Privacy Regulation, Territorial Displays, and Effectiveness of Individual Functioning

Anne Vinsel, Barbara B. Brown, Irwin Altman, and Carolyn Foss University of Utah

This study examines privacy regulation in terms of mechanisms used by college students to make themselves more or less accessible to one another, dormitory room decorations, and the relationships between privacy regulation, personal displays, and short- and long-term adjustment to a university setting.

Newly entering 1st-year students completed a questionnaire that assessed privacy mechanisms, satisfaction with the university, and other topics. Content analyses of photos of room decorations were also completed. Those who eventually dropped out of the university over a year later had fewer and less effective privacy mechanisms, were less satisfied with university life, and were less active in various campus events. Although dropouts tended to decorate their rooms more than "stayins," their decorations showed less diversity and less commitment to the university setting.

This study examines privacy regulation in a college dormitory setting in terms of the mechanisms used by students to make themselves more or less accessible to one another, the personal displays or decorations exhibited by students, and the relationships between privacy regulation, personal displays, and short- and long-term adjustment to a university setting.

The study was designed in accordance with a model of privacy regulation proposed by Altman (1975, 1976, 1977a). This framework defines privacy as "the selective control of access to the self" and as a dialectic process that includes both the opening and closing of the self to others. At certain times people seek contact with others, and at other times they desire to avoid social contact. Although seeking and avoiding social interaction are opposites, a dialectic perspective treats them as part of a unified social system. A related aspect of Altman's approach is that privacy regulation is hypothesized to involve a variety of behavioral mechanisms such as verbal and paraverbal behavior, nonverbal behavior,

Requests for reprints should be sent to Irwin Altman, College of Social and Behavioral Science, University of Utah, Salt Lake City, Utah 84112.

environmentally oriented behaviors of personal space and territoriality, and culture-specific norms and rules that help regulate social interaction. Through different combinations of such behaviors, a person can convey a desire for more or less openness to others. One aim of the present study is to describe the range of mechanisms used by 1st-year university students to regulate their openness and "closedness" to others in the new and strange setting of dormitories. How do they reach out to others for social contact? How do they avoid and shut off contacts with other people?

One of the mechanisms to regulate privacy that is of interest in the present study is territorial behavior. According to Altman (1975), Altman and Chemers (1980), Edney and Buda (1976) and others, human territorial behavior has at least two functions: (a) communication of personal identity, whereby people display their personalities, values, and beliefs on the physical environment and (b) regulation of social interaction, which is achieved by control of spatial areas and objects. The latter function has received considerable attention in the psychological literature in studies of territorial marking, the relationship between dominance and territoriality, and the effective functioning of social systems. The present study focuses on the personal identity function of territoriality through examining decorations used in dormitory rooms.

In addition to descriptions of how students seek out and avoid others and how they display personal identity, a major focus of the present study is on effectiveness of functioning in relation to privacy regulation. According to Altman (1975), privacy regulation plays a crucial role in the well-being of individuals and groups. Hypothetically, people who successfully regulate openness-closedness to others, in accord with personal desires and demands of situations, function better than those unable to regulate self-other accessibility. One goal of the present study is to examine the relationship between privacy regulation mechanisms and several possible indicators of well-being and adjustment of new freshmen at a university. Such indicators include personal feelings of satisfaction with the university, use of facilities and participation in activities, and dropping out of or staying in the university over a year beyond the first freshman quarter. In accordance with one aspect of Altman's approach, our expectation was that students who were proficient in the use of privacy mechanisms would function more effectively than those who had difficulty with privacy regulation.

A second aspect of privacy regulation in relation to viability concerns territorial displays. We expected that students who functioned well or poorly in a university would exhibit different territorial displays in the form of room decorations. There is considerable research on the relationship between territorial behavior and individual and group functioning. For example, Altman and Haythorn (1967) and Altman, Taylor, and Wheeler (1971) reported that members of effective groups in long-term social isolation quickly established territories for chairs, beds, and areas of living space. Similarly, Sundstrom and Altman (1974) found that the breakdown of territoriality in a boys' rehabilitation setting was associated with poor group functioning. And Edney and Buda (1976) reported that establishment of individual territories led to greater feelings of

personal control. Comparable ideas were proposed by Brower (1980), who theorized that urban residents established individual and group territories by means of surveillance and personal displays in response to threats of crime and intrusion by outsiders. These and related studies focused on that aspect of territorial behavior which involved control and regulation of space in the form of marking and/or occupancy. The present study examined the relationship between personal identity displays and individual functioning. Our expectation was that 1st-year students who functioned more effectively would exhibit forms of personal display that were different from those who adapted less well to the new environment.

In summary, the present study was largely a descriptive analysis of the privacy regulation practices of 1st-year university students. Specifically, we described the behavioral mechanisms used by students to either gain social contacts or avoid social interaction with others. In addition, the study described the personal identity displays, in the form of wall decorations, used by students during their first quarter at the university. A final purpose of the study was to examine the possibility that variations in use of privacy regulation mechanisms and personal identity displays would be related to adjustment to the university, as reflected in short-term satisfaction, participation in activities, and long-term staying in or dropping out of the university. Although the study was influenced by Altman's (1975, 1976, 1977a) model of privacy regulation, we did not intend to test directly the dialectic aspect of that model. Instead our primary goal was to provide descriptive baseline information about privacy mechanisms and territorial displays used by students and to explore in a preliminary way the relationship between these behaviors and indicators of adjustment to the university.

Method

Procedure and Participants

During the first 8 weeks of the 1975 autumn quarter, 102 male and female freshmen at the University of Utah were randomly selected to

Table 1
Content Analysis Categories for Wall Decorations

Category	Decorations				
Entertainment/equipment	Bicycles, skis, radios, stereos or components, climbing gear, tennis racquets				
Personal relationships	Pictures of friends and family, prom flowers, snapshots of vacations, letters, drawings by siblings				
Values	Religious or political posters, bumper stickers, ecology signs, flags, sorority signs				
Abstract	Prints or posters of flowers, kittens, landscapes, art reproductions, etc.				
Reference items	Schedules, syllabi, calendars, maps				
Music/theater	Posters of ballet, rock or musical groups, theater posters				
Sports	Ski posters, pictures of athletes, motorcycle races, magazine covers, mountain climbing-hiking posters				
Idiosyncratic	Handmade items (macrame, wall hangings, paintings), plants, unique items (stolen road signs, bearskins, etc.)				

participate in the study. A letter describing the research was sent to dormitory residents, and a follow-up visit was made 7-10 days later. No students who were contacted refused to participate. With their permission, we photographed the wa'ls over students' beds. Because the camera malfunctioned during initial data collection, some photography was repeated during the last weeks of the autumn quarter and, in some instances, during the first 2 weeks of the winter quarter.

Photographs of wall decorations above beds were obtained from 51 males and 32 females. Nineteen of the initial 102 students were eliminated from the study because either they were not available, or they had arranged their beds in double-tier bunks, thereby eliminating decorating space, or there were photography problems.

Students also completed a questionnaire that assessed the types and effectiveness of their privacy regulation mechanisms, their satisfaction with the university and dormitory, and their participation in university activities. The questionnaire also included health and biographical information. Questionnaire data were available for 73 students, including 28 males and 45 females. The reduced sample was due to unavailability of students or to questionnaires that were not completed properly.

Over a year later, at the end of the 1977 winter quarter, we examined university records to determine which students were still enrolled in the university. Those no longer at the university were classified as dropouts, and those still enrolled were categorized as "stayins." Students on academic probation were eliminated from the sample to ensure that the dropout category excluded students who left the university for academic reasons.

Dependent Measures

Participants completed a questionnaire that contained the following types of items: 1

1. Privacy regulation. This 18-item scale assessed the techniques used by students to seek out or

avoid contact with others. It consisted of a checklist of nine contact-seeking and nine contact-avoiding mechanisms that the students might have used during their time at the university. In addition, the students indicated the effectiveness of these mechanisms on a 4-point rating scale.

2. Satisfaction with dormitory and university life. A 22-item scale assessed facets of student satisfaction with both social and academic aspects of dormitory and university life.

3. Participation in university activities. Five items measured student involvement as spectators at athletic and other events; four items assessed their active participation in various social and sports activities; and one item measured their involvement in religious groups.

4. Health. 18 questions addressed aspects of students' physical and mental health during and immediately preceding their first quarter at the university.

5. Knowledge of university services. A group of 16 items assessed students' familiarity with a variety of university services.

A second group of measures involved content analyses of room decorations. An Olympus OM-1 35-mm single lens reflex camera with a Vivitar strobe flash attachment was used to take color slide photographs of the wall above each student's bed. Photographs were taken from a standard distance and angle, approximately 10 feet (3 m) from the wall.

Photographs were analyzed by means of a matrix of 840 1-inch (2.6 cm) squares projected on a wall screen. Each photograph was content analyzed by using the categories described in Table 1.

This category system is a modification of one developed by Hansen and Altman (1976). Decorations were scored in terms of area, or the number of squares covered by an item in a particular con-

¹ The complete questionnaire is available from the authors.

tent category, and *number* of separate items in a particular category.

In addition, we also measured diversity, or variation in decorations, and commitment, or involvement with the university and the local Salt Lake City region. A diversity score was calculated by dividing the number of decorating categories used (according to an expanded system containing 45 content categories) by the total number of separate items appearing on a wall. Two commitment measures were calculated: (a) the number of decorating items that reflected involvement with the university, dormitory, or Salt Lake City region, such as schedules of events, scenes depicting local activities, and the like, and (b) the number of items that referred to home and high school events, pictures of parents and friends, high school mementos, and so forth.

The main content analysis procedure used three coders: One coder rated all slides for area and number of decorations, and the other two coders rated separate sets of 25% of the slides; thus, reliability data were available for 50% of the decorating material. Coder reliability, based on intraclass correlations for individual categories, ranged from .64 to .98 and averaged .94 and .91 for the number and area scores, respectively. For the diversity and commitment measures, half the slides were coded by

two raters: The average intraclass correlation of coder agreement was .95.

Results

Analysis Strategy

Because of the limited number of cases, it was not always possible to do comprehensive statistical analyses on all facets of the data. Instead, we will present descriptive data about privacy regulation and decorating behavior and conduct multiple regression analyses on privacy regulation and decorating behavior in relation to dropping out or staying in the university. These analyses are supplemented by univariate analyses of variance (ANOVA) to test for sex differences and to examine specific items as selected subscales of the questionnaire.²

Table 2
Use and Effectiveness of Privacy Mechanisms

	Proport	chanism	Greater	
Mechanism	All students	Dropouts $(n = 19)$	Stayins $(n = 54)$	mechanism effectiveness
Contact seeking				
Open door to room	.64	.47	.70	Stayins
Go to student union	.22	.11	.26	Stayins
Phone someone	.74	.68	.76	Stayins
Visit others' rooms	.71	.63	.74	Stayins
Attract others with music	.21	.16	.22	Stayins
Use bathroom at busy time	.10	.05	.11	Stayins
Invite people to own room	.64	.58	.67	Stayins
Study in busy place	.30	.21	.33	Stayins
Go to dorm lounge	.70	.78	.67	Dropouts
Average number mechanisms used	4.3	3.7	4.5	
Contact avoidance				
Shut door to room	.92	.84	.94	Stayins
Find quiet place	.62	.42	.69	Stayins
Arrange room for privacy	.16	.11	.19	Stayins
Tune out noise to study	.52	.47	.54	Stayins
Go for walk alone	.49	.37	.54	Stayins
Use bathroom at quiet time	.12	.00	.17	Stayins
Prepare for bed in quiet place	.16	.00	.22	Stayins
Tune out noise to sleep	.59	.53	.61	Stayins
Use loud music to cover noise	.19	.26	.17	Dropouts
Average number mechanisms used	3.8	3.0	4.1	
Total privacy mechanisms used	7.9	6.7	8.5	

² Allen Cole and Charles Turner were especially helpful in providing advice about multivariate analyses of the data.

Privacy Regulation

Table 2 summarizes reports of use and effectiveness of nine contact-seeking and nine contact-avoidance mechanisms. Overall, students employed an average of 7.9 of a possible 18 mechanisms, with slightly greater use of contact-seeking techniques. The most popular contact mechanisms were direct approaches to specific people, such as calling them on the telephone, looking for them in their rooms, or inviting them to one's own room. Less specifically targeted techniques (not directed at particular other people) included going to the dormitory lounge and opening the door to one's room. Infrequently used techniques, also not directed at particular other people, included studying at a time or place where people were apt to be around, going to popular places, turning on music, or using the bathroom at a busy time.

Students also employed a number of direct behavioral means to avoid others, such as shutting the doors to their rooms, going for a walk alone, or finding a quiet place. They also reported using cognitive techniques such as "tuning out" noise when sleeping or studying. Less frequently used avoidance mechanisms included playing loud music, getting ready for bed away from the presence of others, using the bathroom at quiet times, or arranging their rooms to achieve privacy.³

Table 2 also describes the initial use of privacy regulation mechanisms by students who remained in the university $1\frac{1}{2}$ years later compared with those who had dropped out. In general, stayins used 8.5 of 18 possible mechanisms, whereas dropouts used only 6.7 mechanisms. Furthermore, those who stayed in the university reported using a greater number of both contact-seeking (8/9) and contact-avoiding mechanisms (8/9). Students also rated the effectiveness of their privacy mechanisms. Based on a comparison of means, stayins were consistently more satisfied than dropouts with how well their privacy mechanisms worked on 16/18 items.

Certain techniques used more frequently by dropouts were interesting. They reported using loud music to avoid hearing others, whereas stayins used music to attract others. Furthermore, dropouts sought social contacts in the dormitory lounges to a greater extent than did stayins; yet, the folklore of these dormitories is that the lounge is not the best place to meet people.

In summary, these descriptive data suggest that students who remained in the university over a year later reported using a greater variety of techniques for seeking out and avoiding others during their first quarter and that these techniques worked relatively well. On the contrary, students who later dropped out of the university reported using fewer and less successful privacy regulation mechanisms. Multiple regression analyses employing subscales developed from these individual mechanisms are presented later.

Participation in and Satisfaction With University Activities

The questionnaire also measured several aspects of reaction to university life, as summarized in Table 3. Multiple regression analysis yielded an R^2 of .21; F(3, 69) = 6.01, p< .01; adjusted F(3, 69) = 4.80, p < .01. These data indicate that students who remained in the university were more satisfied with the university and dormitory life, had more positive expectations about the university in relation to their academic and career goals, were more active in university affairs, and were less involved than dropouts in religious activities. Although the differences were not significant, stayins also had more knowledge of university services and facilities and engaged less in spectator activities. A discriminant function analysis of these data yielded a correct classification of 72.2% for stayins and 73.7% for dropouts. Students who dropped out also reported more health

³ There were no main effects for sex in relation to use and effectiveness of individual contact-seeking or contact-avoidance mechanisms, based on univariate ANOVAS.

⁴ To examine sex differences in relation to privacy regulation, we conducted 2 × 2 univariate Anovas (Male-Female × Stay-Drop) on use and effectiveness of contact-seeking and contact-avoidance mechanisms. Although 7/36 interaction items were significant, they followed no consistent pattern.

.18

	Me	an				
Student reaction	Dropout	Stayin	r	Beta	R^2	Adjusted R ²
Satisfaction with the university and with future plans (22 items) ^a	49.58	44.24	32***	28	.10***	.09
Active participation in extra- curricular activities (5 items)	1.37	1.98	.28**	.29	.15***	.13
Active participation in religious activities (1 item)	.32	.15	19	23	.21***	.17
Participation in spectator activities (4 items) Knowledge of university facilities	3.47	3.20	11	17	.22	.18

Table 3
Multiple Regression of Satisfaction and Participation for Stayins and Dropouts

Note. In this and subsequent tables, variables with $F \ge 1.0$ were included in the table. Significance of the semipartial correlations was tested, following Kerlinger and Pedhazur (1973, p. 286).

12.15

.05

11.84

(16 items)

problems during the first quarter, although these data did not contribute to the multiple regression. There were no indications that any of these differences were systematically linked to gender.⁵

In summary, students who dropped out of the university over a year later reported a lower number and lesser effectiveness of both contact-seeking and contact-avoiding privacy mechanisms than did the stayins, suggesting that they did not use appropriate techniques for establishing relationships with others during their first weeks at the university. Although more active in religious activities, dropouts were also less active in participatory university affairs and were less satisfied with university and dormitory life. Mean differences indicate that subsequent dropouts had more symptoms of poor health and were more likely to participate in spectator activities.

Combined Privacy Regulation and Participation/Satisfaction Analyses

To ascertain the joint contributions of privacy regulation and satisfaction/participation in university life to long-term viability, we conducted additional multiple regression analyses. The first analysis included satisfaction/participation questionnaire subscales, with scales based on the use and effectiveness of the total number of privacy contact and

avoidance mechanisms. Table 4 summarizes the results of this analysis.

.14

24

The R^2 of .21, overall F(3, 69) = 6.01, p< .01; adjusted F(3, 69) = 4.80, p < .01; and/or Pearson rs of each subscale with the drop-stay criterion support earlier analyses and descriptive data. That is, stayin students were more satisfied with university life, were more active participants in university activities, and participated less in religious activities. There was also a trend (r = .21, p <.10) for stayin students to use a greater number of privacy mechanisms. Mean differences also suggest that dropout students engaged in more spectator activities such as concerts, sporting events, and so forth. A discriminant function analysis using all variables in Table 4 indicates a correct classification of dropouts of 78.9% and a correct classification of stayins of 74.1%.

Given these results, we next conducted a multiple regression analysis using the same satisfaction/participation subscales. However, the privacy use and effectiveness scales were divided into subscales involving contact mechanisms and avoidance mechanisms.

^a Low scores on the satisfaction scale indicate greater satisfaction.

^{*} p < .10. ** p < .05. *** p < .01.

⁵ There was some suggestion that females tended to be more active in extracurricular activities, were more satisfied with and knew more about university facilities, and engaged in more religious activities than did males.

Table 4
Multiple Regression of Privacy Regulation and Participation/Satisfaction
Indices for Dropouts and Stayins

	Me	ean				A. 11
Activity	Dropout	Stayin	r	Beta	R^2	Adjusted <i>R</i> ²
Satisfaction ^a	49.58	44.24	32***	26	.10***	.09
Active participation	1.37	1.98	.28**	.26	.15**	.13
Religious activities	.32	.15	19	23	.21**	.17
Number of privacy mechanisms used	6.68	8.52	.21*	.22	.23	.19
Spectator activities	3.47	3.20	11	15	.25	.19
Effectiveness of privacy mechanisms	2.99	3.05	.05	.16	.27	.20

^a Low scores on the satisfaction scale indicate greater satisfaction.

The results of this analysis (Table 5) yielded essentially similar findings, with respect to satisfaction and participation by stayins and dropouts. However, this analysis suggests that stayin students used a greater number of privacy mechanisms directed at avoiding others compared with dropouts, overall F(4, 70) = 5.79, p < .01; adjusted F(4, 70) = 4.52, p < .01. Thus, although the descriptive data presented earlier suggest that stayins used a greater number of both contact and avoidance mechanisms and that they felt that their mechanisms were more effective, the analysis in Table 5 indicates that it is primarily use of avoidance mechanisms that differentiates the two types of students. Discriminant function analysis of these data indicated a correct classification of dropouts of 78.9% and of stayins of 74.1%.

Wall Decorations and Personalization

The study also analyzed decorations displayed on students' walls during their first quarter. Photographs of wall decorations were content analyzed according to area of wall space covered and number of items in the eight categories of the coding system described earlier. Table 6 summarizes descriptive data for the combined sample and for both males and females. Although students used many personal relationship items, they decorated with a smaller but relatively equal number of items in the other categories. With respect to area, walls were dominated by abstract, sports, and idiosyncratic items. Abstract and sports decorations usually were commercially produced posters. These tended to be relatively large-sized items, with an average of one to two such decorations on

Table 5
Multiple Regression of Contact and Avoidance Privacy Subscales and
Participation/Satisfaction Indices for Dropouts and Stayins

	Mean					A 404 . 4
Activity	Dropouts	Stayins	r	Beta	R^2	Adjusted R ²
Satisfaction ^a	49.58	44.24	32***	28	.10***	.09
Active participation	1.37	1.98	.28**	.27	.15**	.13
Religious activities	.32	.15	19	22	.21**	.17
Number of avoidance mechanisms	3.00	4.06	.23**	.22	.25**	.21

^a Low scores on the satisfaction scale indicate greater satisfaction.

^{*} p < .10. ** p < .05. *** p < .01.

^{*} p < .10. ** p < .05. *** p < .01.

Table 6					
Wall Decorations	of	Male	and	Female	Students

Category		Area	Number of items			
	Males	Females	Combined	Males	Females	Combined
Personal relationships	8.5	20.1	12.6	2.0	8.6	4.3
Abstract	66.1	80.7	71.1	1.5	2.1	1.7
Music/theater	24.4	20.3	23.0	.8	.4	.7
Sports	77.4	21.1	57.7	2.0	1.2	1.7
Values	9.4	16.8	12.0	9	1.2	1.0
Reference items	18.7	5.8	14.2	1.4	.8	1.2
Idiosyncratic	46.4	17.8	36.4	1.1	1.5	1.2
Entertainment/equipment	15.4	10.0	13.5	.9	1.0	.9

walls. Idiosyncratic items, or one-of-a-kind decorations, included handmade planters, rugs, stolen signs, and the like. These also were large, and they covered substantial areas of the wall.

Other types of items included reference items (calendars and schedules), equipment (radios, skis), and posters containing music, theatre, and personal values themes. Thus, students used a wide range of decorations, a finding reported earlier by Hansen and Altman (1976).

There also were differences in the decorating done by men and women. Females decorated their walls with a greater number and larger area of personal relationship items, such as photographs of family and friends and other personal mementos. Males, on the other hand, decorated their walls with a greater number and larger area of sports posters and reference items, such as schedules, calendars, and announcements. In addi-

tion, males used larger idiosyncratic items, such as rugs and wall hangings. The impact of sex differences on the drop-stay criterion is discussed later.

Decorating by Stayins and Dropouts

Descriptive statistics and multiple regression analyses for area and number of wall decorations in relation to staying in or dropping out of the university are presented in Tables 7 and 8.

Although the Rs were relatively small, students who eventually left the university tended to be more extensive decorators than stayins. Dropouts tended to cover their walls with a greater number of items in the personal relationship and music/theater categories. Although the difference is not significant, dropouts also seemed to use a greater area of decorations for reference items and idiosyncratic categories. On the other hand, stayins

Table 7
Decorating by Stayin and Dropout Students

	Area de	corated	Number of decorations		
Category	Dropouts	Stayins	Dropouts	Stayins	
Personal relations	18.5	10.2	7.0	3.2	
Abstract	68.8	72.1	1.7	1.8	
Music/theater	34.7	18.2	1.2	.4	
Sports	59.8	56.8	1.2	1.9	
Values	12.2	11.9	1.0	1.0	
Reference items	21.1	11.4	1.2	1.2	
Idiosyncratic	50.9	30.5	1.1	1.2	
Entertainment/equipment	8.0	15.8	.7	1.0	

	Me	Mean				
Category	Dropout	Stayin	r	Beta	R^2	Adjusted R^2
			Area dec	corated		
Reference items	21.1	11.4	17	17	.03	.02
Music/theater	34.7	18.2	14	19	.05	.03
Entertainment/equipment	8.0	15.8	.17	.16	.08	.04
Personal relations	18.5	10.2	15	16	.10	.06
Idiosyncratic	50.9	30.5	10	13	.12	.06
			Number of o	decorations		77,
Music/theater	1.2	.4	22*	24	.05*	.04
Personal relations	7.0	3.2	18	24	.09*	.06
Entertainment/equipment	.7	1.0	.09	.15	.11	08

Table 8
Multiple Regression Analyses of Wall Decorations for Dropouts and Stayins

decorated more with entertainment/equipment items. Multiple regressions on area yielded F(1, 71) = 2.10, ns; adjusted F(1, 71) = 1.08, ns; and on number of items, F(2, 70) = 3.36, p < .05; adjusted F(2, 70) = 2.29, ns. These data were associated with correct classifications on discriminant function analyses as follows: area—dropouts, 62.5%, stayins, 78.0%; number—dropouts, 33.3%, stayins, 79.7%.

These data do not replicate earlier pilot data of Hansen and Altman (1976), who conducted a study in the same university a few years earlier. In that study, stayins generally exhibited a greater area and number of decorations. However, those data were based on only six male dropouts and on a much shorter time frame.

The limited number of cases ruled out the possibility of multivariate analyses to assess the interaction of dropping out and sex. Univariate 2 × 2 ANOVAS (Male-Female × Drop-Stay) on each content analysis category yielded only one significant interaction in 16 analyses. Female dropouts displayed a greater number of personal relationship items, suggesting that the tendency for dropouts to display more personal facets of their lives may be attributable primarily to female students.

Diversity of Decorations

Content analyses based on the original category system did not wholly capture cer-

tain features of student decorating. In particular, students seemed to vary widely in the diversity of their decorating practices. That is, some students decorated in only a single category, such as sports posters, whereas others used a wide variety of decorations. To measure diversity, we expanded the 8-category content analysis system to a 45-category one that used a more fine-grained breakdown within each of the original categories. For example, personal relationships was further subdivided into cards and letters, postcards, high school nostalgia items, and family items; values was expanded to include religious, political, and related items; reference items was divided into maps, schedules, phone numbers, announcements, calendars, and so on for the other categories.

A diversity score for each student was computed as follows:

$$D = \frac{\text{Number of different categories used}}{\text{Number of total items used}}.$$

A score approaching 1 indicated a great variety of items; a score approaching 0 suggested homogeneity of decorating practices.⁶

^{*} p < .10.

⁶The complete diversity and commitment category systems are available from the authors. As a percentage score, the diversity index is susceptible to wide variation in the case of a small amount of decorating. For this reason, scores were computed only for students who had more than three items on their walls.

A 2 × 2 univariate anova (Drop-Stay × Sex) yielded neither a main effect for sex nor an interaction of sex and drop-stay. However, dropouts had a significantly lower diversity score than stayins, F(1, 65) = 9.8, p < .003, indicating that dropouts decorated their walls in a less varied fashion than stavins. Examples included one dropout student whose wall was completely covered with posters depicting ballet scenes and another student who had only ski posters on the wall. So, although the walls of dropout students tended to have a greater area and number of decorations, as indicated by descriptive data, their personal displays were less diverse than those of stavins.

Commitment in Decorations

Another analysis involved the use of an index that assessed the extent to which wall decorations reflected students' commitment to the new environment of the university and region rather than to their earlier home and setting. (See Footnote 6.) Items counted in the university/region commitment category included maps of campus and schedules of campus events, maps of Salt Lake City and the surrounding region, skiing and mountain posters, and so forth. A 2×2 anova (Sex \times Drop-Stay) yielded no significant sex or Sex \times Drop-Stay differences. However, stayins had higher university/region commitment than dropouts, F(1, 65) = 5.33, p < .02.

In addition, a measure of home and hometown commitment was based on a count of photos of high school friends and parents, drawings by younger siblings, and other mementos such as prom flowers. Because of the small number of cases, it was not possible to do more than simple mean comparisons. The results indicated that dropouts displayed an average of 17.8 home commitment items, compared with 7.8 for stayins, t(22) = 1.97, p < .05. In summary, stayin students decorated more with items symbolic of their commitment to their present university environment, whereas dropouts used more items reflecting commitment to their home environments.

Discussion

One descripitve goal of the present research was to illustrate techniques used by students to regulate their privacy. The results indicated that students used an array of mechanisms to make themselves more or less available to others, with an approximately equal distribution of techniques for contacting and avoiding others. In seeking contact, students were quite direct. They called particular people on the phone, visited others' rooms, or invited specific individuals to their rooms. They generally did not seek out others in an indirect fashion; for example, they less often went to places to meet someone by chance. Similarly, when students wanted to avoid others they were quite direct—they closed their doors, they left the dormitory and went for a walk alone, or they sought out a quiet place on campus. Sometimes they used more indirect techniques, such as "tuning out" others, although these were employed less often.

We also described personal identity aspects of territorial behavior. Most current research on territoriality examines how people mark territories to protect space, the relationship between social structure and space use, and the relationship of territoriality to group functioning. (See Altman, 1975, and Altman & Chemers, 1980, for a review of this literature.) Another facet of territorial behavior, of particular interest to the present study, concerns how students use territories to display aspects of their personalities, interests, and values. A salient feature of students' decorations was that most of them had put up at least one item on their walls. Their personal displays were a blend of easily available, low-cost, commercial material, such as posters, and more idiosyncratic items, such as homemade wall hangings. However, personal displays were somewhat different for men than for women. Females more frequently used personal relationship items, such as mementos and photographs. Males more often decorated with idiosyncratic items, such as sports posters and reference items.

The present study also explored the relationships between privacy regulation, decorating displays, satisfaction, and long-term viability of students. These relationships have

been well documented for marking and occupancy of territories by Altman and Haythorn (1967), Altman, Taylor, and Wheeler (1971), Sundstrom and Altman (1974), and others. Our goal was to extend these findings in relation to privacy regulation mechanisms and territorial displays.

The data yielded a coherent profile of stayins and dropouts that confirmed our expectations. The student who remained at the university over a year later used a wide variety of privacy regulation mechanisms during the first quarter. He or she apparently had a larger number of techniques to contact or to avoid others, and these privacy techniques were direct and targeted at specific people.

In particular, stayins had more avoidance techniques than did dropouts. Given that the dormitory environment inherently provides many opportunities for social contact, it may be more important to develop effective avoidance techniques in such a setting. Stayins were also positive about dormitory living and about the university as a whole, and they were active participants in sports and other activities. They were also confident about remaining in the university, and they were satisfied with the career path and major they were considering. In short, they quickly adjusted to the demands of university life and seemed to handle their day-to-day social relationships quite well.

Stayin students decorated somewhat less than their dropout counterparts except in the entertainment/equipment category. However, they decorated with considerable diversity and richness of material, thereby revealing several facets of themselves. In addition, stayins' decorations indicated commitment to the university and region. They displayed such items as scenes of the Salt Lake City region or the nearby mountains. Furthermore, they used fewer items reflecting attachments to their hometowns, such as high school mementos and photographs of high school scenes.

Dropouts revealed the opposite pattern of behavior. In their first quarter they were less satisfied with the university and dormitory, they were less certain about their major and career plans, and they participated in fewer activities (except celigious groups). Further-

more, eventual dropouts had a smaller range of privacy regulation mechanisms, especially avoidance techniques. And the data suggest that the privacy mechanisms they emphasized were somewhat inappropriate. For example, they sought out people in the dormitory lounge, a reputedly poor place to meet others. They also used loud music to drown out noise, whereas stayin students reported using music to attract others.

Dropouts were more extensive decorators, and their pattern of decorations differed from those of stayins. They tended to be less diverse in their decorations, perhaps because they had fewer interests or because they chose to reveal only a few facets of themselves to others. Furthermore, their decorations symbolized a lack of commitment to the university and community. Instead, their displays suggested a greater commitment to their past life and to their parents and friends. Thus dropouts seemed to show low social competence, manifested by ineffective privacy regulation techniques, more dissatisfaction with the university and dormitory, and limited participation in university activities. Furthermore, their pattern of territorial displays reflected less imagination or diversity of interests and an absence of commitment to the new university environment.

These profiles of dropouts and stayins need to be qualified. The data do not permit identification of causal relationships between components of the dropout and stayin profiles. Thus, one cannot attribute lack of satisfaction with the dormitory and university to poor privacy regulation or vice versa. Nor can one establish causal linkages between decorating practices and privacy regulation. Instead, we have presented a social unit analysis (Altman, 1977b) in which a variety of behaviors from several levels of functioning fit together in a coherent profile. All one can say at this juncture is that privacy regulation, territorial displays, and various measures of satisfaction and participation seem to fit with one another and with indicators of viability. Further research is necessary to tease out specific cause-effect relationships among these variables and the relationship of these factors to other variables, such as personality and family history. For our purposes, however, these profiles are important because they show an interrelation among privacy regulation and territorial displays and a variety of other behaviors, especially indicators of short- and long-term adjustment, and they demonstrate the value of a social unit analysis that involves the quantitative description of "types" of intact social units-people and groups-as an interesting and useful approach to the study of social psychological processes.

This study also suggests some theoretical and applied directions for future research. At a theoretical level, the data suggest the need to weave in more facets of student behavior to better understand the profiles described above. How do well and poorly adjusted students regulate privacy in their ongoing relationships? How are they viewed by others in terms of social competence? To what extent are they "smooth" in their development, management, and closing off of social interactions? What social histories do dropouts and stayins have with friends, family, and others? Or, in the realm of personal identity displays, do students reveal different conscious motives and plans regarding decorations? Are differences in personal identity displays associated with personality qualities? How do personal identity displays affect the initial development of relationships? Do different combinations of privacy mechanisms work better or worse in different settings?

At an applied level, the present research suggests some intervention programs. For example, one could use the data of the present study to identify potential dropouts during their first weeks at a university. Intervention programs could be developed to train resident counselors to deal with student dissatisfaction, to provide career counseling, to train students in privacy regulation, to communicate the possible meanings of decorating, and so forth. Assessment of the effectiveness of such intervention programs could be charted for intervention and appropriate control groups. In addition, such programs could vary their content and emphasis on various facets of the data and theory discussed here in order to assess the relative contribution of different factors to viability.

References

Altman, I. The environment and social behavior: Privacy, personal space, territory and crowding. Monterey, Calif: Brooks/Cole, 1975.

Altman, I. Privacy: A conceptual analysis. Environment and behavior, 1976, 8, 7-29.

Altman, I. Privacy regulation: Culturally universal or culturally specific? Journal of Social Issues, 1977, 33, 66-84. (a)

Altman, I. Research on environment and behavior: A personal statement of strategy. In D. Stokols (Ed.), Perspectives on environment and behavior. New York: Plenum Press, 1977. (b)

Altman, I., & Chemers, M. M. Culture and environment. Monterey, Calif.: Brooks/Cole, 1980.

Altman, I., & Haythorn, W. W. The ecology of isolated groups. Behavioral Science, 1967, 12, 169-182. Altman, I., Taylor, D. A., & Wheeler, L. Ecological aspects of group behavior in social isolation.

Journal of Applied Social Psychology, 1971, 1,

Brower, S. Territory in urban settings. In I. Altman, A. Rapoport, & J. F. Wohlwill (Eds.), The environment and culture: Vol. 4. Human behavior & environment. New York: Plenum Press, 1980. Edney, J. J., & Buda, M. A. Distinguishing terri-

toriality and privacy: Two studies, Human Ecology, 1976, 4, 283-296.

76-100.

Hansen, W. B., & Altman, I. Decorating personal places: A descriptive analysis. Environment and Behavior, 1976, 8, 491-504.

Kerlinger, F., & Pedhazur, E. Multiple regression in behavioral research. New York: Holt, Rinehart & Winston, 1973.

Sundstrom, E., & Altman, I. Field study of dominance and territorial behavior. Journal of Personality and Social Psychology, 1974, 30, 115-125.

Received January 7, 1980