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This study offers empirical support to the proposition that college environments differ and suggests that environmental presses in the multiversity are socially, academically, family, and religiously oriented. It is believed that a student's negative reaction to 1 or more of these presses can result in his withdrawal from the institution. To investigate this, questionnaires were sent to 1131 students who had withdrawn from the Arts and Sciences College of a large university during their first 2 years in college. (After the deletion of withdrawals defined as "involuntary," 659 remained in the final analysis sample.) The pattern of responses indicated the existence of groups of students having problems that fit into academic, social, religious, family, and perhaps other categories. Evidence showed that these may be separate problem areas for different individuals. The recognition of types of dropouts may help educators better understand how students interact with an institution's environmental presses. (JS)

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A TYPOLOGY OF COLLEGE STUDENT DROPOUTS

An Environmental Approach

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Abstract

College and university presses were found to be related to student behavior in a followup survey of 1131 dropouts. Many of the reasons given for dropping out could be summarized by a typology of dropouts: social, academic, family, religious, and others. The typology may have broad meaning for researchers, faculty, students, administrators and others having responsibilities for higher education.

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The college environment is one of the newer objects of study in higher education. Attempts have been made to identify various college characteristics (Astin, 1965; Astin & Holland, 1961; Pace & Stern, 1958), to describe college student subcultures (Clark, 1962; Peterson, 1965; Trow, 1962), and to measure the effect of the interaction of different college characteristics and attributes of students (Thistlethwaite, 1963; Pervin, 1965; Stern, Stein and Bloom, 1956). The investigation reported here offers empirical support to the proposition that college environments differ, and suggests that environmental presses in the multi-versity are socially, academically, family and religiously oriented. Also suggested is that some presses tend to be unrelated to each other, and that a typology of dropouts can be related to the salient environmental presses.

Murray's (1938) dual concept of personal needs and environmental press seems to have provided a starting point for most of the studies of college environments. Individuals are seen as having characteristic needs and the strength and relationship of these needs were what characterized the personality. In corollary fashion, the environment is seen as having potentials for satisfying or frustrating these needs. These potentials (satisfying and/or frustrating) were called environmental presses.

Stern, Stein, and Bloom (1956) were among the first to elaborate on Murray's concept by showing in studies at the University of Chicago

that the predication of academic performance was improved as the environmental presses (psychological demands) were defined. For example, students with high needs for order would experience greater satisfaction and thus perform well in an orderly-structured environment, but would experience frustration and anxiety in a disorderly environment and thus perform poorly.

Another early study of college environments is represented by the work of Thistlethwaite (1959) who examined 36 colleges. He concluded that student reports (all National Merit Scholars) provided additional evidence that it was possible to investigate college environments systematically. Thistlethwaite in a more recent study (1963) reported considerable differences among colleges. These differences are, notably, along the dimensions we might feel are consistent with common perceptions. For example, MIT was scored the highest on a scale of Scientism; Georgia Tech and Rensselaire were highest on a scale of Pragmatism; Harvard and Radcliffe had the highest scores on Humanism; and the University of Chicago the highest on Understanding (Thistlethwaite, 1963, p. 185).

At least one other study has dealt specifically with the question of person-environment fit. Pervin and Rubin (1967) administered a diagnostic instrument (like the CCI) to 50 freshman to measure discrepancies "between perceptions of the self and the college, the self and students, and the college [Princeton] and the ideal college." They reported that perceived discrepancies between these dimensions were related to the likelihood of dropping out for nonacademic reasons and to nonacademic dissatisfaction with college; students with discrepancies on these measures expected that they would probably become dropouts.

This study did not examine actual dropout behavior.

In the Pervin and Rubin study it was interesting to note that the discrepancies were more closely related to dropping out for nonacademic reasons (personal) than for academic reasons, and more for nonacademic dissatisfaction than for academic dissatisfaction. Their findings suggest the utility of distinguishing between academic and non-academic (social) dropouts and academic and nonacademic frustration.

More recently Panos and Astin (1968) have suggested that in order to develop a fuller understanding of the dropout problem it is necessary to devise meaningful typologies. This study represents one approach to filling that need.

The Study

A few investigations have validated the theory that different presses have different effects on students. This investigation, then, validates that proposition yet differs from each of the previous studies. Stern, Stein and Bloom (1956) focused on personality dimensions. Thistlewaite (1963) did not relate the institutional press of a particular institution to individual differences at the same institution. And the Pervin and Rubin (1967) study did not employ a longitudinal design or study actual dropouts.

This investigation also supports the notion that, in the perception of students, broad presses can be differentiated one from another. And one or more of these broad presses can be a focal point of a student's discomfort, resulting in withdrawal from the environment.

Methodology: Briefly

A follow-up questionnaire was sent to 1131 students who had originally enrolled in the Arts and Sciences College of a large university and had withdrawn during the first two years of college. Questionnaires were returned by 835 respondents.

The follow-up questionnaire was designed with two objectives in mind. First, it was to determine the reason for withdrawal. Since the basic notion of this study is that of person-environment incongruence, it was desirable to distinguish between "discretionary" and "nondiscretionary" withdrawals. Nondiscretionary withdrawals are defined as "involuntary" withdrawals from the college that largely resulted from the influence of someone or something other than the student, e.g., "My mother was seriously ill and I went home to care for her," "I was offered a much better athletic scholarship at another college," "I withdrew to have a baby," and so on.

Question. What reason or reasons did you have for withdrawing from the University? Please give as complete an answer as possible. For example: I couldn't seem to find other students like myself that I was happy with so I enrolled at Reed College after my freshman year, or my grades were disappointing to me so I transferred to Central Michigan University, and so on.

On the basis of responses to this question and confirmations on other problem dimension scales it was possible to identify two groups of students who were excluded from most of the remaining analysis. The first group was composed of students who had not actually withdrawn from the University. For example, coeds who married and enrolled under their married names were no longer easily identified on the lists of entering freshmen and were assumed to have withdrawn. Other groups of students had likewise not withdrawn; some were studying abroad on University sponsored programs, had graduated early (in three years), or had gone to another institution because they had been admitted to the other institution's professional school (law or medicine) before completing their studies at the University.

The second group of students who were not eligible for the analysis

sample was composed of students who apparently were not incongruent with the major pressures of the environment. The nondiscretionary withdrawals, as defined earlier, were students (1) who had suffered some physical disability, e.g. blindness, automobile accident, football injury; in addition, this category includes women who were pregnant; (2) students who had to be at home or at least leave the University because a parent was ill; (3) women who withdrew to be with a "loved one," e.g., "My husband had received a fellowship at the University of Chicago"; (4) students who withdrew because the parents wished it, e.g., "My parents insisted that I attend a smaller college closer to home"; and (5) other miscellaneous withdrawals such as a temporary withdrawal in order to study under a noted scholar at another institution, an unusual opportunity to travel in Europe, financial difficulties (surprisingly few) and so on.

These deletions were necessary to "clean up" these data. That is, it was necessary to be reasonably certain that the withdrawals from the University had in fact left for causes other than the "involuntary" type described above.

It is recognized that the reasons some of these students gave for withdrawing may only be rationalizations. Thus, these reasons cannot be taken completely at "face value." It is assumed, however, that this group is largely composed of students for whom the University pressures were not incongruent.

This final deletion of respondents resulted in reducing 785 usable returns to 659 ($785-126=659$). The 659 respondents (now "true" withdrawals) became the final analysis sample. This group of withdrawals is the subject of all subsequent analysis. This sample is composed of students

who appear to have left the environment because of some lack of "fit".

Table 1 relates the number of withdrawals in the study to entering freshmen by cohort and sex. The most significant relationship seems to be that for each cohort and for each sex the proportion of dropouts is the same. It would appear that the same proportion of entering men and women find themselves lacking a "fit" with the institution. About 15% of the entering classes are in the dropout sample. Because of the larger proportion of women admitted the female dropout sample (N = 355) is larger than the male sample (N = 304).

TABLE ABOUT HERE

Perhaps the most significant inference that can be made about these data is that a substantial proportion of the entering students seem to be lacking in some form of "fit" with the College. The 659 students in the final withdrawal sample represent 15.08% of the entering classes (N = 4368). The actual proportion lacking in fit is probably higher. Just what the actual proportion might be cannot be determined for a number of reasons. For example, the actual percentage could be substantially higher if we knew more about the "walking wounded," i.e., the students who despite social and academic difficulties are able to remain in the College or have transferred to another college within the University.

Not included in the sample are students on whom we did not have entrance data (N = 94); if these students were included in the follow-up survey a larger proportion of the entering classes would be classified as dropouts. Not included in the sample are those students who did not return the followup questionnaire (N = 211); if they were included,

again a larger proportion would be among the dropouts. Nor are any of the commuting students included. On the other hand, not all of the students who did dropout and who are in this analysis sample are clearly lacking in fit. Approximately a third of the withdrawals (N = 217) left because of a wide variety of reasons that seemed neither clearly academic or social, e.g., "I wanted to be closer to home" or "I was bored with college." These students may have withdrawn from any college regardless of press. This group is described in more detail in the following section of types of dropouts.

Types of Dropouts

A second objective of the follow-up questionnaire was to distinguish among students who were incongruent with two of the major presses (social and academic) of the College. In order to do this, each respondent was asked to respond to 20 "problem dimension" statements. The statements were in regard to the kinds of problems often experienced by college students. Each respondent rated the problem on a five-point scale (0 to 4) of how important each problem was for him while he was in attendance at the University. The problems are referred to as "problem dimensions."

Figure A lists the complete wording of the problem dimensions, grouped by type of problem, and a shortened version of the problem statements. The shortened version is used to simplify discussion, e.g., "A feeling of being lost at the University because it is so big and impersonal" is shortened to "being lost at MU".

FIGURE A ABOUT HERE

Another comment seems to be in order about the dropout sample. Although an effort has been made to identify certain types of dropouts--types that seem to have relevance to environmental presses--the numbers or proportions, especially in the subsamples, can only be considered rough approximations. This rough categorization is a result of the limitations imposed through the definitions employed and the necessity to rely on the students' responses. Nevertheless, as rough as this categorization may be, it does seem to present an alternative to considering all students as just dropouts. Categories of dropout behavior may help us better understand what is happening as students interact with institutions' environmental presses.

Furthermore we should observe the process of selection in at least two ways: selective expulsion from and self-selection out of the institution. In terms of self-selection out or selective expulsion it seems that these means of selection may operate differently depending upon the press and personality trait being considered. For example, in an institution of higher education there is an academic press--ability continuum. The academic press may mean there will be both selective expulsion (academic dismissal) and self-selection out ("I had better transfer somewhere else where it is easier, where I can handle the work"). However, even at the high end of the academic continuum, when the student has more than enough ability, there may only be self-selection out of the institution. When considering, for another example, a social press like "cosmopolitaness" the students who are not congruent at either end of the continuum may elect to leave the institution (self-selection out) but for different reasons. Those students

who are less cosmopolitan (i.e., more provincial, less worldly) may tend to find the social environment (and academic) threatening, overwhelming and otherwise unsettling. The most cosmopolitan student may, however, find that he is not challenged or stimulated in this setting and will likewise leave.

Thus, while incongruence may be present, the nature of the behavior and the type of mechanism for selection differs depending upon the press and personality trait under consideration.

Analysis of Responses to the Follow-up Questionnaire

The purpose of this section is to examine in greater detail the responses to the follow-up questionnaire. An intercorrelation analysis of the problem dimensions adds support to the notion that students may find themselves in a disfunctional (lack of fit) relationship with one or more aspects of the environmental press. First, we examine these data in a product-moment intercorrelation matrix (Table 2), then we use a principal-components analysis to confirm the "typing" of dropouts.

A product-moment intercorrelation matrix for the 20 problem dimensions is presented in Table 2. Correlations that are statistically significant ($r = .115$) at the 1% level of confidence are underlined while correlations for $r = .33$ or greater are circled.

TABLE 2 ABOUT HERE

The correlations of $r = .33$ or higher were arbitrarily selected as a level of correlation above which it was felt "substantial" relationships were more evident. The 1% level of confidence was chosen to be more

selective about demonstrating the correlations that were statistically significant than would be true at the 5% level. At the 5% level of confidence correlations of $r = .088$ or greater are significant.

The data from this intercorrelation matrix were among the more significant and personally satisfying results of the investigation. What can be said about these data? Judging from the range of correlations (.00 to .71) it appears that the respondents were selective in how they responded to the problem dimensions. That is, they didn't respond as though all things were problems. As an example, a "family crisis like death or divorce" (Item 15) would not be expected to influence greatly the students' problems in most other areas included on the questionnaire. And it will be noted that only Item 14, "a family financial crisis...", is significantly related to this problem, as would be entirely expected.

As another example of selectivity in student response note the correlations with Item 20, "Seeing too few faculty." While the majority of items are statistically significant (underlined). Items 2, 6, 10, 14, 15, 16, 17, and 18 dealing with such problem areas as "fraternity rushing" (Item 2, $r = .03$), a disappointment in a relationship with a member of the opposite sex" (Item 6, $r = .07$), "a family financial crisis..." (Item 14, $r = .00$), and "being emotionally upset..." (Item 18, $r = .03$) show no relationship. As we would expect these other problem dimensions should not be related to concerns regarding the amount of contact with the faculty. On the other hand "a feeling of being lost at MU...", and "an inability to express my interests and abilities..." (Item 11, $r = .40$ and Item 19, $r = .33$) are more closely related to a

"disappointment in having too little contact with the faculty."

More important perhaps than the apparent selectivity of response is the pattern of relationships that emerge from examining the correlations that are $r = .33$ or greater (circled). It will be recalled that items were selected for the follow-up questionnaire on their assumed ability to distinguish types (social, academic, etc.) of withdrawals. In this respect it is gratifying to note the almost complete absence of correlation between certain problem dimensions. For example, responses to Item 12 "An inability to find individuals or groups which were really congenial..." (a social problem) are not related to responses on Items 1, 3 or 5 (academic problems), correlation of $-.02$, $-.02$, and $.01$ respectively. This same lack of relationship exists between all of the academic and social problem dimensions. The lack of relationship can be made clearer by a "cluster analysis."

To help clarify and summarize the relationship in Table 2 a cluster analysis (a grouping of items with relatively high correlations of $r = .33$ or greater) is presented in Figure B. In the diagram the circles represent problem dimensions while the lines that join the circles indicate relationships. Solid lines represent correlations of $r = .33$ or more, while the broken lines include other less high relationships. The broken lines are included if the correlations among problem dimensions within a cluster or between clusters is $r = .25$ or greater.

Three clusters tend to emerge from these data. The largest cluster is made up of the four problem dimensions that were included in the follow-up questionnaire to distinguish the social withdrawals from other withdrawing students. Two other clusters of three problem

dimensions each represent the academic and religious groups.

One problem dimension (Item 8) appears in two clusters. It seems that students having concerns regarding their "religious faiths" (Items 9 and 10) as well as those finding the environment "too cosmopolitan" and lacking in "congenial individuals and groups" were also likely to express difficulty in meeting students with different standards, i.e., "ways to act, sexual standards, moral behavior" (Item 8).

One problem dimension (Item 20), "A disappointment in having too little contact with the faculty," did not have a cluster to which it seemed to belong. This item is included in the diagram, however, because it is positively related ($r = .40$) to "a feeling of being lost at MU (Item 11).

FIGURE B ABOUT HERE

It should also be noted that each cluster has at least one correlation of $r = .50$ or higher. These relatively high correlations seem to identify the "key" problem dimension around which the other related problem dimensions cluster and thus help complete the picture.

Principal-Components Analysis

As a final test to determine the presses acting upon the sample, a principal-components analysis was run on the inter-correlation matrix. The principal-components analysis differs significantly from the more often cited factor analysis in that 1's are maintained along the main diagonal of the matrix in the former. This technique is particularly desirable when the initial factor structure of the matrix is desired,

as was the case here.

Based upon the popular convention of considering only those factors with a latent root greater than 1, then, seven factors emerged for further study. As Table 3 indicates, these seven factors account for 62% of the total variance.

TABLE 3 ABOUT HERE

TABLE 4 ABOUT HERE

Table 4 presents the corresponding loadings for these seven factors. Looking at only those loadings greater than .50, it is possible to assign descriptive titles to these factors, as has been done in Figure C.

FIGURE C ABOUT HERE

Four significant factors emerged from this initial analysis: Social, accounting for 20% of the variation; Academic, which accounts with Social for about one-third of the total variation; Family, a new press; and Religion. The fifth factor lacks definition but appears to be closely related to the Family factor. Perhaps a rotation (see below) would shed further light on this press. The Greek and Discipline factors also appear to cause some lack of "fit."

As usually occurs when a principal-components analysis is performed, we have only narrowed down the number of variables for future study. As these factors tended to support our initial conclusions, no further

analysis was undertaken at this time.

In the future, however, a Varimax rotation should be performed on these seven factors to further isolate those variables accounting for the total variation in the hopes of further pinpointing those presses most critical to the college student.

Conclusion

The pattern of responses suggests the existence of groups of students having problems that distinguish themselves along academic, social, religious, family, and perhaps other lines. The higher relationships within the academic problem dimensions as compared to the lower relationships between the academic cluster and the social or religious cluster suggest that these may be separate problem areas for different individuals. This evidence, thus, appears to support one of the major hypotheses of this investigation, i.e., there are major presses within the environment of institutions that confront students. Two of the major presses are social and academic; a third may be religious. Students may be led to withdraw from the environment because they experience difficulties in their encounters with any of these presses separately or with all of them simultaneously.

The resulting typology, while it necessarily oversimplifies human reality represents a conceptual contrivance that may lead to new understandings of that same reality. One next step is to identify the characteristics of students likely to have, for example, social difficulties, then these data can become more broadly meaningful to faculty, administrators, students, and others having responsibilities for higher education.

REFERENCES

- Astin, Alexander W., 1965. Who Goes Where to College? Chicago: Science Research Associates.
- Astin, Alexander W. and Holland, 1961. "The Environmental Assessment Technique: A Way to Measure College Environments." Journal of Educational Psychology, 52, 308-316.
- Clark, R. B., 1962. Educating the Expert Society. San Francisco: Chandler.
- Cope, R.G., 1968. "Limitations of Attrition Rates and Causes Given for Dropping Out of College." The Journal of College Student Personnel, November 1968, 386-392.
- Murray H. A., 1938. Explorations in Personality. New York: Oxford University Press.
- Pace, C.R. and Stern G. G., 1958. "An Approach to the Measurement of Psychological Characteristics of College Environments." Journal of Educational Psychology, 49, 269-277.
- Pervin, L. A. and Rubin D. B., 1967. "Student Dissatisfaction with College and the College Dropout: a Transactional Approach." Journal of Social Psychology, 72:2, 285-295.
- Peterson, Richard E., 1965. On a Typology of College Students. Research Bulletin, 65-9, Educational Testing Service, Princeton, New Jersey, 1965.
- Stern, G. G., Stein, I. M. and Bloom, B. S., 1956. Methods in Personality Assessment. Glencoe, Illinois: The Free Press.
- Thistlethwaite, D. L., 1959. "College Press and Student Achievement." Journal of Educational Psychology, 50, 183-191.
- Thistlethwaite, D. L., 1963. Recruitment and Retention of Talented College Students. Cooperative Research Project with the U. S. Office of Education, January 1963.
- Trow, M., 1962. "Student Cultures and Administrative Action." In R. L. Sutherland, et al. (Eds) Personality Factors on the College Campus. Austin, Texas: The Hogg Foundation.

TABLES AND FIGURES

Figure A - List of Problem Dimensions

<u>Questionnaire Item Number</u>	<u>Wording from the Questionnaire</u>	<u>Shortened Wording for Discussion</u>
	<u>Academic</u>	
1	A difficulty learning regular study habits--learning what to do during my time allotted for study	Difficulty learning study habits
3	A discouragement because of being placed on academic probation	Placed on academic probation
5	A fear of academic failure--not able to maintain a "C" average	Fear of academic failure
	<u>Social (nonacademic)</u>	
11	A feeling of being "lost" at the University because it is so big and impersonal	Being lost at MU
12	An inability to find individuals or groups which were really congenial and with which I felt happy	Not finding congenial groups
13	A shock in meeting people who seemed much more cosmopolitan or had been around more than I	Meeting more cosmopolitan students
16	A difficulty accepting the "snob" appeal of most social groups on campus	Snobbish social groups
	<u>Religious</u>	
8	The difficulty of meeting students with very different standards than my own--ways to act, sexual standards, moral behavior	Difficulty with students who had different standards
9	A feeling that my religious beliefs were constantly being challenged and threatened	Religious beliefs were threatened

Figure A (continued)

Questionnaire Item Number	<u>Wording from the Questionnaire</u>	<u>Shortened Wording for Discussion</u>
10	A questioning of my own religious faith or beliefs	Questioning my religious beliefs
	<u>Miscellaneous</u>	
2	A disappointment in rushing, not receiving a bid to the house I wanted to pledge	Disappointment in rushing
4	A concern over earning too many "C's" and the doubt about my record being acceptable to a graduate school	Concern over too many "C's"
6	A disappointment in a relation- ship with the opposite sex-- a hurt, loss, rejection	Disappointment with a relationship with the other sex
7	Disillusionment about friend- ship or a friend	Disillusionment about a friendship
14	A family financial crisis that affected my plans	Family financial crisis
15	A family crisis like death, divorce in the family	Family crisis
17	A problem with the police or disciplinary agents of the University	Disciplinary problems
18	A physical disability, psychological problem or emotional upset	Emotional upset
19	An inability to express my interests and abilities --to express myself	Inability to express oneself
20	A disappointment in having too little contact with the faculty	Too little contact with faculty

Figure B - Cluster Diagram of Selected Correlations from Table 2

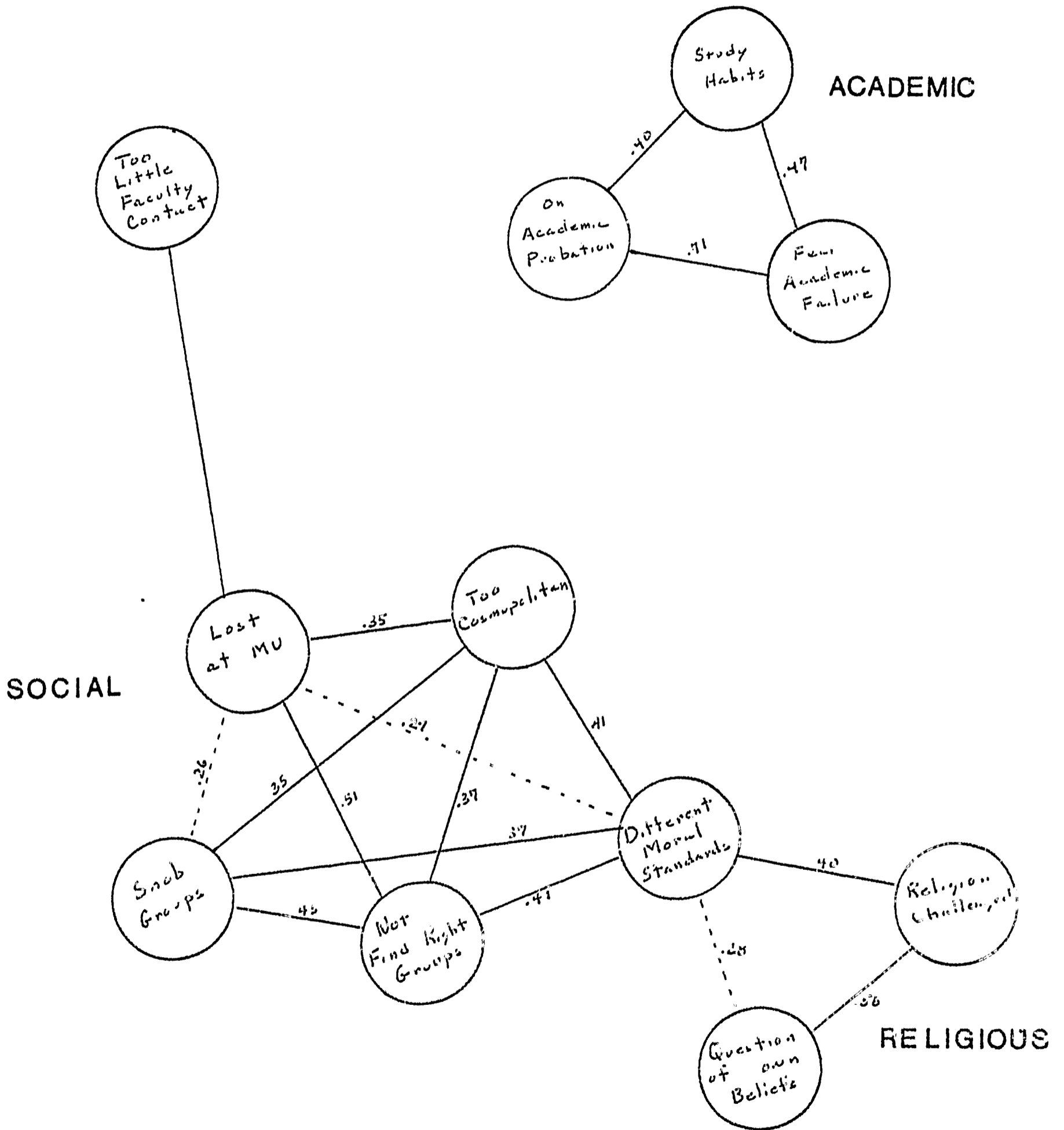


FIGURE C

The Principal Factors*

Factor I--SOCIAL

- 19 Inability to express oneself.
- 13 Meeting more cosmopolitan students.
- 8 Difficulty with students who had different standards.
- 12 Not finding congenial groups.
- 11 Being lost at MU.
- 6 Disappointment with a relationship with the other sex.
- 16 Snobbish social groups.
- 7 Disillusionment with a friendship.

Factor II--ACADEMIC

- 5 Fear of academic failure
- 3 Placed on academic probation.
- 1 Difficulty learning study habits.

Factor III--FAMILY

- 14 Family financial crisis.
- 15 Family crisis.

Factor IV--RELIGION

- 10 Questioning my religious beliefs
- 9 Religious beliefs were questioned

Factor V--_____**

Factor VI--GREEK

2 Disappointment in rushing.

Factor VII--DISCIPLINE

17 Disciplinary problems.

*Variables with loadings greater than .50 are listed in descending order of loading and a descriptive name is given to each factor.

**No variable had a loading greater than .50.

Table 1

Analysis Sample as a Percentage of
Entering Freshmen by Cohort and Sex

Sex	Cohort						
	Class of 1966		Class of 1967				
	<u>Enrolled</u>	<u>Analysis Sample*</u>	<u>Sample as a Percent of Enrolled</u>	<u>Enrolled</u>	<u>Analysis Sample*</u>	<u>Sample as a Percent of Enrolled</u>	<u>Sample Totals for Each Sex</u>
Male	1,053	165	15.7	995	139	14.0	304
Female	1,154	176	15.3	1,166	179	15.4	355
Total	2,207	341	15.4	2,161	318	14.7	659

*These are only those students who are actually in the analysis sample. This sample does not include any nonrespondents, withdrawals who left for nondiscretionary reasons, commuting students, or those on whom data were available.

Table 2 - Intercorrelation Matrix of Mean Scores on the 20 Problem Dimensions

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Study Habits (1)																				
Greek Rushin (2)	-.01																			
Acad. Probati (3)	.40	-.01																		
Too Many C's (4)	.23	.07	.25																	
Acad. Failure (5)	.46	-.08	.71	.28																
Opposite Sex (6)	.22	.10	.10	.11	.13															
No Friendship (7)	.07	.18	.06	.08	.04	.37														
Moral Stand. (8)	.05	.14	.01	.05	.04	.23	.33													
Relig. Challe'd (9)	.06	.07	.05	.13	.10	.16	.12	.40												
Q. Own Beliefs (10)	.06	.05	.03	.11	.02	.19	.11	.28	.56											
Being Lost (11)	.15	.01	.18	.10	.24	.17	.18	.27	.12	.08										
Not Rt. Groups (12)	-.02	.13	-.02	.06	.01	.21	.36	.41	.14	.09	.50									
Too Cosmopol. (13)	.16	.13	.12	.12	.16	.27	.22	.40	.22	.15	.34	.37								
Family Finan. (14)	.03	-.03	.08	.14	.03	.09	.12	.02	-.00	.08	-.00	-.00	.06							
Family Crisis (15)	.02	-.01	.10	.09	.05	.10	.08	.02	-.00	.05	.04	.03	.01	.34						
Snob Groups (16)	.00	.21	-.01	.06	-.01	.20	.25	.36	.17	.14	.25	.45	.35	.07	-.01					
Disc. Probs. (17)	.05	.03	.01	.02	.04	.02	.03	.06	.03	.01	-.03	-.00	.01	.04	.03	.02				
Emotional (18)	.15	.02	.08	.04	.09	.35	.23	.15	.01	.09	.18	.18	.16	.09	.22	.15	.09			
Express Self (19)	.25	.07	.14	.10	.23	.29	.25	.28	.16	.17	.31	.31	.31	.05	.27	.15	.01	.32		
Few Faculty (20)	.13	.03	.22	.19	.24	.07	.15	.15	.13	.06	.40	.18	.17	.00	.04	.10	.06	.03	.33	

Note: Figures in the table are product-moment correlations. All correlations are positive unless otherwise indicated. (N=774)

TABLE 3

Latent Roots for the Principal-Component Analysis

Factor	Latent Root	Cumulative % Trace
I	3.97	19.87
II	2.21	30.94
III	1.50	38.43
IV	1.46	45.75
V	1.15	51.48
VI	1.08	56.87
VII	1.01	61.94

TABLE 4

Principal Factor Loadings*

Variable	Factor						
	I	II	III	IV	V	VI	VII
1	37	<u>57</u>	-2	4	-34	0	-4
2	20	-25	-1	0	-21	72	-2
3	35	73	-8	3	-1	13	-8
4	31	36	4	20	19	41	-7
5	40	<u>75</u>	-16	2	-5	2	-3
6	<u>53</u>	-4	32	0	-43	-9	-14
7	<u>52</u>	-22	23	-14	-16	16	-6
8	<u>61</u>	-36	-11	18	1	-1	6
9	43	-17	-18	72	6	-11	3
10	37	-16	1	<u>73</u>	2	-19	-3
11	<u>59</u>	2	-26	-33	31	-20	2
12	60	-38	-13	-32	18	0	-3
13	<u>62</u>	-13	-12	-6	0	6	-9
14	15	10	<u>63</u>	10	44	14	-7
15	15	13	<u>67</u>	1	39	-5	0
16	52	-38	-5	-13	4	22	-6
17	7	3	14	5	-13	14	<u>93</u>
18	41	0	47	-20	-31	-32	8
19	<u>63</u>	4	-1	-15	-10	-23	5
20	44	21	-28	-14	37	-4	27

*Loadings greater than .50 are underlined and the decimal points have been dropped.