women. Only one type of personalization, personal items addition, showed a significant difference

between males and females at the level of 0.01 ($Z=3.99$ which is larger than the critical value of 2.58). It appears that female residents did tend to add more categories of personal items to their rooms than did males. A further analysis in terms of ten categories of personal items is shown in Table 15.

Table 15

COMPARISON OF PERCENTAGE OF ADDING TEN CATEGORIES
OF PERSONAL ITEMS BETWEEN FEMALES AND MALES

Category ^a	N=	Female 100	Male 100	Difference
1. Plant		59%	19%	40%
2. Bedspread		88%	60%	28%
3. Curtain		18%	2%	16%
4. Large Pillow		54%	39%	15%
5. Carpet		68%	54%	14%
6. Seating Cushion		18%	8%	10%
7. TV Set		58%	51%	7%
8. Refrigerator		66%	61%	5%
9. Lamp		83%	80%	3%
10. Music System		78%	77%	1%

^a Categories are listed in descending order according to the difference

According to Table 15, more females engaged in adding personal items to their rooms than did males for all categories. In general, the size of the differences for electric appliances (e.g., TV set, refrigerator, music system, and lamp) between both sexes were minimal. On the

other hand, the role of gender seems evident in the remaining categories: 59% of the females added plants to their rooms, while only 19% of the males did so. 88% of the females brought their bedspreads, whereas only 60% of the males did. Also, compared with only 2% of the males, 18% of the females curtained their windows.

Class Level

It has been known that graduate students have a high level of perceived importance of personalization than undergraduate students. The next analysis focused on their actual behavior toward personalization, and the way in which the results fit with students' reports of their attitudes toward personalization. Table 16 compares the average amount of three types of personalization between undergraduate and graduate students.

Table 16

COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF PERSONALIZATION BETWEEN UNDERGRADUATE AND GRADUATE STUDENTS

Type	UNDERGRADUATE N= 169		GRADUATE N= 31		Z
	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	3.43	2.12	1.74	1.50	5.36*
Personal items addition	5.98	2.33	3.32	1.76	7.32*
Wall decoration	39.46	24.84	12.39	10.40	10.13*

* $p < 0.01$

Comparison of means for the two groups indicates that the differences in the amount of all three types of personalization are significant ($Z=5.36$, 7.32 , and 10.13 which are larger than the critical value of 2.58 for significance at the $p=0.01$ level). Therefore it appears that based on these data, undergraduates not only had a higher level of perceived importance regarding personalization, but also did indeed engage in more personalization than graduate students in all categories.

Kantz (1969) suggests that as late adolescents, the undergraduate residents are likely to be more energetic. Areas and finishes capable of permitting energy release together with rooms which permit such creative expression as wall decorations would remove some of the burden of conformity and the malaise of frustration. Thus, personal identity with their living space could be a psychological need as a source of stability and security.

In contrast to undergraduates, the more mature graduate students have moved into the adult world. A project on student housing at the University of California (1969) indicated that older and more mature students were less likely to accept university housing because of "the more annoying residence hall regulation become" and "the less socializing they feel impelled to take part in". This premise suggests that graduate students might engage in less social interaction than their undergraduate counterparts. Table 17 shows the comparison of the extent

degree of social contact for undergraduate and graduate students in the sample of this study.

Table 17
COMPARISON OF DEGREE OF SOCIAL CONTACT WITH NEIGHBORS
BETWEEN UNDERGRADUATE AND GRADUATE STUDENTS^a

	UNDERGRADUATE		GRADUATE		Z
	N= 169		N= 31		
	\bar{X}	SD	\bar{X}	SD	
The Degree of Social Contact with Neighbors	3.63	1.35	2.58	1.34	5.53*

* $p < 0.01$

^a score based on a scale ranging from "very often" (5.00) to "seldom or never" (1.00)

As Table 17 shows, undergraduates did engage in more social interaction than graduate students in dormitories, supporting the previous research. This lower degree of social contact with neighbors may be associated a lesser desire to reinforce self-identity and to communicate values to others, and thus less perceived and actual importance for personalization of the room.

Cultural Background

Studies by environmental psychologists (Hall, 1966; Altman, 1980; Holahan, 1982) have indicated that cultural difference operate as a strong influence on people's personal space, territoriality, and privacy behavior. The present study attempted to explore two effects of cultural background on personalization: American versus non-American

cultural background, and the rural versus urban character of one's environment during childhood. Table 18 displays the mean amount of each of the three types of personalization for American and international students, and the results of the tests for statistical differences in personalization between the groups.

Table 18

COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF PERSONALIZATION BETWEEN AMERICAN AND INTERNATIONAL STUDENTS

Type	AMERICAN N= 166		INTERNATIONAL N= 34		Z
	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	3.49	1.97	1.59	1.46	6.46*
Personal items addition	6.04	2.31	3.26	1.66	8.27*
Wall decoration	38.83	25.25	17.99	16.58	6.03*

* $p < 0.01$

Comparison of means for the two groups indicates that the differences for all three types of personalization are significant ($Z=6.46$, 8.27 , and 6.03 which are larger than the critical value of 2.58 for significance at the $p=0.01$ level). American residents had a stronger tendency to personalize rooms through furniture rearrangement/addition, personal items addition, and wall decoration than did international students.

These differences could be attributed in part to the

distant places from which international students come, and their restriction in bringing many personal items and furniture from home. Also, whether they go back to their home country or to other places after graduation, moving too many personal items might be inconvenient. Therefore, international students may be less apt to acquire additional objects for dormitory living.

The second explanation for the consistently lower amounts of personalization come from the data displayed previously in Table 13. Apparently, international students do not consider personalization as important as Americans do. These different attitudes toward personalization could provide another reason for international students' lower levels of personalization.

Urban/Rural Background

The size and degree of structural differentiation of a town environment influences the inhabitants' behavior (Michelson, 1970). Therefore, urban or rural backgrounds of the dormitory residents' may also affect their personalization. Table 19 presents the different amounts of the three types of personalization categorized by the residents' rural/urban backgrounds. In order to reflect the range of residential environments from which the students come, the residents from mid-size cities were added into this table.

Table 19

COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF PERSONALIZATION AMONG RESIDENTS FROM THREE DIFFERENT SIZE OF TOWNS

Type	BIG N= 89		MID-SIZE N= 57		SMALL N= 54		F
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	2.95	2.25	3.35	1.93	3.32	2.13	0.63
Personal items addition	5.38	2.55	5.27	2.09	6.17	2.57	3.01*
Wall decoration	34.55	21.98	38.03	22.50	33.84	25.39	1.08

* $p < 0.05$

Big City: more than 100,000 pop.

Mid-size: 10,000 to 100,000 pop.

Small Town: less than 10,000 pop.

As Table 19 illustrates, no significant differences were found in furniture addition/rearrangement and wall decoration, but residents of the small towns reported adding significantly more types of personal items than those in both big and middle city-size categories.

Table 20 compares the addition of ten categories of personal items between residents from small towns and mid-size/big cities. For purposes of this analysis, "small town" was defined as a rural area, and "mid-size/big city" was defined as an urban area.

Table 20

COMPARISON OF ADDING TEN CATEGORIES OF PERSONAL ITEMS
BETWEEN RESIDENTS FROM RURAL AND URBAN AREAS

Category ^a	RURAL N= 54	URBAN 146	Difference
1. Plant	57%	32%	25%
2. Carpet	74%	55%	19%
3. Large Pillow	57%	42%	15%
4. Refrigerator	67%	62%	5%
5. TV Set	56%	54%	2%
6. Lamp	83%	81%	2%
7. Curtain	11%	10%	1%
8. Seating Cushion	13%	13%	0%
9. Bedspread	74%	74%	0%
10. Music System	76%	78%	-2%

^a Categories are listed in descending order according to the difference

With the exception of three categories - plants, carpet, and large pillow, the size of the differences for the remainder were minimal. Of three categories which showed noticeable differences, plants was the one with greatest difference. Almost three-fifths of rural residents reported adding plants to their rooms, while only one-third of urban residents did so. In addition, compared with urban residents, 19% and 15% more of rural residents respectively added carpets and large pillows to the rooms, indicating that carpet and large pillow were the other two categories

with important sizes of differences. In Table 20, music system was the only category which was added more frequently by urban residents than rural residents. Since the size of the difference was only 2%, this difference was not worth noting.

Temporal Characteristics

The Length of Dormitory Living

Edney (1972) found that long term residents of homes had more elaborate personal markers, compared with short term residents. If this premise is extended to the present study, dormitory residents who had lived in rooms for longer periods of time should display greater personalization.

Table 21 compares the average of three types of personalization between new arrivals and long term residents.

Table 21

COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF PERSONALIZATION BETWEEN NEW AND LONG TERM RESIDENTS

Type	NEW N= 166		LONG TERM N= 33		Z
	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	3.08	2.04	3.61	2.48	-1.15
Personal items addition	5.48	2.48	5.88	2.22	-0.93
Wall decoration	34.01	24.28	40.10	28.17	-1.16

Even though long term residents have higher means for all types of personalization, statistical comparison of the group means indicates that no significantly different amount of any of the three types of personalization between new arrivals and long term residents. This result conflicts with the "possessive motive" mentioned in Chapter One, but fits with the failure of personalization to predict expected length of residency in the dormitory room. The finding might be explained by two factors - time and space.

Unlike a family house, a dormitory is only used as a temporary living place. The differences in length of residence between new arrivals' and long term residents' are typically less than three years. Furthermore, according to Hansen and Altman (1976), a large proportion of students decorated their living spaces soon after arriving on campus, and practically all students did some decorating by the time they had lived in their rooms for several weeks. Therefore, personalizing appears to be a rapid and near universal process in university dormitories, with rooms of new arrivals soon resembling those of longer term residents.

The other factor influencing the lack of differences between new and long term residents may be space. In general, there is limited space in dormitory rooms to accommodate extra personal furniture and items. This spatial constraint may limit the long term residents' continued accumulation of furniture or personal items

during their dormitory living.

Environmental Characteristics

Number of Persons Residing in Room

Because single dormitory rooms are very limited in number at K-State, only nine were available for this research. Thus, the comparison here focuses on two-person and three-person rooms. Since all three-person rooms were located in Putnam, the data for evaluating the influence of the number of persons residing in room were selected only from this hall. The results of this comparison are shown in Table 22.

Table 22

COMPARISON OF AVERAGE AMOUNT OF THREE TYPES OF PERSONALIZATION BETWEEN TWO AND THREE-PERSON ROOMS IN PUTNAM HALL

Type	TWO N= 31		THREE N= 16		t
	\bar{X}	SD	\bar{X}	SD	
Furniture addition and rearrangement	4.16	1.73	2.88	1.50	2.50*
Personal items addition	6.35	1.91	4.38	1.57	3.55**
Wall decoration	28.95	19.78	36.36	26.81	-1.08
** p < 0.01 * p < 0.05					

Comparison of the average amount of the three types of personalization between two and three-person rooms indicates that the differences in two types - furniture addition/rearrangement and personal items addition - are

significant ($t = 2.50$ and 3.55 which are larger than the critical value of 2.42 and 2.70 for significance at the $p=0.02$ and 0.01 level respectively). It appears that based on these data, the residents living in two-person rooms were more likely to rearrange and add furniture, and to add personal items than those living in three-person rooms. These additions occurred despite the limited sizes of the rooms (The two-person rooms are smaller than the three-person rooms in Putnam Hall.). The amount of wall decoration was not significantly different between two and three-person rooms.

A similar result was reported by Holahan and Saegert (1973) in their study for a psychiatric hospital in New York City. They found that patients living in the newly partitioned two-bed sections made more efforts to add personal items than they had done when living previously in multibed wards.

Environmental psychologists (Valins and Baum, 1973; Schmidt and Keating, 1979) have pointed out that a room with high density may cause people to feel a lack of personal territory and reduce his or her sense of personal control of the room. Similarly, the crowding (individuals' perceptions of spatial restrictions) in university dormitory rooms also may adversely affect students' sense of belonging. Therefore, the feelings of control and crowding for students in three-person rooms may be relatively lower than that of students in two-person rooms,

and might be an important factor in decreasing the interest and willingness of residents' in three-person rooms to add their own furniture and items.

Flexibility of Furniture Arrangement

It is of little doubt that furniture constitutes the major portion of the dormitory student's immediate environment. Other than his or her roommate, the student's in-room actions are circumscribed by furniture to a greater degree than perhaps any single other element. Recently, a trend in the design of dormitory rooms has been away from movable furniture and towarded built-in furnishings. In order to further understand the influence of these two kinds of furniture on students' choices for personalization, it is worth considering the flexibility of furniture arrangements. The following table describes the characteristics of furniture in four halls.

Table 23

THE CHARACTERISTICS OF FURNITURE IN FOUR DORMITORIES

	Putnam	Moore	Edwards	Goodnow
Bed	N	F	M	M/N
Desk	N	N	N	M
Closet	F	F	F	F
Dresser	N	N	N	F
Bookshelf	None	F	F	F
F : Built-in (fixed) M : Built-in (movable) N : not Built-in (movable)				

The rooms in Goodnow had the greatest amount of fixed furnishings, while rooms in Putnam and Edwards appeared to have the greatest options for rearrangement. The object of the analysis based on these characteristics is to explore the relationship between the number of pieces movable furniture in the room and the residents efforts to rearrange furniture. In other words, the object is to examine whether the residents who have more movable furniture pieces tend to make more efforts to rearrange that furniture. This question was addressed by constructing a ratio of the number of furnishings that were rearranged to those that could be rearranged, and ranking the ratios.

Table 24
COMPARISON OF AVERAGE PIECES OF REARRANGED FURNITURE
IN FOUR DORMITORY ROOMS

	Putnam N= 50	Moore ^a 50	Edwards 50	Goodnow 50
A: Number of Rearranged Furniture Pieces	2.54	1.56	1.22	1.70
B: Number of Movable Furniture Pieces	3	2.5	3	2
Ratio: A / B x 100	84.7	62.4	40.7	85.0
Rank Order	2	3	4	1

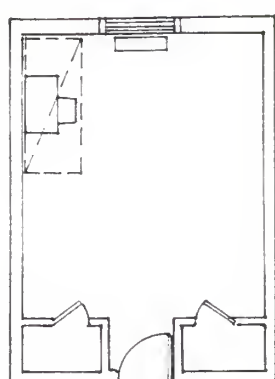
^a The beds in Moore Hall are glued to the floor, but they can still be moved with a crow bar.

Among four dormitories, Goodnow has the fewest kinds of movable furniture, but the residents still made the most

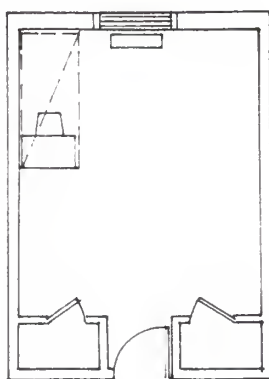
efforts to rearrange furniture. On the other hand, although the beds, dressers, and desks in Edwards all were movable, the residents in this hall still had moved the fewest pieces. It seems clear that the number of movable furniture pieces in the room is not a strong predictor of the number of furniture pieces rearranged by the residents.

In order to further explore the limitations that students might experience in furniture rearrangements, the number of furniture arrangement patterns for each room was identified. Table 25 describes the comparison of number of furniture arrangement patterns in rooms. In the four dormitories, only two-person standard rooms were used in this comparison. This analysis was completed by constructing a ratio of the number of persons who lived in two-person rooms to the number of furniture patterns they arranged, and comparing with the ratios. To emphasize the individual's personalization, the number of furniture patterns and furniture pieces were based on the unit of the person, rather than the room. The most frequent arrangements of furnishings in each of the four halls are shown in Figure 2 and Figure 3.

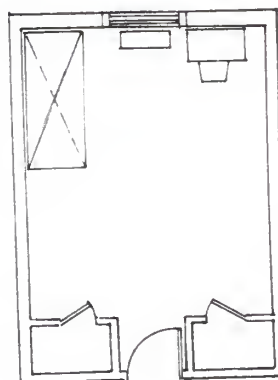
Figure 2
THREE MOST POPULAR PATTERNS OF FURNITURE ARRANGEMENT
IN PUTNAM AND MOORE HALL



2^a

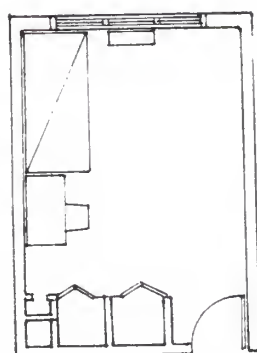


2

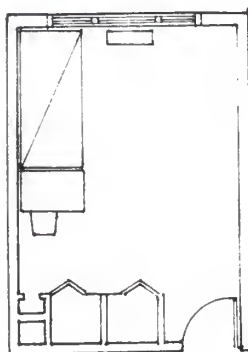


2

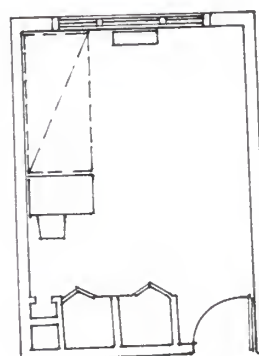
PUTNAM HALL



24
(original)



6



4

MOORE HALL

^a number of persons whose arrangements fell into the above pattern



single bed



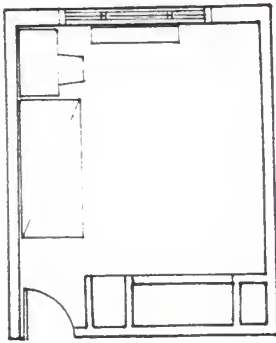
sleeping loft



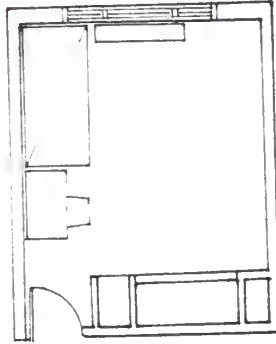
bunk bed

Figure 3

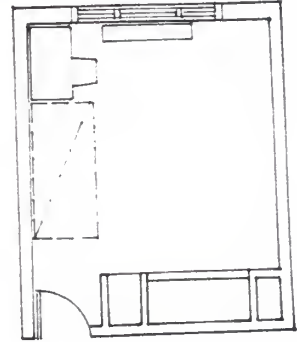
THREE MOST POPULAR PATTERNS OF FURNITURE ARRANGEMENT
IN GOODNOW AND EDWARDS HALL



5^a
(original)

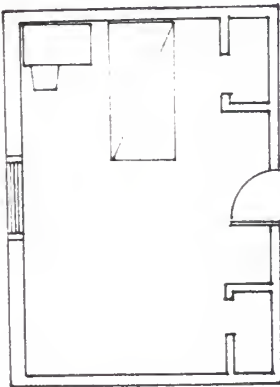


4

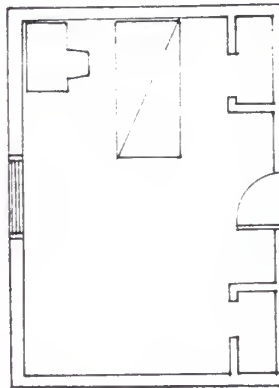


3

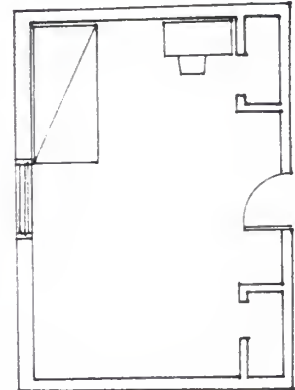
GOODNOW HALL



16
(original)



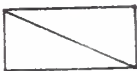
7



5

EDWARDS HALL

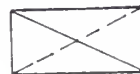
^a number of persons whose arrangements fell into the above pattern



single bed



sleeping loft



bunk bed

Table 25
COMPARISON OF NUMBER OF FURNITURE ARRANGEMENT PATTERNS
IN FOUR DORMITORY ROOMS

	Putnam	Moore	Edwards	Goodnow
Number of Kinds of Movable Furniture	2	1.5	2	2
A: Number of Patterns	18	15	16	34
B: Number of Persons	21	49	48	47
Ratio: A / B x 100	85.7	30.6	33.3	72.3
Number of persons retaining original arrangement	0	24	16	5

With the exception of Moore Hall, all of the other three halls have movable beds and desks. In Moore, the beds were glued to the floor and could not be moved except with a crow bar. (seven students did this, however). The results in Table 25 suggest that Moore Hall had the most residents who did not change the locations of beds and desks. In addition, it had the fewest patterns of furniture arrangement among four dormitories. These findings suggest that fixed beds in Moore Hall did eliminate many arrangement possibilities.

Another finding from Table 25 is that 72.7% of the residents in two-person standard rooms do not arrange the furniture as originally placed by residence hall administrators. Putnam Hall is particularly noteworthy in this respect, since no resident retained the original furniture arrangement. Even though the beds were glued to

the floor, 51.5% of the residents in Moore Hall still managed to change the original arrangement. It appears that most dormitory students have a strong desire to rearrange their furniture to meet personal needs.

The Physical Features of The Room

The differences between dormitories in personalization, which may reflect the influences of the physical design of the rooms, was explored further through analysis of variance. Table 26 shows the comparison of average amount of the three types of personalization among the four dormitories. One way analyses of variance indicate that the differences for all three types of personalization are significant.

Table 26
COMPARISON OF AVERAGE AMOUNT IN THREE TYPES OF
PERSONALIZATION AMONG FOUR DORMITORIES

Dormitory	N	Furniture		Personal Items		Decoration	
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Putnam	50	3.70	1.71	5.64	2.18	31.20	21.89
Moore	50	2.28	1.75	5.96	2.20	45.48	25.53
Edwards	50	1.70	1.34	3.72	2.02	21.57	16.66
Goodnow	50	3.36	1.97	6.94	2.24	42.80	27.68
F		14.88*		19.45*		11.20*	

* $p < 0.01$

Furniture: Furniture rearrangement/addition
Personal Items: Personal items addition
Decoration: Wall decoration

In order to examine if there were any physical features in students' rooms that had restricted the ways residents might like to personalize their rooms, an open-ended question was included in the questionnaire. Responses identified a great variety of complaints, although half of them could be categorized into some major groups. Several statements which were most frequently mentioned for each hall are listed below:

Edwards

"There are not enough electrical outlets in my room."

(11 of 25 responses)

"Furniture is too heavy and awkward to be rearranged."

(3 of 25 responses)

Moore

"The beds are connected to the floor preventing rearrangement." (26 of 35 responses)

"My room has a corner that is squared off and sticks out, which gets in the way when finding a new way to move the beds." (3 of 35 responses)

Goodnow

"The heater gets in the way when moving furniture."

(8 of 32 responses)

"Room is a little too small to arrange the given furniture." (7 of 32 responses)

"The bookshelves are bolted, which caused problems for lofts and wall space." (3 of 32 responses)

Putnam

"We are required to keep unwanted original furniture in the room instead of storing it." (5 of 20 responses)

Each statement listed above was mentioned by three or more residents in the hall. Most of these statements are relevant to furniture rearrangement/addition. Only two features -inadequate electric outlets and insufficient room

space - might restrict residents in adding personal items. However, no comment was made about decoration. Therefore, it seems that, of three types of personalization, furniture rearrangement/addition is the most likely to be affected by the features of room. On the contrary, the relationship between decoration and any limitation of room features appears the weakest.

With the exception of the dissatisfaction with beds bolted to the floor, all of the design features mentioned in these comments existed in every dormitory. For example, each room of all dormitories had only two electric outlets, although more residents of Edwards mentioned it. Also, despite the fact that more residents of Edwards complained, the type of beds in Edwards, Moore, and Goodnow were identical. Thus, except that the lower furniture rearrangement of Moore Hall was due to the bolted beds, the other significant differences in three types of personalization among four halls (see Table 26) were hardly explained by the design features which were criticized by residents. Because the population of each subgroup was not equally distributed in the four dormitories, it may be that the differences of amount of personalization among four dormitories are more likely attributed to the other factors mentioned earlier, such as class level or cultural background.

Generally, college dormitory residents are grouped according to their gender, class level (undergraduate/

graduate), and marital status. In other words, except for married student housing, different residence halls or wings usually house different sexes or class levels of students. Since diverse needs exist in different groups, careful attention should be given to meet the varying needs of these groups in designing dormitories. To provide additional information about how different groups of residents react to seven design features of their rooms, residents were asked to rate their satisfaction with these features. Two comparisons of mean ratings by males and females, and for undergraduate and graduate students are presented in Table 27 and 28.

Table 27
COMPARISON OF MEAN RATINGS BY MALE AND FEMALE RESIDENTS
ON SEVEN FEATURES OF DORMITORY ROOMS

Feature	MALE N=100		FEMALE N=100		Z
	\bar{X}^a	SD	\bar{X}	SD	
Room size	3.17	1.30	3.39	1.27	-1.21
Window size	3.89	0.98	3.91	1.19	-0.13
Furniture arrangement	3.45	1.01	3.48	1.17	-0.19
Closet space	3.13	1.24	2.81	1.19	1.86
Space for study	3.35	1.15	3.11	1.15	1.47
Soundproofing	2.38	1.27	2.25	1.23	0.73
Privacy	3.21	1.27	3.27	1.10	-0.36

^a score based on a scale ranging from "highly satisfied" (5.00) to "highly dissatisfied" (1.00)

As the findings in Table 27 indicate, both males and females rated soundproofing as having the lowest level of satisfaction, which suggested that noise was the primary problem in dormitory rooms. Next to soundproofing, closet space was the least satisfactory to residents. This was the only item which come close to showing a significant difference between males and females (at the probability level of 0.1, $Z=1.86$ which is larger than the critical value of 1.645). That is, female residents had a greater need for more closet space than males. This finding appears consistent with the findings shown in Table 13, which showed females tended to add more personal items to their rooms than did males. More volume of personal effects may result in their dissatisfaction with the closet capacity to store some of them.

The next analysis, comparing satisfaction levels between graduate and undergraduate students, was based on data from residents of Edwards, where most graduate students lived. Thus the features of the rooms were identical for this analysis. The results of this analysis are shown in Table 28.

Table 28

COMPARISON OF MEAN RATINGS BY UNDERGRADUATE AND GRADUATE
STUDENTS ON SEVEN FEATURES IN EDWARDS HALL

Feature	UNDERGRADUATE N= 22		GRADUATE 28		t
	\bar{X} ^a	SD	\bar{X}	SD	
Room size	4.05	1.05	3.11	1.55	2.44*
Window size	3.59	0.91	3.25	1.27	1.06
Furniture arrangement	3.68	1.04	3.14	0.97	1.90
Closet space	3.05	1.13	2.57	1.35	1.34
Space for study	3.82	0.96	2.75	1.29	3.23**
Soundproofing	2.59	1.26	2.61	1.31	-0.05
Privacy	3.55	0.96	3.18	1.16	1.20

** p < 0.01

* p < 0.05

^a score based on a scale ranging from "highly satisfied" (5.00) to "highly dissatisfied" (1.00)

More differences in satisfaction with design features were identified for graduate and undergraduate students. Satisfaction with two features - room size, and space for study - showed significant differences between graduate and undergraduate students. Of these two features, satisfaction with space for study emerged as the stronger difference. Since graduate students typically are more academically oriented, it is understandable that a good study space was most in demand by graduate students. Research of student housing in the University of California (1969) stated that the crucial need was for better illumination, more

bookshelves, and larger desks than normally were provided the undergraduate students. Because of the lack of these features, graduate occupancy rates in their residence halls were minimal.

Another feature with a significant difference in the level of satisfaction between undergraduate and graduate students is room size. This finding suggests that graduate students find small rooms less satisfactory. However, this lack of satisfaction probably does not reflect a need based on accumulation of personal items by graduate students (which was less than undergraduate students). It is not clear what caused this difference between class levels. No other previous research related to this subject was found.

Although the difference between graduate and undergraduate students did not reach statistical significance, satisfaction with furniture arrangement also showed a trend toward graduate students being less satisfied. It has been mentioned previously that undergraduate students engaged in more furniture rearrangement. This more frequent rearrangement might be conducive to their higher satisfaction with current furniture arrangements.

V. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Exploring the attitudes and the ways in which dormitory residents personalized their rooms has been the main concern of this study. A variety of personal and environmental issues associated with residents' personalization of their rooms have been revealed in this thesis through descriptive and inferential statistical analyses. The following paragraphs summarize these findings.

Distributions of Personalization

1. Almost all of the residents (99.5%) have at least engaged in some personalization of their rooms, demonstrating that personalization is quite commonplace among dormitory students.

2. Of four major reasons for personalizing one's room, "making the room more your own place" is the strongest one. Female residents usually have more reasons to engage in personalization than do males.

3. Adding personal items is the most popular type of personalization for dormitory students. Almost all (98.5%) residents reported that they had added personal items to their rooms. Wall decoration is the next most common type of personalization, and the most popular materials used to

decorate the rooms are posters.

4. The residents rearranged and added an average of 1.8 and 1.0 pieces of furniture respectively. In addition, they added an average of 5.6 types of personal items, and about 35% of the walls on the average were covered by student's decorative materials.

Relationships between the Amount of Personalization And Five Outcome Variables

5. The amount of personalization displayed by residents has a significant positive relationship with the level of satisfaction with one's room, the degree of social contact with neighbors, and the use of one's own room for social interactions.

6. No significant relationship was found between the students' personalization and their expected length of dormitory living or daily time spent in residence room.

Perceived Importance of Personalization

7. Females, Americans, and undergraduate students perceived significantly higher levels of importance for personalization than did males, international and graduate students.

8. Residents from small towns also considered personalization more important than did those from big cities, but no differences were found in the perceived

importance of personalization between new arrivals and long term residents of the dormitory rooms.

Differences in Personalization Attributable to Personal, Temporal, and Environmental Characteristics

9. Female residents tended to add more categories of personal items to their rooms than did males. In general, more females added plants, bedspreads, curtains and large pillows than males. The differences for electric appliances between both sexes were minimal.

10. Undergraduate students engaged in more personalization than graduate students including furniture rearrangement and addition, personal items addition, and wall decoration.

11. American students had a stronger tendency to personalize rooms through furniture rearrangement and addition, personal items addition, and wall decoration than did international students.

12. The residents from small towns added more personal items to their rooms than did those from mid-size and big cities. Plants, carpet and large pillows were three categories that showed noticeable differences between rural and urban residents.

13. Although long term residents had higher means for all types of personalization, no statistical differences were found in the amount of any of the types of personalization between new arrivals and long term

residents.

14. The residents living in two-person rooms were more likely to rearrange and add furniture, and to add personal items, than those living in three-person rooms.

15. Compared to built-in systems, movable furniture apparently led to more arrangement possibilities. Nevertheless, the number of movable furniture pieces in the room was not a strong predictor of the number of furniture pieces rearranged by the residents.

RECOMMENDATIONS FOR MANAGEMENT AND DESIGN OF DORMITORIES

Based on the results of this study, a number of recommendations are proposed below to help residents of dormitory rooms achieve the personalization they desire. Although residents' backgrounds and personal characteristics influence personalization, impediments to personalization also can come from administrative policies as well as design features. Therefore, these recommendations are offered for both administrators in terms of management policy, and for designers in terms of design implications.

Management Policies

The findings from this study have indicated that students consider it to be very important to be able to personalize their own rooms. The resident wants through personalization to make the room more his or her own place,

more attractive, and more functional. Results from the present research also identify a positive relationship between the amount of a resident's personalization and the level of satisfaction with one's room and one's dormitory. Thus, personalization is not only welcome, but also important to dormitory students. Unfortunately, most college housing departments have very strict rules which generally discourage student personalization.

Brehm's (1966) theory of psychological reactance suggests that when individuals experience a perceived loss of freedom to act in some way, they react by assuming the attitudes or engaging in the behaviors that they feel have been suppressed. This occurs even though these attitudes or behaviors may not represent the way they would act or feel in situations where there was no perceived threat or actual loss of freedom. In other words, an individual who feels that he or she has been denied the opportunity to personalize, may complain about such restrictions and even modify the environment in defiance of rules which prohibit such activities. Becker (1977) has also pointed out that high levels of personalization of the proximate environment will be associated with low levels of damage to the environment by current occupants. He found that much of the apparently willful destruction of the physical environment seems to be preceded by the perception that administrators, or designers do not care about, or are even hostile to, the persons living in the setting. Restrictions on personaliz-

ing environments are significant means of conveying this lack of concern, intentionally or unintentionally. From this perspective, vandalism can be viewed as an environmental message that informs others about what residents think of such restrictions and those responsible for their creation and enforcement.

The above discussion suggests that the perceived freedom to make personalization may be as important to students as actually making personalization. Restricting such freedom may elicit residents' negative reactions. Accordingly, it is suggested that housing administrators amend current regulations and adopt more permissive rules to meet students' needs. Further, some positive policies could also be adopted to encourage residents to personalize their rooms. For example, housing departments could periodically hold a competition for room decoration in each hall and invite the professors from departments such as Art, Architecture, Interior Architecture or Design as judges. Also, international students could be encouraged to furnish and decorate their rooms with the artifacts of their native lands. Not only might this add to their comfort, but rooms then become interesting museums with exotic articles. Thus dormitory students have opportunities to contact and learn different cultures. Another good example of a situation that encourages personalization is that of Hampshire College. Becker (1977) has stated that all the furniture provided the dormitory students at

Hampshire College was movable. In addition, the dormitory administrator stacked students' furniture in the middle of the rooms at the beginning of each year so that the residents were forced to arrange it. This is a graphic example of administrative attempts of encouraging students to shape their own environments.

Another method which Heilweil (1973) suggested is an administrative policy permitting students to trade in furniture that they do not want for furniture that they do, in a central housing furniture exchange. This does require restoring the room to its original condition when the students leave. Also, providing residents a greater choice of furniture in terms of colors and types may enhance their satisfaction with furniture and facilitate personalization.

Results from the present research have indicated that most residents had at least added some categories of personal items to their rooms. It reflects that students indeed need these items to make their dormitory life more comfortable or convenient. However, because of the inconvenience in dealing with these items after moving out of dormitory or upon graduation, students, and especially international students, sometimes avoid acquiring too many kinds or pieces of personal items. If the items which the housing department offers for residents' rentals covered a wider range (currently, only refrigerator and telephone are available at K-State) such as televisions, curtains, and art prints, a greater range of personalization might be

possible. Heilweil (1973) cited Propst (1971) as saying that this type of system could be expanded to allow students to rent all their furniture from the dormitory, or none of it, with attendant savings.

Design Implications

Results from this study indicate that dormitory space that satisfies students' needs must take the opportunities for personalization into consideration. No matter how well a college dormitory is designed, if the rooms of the dormitory can not be modified by students, the residents are unlikely to be satisfied. This conclusion recommends physical design features conducive to personalization of dormitory rooms. Some of these design features are illustrated in Figure 4. It is hoped that students' needs for personalization may be met through such design features.

One of the first recommendations to designers of dormitories is to carefully select wall surface materials. For easy maintenance sake, most wall surfaces of dormitory rooms tend to be flat, shiny and easy to clean. Nevertheless, they are easily scratched or damaged when students use tacks or tape to mount pictures or posters. Therefore, many schools have strict rules against students hanging pictures or posters on the walls. It must be recognized that students' decoration of their rooms is inevitable. Therefore, it may be wiser to make provisions

for such decoration in the specification of materials and finishes, rather than to be faced later with yearly maintenance expenses. It is recommended that dormitory rooms contain some soft wall materials, such as tack boards, cork, burlap, linen or wood for part of the wall surface so that students can hang pictures, paintings, or posters without marring the wall finishes. The soft wall materials may be costly for installation, but they may reduce maintenance. Sommer (1974) pointed out that in the University of California at Davis, the soft materials have been proven cheaper and more satisfying than the previous arrangement of bare walls accompanied by constant inspections, fines, and periodic repainting by the maintenance staff.

Besides, most soft wall materials are also ideal for absorption rather than reflection of sound, and thus reduce noise. As mentioned previously, noise is a primary problem in dormitory. Carpet is a good material to filter noise. If the floor can be covered with a carpet, it can help not only to reduce noise problem, but also to present a residential atmosphere. Although carpets are not furnished in most of the dormitory rooms at K-State, many students acquire or are interested in having carpeting in their rooms. Thus including carpeting in dormitories appears to be vitally important to suit students' needs.

When designing dormitories, an important element that architects often neglect is adequate storage space. Because

of the lack of big storage rooms, many students complained that they were required to keep unwanted original furniture in the room instead of storing it. This is quite inconvenient if students wish to add their own furniture to their rooms. The problem could be solved if each floor of dormitory had a storage room where is sufficient to accommodate residents' unwanted furniture, and perhaps bulky infrequently used items, such as luggage. Therefore, the provision of generous storage space should be considered by the designer as one of the highest priority items on the list of needed design features.

Recently there has been a trend toward more built-in room furnishings in residence halls. Built-ins reduce the potential for variety and the ability of students to shape their room space to meet personal needs. Nevertheless, built-ins are often cheaper and tend to take up less space, thus making dormitories financially competitive and allowing for small dormitory rooms to have more remaining free space for students. It has been noted that inadequate room space is one of sources of residents' complaints. Built-in systems still might allow personalization in dormitory rooms, if they are designed according to the following two principles.

Movable - furnishings may be removed without complicated tools.

Light weight - furnishings may be rearranged by any two residents.

The present study has verified that most residents have a strong desire to rearrange their furniture. In order to meet students' needs, flexibility is an important factor to be considered in designing dormitory furnishings. For example, the bed unit could be either hung from the wall (using the wall for structural support) or free standing. Dressers, desks and chairs should also be removed as residents wish. Additionally, both desks and chairs must permit shifting, tilting and leg stretching. The other important thing is that all furnishings must avoid being made by heavy materials so that weaker residents can move them easily.

The recommendations proposed above are for general dormitory rooms. In designing dormitory rooms for different groups, the special needs of the particular group must be seriously considered. Chapter Four has provided information about how different groups of residents reacted to design features of their rooms. According to these results, females were inclined to have a greater need for more closet space than males. Thus, giving female residents more closet space to meet their particular needs may be one of considerations in designing female dormitory rooms. In addition, because results also revealed that females had more personal items, a closet unit with more shelves for the storage of personal objects may be another need.

The results in Chapter Four also showed that more graduate students were dissatisfied with their study space

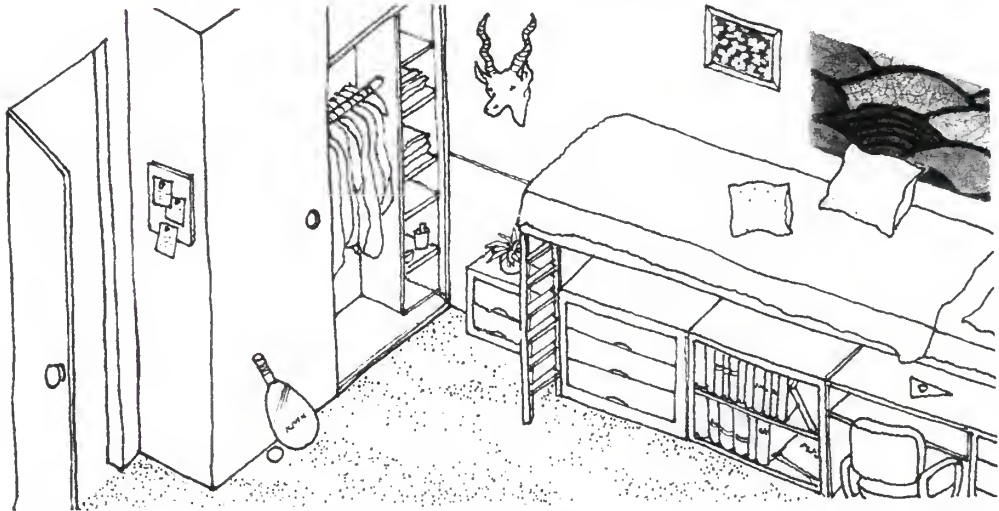
than undergraduate students. Thus, a suitable study space may be an important qualitative criterion for graduate student dormitory. In general, good illumination and adequate bookshelves are two crucial physical factors for intensive study. An ideal study area should have adequate shelving as well as good lighting. Currently, there is a trend for more and more students to add personal computers to their rooms. Since the desks in dormitories are invariably too small, for even a personal computer, there is little room for books. Thus, an adequate desk top space also is needed by students.

According to the data from this study, the residents living in three-person rooms were less likely to personalize their rooms than those living in two-person rooms. This result may be due to their lower personal space feelings in their own rooms. Thus, dormitories could provide the residents in three-person rooms with movable partitions or screens so that they could create personal space territories and have visual privacy, or consider not providing three-person rooms.

In addition to the major design features mentioned above, other minor design details may also facilitate students' personalization. These details include providing sufficient electrical outlets for the increasingly electrified generation of college students, a wide window sill for plants or the display of other personal objects, and a telephone jack for the choice of places to put a telephone.

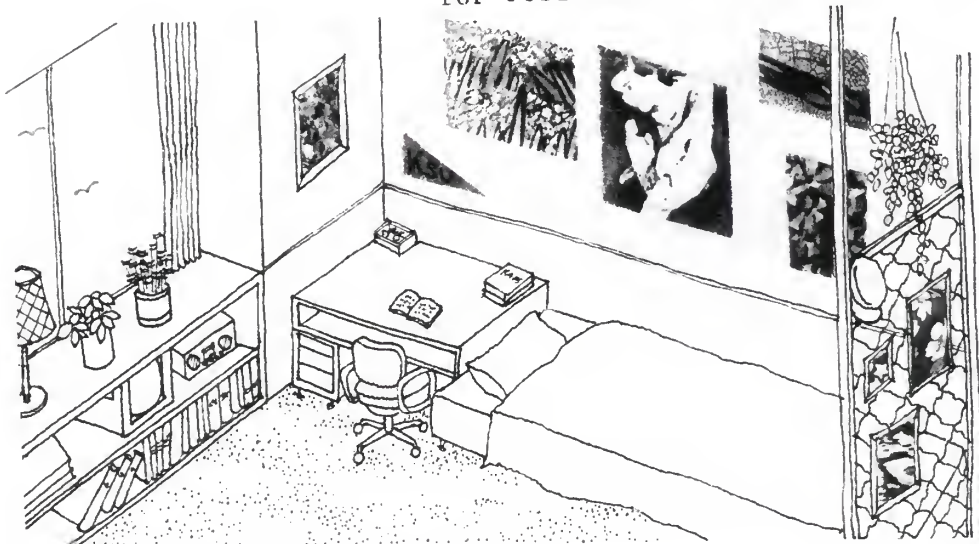
females need more closet
space and shelves

the bed unit can be either hung
from the wall or free standing



the floor is covered with a carpet

room contains soft wall materials
for residents' decoration



a wide window sill can be used
for plants and displays

desk and chair permit shifting,
tilting and leg stretching

Figure 4: Proposed Design Features

FUTURE RESEARCH DIRECTIONS

This thesis has tried to explore how dormitory students personalized their rooms at Kansas State University. Similar research in other colleges is needed to corroborate the findings of this study. Five related research objectives listed below are recommended for future studies.

(1) Because single rooms are very limited in number at K-State, only nine were available for this research. Thus, this study only focused on two-person and three-person rooms. However, there is a growing demand for single rooms on college campus. Most dormitory residents preferred single rooms, despite of higher prices (Hsia, 1968; Van der Ryn and Silverstein, 1967). Single rooms provide freedom, privacy, and a place the student can call his or her own. It is necessary that future researchers pay much attention to single rooms, and examine single room residents' personalization.

(2) Karlin and his associated (Karlin, Rosen, and Epstein, 1979) reported that the grades of students in triple rooms at Rutgers University were significantly depressed, but after students were reassigned to less crowded accommodations their grades improved significantly. The present study identified that the residents living in three-person rooms were less inclined to engage in personalization than those living in two-person rooms. In

addition, residents in three-person rooms were less satisfied with their rooms than those in two-person rooms (3.8 versus 4.3 on a 5 point scale). These findings may reflect that three-person rooms are not advisable as living spaces for college students as single and double rooms. Thus, more research regarding dormitory multiperson rooms should offer valuable information for both college housing departments and dormitory designers to use in the programming and design of new facilities.

(3) In this study, all time-related variables failed to show significant relationships with the residents' personalization. One possibility is that temporal characteristics might not be important factors affecting dormitory students' personalization. The other possibility may be that students' time spent in rooms and length of dormitory living are more determined by external factors, such as academic schedule or economics. However, this issue (the relationship between temporal characteristic and students' personalization) requires further study.

(4) Hsia (1968) pointed out that off-campus was the place most students, especially upperclass students, would like to live. Residence halls were only a stepping stone for off-campus living. Van der Ryn and Silverstein (1967) wrote that of the on-campus residential population at Berkeley, 45% were freshmen, 26% were sophomores, 22% were juniors, and only 7% were seniors. The data in this study also indicated that 49% were freshmen, while only 12% were

seniors. Accordingly, dormitories are primarily occupied by younger students. Thus, in addition to on-campus dormitories, off-campus apartments and houses appear to be the other ideal settings for investigating college students', especially upperclass students', personalizing behavior.

(5) Personalization serves to reflect or reinforce the people's own sense of identity, as well as express it to others. Thus personalization occurs in any environment and to any person. For this reason, future research needs to continue the present studies to explore how different people personalize their particular environments, such as patients in wards, employees in offices, elderly in congregate housing, or dwellers in apartments. Furthermore, different kinds of personalization, such as exterior personalization versus interior personalization, and group personalization versus individual personalization, also need further study.

It is hoped the results from this study will improve the future quality of life for residents of KSU residence halls, through specific recommendations to the Housing Department, and for residents of other university residence halls by suggesting ways in which halls can be better designed to meet students' needs.

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APPENDIX A: QUESTIONNAIRE

I am a graduate student in architecture at KSU. This questionnaire is part of a study concerning the ways in which students rearrange and decorate their rooms in dormitories. Information gained from this study should help improve the future quality of life for residents of university residence halls by suggesting ways in which the halls can be better designed to meet students' needs.

I would appreciate your cooperation in filling out the following questions and rating the physical elements of your room. As you are most familiar with your living space, your voluntary participation will make a significant contribution to this project. I would also like to take a photograph of your room, so that I can record the way you have decorated it.

The information you provide and the photograph will be kept confidential, so please feel free to express your opinions. You may choose not to answer any question if you wish. There should be no risks to you.

If you have any question about this research, please contact me at 537-0711.

Thank you very much for your help.

Hunan Tzuoo

QUESTIONNAIRE

1. Type of room: ☐ One-person; ☐ Two-person; ☐ Three-person room
2. Your class: ☐ Fresh.; ☐ Soph.; ☐ Jr.; ☐ Sr.; ☐ 5th year undergraduate
☐ Grad.
3. Your major: _____
4. Sex: ☐ Male; ☐ Female
5. Home state: ☐ Kansas; ☐ Other State; ☐ Foreign Country _____
please specify
6. What population range best describes your home town?
☐ less than 10,000 pop.; ☐ 10,000 to 100,000 pop.; ☐ over 100,000 pop.
7. How long have you lived in this room? (number of semesters, including
present semester) _____
8. How much longer do you expect to live in this room? (number of semesters,
excluding present semester) _____
9. How many hours per day do you usually spend in your room?
☐ under 8 hrs. ☐ 8-11 hrs. ☐ 12-16 hrs. ☐ 17-20 hrs. ☐ over 20 hrs.

10. How important is it to you to be able to decorate your room and arrange furniture as you wish?

very important $\frac{\quad}{(1)}$ / $\frac{\quad}{(2)}$ / $\frac{\quad}{(3)}$ / $\frac{\quad}{(4)}$ / $\frac{\quad}{(5)}$ not at all important

11. Have you rearranged the furniture provided by the residence hall?

[]No

[] Yes, I have changed the location of _____bed _____desk _____dresser
others

12. Have you added any furniture in your room?

Please put the appropriate number (0, 1, 2, etc.) of any items you have added in the parentheses.

☐ No

```
[ ]Yes, I have added ( ) sleeping loft
                      ( ) partition
                      ( ) bookshelf
                      ( ) chair, bench, stool
```

() bed
() dresser
() desk

others

13. Have you added any personal items (excluding furniture) in your room?

[] No

[] Yes. I have added () carpet or rug

() bedspread

() large pillows

() seating cushions

() plants

others

() TV set

() refrigerator

() music system

() curtains

() lamps

others

14. Have you decorated the walls of your room?

[] No

[] Yes, I have decorated the walls with () posters

() posters () photographs

() paintings

() maps

() drawings

() calendars

() academic schedules

others

15. Have you painted your room?

[] No

[] Yes, I have painted () walls.

The original color was . The present color is .

16. What were your reasons for making these changes?

(You may choose more than one answer, but if you do, please mark the most important reason with a *.)

- [11. make it more attractive

```
[ 12. make it more functional
```

- []2. make it more functional
- []3. make it more "your own place"

[]4. make it more private

others

17. How often do you get together with neighbors in your dorm for social activities?

- []1. several times a day
- []2. about once a day
- []3. 2-4 times a week
- []4. 2-4 times a month
- []5. seldom or never

18. How often do you use your room for socializing with others in the dorm?

- []1. several times a day
- []2. about once a day
- []3. 2-4 times a week
- []4. 2-4 times a month
- []5. seldom or never

19. How well do you like living in your present residence hall?

very much / / / / not at all
(1) (2) (3) (4) (5)

20. How well do you like living in your present room?

very much / / / / not at all
(1) (2) (3) (4) (5)

21. Please indicate how satisfied you are with the following features of your room.

	highly satisfied	(1)---	(2)---	(3)---	(4)---	(5)	highly dissatisfied			
room size	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
window size	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
furniture arrangement	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
closet space	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
space for study	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
soundproofing	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)
privacy	<u> </u>	(1)	<u> </u>	(2)	<u> </u>	(3)	<u> </u>	(4)	<u> </u>	(5)

22. Were there any physical features in your room (including furniture and equipment) that have restricted the ways you might like to rearrange or decorate your room so that it meets your needs?

APPENDIX B: KSU DORMITORY MANAGEMENT POLICIES
(PARTS OF STUDENT ROOMS AND SERVICES)

Student Rooms and Services

Each room is furnished with a bed, desk, chair, storage and closet, window blinds, bulletin board, and trash can for each resident. Sheets, pillowcases, and mattress pads are provided and laundered, at no additional charge.

Furniture in your room is your responsibility, and may not be removed. Damages to a room or its contents that are not recorded on cards provided at check-in will be charged to the residents of the rooms.

Students may individualize their rooms, but construction must be approved by the hall director and comply with safety and fire codes.

Waterbeds with heaters are permitted in the residence hall at a small additional fee.

Room telephones are currently installed in all halls except Moore and Smurthwaite. Residents will be billed by the Department of Housing at a rate consistent with existing telephone company rate charges.

All residents, regardless of hall, may make long-distance calls by using credit cards available from telecommunication companies.

Air-conditioning is installed in all but Boyd and Putnam Halls; it will be assured only during summer sessions.

Washing machines and dryers are provided at no extra charge.

Refrigerators may be rented from the Department of Housing. Personal refrigerators may not exceed five cubic feet.

Cable television service may be purchased in all halls (except Smurthwaite).

APPENDIX C: SOME OBSERVATIONS OF DORMITORY ROOMS

Figure 5 - 10

SOME OBSERVATIONS OF DORMITORY ROOMS



Fig. 5: Within all of the decorative materials, posters were the most frequently used by dormitory students.



Fig. 6: Building a loft not only makes the room unique, but also creates more usable space.



Fig. 7: Female residents tended to engage in adding more categories of personal items to their rooms than did males.



Fig. 8: Without personal decorations, the barrenness of the room is distasteful.



Fig. 9: There is limited space in dormitory rooms to accommodate extra personal furniture and items.



Fig.10: Since the desk is invariably too small, for even a personal computer, there is little room for books.

APPENDIX D: THE ORIGINAL FURNITURE ARRANGEMENTS

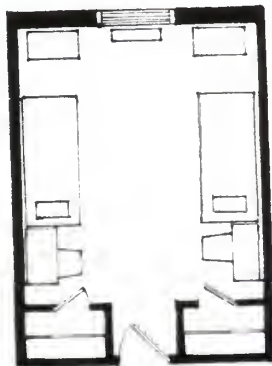
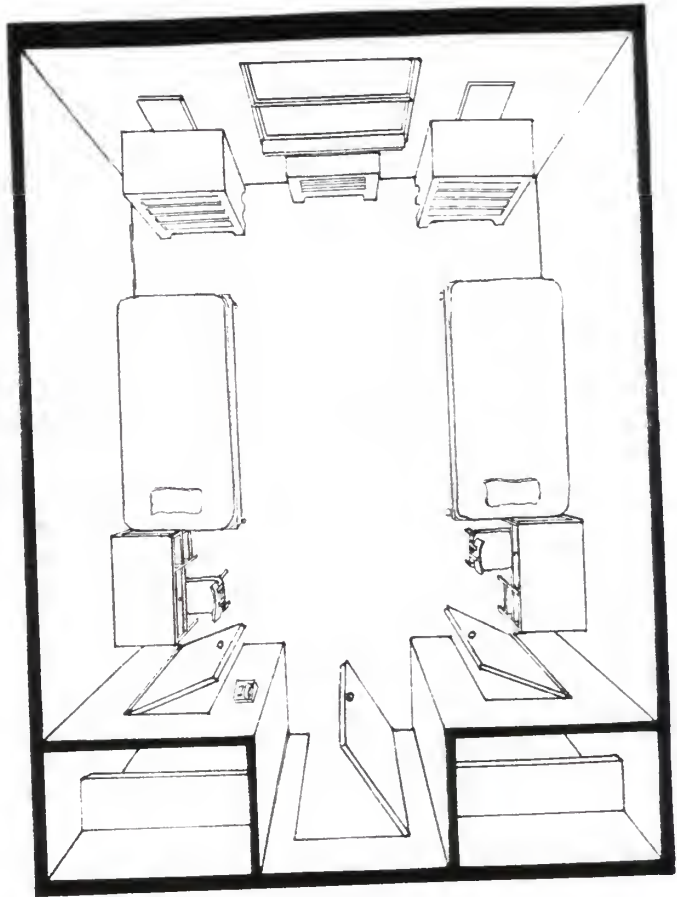


Figure 11

The Typical Room Plan and Original
Furniture Arrangement in Putnam Hall

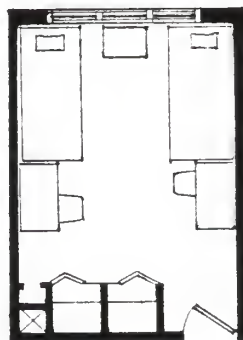
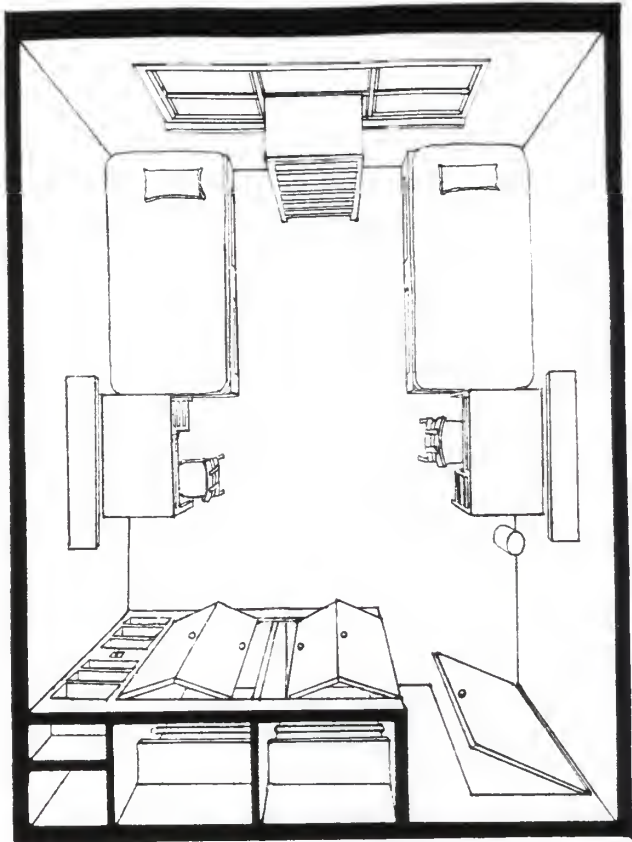


Figure 12

The Typical Room Plan and Original
Furniture Arrangement in Moore Hall

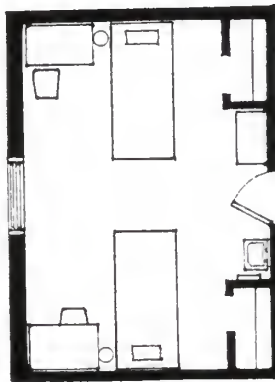
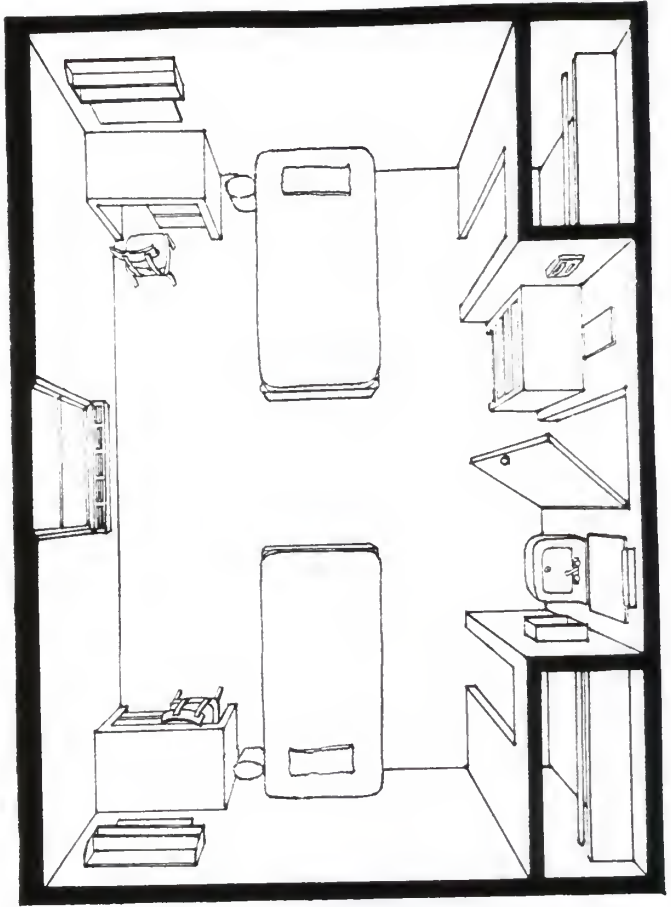


Figure 13

The Typical Room Plan and Original
Furniture Arrangement in Edwards Hall

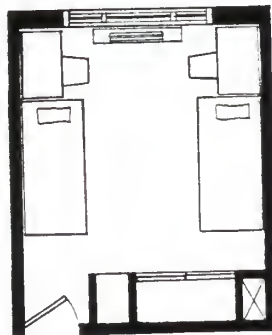
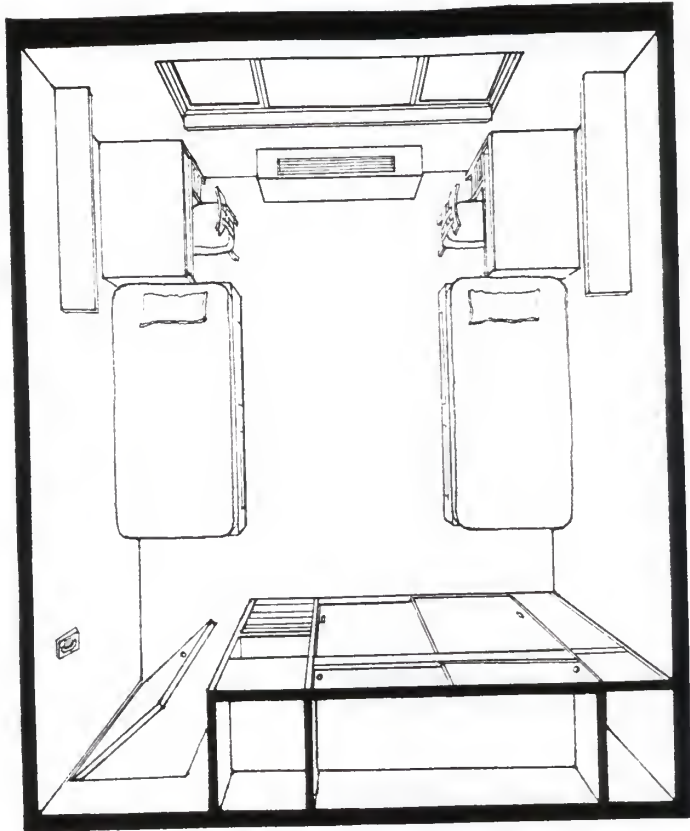


Figure 14

The Typical Room Plan and Original
Furniture Arrangement in Goodnow Hall

APPENDIX E: FLOOR PLANS OF FOUR RESIDENCE HALLS

Fig. 15: Putnam Hall

Third Floor Plan

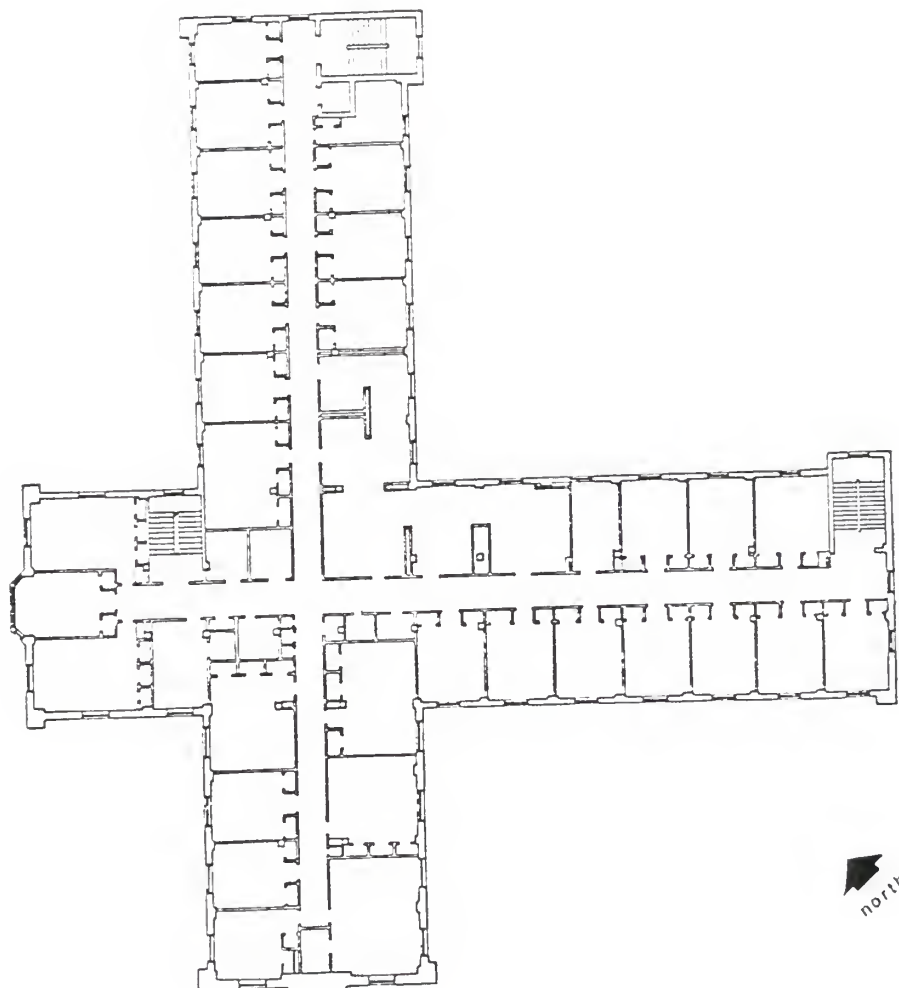


Fig. 16: Moore Hall
First Floor Plan



Fig. 17: Edwards Hall
First Floor Plan

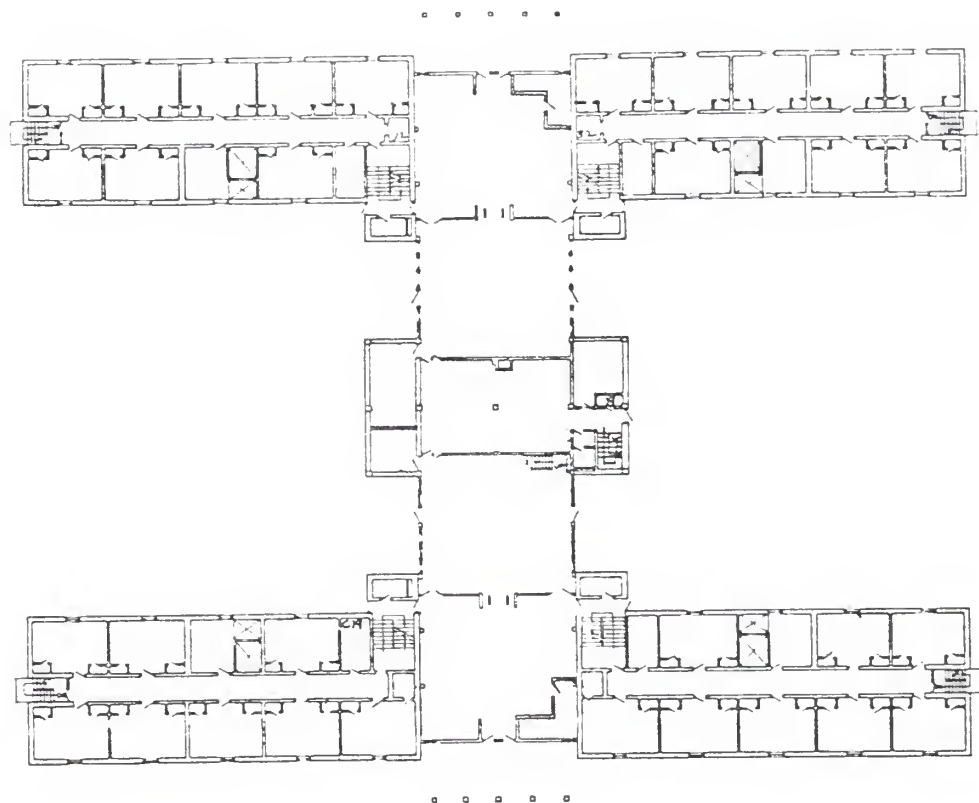
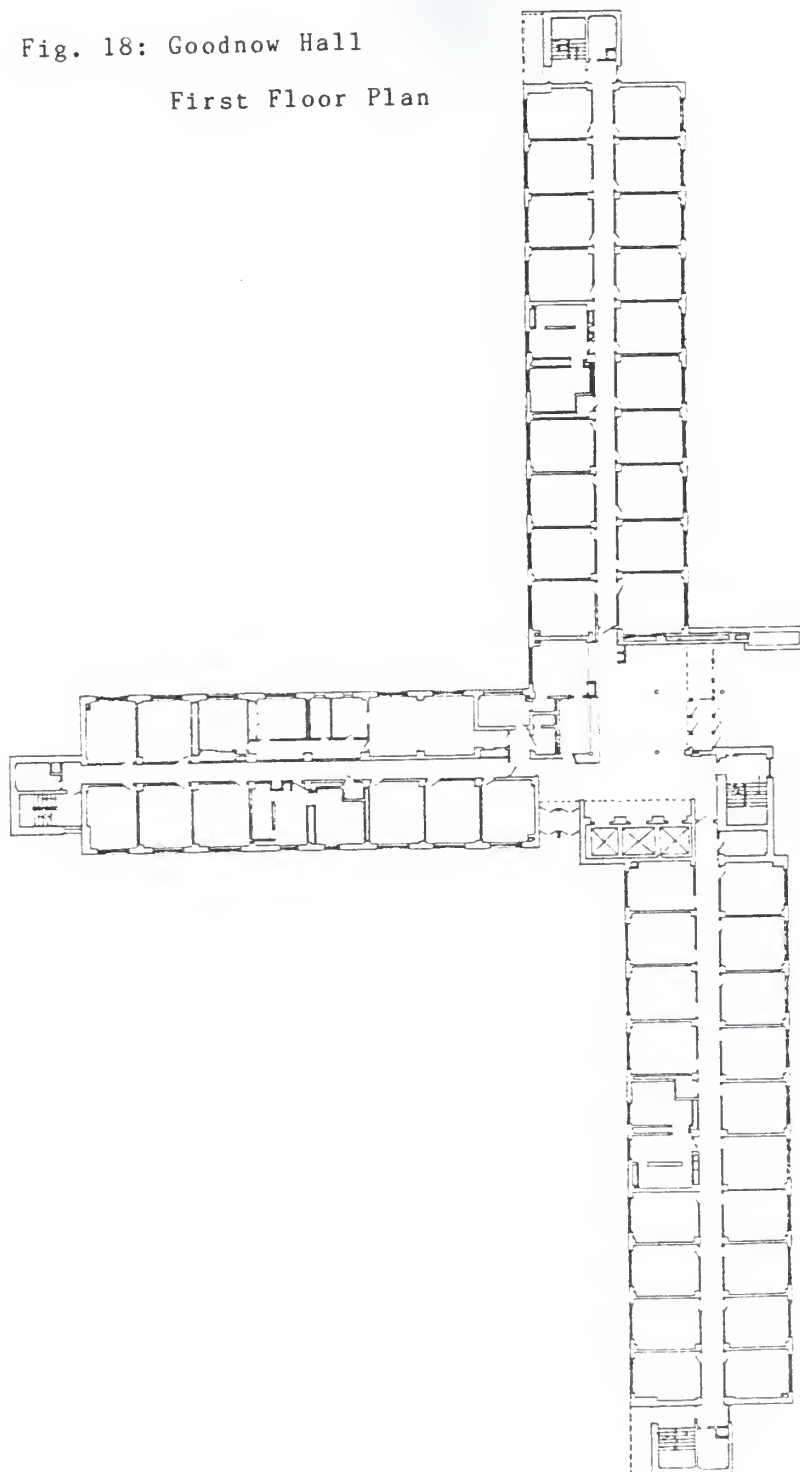


Fig. 18: Goodnow Hall
First Floor Plan



PERSONALIZATION IN UNIVERSITY DORMITORY ROOMS

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ABSTRACT

This thesis examines how dormitory residents personalized their living spaces. The specific objectives of this study are (1) to explore the personalizing behavior existing among the residents of dormitories (2) to identify the effects of personal, temporal and environmental factors on personalization (3) to formulate some recommendations for designing future dormitory rooms.

Two hundred students were equally selected as subjects from the residents of four residence halls on the Kansas State University campus. Questionnaires, photographs, and furniture maps were the three major instruments used to collect the data of these subjects' personalization.

A variety of dormitory students' important personalizing behavior was revealed through the statistical analyses of the data: 99.5% of the residents had at least engaged in some personalization of their rooms, "making the room more your own place" was the strongest reason to have residents personalize rooms, adding personal items was the most common type of personalization for dormitory students, and posters were the most popular decorative material used by dormitory students.

Based on the results of this study, some recommendations in terms of management policy and design implications were proposed to improve the future quality of life for dormitory residents.