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TOWARD A TYPOLOGY OF MALE AND FEMALE PERSISTERS AND NONPERSISTERS: A FOUR-YEAR LONGITUDINAL STUDY.

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GRADUATE COLLEGE

TOWARD A TYPOLOGY OF MALE AND FEMALE PERSISTERS AND NONPERSISTERS: A FOUR-YEAR LONGITUDINAL STUDY

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

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BY

MYRNA LEE CARNEY

Norman, Oklahoma

1979

TOWARD A TYPOLOGY OF MALE AND FEMALE PERSISTERS AND NONPERSISTERS: A FOUR-YEAR LONGITUDINAL STUDY

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TOWARD A TYPOLOGY OF MALE AND FEMALE PERSISTERS AND NONPERSISTERS: A FOUR-YEAR LONGITUDINAL STUDY

CHAPTER I

PURPOSE AND NATURE OF THE STUDY

Introduction

Lower enrollment trends and growth patterns in higher education have resulted in competition for students in all types of institutions and among academic departments within the institutions. Increasing the number of students who stay in school after they do enroll necessitates a better understanding of the processes involved in the attrition. In some instances, lack of institutional growth and in some cases institutional or academic departmental survival were the sole reasons for the studying of retention to gain a better understanding of the types of students who persisted and those who left the institution.

Evidence from national studies generally showed that for every ten students who entered college, only four would graduate from the institution that they originally started from four years later. Nearly fifteen million men and women would enter approximately three thousand colleges

and universities during the 1980s. It could be expected that five or six million of these students would never earn degrees within the traditional four-year period and another three million would delay their baccalaurate to a later date (Cope, 1978). The failure of students to complete degree programs for which they registered represented inefficient utilization of scarce institutional resources.

The selection of a college or university and an academic major were decisions that every college student faced. The process of making these decisions was not completely understood. Most people have assumed that wise selections in these areas involved the realistic appraisal by the student concerning his/her personal characteristics and competencies with the demands of the prospective academic field of study. Institutional match was also of prime importance. When a student's characteristics more closely resembled those of the typical student in their prospective field or institutional choice, he/she likely would feel at home and remain in his/her field of study and at the institution. Incongruencies between student, student's choice of institution, and student's major field resulted in feelings of alienation and dissatisfaction which usually led to a change of academic major or dropout. These generalizations have been supported by earlier studies (Abe & Holland, 1965; Chickering, 1966; Darley & Hagenah, 1955; Feldman & Newcomb, 1969).

Statement of the Problem

The attempt in this study was to examine entering freshman background characteristics, degree expectations, academic factors, interests and attitudes to determine if there were types of male and female freshman students who persisted or dropped out over a period of eight semesters.

Since typologies have been used to describe student sub-cultures and institutions, it seemed likely that data collected upon enrollment of new freshmen and academic data collected at various times throughout four years could be used to designate various types of male and female persisters and dropouts. Therefore, the hypothesis formulated for purposes of this study was that student responses to a survey related to such variables as family background, income level, degree expectations, interests, attitudes and self-assessed skills, combined with college grade data and American College Test data, might interact in indicating various types of male and female persisters and nonpersisters. The present study is an exploration and an investigation of this general hypothesis.

Significance of the Study

The literature review revealed that a great number of approaches have been used to investigate the process of attrition from institutions of higher education. This review showed that there were major voids in knowledge of

the factors that were related to successful completion of the undergraduate degree or factors that led to withdrawal before completion of the degree. Many studies focused on the proportion of a freshman class not returning one year later. Others have relied heavily on ex post facto methodology by selecting a sample of students that had already dropped out and then trying to discover what factors may have been significant in predicting attrition. Some used interviews or questionnaires to obtain the students' reasons for withdrawal. Finally, most investigations on attrition did not make use of multivariate statistical techniques. The review of the literature indicated that it was reasonable to assume that multiple factors operated together to produce attrition and persistence. The above weaknesses precluded making any conclusions about the independent effects of the various factors that were correlated both with dropping out and with each other.

This investigation did not propose to address all of the preceding problems, but it did deal with some of them. First, the data base was unique in that it included the entire population of entering freshmen at a large southwestern, state-supported institution. The longitudinal nature of this study was a unique feature because of the inclusiveness of the variables related to pre-college data and data collected during the four years. The findings would allow defensible conclusions to be made as a result.

Since the review of the literature revealed differences in attrition rates according to the type of institution, the findings of this study could serve as meaningful comparative data for other large, state-supported institutions to describe men and women persisters and non-persisters.

CHAPTER II

RELATED LITERATURE

The review of the literature attempted to identify some factors that had been found to be related to attrition evidenced from earlier studies. Even though many past research endeavors had produced inconsistent results, some did have consistent findings that would assist in pointing to factors that should be considered in conducting research in the area of retention.

The misleading and contradictory findings in some instances have taken stated reasons that students gave in the dropout process as the true reasons for leaving an institution. Demos (1968) found that in many cases where students had listed finances as the reason for dropping out, reaaons of a personal nature and poor academic performance or uncertainty of academic major were more likely to be the primary reasons. Tinto (1975), in his synthesis of recent research on the dropout, described persistence as the lack of adjustment to college involving the interaction process between characteristics that the student brought with him/her and the specific college in which she/she enrolled. Therefore, a model using reasons from

another institution was invalid because of differences in individual backgrounds of students and differences among two-year, private or public universities and colleges.

Much research that was conducted did not give enough attention to the longitudinal process (Tinto, 1975). It was necessary to look at differences in students as they entered an institution in order to follow them to determine if differences in students' needs, goal aspirations, attitudes, academic backgrounds, family backgrounds and other factors led to differences in dropout rates (Astin, 1963). Jex and Merrill (1962) urged that the longitudinal approach be used since this approach permitted an explanation of factors among students who dropped out and returned and students who dropped out from higher education altogether. Tinto (1975) suggested that individual institutions should develop their own longitudinal data files which would lead to more meaningful comparative analyses of institutional impact over time.

Methodologically, many studies have focused only on the characteristics of those students who persisted or students who have left, failing to make comparisons between groups (Pantages & Creedon, 1978). Research conducted by Demitroff (1974) and Demos (1968) showed that multiple factors operated concurrently to produce attrition, but many studies limited their research to only one or two factors at a time.

In order to study the attrition process longitudinally, Astin (1971) recommended that research involve multiple measures of entering student characteristics, follow-up measures, and appropriate research designs for controlling differences among students entering different types of institutions. Hoyt (1978) suggested that attrition research should begin with the collection of data about the students before they enrolled in an institution. Included in these measurements should be measures of academic potential, goals and aspirations, and potential barriers to program completion such as finances, health, and educational deficiencies.

In having described some of the weaknesses and suggestions for attrition research, attention was focused on those characteristics that were found to be related to student persistence in college. Some of the factors in which consistent findings were shown were: family background of students, individual characteristics of students, the students' past educational experiences, institutional characteristics, and the academic and social integration within the college environment.

Family Background

Studies related to socioeconomic status of students produced inconsistent findings (Astin, 1973; Eckland, 1964; Panos & Astin, 1968; Sewell & Shah, 1967). Astin and Eckland found that family income was not related directly

to attrition; whereas, Sewell and Shah found that students who came from lower status families had higher dropout rates than those students from higher status families. Astin (1972) concluded that family income alone was becoming increasingly less related to college persistence.

Other findings pointed to higher dropout rates for students coming from families whose parents had less formal education (Spady, 1971). Astin (1973) found that the chances of a student of either sex remaining in school would increase by 10 percent if the mother had a degree beyond the bachelor's. Rossman and Kirk (1970) however, found no evidence to support these findings. After reviewing attrition research for a period of twenty-five years, Pantages and Creedon (1978) concluded that there had not been enough research conducted on the individual effects of father's or mother's education as it related to the sex of the student.

Studies related to ethnicity and attrition also produced inconclusive findings. Generally, studies in this area did not hold constant high school rank in class or scholastic aptitude (Pantages & Creedon, 1978). American Indian and Chicano students were found to have the highest dropout rates in the national longitudinal study conducted by Astin (1976) from 1968 to 1972. Astin (1972) also reported that women and black students had higher attrition rates than did white men students. Even though women had

higher dropout rates, Astin (1972) reported that women who persisted were more likely to have completed a bachelor's degree in four years than were men. Proportionately more black than white freshmen were still enrolled after one year in a study conducted by Fidler and Ponder (Note 2) at the University of South Carolina. They also found blacks to have consistently higher persistence rates thereafter. Tinto (1975) stated:

> There is simply too little information regarding the relationship between race and dropout in higher education. It is clear that race is an independent predictor of dropout, but it is unclear in which ways this aggregate relationship occurs. We simply do not know enough about the processes of interaction that lead individuals of different racial backgrounds to dropout from higher education (p. 119).

Results from earlier studies showed that size of hometown was a factor in attrition rates. Students from rural areas and students from small towns had a higher dropout rate than students from more urban settings and larger cities (Summerskill, 1962). Later studies, however, had not supported these findings (Johansson & Rossmann, 1973).

Individual Characteristics

A higher proportion of men graduated from college than women (Astin, 1972). As had already been reported in this review, Astin did find a higher percentage of women than men who graduated in four years. Of those students

who did drop out, a greater proportion of women than men tended to be voluntary dropouts rather than academic dismissals (Spady, 1970). Other studies found no significant differences in the overall attrition rates of men and women (Johansson & Rossmann, 1973; Sewell & Shah, 1967). Demos (1968) reported that men dropped out at significantly higher rates. The differences found between men and women dropout rates may be partially explained by the finding that the sex variable may be a significant factor in dropouts at some institutions and not at others (Cope, Pailthorp, Trapp, Skaling, & Hewitt, 1971). In 1964, Astin found that in institutions having a higher ratio of men to women, there were higher attrition rates among women students. In this same study, Astin also reported that women were less likely to re-enroll after dropping out. Pantages and Creedon (1978) concluded from their synthesis of attrition research that more men persisted in college beyond the four-year period; therefore, graduation rates over a ten year time period favored the men.

Measured ability was found to be related to persistence in college by various studies (Sewell & Shah, 1967; Wegner & Sewell, 1970). Astin (1972), however, found that an individual's past grade performance was a better predictor of success in college, because it reflected the person's ability to perform within an educational setting.

The majority of studies in this area indicated that there were significant differences in scholastic aptitude measures between dropouts and non-dropouts.

Students with high degree expectations were more likely to persist than students with lower degree expectations (Astin, 1973). These findings were supported by Hackman and Dysinger (1970) who studied the relationship between academic competence and college commitment. They found that students with high academic competence and moderate to high college commitment were more likely to persist. They also found that students with high competence, but lower commitment to college were more likely to transfer to another college or withdraw. Students with lower academic competence and high commitment to achieving a degree tended to persist until they were forced to leave for academic reasons. Tinto (1975) suggested that since voluntary or non-academic withdrawal was more prevalent among women students, goal commitment may be a factor in the persistence or non-persistence of women students. In general, most studies indicated that once the student's ability was accounted for, the higher the level of plans whether educational or career, the more likely the students would remain in college.

Demitroff (1974) reported that dropouts were more dissatisfied with their major field of study than were persisters. The studies that investigated this area have shown inconsistent results. Panos and Astin (1968) found

that in declaring an intended major upon entry to an institution did not predict persistence.

Various personality traits were found to differentiate between the dropout and the persister. Heilbrun (1965) found that students who persisted tended to be more conforming and showed freedom from rebellion and authority problems. Other studies indicated that dropouts were unable to adapt to the college environment, were more rebellious against authority, and were more non-conforming than were persisters (Astin, 1964; Hannah, 1969; Heilbrun, 1965). Personality differences between the persister and nonpersister were found by Heilbrun (1965) on the Socialization and Responsibility scales of the Minnesota Multiphasic Personality Inventory. To date, research studies provided findings that showed which personality traits were significantly related to attrition (Pantages & Creedon, 1978). They state:

> Many of the personality-attrition studies have failed to find significant differences between dropouts and non-dropouts, let alone distinguish among different types of dropouts . . . far more research is necessary in order to determine if there are personality differences between dropouts and persisters . . . the results achieved from such studies so far may, however, be useful for designing advisory and counseling programs for potential dropouts with a view to reducing the attrition rate (p. 74-75).

Studies frequently described personality traits of college populations such as intellectual, social, emotional, attitudinal, background, as well as unique

abilities of the student. In a study of types of students, Chickering (1966) found patterns of intellectualism, social interests, practical orientation and conservatism in the college sample studied. Lacking in this study and other characteristics' studies were distinctions between college men and women, especially in the area of attrition.

Clark and Trow (1966) through their research were able to classify students into four major types of subcultures consisting of collegiate, vocational, academic and non-conformist, which they concluded were present on every college campus. In 1962, Newcomb suggested that these types of student groups would vary in their identification with their institution. As an example, the academic and collegiate group strongly identified with their college while the non-conformist and vocational groups showed little identification.

Past Educational Experiences

Various studies showed a relationship between size of high school and persistence in college (Little, 1959; Sexton, 1965). Little found other factors such as high school rank, high school grades, and intelligence in combination with the size of the high school were related to attrition. One of the more recent studies found that size of high school was related to persistence only when the size of high school was less than 20 students and that

the very largest high schools had the highest retention rates (Anderson, 1974). Anderson suggested that these findings may be related to the type of sample studied. The type of high school may be the determining factor that could explain some of the contradictions of the research findings (Astin, 1973). Astin found that graduates from private high schools tended to have higher retention rates, but suggested that this may be due to the students who attended private high schools were better prepared for college.

Research conducted by Demitroff (1974) indicated that academic factors were the most reliable predictors of attrition. Pantages and Creedon (1978, p. 162) stated in their review of the literature covering a period from 1950-1975, "academic variables are still the strongest single-variable predictors presently available in the study of persistence and attrition." Astin (1973) found that for students having a high school grade average of 3.50 or more, there was a 70 percent increase in the probability of achieving a bachelor's degree in the four years. Other research studies indicated that high school grade average and rank in class could be used to differentiate dropouts from persisters (Panos & Astin, 1968; Summerskill, 1962). Eckland (1964) showed that high school rank in class was only half as effective in predicting whether the dropout would be permanent as it was in predicting which students would dropout.

In comparing dropouts and persisters, Carney and Geis (Note 1) found significant differences in students' Nelson-Denny reading scores and students' own self-assessed writing and reading scores. Students who were still enrolled at the beginning of their junior year had higher reading scores and higher self-assessed skills. In the area of academic skills, Astin (1975) found effective study habits to be significantly related to persistence.

Institutional Characteristics

Type of institution was related to persistence rates. Astin (1972) noted that public institutions were found to have higher dropout rates than private institutions. Tinto (1975) hypothesized that this was due to the selection process of private institutions taking place before the student enrolled, whereas, the selection process in public institutions occurred after the student enrolled. The effect of this as Tinto and Cullen (1973) stated:

> As college entrance becomes increasingly more "open", we would expect, a wider distribution of ability and motivational characteristics among entrants, that the social selection function of higher education will increasingly take place within the colleges univesities rather than between high school and college (p. 27).

Astin (1975) found that small colleges having fewer than 500 students and instutions having enrollments of 10,000 to 20,000 had dropout rates higher than expected. Astin (1975, p. 127) concluded from this finding, "otherwise size shows no consistent relation to persistence." Kamens

(1971) however, found that large institutions had higher retention rates for students with average or high ability. There was an indication that large institutions were less likely to be seen by students as being friendly because in these institutions, there was less contact between students and faculty (Feldman & Newcomb, 1969). These factors created more dissatisfaction among students and contributed to dropout proneness. In another study, Cope (1972) found that small institutions had greater success in retaining students from small high schools, whereas, larger institutions were more successful in retaining students who had previously attended larger high schools.

Students who resided on campus generally had lower attrition rates than did students who lived off-campus (Astin, 1975). Chickering (1974) found that the positive impact of college was less for a student commuting to the campus than was found for the student living in the residence halls. Pantages and Creedon (p. 78, 1978) hypothesized that, "on-campus housing generally serves a valuable and positive socialization function that facilitates a student's adjustment and consequently satisfaction with the institution."

A number of studies showed residence hall students to be better adjusted, to have more defined goals and aspirations, and to have higher grade point averages than the non-residence hall students. The impact of residence halls

might be summarized by the following:

> Students who live at home, in comparison with those who live in college dormitories, are less fully involved in academic activities, in extracurricular activities, and in social activities with other students. Their degree of aspirations diminish and they become less committed to a variety of long-range goals. They enter educationally and developmentally useful experiences and activities less frequently. They report a shrinking range of competence. Their self-ratings for a diverse array of abilities and desirable personal characteristics drop. Their satisfaction with college decreases, and they become less likely to return (Chickering, 1974, pp. 84-85).

The evidence from various research studies indicated that certain types of colleges were comprised of certain kinds of students (Feldman & Newcomb, 1969). Thus, colleges differed in many ways which had an impact on the students who were enrolled. Therefore, as Feldman and Newcomb (1969, p. 145) stated, "it is a matter of 'fit' between the individual and the institutionally provided environment--a fit that represents a reciprocal adaptation of differential selection of student recruits and of environmental characteristics provided by the institution."

Some studies suggested that the college environment may discourage creative, independent student behavior. A study by Chickering (1969) found students who left college were more creative, complex, mature, and independent than the students who persisted. The students who persisted were more conforming and controlled than were their non-persisting counterparts. Other studies had found non-persisters to score higher on the thinking introversion,

impulse expression, and complexity scales of the Omnibus Personality Inventory than the students who persisted (Ellison & Simon, 1973). If the most creative, critical thinking students tended to withdraw from college, the availability of appropriate models may be insufficient and may reflect a deficiency in this area. These studies further supported the concept of lack of "fit" between the students and their environment.

Just as students in many cases selected institutions that were more compatible to their own backgrounds and interests, students also sought academic major fields that were appropriate for their interests, values, and their abilities. The results of the research supporting this notion by Abe and Holland (1965) indicated that students were attracted to specific academic major fields based on their competencies, interests, self-conceptions, achievements, and family resources. For example, they found students planning to major in scientific fields differed greatly from students in other academic fields of study.

The evidence presented related to types of students who selected a specific college and a specific academic major suggested that research was needed to determine if there were differences between students who left a particular institution and those who persisted. As Tinto (1975) stated:

> It follows that insufficient integration may arise from either insufficient intellectual development or insufficient congruency between the intellectual

> development of the individual and the normative climate of the academic system (p. 106).

The withdrawal from the system may be seen as a lack of "fit" between the student and the normative climate of the institution.

Collegiate Academic Performance

The student's academic performance in college was found to be the single most important predictor of persistence in college (Astin, 1972; Astin, 1975; Carney & Geis, Note 1; Kamens, 1971). Spady (1971) found that grade performance was a more important factor for males than for women as a predictor of attrition. In reviews of various attrition studies by Summerskill (1962) and Pantages and Creedon (1978), first semester college grades were found to be a significant factor in dropout. Pantages and Creedon theorized that good grades were effective reinforcers that maintained and strengthened student's future academic performances, in addition to decreasing the chance that the student would leave an institution. Overall grade point average tended to be a better predictor of attrition than grade average in the student's academic major area (Astin, 1975). As a result of these findings Astin stated:

> Students who are involved in the academic life of the institution are more likely to expend the effort necessary to get more grades than are students who are not involved. In another sense, the results relate to the question of fit between students and institutions: (a) their own performance and that of most of their fellow students, and (b) their low level of achievement and high value placed on achievement by the institution (1975, p. 100).

Summary

The main conclusions which could be drawn from the review of literature related to the attrition and persistence of college students were:

1. Much of the research attempting to isolate specific factors which were significantly related to retention of students produces inconsistent findings.
2. Research on college attrition was ineffective because of inadequacies of measuring instruments, methodology used in analyzing the results, and the type of research designs used to study the problem.

From a methodological point of view, most of the research reviewed could be grouped into the following general categories: (a) census studies where entering freshman classes were followed through a number of semesters of enrollment to obtain attrition rates; (b) studies which attempted reasons why students withdrew; (c) case studies where subjects were identified as potential dropouts and were followed through their collegiate experiences; and (d) prediction studies in which variables were related to criteria of nonpersistence or persistence.

Attrition research studies had developed some interesting theories and models for explaining the dropout process; but the results tended to be confusing and in many instances, contradictory. Research related to various factors which affected attrition had been extensive. Of the demographic variables that had been studied, age had not been found to be a crucial factor in attrition rates,

but sex had been found to be a significant factor in attrition in some types of institutions. Level of parental education may be an important factor in persistence. The size of the student's high school and home town may be significant only for students coming from extremely small towns and schools.

Academic variables appeared to be the most significant factors that could be used to predict attrition accounting for in some studies, half of the variance. Academic factors which had been found to be the best predictors were: high school grade average, high school rank in class, and scholastic aptitude measures. The students' first semester college grades had been found to be predictors of attrition, but only in instances where grades were low.

The importance of personal factors such as goal directedness was supported by some research studies. Studies using personality assessment tests and instruments designed to measure student expectations had yielded. results that supported continuing research in these areas.

In general, most researchers in the area of retention today used the "college fit" model as a theoretical framework for explaining the lack of congruence between the student and the institution which led to attrition. Most researchers had concluded that attrition was the result of an interaction among a variety of variables. It was sug-

gested by many researchers that each institution should develop its own longitudinal analysis to study the problem of attrition. One of the major voids in the research reviewed was the failure to assess the extent to which variance in retention was related to types of institution. Local research could be used to secure normative data to establish a baseline for retention, to develop a system for early identification of potential dropouts, and to formulate an institutional philosophy regarding retention.

CHAPTER III

METHOD

Subjects

The population for this study comprises 2628 new freshman students who were enrolled at the University at the beginning of the 1975-76 fall semester. The selection criteria for the subjects were limited to:

1. Freshmen who did not have more than six hours of previous college course credit hours.
2. Freshmen who were enrolled in one or more hours of course work for credit and did not include freshmen who were taking courses for audit purposes.

The New Freshman Survey was administered during the summer orientation and pre-enrollment program and during the regular fall registration. Each of the students were requested to supply their student identification numbers on the New Freshman Survey which were later matched with the institutional student master file information containing such data as academic major, American College Test scores, and other demographic data. When identification numbers given by the students on the New Freshman Survey and the identification numbers on the student master file

were matched, 506 students or 19 percent of the students either did not have correct identification numbers for matchup purposes or had not answered the survey. The 2122 (81%) freshmen having New Freshman Survey information were representative of the total freshman class population as to sex, ethnicity, and resident status. This distribution is given in Table 1.

TABLE 1

DISTRIBUTION OF POPULATION AND SURVEY GROUP

Variable	Population		Survey Group	
	N	%	N	%
Men	1450	55.2	1134	53.4
Women	1178	44.8	988	46.6
White	2313	88.0	1895	89.3
Black	116	4.4	82	3.9
Hispanic	23	0.9	15	0.7
Asian/Pacific Islander	12	0.5	7	0.3
American Indian	82	3.1	67	3.2
Foreign	82	3.1	56	2.6
In-state	2335	88.9	1924	90.7
Out-of-state	293	11.1	198	9.3

Wiersma (1962) had stated that "generally, seventy-five percent is considered a minimum rate of return (p. 282)." Rummel (1958) in considering response rate stated:

> Conclusions based upon small percentages of returns are often suspected of bias, although this is not necessarily true. If sampling is well done, that is, if it is representative of the individuals in the population, the percentage of returns is not particularly meaningful in itself. The most important factor in the analysis of the data is to have an

> adequate number of representative returns rather than any given percentage of the number of questionnaires originally distributed (p. 109).

The response data indicated an adequate number of representative returns of the New Freshman Survey, which were considered satisfactory for purposes of this study. American College Test data were available for 2551 freshmen or 97 percent of the 2628 students.

The distribution of high school size showed that 28 percent of the subjects came from high schools with an enrollment of 600 or more in the high school graduating class. The major concentration of subjects was in high school graduating classes with enrollments of 200-600. Only 14 percent were graduated from a class of less than 100.

The hometowns represented by the population were mostly urban in-state cities. One-half the students were from towns of 50,000 population or more. Only 8 percent were from towns with a population of 2500 or less.

Forty-seven percent of the population had fathers who had a college degree. Twenty-five percent of the mothers had a college degree.

The population represented students who were mostly 18 year-old freshmen who had entered the university immediately after graduation from high school. Eighty-five percent of the students were 18 years of age and enrolled in college the fall semester after high school graduation. Less than 10 percent of the students waited two or more years before beginning college.

Procedure

The New Freshman Survey was administered in group sessions during the summer and fall enrollment sessions. Before the students responded to the survey, the following instructions were given them orally:

> This questionnaire is being used to collect information about students who come to the University. It will not become a part of your record, and your responses will not be identified with you personally or released to anyone. It is necessary to have your student identification number on the form to be able to relate the information to future surveys which might again involve you. We would like to have you respond honestly and accurately as possible, and please do not share your responses with others who are also completing the questionnaire. We want your confidential responses, and we will treat them confidentially.

Following the completion of the New Freshman Survey, the student responses were transferred to answer sheets for scanning purposes. The data obtained from the machine scanning of the surveys were combined with American College Test scores and such demographic data as sex, ethnic background, resident status and admit status. The data obtained from the various sources were stored on magnetic tape for up-dating of future grade data and enrollment status for eight semesters.

The University Computer Services staff aided in identifying students who met the selection criteria and in the development of the computer program to match survey information with the other data from the American College Test and student master file information. Each semester

the data were up-dated by Computer Services staff to include current enrollment status and current academic grade information.

The areas and variables delineated for purposes of this study were:

Variables	Measures
Size of home town	New Student Survey item 9
Parental educational and financial background	New Student Survey items 10, 11, 14, and 19
Student academic background	New Student Survey item 30 and American College Test scores
Academic expectations and academic attitudes	New Student Survey items 31 and 32
Reasons for selecting the University of Oklahoma	New Student Survey items 20-29
College expectations	New Student Survey items 35-39
Personal and social attitudes	New Student Survey items 14, 17 and 50-69
College academic performance	Overall grade point average

Definition of Terms

Throughout this study the following terms were utilized in accordance with these definitions:

1. Dropout. Anyone who was not enrolled during the last semester of the fourth year.
2. Persister. Anyone who was enrolled four years after entering as a new freshman or who had graduated previous to this time. This definition

included all students who had been enrolled after terminating their enrollments sometime during the four years.

Measuring Instruments

In developing this study it was deemed necessary to assess as many factors as were found to be related to attrition in other research studies and as would be feasible in a limited period of time. The New Freshman Survey was constructed specifically for the purpose of providing information that would be used in this four-year longitudinal study. (See Appendix A for a copy of the complete instrument.)

American College Test scores were available for 97 percent of the population. The four parts of the test measured educational development and academic achievement in English usage, mathematics usage, social studies reading, and natural sciences reading. In addition, there was a composite score.

Data Analysis

A separate factor analysis of the variables was conducted within each of the four groupings: male persisters, female persisters, male nonpersisters and female nonpersisters. Factor analysis was selected for purposes of this study because of the large number of variables that were available. This method of analysis could be used to reduce the data into a smaller number of factors than

the original number of variables to explain the variances within the four groupings. "Factor analysis is a useful tool for such a reduction, because it gives a description of a large number of variables in terms of a few relatively independent factors" (Henrysson, 1960, p. 55). Henrysson also posited that factor analysis could be performed without definite hypotheses as to the presence of a certain factor structure. The main advantage of using this method of analysis was the fact that it could assist in finding factors that were easier to understand than the multiplicity of single variables that had been found to be related to attrition in other research studies.

The principal components analysis of subjects' responses to the New Freshman Survey, ACT data, and academic grade data was employed. The variables were intercorrelated using a missing data program and factor analyzed by the Biomedical Computer Programs P-series 1977 factor analysis sub-program. Initial computations using the method of principal components and factors with eigenvalues exceeding 1.0 were retained for the rotational steps. All rotations involved the use of the varimax rotation which rotated the original factors orthogonally to a more interpretable solution.

Because the factor analysis method could not answer the questions of inter-group significant differences, the degree of relationship between response variables, and group memberships for typology purposes, the method of

multiple discriminant function analysis was incorporated. Cooley and Lohnes stated:

> This model is useful to the scientist who is interested in examining or predicting the group membership of individuals on the basis of a set of continuously scaled attributes of those individuals. The distinction of this problem is that the criterion variable of membership is categorical and nominal rather than continuous in its scaling (p. 13).

The stepwise discriminant function analysis program provided by the Biomedical Computer Programs P-series 1977 was used to statistically determine which variables could be used to satisfactorily discriminate among the four groups of male and female persisters and nonpersisters for classification purposes.

CHAPTER IV

RESULTS

The results indicated that 1258 (48%) of students at the University persisted from the freshman year to the senior year. The 1370 students who were nonpersisters represented 52% of the total freshman population used in this study. Forty-seven percent of the males and 58% of the females were nonpersisters as shown in Table 2.

TABLE 2

MALE AND FEMALE PERSISTENCE AND NONPERSISTENCE RATES

Group	Persisters		Nonpersisters	
	n	%	n	%
Male	763	52.6	687	47.4
Female	495	42.0	683	58.0
Overall	1258	47.9	1370	52.1

Table 3 shows the means and standard deviations for the male and female persister and nonpersister groups by variable. The F-ratio was computed for each of the six

TABLE 3

MALE AND FEMALE PERSISTER AND NONPERSISTER GROUP VARIABLE MEANS AND STANDARD DEVIATIONS

Variable and New Student Survey Item No.	Means: Male Persist.	Male Nonpersist.	Female Persist.	Female Nonpersist.	All Gps.	nF=	F to Enter 3 2624	
English ACT	19.77167	18.99048	21.23621	20.36044	19.98079		25.464	*
Math ACT	22.65268	20.43231	20.14746	17.44266	20.25151		57.115	*
Social Science ACT	22.37614	20.55750	20.23030	17.97803	20.55350		42.353	*
Natural Science ACT	20.95020	23.51674	22.43231	20.63982	22.08097		49.824	*
Composite ACT	22.49409	20.80860	21.10303	19.01659	20.90334		80.406	*
9. Population of hometown	3.61529	3.41257	3.56207	3.40257	3.49699		6.210	*
10. Father's education	3.39210	3.15819	3.44699	3.28129	3.30210		9.123	*
11. Mother's education	2.82820	2.66936	2.95674	2.77575	2.78686		10.544	*
14. Ease in talking with parents	1.80367	1.80381	1.67754	1.78507	1.79718		7.256	*
15. Family income level	2.66418	2.84434	2.89691	2.99886	2.82390		7.333	*
17. Past church attendance	1.72749	1.80506	1.52830	1.68030	1.68759		19.132	*
19. Financial concerns	1.55197	1.62506	1.50701	1.61509	1.57925		5.085	*
20. Close to home	2.49222	2.51207	2.41105	2.40450	2.46972		1.631	
21. Friends at college	2.75104	2.81233	2.81986	2.85219	2.80631		1.543	
22. Good program in major	1.70693	1.75537	1.81419	1.78136	1.75394		1.650	
23. Cheaper than others	3.04062	3.05717	2.96719	3.10304	3.04757		2.473	
24. Fiancial aid given	3.40763	3.45310	3.37126	3.42143	3.41895		0.851	
25. Liberalness of school	2.90689	2.93222	3.00595	2.97202	2.96081		0.822	
26. Athletic teams	2.89693	2.93785	3.12587	3.05226	2.99112		8.537	*
27. Parents' desire	3.12717	3.16669	2.96873	3.08400	3.09644		5.385	*
28. Fit in campus life	2.82605	2.89088	2.72184	2.84150	2.83935		4.469	*
29. College recruiter	3.52537	3.60300	3.55159	3.50335	3.56837		2.054	
30. Preparation for college	2.07437	2.24390	2.17734	2.25419	2.18482		8.957	*
31. Degree expectations	2.49757	2.41211	2.30139	2.27463	2.38034		29.250	*
32. Sureness of major	2.10196	2.00482	2.17180	2.06388	2.09028		3.029	
35. Help in career plans	1.59558	1.56620	1.52806	1.51700	1.55476		2.080	
36. Greek life	2.46123	2.72699	2.31601	2.52910	2.52099		20.749	*
37. Student government	2.62929	2.68918	2.63860	2.60386	2.66348		1.018	
38. Intramurals	1.90033	2.09907	2.06776	2.44702	2.22977		53.530	*
39. Campus religious groups	2.86120	2.86938	2.75824	2.81088	2.83086		2.364	
40. Fine arts activities	2.39875	2.39046	2.18888	2.20768	2.33079		6.650	*
41. Liberal education	1.82276	1.80785	1.71344	1.71088	1.76919		3.661	
42. Career specialist	1.53052	1.55217	1.59819	1.50526	1.55295		0.762	
43. Philosophy of life	2.06425	2.06804	1.95239	1.91782	2.00622		5.053	*
44. Working in helping people	2.01592	1.96698	1.80321	1.65741	1.83222		44.519	*
45. Taking a foreign language	2.73540	2.79108	2.51140	2.62636	2.67946		13.185	*
46. Living in dorms	2.26240	2.30830	2.01603	2.13099	2.19761		12.776	*
47. Finding someone to marry	2.85649	2.85872	2.75731	2.74276	2.81403		3.352	
48. Meeting people from ethnic	2.31791	2.23455	1.96404	1.98782	2.14368		32.283	*
49. Living away from home	1.96987	2.03048	1.79539	1.87671	1.92864		9.563	*
50. Marijuana legalization	3.14927	3.12807	3.45193	3.30324	3.24075		8.977	*
51. Wealth distribution	2.87836	2.80637	2.81123	2.77988	2.82130		1.308	
52. Organized religion	2.95770	2.85414	3.05438	2.91771	2.90417		3.478	
53. Equality law, and order	2.61469	2.52634	2.67267	2.65626	2.61332		2.706	
54. Laws against pornography	3.23122	3.21203	2.78914	2.75398	3.01890		47.153	*
55. American way of life	2.02220	2.05767	2.18011	2.19108	2.10521		4.548	*
56. Trial marriage	2.89136	2.75875	3.15122	3.02158	2.93948		11.968	*
57. Discipline	2.81945	2.74072	2.72946	2.73309	2.75958		1.496	
58. Politicians	2.46647	2.32893	2.91639	2.45669	2.83738		5.208	*
59. Parents' kind of life	2.89624	3.01245	2.87883	3.10163	2.97672		5.450	*
60. Speaker freedom	1.70757	1.70327	1.75794	1.74025	1.72962		0.881	
61. Racial prejudice	2.08102	2.11356	2.03517	2.03647	2.06676		1.240	
62. Premarital sex	3.51023	3.52602	3.10551	3.33591	3.39033		15.576	*
63. Like parents' political	2.74901	2.81594	2.66397	2.80171	2.76819		2.605	
64. Drugs a big problem	2.18194	2.13802	2.05463	2.09531	2.12396		2.127	
65. Drugs law enforcement	2.36704	2.37789	2.25474	2.38411	2.30266		1.499	
66. Programs on sexuality	2.37831	2.40398	2.43016	2.36760	2.39941		0.762	
67. Law enforcement	2.10368	2.02209	1.93375	1.87016	1.98971		8.893	*
68. Academic effort	1.96961	1.98205	1.94930	2.04105	1.98674		1.554	
69. Political views	2.71573	2.69600	2.81448	2.74934	2.73790		2.824	
70. Overall college gpa	2.69712	1.99023	2.91995	2.41305	2.48214		173.308	*

TABLE 3 - Continued

Variable and New Student Survey Item No.	Standard Deviations			
	Male Persist.	Male Nonpersist.	Female Persist.	Female Nonpersist.
English ACT	4.37529	4.55832	4.39658	4.58100
Math ACT	7.10731	7.89705	6.82420	8.11054
Social Science ACT	6.80123	7.72734	6.94905	8.00848
Natural Science ACT	6.27488	7.41014	6.21261	7.34084
Composite ACT	5.36507	6.36259	5.30736	6.65035
9. Population of hometown	1.10981	1.12190	1.15153	1.18169
10. Father's education	1.07262	1.11003	1.10766	1.12712
11. Mother's education	0.88981	0.90340	0.98526	0.92597
14. Ease in talking with parents	0.69802	0.69103	0.62940	0.71664
15. Family income level	1.09042	1.02418	1.33997	1.20385
17. Past church attendance	0.67600	0.67524	0.62970	0.68617
19. Financial concerns	0.55205	0.59305	0.62813	0.60087
20. Close to home	0.84342	0.89439	0.88066	0.89021
21. Friends at college	0.90558	0.88075	0.94853	0.93722
22. Good program in major	0.78044	0.85241	0.88174	0.87314
23. Cheaper than others	0.84890	0.80646	0.94335	0.86530
24. Fiancial aid given	0.89156	0.85967	1.00938	0.92204
25. Liberalness of school	0.81254	0.83657	0.88634	0.90020
26. Athletic teams	0.88651	0.88584	0.86209	0.91509
27. Parents' desire	0.81517	0.81768	0.98286	0.90000
28. Fit in campus life	0.86688	0.81674	0.94023	0.92156
29. College recruiter	0.69126	0.63909	0.70072	0.68282
30. Preparation for college	0.73724	0.74279	0.73126	0.77512
31. Degree expectations	0.48835	0.50991	0.48645	0.51053
32. Sureness of major	0.72139	0.74633	0.81734	0.78326
35. Help in career plans	0.65957	0.65266	0.67611	0.66098
36. Greek life	0.91278	0.84978	1.04357	0.90123
37. Student government	0.88554	0.82208	0.89800	0.85719
38. Intramurals	0.89042	0.86184	0.94426	0.85787
39. Campus religious groups	0.73171	0.75683	0.91437	0.80715
40. Fine arts activities	0.90243	0.87993	0.98445	0.90972
41. Liberal education	0.78957	0.82649	0.81263	0.78571
42. Career specialist	0.74503	0.78670	0.88401	0.82724
43. Philosophy of life	0.89237	0.88290	0.92080	0.87012
44. Working in helping people	0.86217	0.83024	0.75685	0.71501
45. Taking a foreign language	0.77059	0.76849	0.90902	0.84737
46. Living in dorms	0.81932	0.84182	0.87710	0.84785
47. Finding someone to marry	0.77266	0.73643	0.81168	0.81082
48. Meeting people from ethnic	0.80616	0.81409	0.77514	0.78166
49. Living away from home	0.83013	0.80558	0.75507	0.80789
50. Marijuana legalization	1.22153	1.21443	1.21132	1.21673
51. Wealth distribution	1.04576	1.00032	0.96316	0.99010
52. Organized religion	1.06677	1.00606	1.05783	1.04791
53. Equality, law, and order	0.98261	0.99340	1.03781	1.01702
54. Laws against pornography	0.93924	1.01007	0.97747	0.94998
55. American way of life	0.97445	1.04339	1.08623	1.04088
56. Trial marriage	1.10213	1.18952	1.26215	1.23776
57. Discipline	0.91473	0.94305	0.93272	0.93588
58. Politicians	0.90170	0.84201	0.91150	0.84287
59. Parents' kind of life	1.08728	1.04067	1.22453	1.22293
60. Speaker freedom	0.84704	0.80849	0.88350	0.84888
71. Racial prejudice	0.91912	0.96279	0.95201	0.90950
72. Premarital sex	1.13692	1.14677	1.29905	1.23504
63. Like parents' political	1.02313	0.96490	1.01171	1.01191
64. Drugs a big problem	0.95735	0.93567	0.92043	0.93206
65. Drugs law enforcement	1.07937	1.08331	1.02980	1.06063
66. Programs on sexuality	0.81461	0.88189	0.94784	0.87813
67. Law enforcement	0.96851	0.91842	0.85107	0.85922
68. Academic effort	0.76689	0.75957	0.83778	0.84884
69. Political views	0.74322	0.75381	0.72036	0.71136
70. Overall college gpa	0.59480	0.92105	0.55170	0.86088

variables to determine if the four groups did differ significantly. The results indicated that the groups did differ on 35 of the 61 variables, $F(3,2624)=3.78, p<.01$. Significant differences in terms of mean scores between the groups were found on such variables as: all ACT scores, population of hometown, educational level of parents, relationship with parents, family income level, past church attendance, reasons for choosing the university, overall college grade average, interest in certain campus activities, interest in residence hall living, interest in Greek life, and attitudes toward such things as law enforcement, premarital sex, trial marriage, and academic effort.

The R-Technique Factor Analysis

The American College Test scores, the items from the New Freshman Survey, and overall college grade-point average were used in the R-technique factor analysis. These items covered a broad range of content which might be considered to be relevant to the response styles of students who persisted and those who were nonpersisters. Due to the concern for similarity of variables, the R-technique factor analytic design was considered appropriate as an analysis for this study.

Mean responses on the 61 variables from the ACT, the New Freshman Survey, and the overall college grade average were intercorrelated and yielded a 61 x 61 correlation matrix for male and female persisters and nonpersisters.

Each of the four correlation matrices was factor analyzed by the BMDP4M-factor analysis program. All computations were performed in double precision to increase accuracy. The principal component analysis was used for the unrotated factor or initial component extraction. For purposes of obtaining an interpretable factor structure, components with eigenvalues greater than 1.0 were extracted and subjected to varimax rotation where the criterion equation contained a constant, gamma = 1.00.

The R-technique factor analysis data are presented in Tables 11 to 30 in Appendix B. Because of the length of the variable names in Tables 11 to 30, numbers and abbreviated forms of variable labels have been used. A coding scheme is presented in Appendix B for ease in understanding the condensed variable name forms used in each of the tables. The correlation matrices, unrotated factor loadings (pattern) for principal components, variance explained by each factor, rotated factor loadings (pattern), and the sorted rotated factor loadings (pattern) for each of the four groups appear in the following order: male persisters, female persisters, male nonpersisters, and female nonpersisters.

The investigation of the distribution of factor loadings for the four separate R-technique factor analyses suggested that the identification of the factors might best proceed in terms of variables with loadings of .50 or

higher. Therefore, the interpretation of factors in this study was based on those factors which had at least two factor loadings of .50 or higher. Beyond this point, the results did not lend themselves to accurate interpretation.

Male Persisters

The R-technique factor analysis for the male persisters yielded 19 factors which accounted for 61% of the total variance. Factors I-IX, which had the highest factor loadings accounted for 41% of the total variance in the responses of males who persisted from the freshman year to the senior year.

Factor I. Seven items with the highest loadings on this factor were:

Composite ACT	.98
Natural Science ACT	.85
Social Science ACT	.82
English ACT	.76
Math ACT	.75
Self-assessed preparation for college	-.44
College grade point average	.48

All the above items were consistent with the interpretation of an academic dimension. This factor clearly pointed to the academic background, degree of preparation for college as assessed by the student, and his college academic performance.

Factor II. Thirteen items were most characteristic of this factor:

56.	Attitude toward trial marriage	.78
62.	Attitude toward premarital sex	-.76
50.	Attitude toward the legalization of marijuana	.61
17.	Church attendance frequency	-.55
54.	Attitude toward pornography	-.51
65.	Attitude toward University enforcement of drug laws	-.33
52.	Attitude toward importance of organized religion	.40
57.	Attitude toward discipline	-.32
39.	Interest in a campus religious group	-.46
60.	Attitude toward freedom of speech	.29
63.	Student's political beliefs much like parents	-.27
66.	Need for programs on sexuality	.36
69.	Political views self description	.45

The loadings on this factor reflected a general dimension related to religious, social, and political attitude. These findings reflected an interrelationship between religious, social, and political attitudes. This dimension might be labeled social value orientation.

Factor III. Items that were the most characteristic of Factor III were the following:

25.	Reason for college choice - thought to be a liberal university	.68
28.	Reason for college choice - thought I would "fit in campus life"	.67
26.	Reason for college choice - athletic teams	.59
27.	Reason for college choice - parent's desire	.52
36.	Interest in pleging a Greek organization	.28

21.	Reason for college choice - friends at	.30
9.	Population of hometown	.29
41.	Interest in getting a broad, liberal education	.31

The loadings on this dimension were indicative of influences that led students to choose the university. It also suggested that these reasons were dependent upon the size of hometown in which the student lives. The variables included here also point to a combination of internal as well as external influences that led to the students' choice of college.

Factor IV. Items most representative of this factor were:

44.	Interest in working in a helping relationship	.73
43.	Interst in developing a philosophy of life	.71
37.	Interest in participating in student government	.26
40.	Interst in fine arts activities	.37
48.	Interest in meeting people from different ethnic groups	.35
41.	Interest in getting a broad, liberal education	.45
66.	Need for programs on sexuality	.36

The variable loadings on this dimension reflected the students' attitude toward a liberal education, interest in people, and self understanding. These findings would suggest both a level of interest in self and in others.

Factor V. The items below were characteristic of Factor V:

50.	Attitude toward legalization of marijuana	-.45
54.	Attitude toward pornography	.28
64.	Attitude toward drugs being a youth problem	.75
65.	Attitude toward University enforcement of drug laws	.74
67.	Attitude toward law enforcement for students	.42
55.	Attitude toward American way of life	.29
40.	Interest in participating in fine arts activities	-.27

The loadings on this dimension indicated strong persister attitudes toward law, law enforcement, and society. This dimension indicated persister males expressed strong opinions on social issues.

Factor VI. Five items had loadings of .25 or higher on this factor.

11.	Father's level of education	.83
12.	Mother's level of education	.77
15.	Parental income level	-.44
9.	Population of hometown	.37
31.	Degree expectations	.26

The interrelationship between parental educational background, family income level, size of hometown, and the students' degree expectations were reflected by the loadings on this dimension. It suggested socio-economic influences.

Factor VII. Six items had loadings of .25 or higher on this factor.

27.	Reason college choice - parent's desire	.29
14.	Ease in talking with parents	.73
59.	Attitude toward having parents' kind of life	.65

15.	Parental income level	.37
63.	Student's political beliefs much like parents	.44
19.	Concern for financing college education	.44

Relationship with parents was indicated by the loadings on this factor. This dimension represented the interrelationship between income level of the family and opinions about parents. These results tended to reflect a tendency for parental influence on the choice of college by the student to be dependent on the type of relationship the student had with the parents.

Factor VIII. The items below were characteristic of Factor VIII.

32.	Sureness of academic major	.78
22.	Reason for college choice - good program in major	.73
30.	Self-assessed preparation for college	.29
42.	Interest in becoming a specialist in a career	.43

Goal directedness and academic self-evaluation were reflected by the loadings on this dimension. The two areas appeared to be related.

Factor IX. Factor IX had five items with loadings of .25 or higher.

38.	Interest in participating in intramurals	.68
36.	Interest in pledging a Greek organization	.57
30.	Self-assessed preparation for college	.25

37.	Interest in participating in student government	.49
39.	Interest in participating in religious groups	.33

All of the above items were consistent with the interpretation of a social and activities dimension. Perhaps the level of interest in participation in activities was dependent on the degree of preparation for college as evidenced by the loading of item 30 on Factor IX.

Male Nonpersisters

Twenty factors were extracted from the factor analysis for male nonpersisters which accounted for 61% of the total variance. The first seven factors accounted for 35% of the total variance in the responses of males who did not persist.

Factor I. Six items had loadings of .25 for higher on this factor.

Composite ACT	.99
Natural Science ACT	.92
Social Science ACT	.89
Math ACT	.85
English ACT	.64
Overall college grade average	.33

This factor clearly pointed to the dimension of the academic background of male nonpersisters. The very high loadings of the six items on this factor indicated that the academic background of the male nonpersister was an important dimension to be considered in male attrition.

Factor II. Ten items had loadings of .25 or higher on this factor.

62.	Attitude toward premarital sex	.79
56.	Attitude toward trial marriage	-.76
54.	Attitude toward pornography	.67
17.	Church attendance frequency	.63
50.	Attitude toward legalization of marijuana	-.59
65.	Attitude toward University enforcement of drug laws	.40
53.	Attitude toward equality, law, and order	.28
57.	Attitude toward discipline	.39
60.	Attitude toward freedom of speech	-.44
52.	Attitude toward the importance of organized religion	.46

The loadings on Factor II reflected the male non-persisting student's attitudes toward religion, the law, and social issues. These findings reflected an inter-relationship between religious, social, and political attitudes.

Factor III. The items below were characteristic of Factor III:

41.	Interest in getting a liberal education	.72
43.	Interest in developing a philosophy of life	.68
44.	Interest in working in a helping relationship	.60
42.	Interest in becoming a specialist in a career	.27
40.	Interest in fine arts activities	.43
48.	Interest in meeting people from from different ethnic groups	.43
45.	Interest in taking a foreign language	.35

This dimension emphasizes the nonpersisting male students' attitude toward developing a philosophy of life, attitude toward other people, and his interest in becoming a specialist in a career. These findings would suggest both a level of interest in self and in others.

Factor IV. Items that were most characteristic of Factor IV included the following:

53.	Attitude toward equality, law, and order	.71
65.	Attitude toward University enforcement of drug laws	.64
64.	Attitude toward illegal drugs being a youth program	.59
50.	Attitude toward legalization of marijuana	-.34
68.	Attitude toward high quality academic effort	.40
69.	Political view self description	-.27

The loadings on this dimension were indicative of the students' attitudes toward the law, law enforcement, and issues concerning today's youth. The loadings also reflected an interrelationship between the students' self description of their political views, their attitude toward high academic effort being required, their attitudes toward drugs, and their attitude toward enforcement of drug laws.

Factor V. Five items had loadings in .25 or more on this factor.

28.	Reason for college choice - thought I would "fit in"	.68
29.	Reason for college choice - recruiter or representative	.66
27.	Reason for college choice - parents' desire	.64

26.	Reason for college choice - athletic teams	.66
25.	Reason for college choice - thought college to be liberal	.41

The loadings on this dimension indicated external factors that influenced a student to select the University. Social and personal influences and University image. were interrelated.

Factor VI. The following four items were most characteristic of Factor VI.

12.	Mother's level of education	.83
11.	Father's level of education	.77
36.	Interest in pledging a Greek organization	-.33
9.	Population of hometown	.29

The loadings on this dimension indicated an interrelationship between parental education background and size of hometown and interest in social life on campus.

Factor VII. The items below were characteristic of Factor VII.

32.	Certainty of academic major	.77
42.	Interest in becoming a specialist in a career	.64
22.	Reason for college choice - good program in major	.67
31.	Degree expectations	-.33
30.	Self-assessed preparation of college work	.29

The loadings on this dimension reflected goal directedness and academic self evaluation. The two areas appeared to be related.

Female Persisters

Nineteen factors were isolated from the analysis which accounted for 64% of the total variance. The first ten factors accounted for 46% of the total variance.

Factor I. Eleven items had loadings of .25 or higher on this factor.

Composite ACT	.96
Natural Science ACT	.82
Social Science ACT	.81
Math ACT	.80
English ACT	.80
Overall college grade average	.70
15. Parental income level	-.30
31. Degree expectations	.27
30. Self-assessed preparation for college	-.47
67. Attitude toward law enforcement for students	-.32
68. Attitude toward high quality academic effort	-.37

Academic background, academic performance, and academic motivation were clearly reflected by the loadings on this dimension. All were consistent with the interpretation of an academic dimension.

Factor II. Items that were most characteristic of Factor II included the following:

62. Attitude toward premarital sex	.79
56. Attitude toward trial marriage	-.76
50. Attitude toward the legalization of marijuana	-.70
54. Attitude toward pornography	.67
65. Attitude toward University enforcement of drug laws	.62
64. Attitude toward drugs being a youth problem	.35

52.	Attitude toward importance of organized religion	-.27
39.	Interest in a campus religious group	.38
60.	Attitude toward freedom of speech	-.46
25.	Reason for college choice - thought college to be liberal	-.32
17.	Church attendance frequency	.48
69.	Political views self description	-.36

The interrelationship of attitudes toward religion, social issues, and value orientation were reflected by the loadings on this dimension. This dimension might be called social value orientation.

Factor III. The six items most characteristic of Factor III were:

22.	Reason for college choice - good program in major	.79
32.	Sureness of academic major	.77
42.	Interest in becoming a specialist in a career	.71
31.	Degree expectations	-.34
30.	Self-assessed preparation for college work	.30
68.	Attitude toward high quality academic effort	.27

Career orientedness and academic motivation were reflected by the loadings on this dimension. Goal directedness and self-assessed preparation for college work were also reflected by the loadings on this dimension.

Factor IV. The items below were most characteristic of Factor IV.

59.	Attitude toward having parents' kind of life	.72
63.	Student's political beliefs much like parents	.68
14.	Ease in talking with parents	

24.	Reason for college choice - financial aid received	-.30
36.	Interest in pledging a Greek organization	.31
19.	Concern for financing college education	.26
61.	Attitude toward racial prejudice	-.26

Relationship with parents indicated by the loadings on this dimension. Financial concerns, racial attitudes, and interest in campus social life were also reflected by the loadings which showed a tendency to be interrelated with parental relationships.

Factor V. Factor V had nine items with loadings of .25 or higher:

49.	Interest in living away from home	.71
46.	Interest in living in University housing	.71
20.	Reason for college choice - close tohome	-.28
66.	Need for programs on sexuality	.29
38.	Interest in particcipating in intramurals	.32
55.	Attitude toward American way of life	.31
36.	Interest in pledging a Greek organization	.36
26.	Reason for college choice - athletic teams	.28
47.	Interest in finding someone to marry	.47

Personal autonomy was reflected by the loadings within this factor. Interest in campus social life and personal understanding also contributed to this dimension.

Factor VI. This factor had its largest loading on six items:

11.	Father's level of education	.83
12.	Mother's level of education	.76
24.	Reason for college choice - financial aid given me	.31
15.	Family income level	-.29
19.	Concern for financing college education	-.45
61.	Attitude toward racial prejudice	-.26

The factor loadings on this factor reflected the influence of family educational background on the female persisting students' attitudes toward racial prejudice and their level of financial concerns. This factor suggested a socio-economic influence.

Factor VII. The five items below were characteristic of Factor VII:

44.	Interest in working in a helping relationship	.75
48.	Interest in meeting people from different ethnic groups	.62
43.	Interest in developing a philosophy of life	.48
61.	Attitude toward racial prejudice	.28
68.	Attitude toward high academic effort	.32

Interest in other people and in one's self were reflected by the loadings on this dimension. Perhaps it could be called interest in service to others.

Factor VIII. Six items had loadings of .25 or higher on this factor.

25.	Reason for college choice - thought college to be liberal	.64
45.	Interest in taking a foreign language	.58
40.	Interest in fine arts activities	.42

43.	Interest in developing a philosophy of life	.48
17.	Church attendance frequency	-.28
47.	Interest in finding someone to marry	.43

The loadings indicated a combination of liberal education and personal goals. Frequency of church attendance appeared to be interrelated with these goals.

Factor IX. Items with high loadings on Factor IX were as follows:

27.	Reason for college choice - parents' desire	.73
29.	Reason for college choice - recruiter	.60
28.	Reason for college choice - thought I would "fit in"	.50
25.	Reason for college choice - thought college to be liberal	.27
26.	Reason for college choice - athletic teams	.49

This dimension might be referred to as external influences. The factor loadings indicated that the persisting woman student was influenced by the image she perceived the University to have in addition to parental desire for her to attend.

Factor X. The five items with the highest loadings on this factor included:

54.	Attutide toward pornography	.31
65.	Attitude toward University enforcement of drug laws	.27
57.	Attitude toward discipline	.68
53.	Attitude toward equality, law and order	.62
58.	Attitude toward politicians	.54

Political views were indicated by the factor loadings

on this dimension. Acceptance of law and order and law enforcement appeared to be significant contributors.

Female Nonpersisters

Fifty-eight percent of the variance in the responses of female nonpersisters was accounted for by 18 factors which were extracted from the analysis. Factors I through IX accounted for 41% of the variance found for female nonpersisters.

Factor I. The items below were characteristic of this factor:

Composite ACT	.98
Natural Science ACT	.91
Social Science ACT	.90
Math ACT	.87
English ACT	.71
Overall college grade average	.50
Self-assessed preparation for college	-.28

This dimension suggested that academic background and college academic performance were related to female nonpersistence. It emphasized academic performance and academic background.

Factor II. Ten items had loadings of .25 or higher on this factor:

56.	Attitude toward trial marriage	-.78
62.	Attitude toward premarital sex	.75
50.	Attitude toward legalization of marijuana	-.69
54.	Attitude toward pornography	.54
17.	Church attendance frequency	.54
52.	Attitude toward importance of organized religion	-.34

53.	Attitude toward equality, law, and order	.40
55.	Attitude toward American way of life	.32
60.	Attitude toward freedom of speech	-.42
65.	Attitude toward university enforcement of drug laws	.49

Religious, social, and political attitudes tended to be interrelated as evidenced by the loadings on this dimension. All the loadings were consistent with an interpretation of a social and political value orientation which was not surprising among students. The high loading on premarital sex in opposition to the high loading on trial marriage might be an out-going activity which attracted social approval.

Factor III. On Factor III the following items yielded significant loadings:

40.	Interest in fine arts activities	.62
41.	Interest in getting a broad, liberal education	.58
43.	Interest in developing a philosophy of life	.51
37.	Interest in participating in student government	.54
44.	Interest in working in a helping relationship	.36
39.	Interest in being a member of a religious group	.34

This dimension emphasized the nonpersisting female tudents' attitude toward getting a broad, liberal education and in developing a philosophy of life. Although items 44 and 39 appeared to be inconsistent with the interpretation of the factor, it was conceivable that helping people and being a member of a religious group were personal goals

related to extended experiences which could enhance the development of a philosophy.

Factor IV. Items having the highest loadings on Factor IV included the following:

25.	Reason for college choice - thought college to be liberal	.73
28.	Reason for college choice - thought I would "fit in"	.72
29.	Reason for college choice - recruiter	.53
26.	Reason for college choice - athletic teams	.41
27.	Reason for college choice - parents' desire	.39

The loadings on this dimension indicated external influences on the students' decision to attend the University. These loadings pointed to the importance of the image of the University in the decision-making process of the student. It seemed that these items pointed to unfettered sociability.

Factor V. Factor V was characterized by three high, positive loadings and one moderate negative loading on the following items:

32.	Certainty of academic major	.74
22.	Reason for college choice - good program in major	.72
42.	Interest in becoming a specialist in a career	.61
31.	Degree expectations	-.45
30.	Self-assessed preparation for college	.28

The loadings on this factor indicated an interrelationship among degree expectations, certainty of major, self-assessed preparation for college and career orientedness. This dimension might be called career orientedness.

Factor VI. Items with the highest loadings on this factor were:

10.	Father's level of education	.77
11.	Mother's level of education	.76
9.	Population of hometown	.32
15.	Parental income level	-.25

Family socio-economic characteristics were depicted by the variable loadings on this dimension. The loadings on level of parental education seemed related to size of hometown and family income level.

Factor VII. The six items having loadings of .25 or higher on this factor were:

24.	Reason for college choice - financial aid received	.70
19.	Concern for financing college education	.64
23.	Reason for college choice - cheaper	.34
55.	Attitude toward American way of life	-.25
51.	Attitude toward wealth distribution	.27
15.	Family income level	-.43

This dimension might be called financial concerns. The loadings on this dimension clearly point to an interrelationship among family income level, American way of life, concern for finances, influence of financial aid received on college choice decision, and the distribution of wealth.

Factor VIII. The following items had loadings of .25 or higher on this factor:

59.	Attitude toward having parents' kind of life	.69
63.	Student's political beliefs much like parents	.66
14.	Ease in talking with parents	.54
69.	Political views self description	-.28

Relationship with parents indicated by the loadings on this dimension. Attitude toward having parents' kind of life and ease in talking with parents was interrelated with the political attitudes of the students.

Factor IX. The items listed below were characteristic of Factor IX.

49.	Interest in living away from home	.65
46.	Interest in living in the residence halls	.63
47.	Interest in finding someone to marry	.54
45.	Reason for college choice - thought college to be liberal	.27
48.	Interest in meeting people from different ethnic backgrounds	.26

The loadings on this dimension indicated attitudes toward personal autonomy and meeting other people. A desire for personal independence was depicted by the positive loadings on this dimension.

The results of the four separate R-technique factor analyses indicated that no one single factor could explain a large proportion of the total variance within each group. The four analyses did indicate that 58 to 64 percent of the total variance within each group could be explained by the 18 to 20 factors that were extracted. Since the original variable measures were standardized to a variance of one,

any eignevalue greater than one corresponded to a component with greater variance than the original measures. Since 18-20 factors with eigenvalues greater than one were extracted for the four group analyses, there was a contribution made to the objective of reducing the number of variables, so that any component should be kept for future measurement purposes.

The first factor extracted in each of the four separate R-technique analyses was quite similar across the four groups. Since it emerged first, this factor accounted for more variance in the four groups than any remaining individual factor in all four groups. Most of the items loading on the first factor were related to ACT scores, self-assessed degree of preparation for college, college grade-point average, degree expectations, and attitude toward academic effort. The other factors extracted for the groups contained item loadings reflecting such dimensions as: social and political attitudes, reasons for choosing the university, interest in self and others, family socio-economic background, relationship with parents, goal directedness, interest in campus life, and personal autonomy.

The Stepwise Multiple Discriminant Function Analysis

A multiple stepwise discriminant function analysis was performed for purposes of computing a set of linear classification functions. The grouping used in the analysis

with the 61 independent variables was the four groups of male and female persisters and nonpersisters. All 61 of the variables were allowed to enter the stepwise multiple discriminant function analysis. This procedure was performed by utilizing the BMDP7M program provided by the BMDP Biomedical Computer Programs P-series 1977. The aim of this analysis was to provide information about the relative importance of each variable in its ability to separate groups defined as male and female persisters and nonpersisters.

The Wilks' lambda method was used to select a stepwise procedure criterion. The maximum number of steps for the stepwise procedure was limited to 36, one more than the total number found to discriminate significantly between the group means as determined by the F-ratio. The minimum value necessary for inclusion and deletion was 1.00 with a tolerance level of .001. The proportion of prior probabilities was based on the unknown percentage of the population falling into each of the four groups used for purposes of this study. The maximum number of discriminant functions to be derived from the analysis was set at number of groups minus one. The method of using the group means for handling missing values was utilized in this analysis, since the analysis of missing data was random.

The results of the stepwise multiple discriminant function analysis are shown in Table 4. These results

TABLE 4

SUMMARY OF STEPWISE MULTIPLE DISCRIMINANT FUNCTION ANALYSIS

SUMMARY TABLE

STEP NUMBER	VARIABLE ENTERED	VARIABLE REMOVED	F VALUE TO ENTER OR REMOVE	NUMBER OF VARIABLES INCLUDED	U-STATISTIC	APPROXIMATE F-STATISTIC	DEGREES OF FREEDOM	
1	77 GPA		173.3082	1	0.8346	173.309	3.00	2624.00
2	2 MATHACT		69.9458	2	0.7728	120.255	6.00	5246.00
3	46 PORNU		43.1050	3	0.7365	94.956	9.00	6381.41
4	1 ENGACT		40.8706	4	0.7036	82.134	12.00	6934.80
5	30 INTRAM		35.2648	5	0.6763	73.410	15.00	7233.07
6	36 HELPING		29.0421	6	0.6545	66.546	18.00	7408.13
7	25 DEGREE		23.9319	7	0.6370	60.880	21.00	7518.03
8	28 GREEK		24.0342	8	0.6199	56.886	24.00	7590.70
9	3 SOCACT		17.4055	9	0.6078	52.603	27.00	7640.71
10	40 FUNTC		10.0378	10	0.6009	48.449	30.00	7676.21
11	47 AMERICA		5.7736	11	0.5969	44.672	33.00	7702.03
12	59 LAW		5.1367	12	0.5934	41.432	36.00	7721.13
13	38 RESHALL		4.9330	13	0.5901	38.675	39.00	7735.33
14	61 HAPPY		4.8954	14	0.5868	36.310	42.00	7746.24
15	4 NATSACT		4.3908	15	0.5838	34.221	45.00	7754.42
16	5 COMACT		53.0288	16	0.5503	35.961	48.00	7760.15
17	20 TEAMS		4.0947	17	0.5477	34.124	51.00	7765.25
18	21 PARENTS		5.1838	18	0.5444	32.505	54.00	7768.85
19	54 PRESEX		3.9483	19	0.5420	31.091	57.00	7771.08
20	45 ORDER		2.6557	20	0.5403	29.666	60.00	7772.73
21	22 FITIN		2.3633	21	0.5389	28.398	63.00	7773.73
22	37 LANG		2.3111	22	0.5374	27.225	66.00	7774.20
23	11 INCOME		2.2871	23	0.5360	26.153	69.00	7774.24
24	17 CHEAPER		2.1374	24	0.5347	25.162	72.00	7773.91
25	41 AWAY		1.8679	25	0.5335	24.238	75.00	7773.20
26	10 TALKING		1.8912	26	0.5324	23.386	78.00	7772.35
27	9 EQUICMIM		1.7410	27	0.5313	22.590	81.00	7771.21
28	15 FRIENDS		1.7081	28	0.5303	21.849	84.00	7769.88
29	48 TRATAL		1.6497	29	0.5293	21.158	87.00	7768.45
30	57 DRUGLAW		1.6119	30	0.5283	20.511	90.00	7766.73
31	7 TOWNPOP		1.4901	31	0.5274	19.901	93.00	7764.45
32	23 RECRUIT		1.5406	32	0.5264	19.331	96.00	7763.06
33	12 CHURCH		1.5318	33	0.5255	18.795	99.00	7761.07
34	32 FINEARTS		1.2544	34	0.5247	18.281	102.00	7759.00
35	60 EFFORT		1.2408	35	0.5240	17.795	105.00	7756.84
36	16 GOODPROG		1.2782	36	0.5232	17.338	108.00	7754.62

EIGENVALUES

0.54351 0.21233 0.02140

CUMULATIVE PROPORTION OF TOTAL DISPERSION

0.69929 0.97247 1.00000

CANONICAL CORRELATIONS

0.59340 0.41850 0.14473

U-STATISTIC OR WILKS' LAMBDA 0.5232071 DEGREES OF FREEDOM 36 3 2624
APPROXIMATE F-STATISTIC 17.338 DEGREES OF FREEDOM 108.00 7754.62

F - MATRIX DEGREES OF FREEDOM = 36 2589

(See coding scheme in Appendix B for variable label definitions)

indicated 36 variables entered the stepwise process with an F-to-Enter exceeding 1.0. The 36 variables yielded a Wilks' lambda of .523, which is approximated by a multivariate, $F(108,7754)=17.333, p<.001$. The single best-discriminating variable which entered the stepwise procedure at the first step was the overall college grade-point average.

Three discriminant functions were obtained for the four groups. The first two functions were found to account for 97.2% of the total variance as shown in Table 5. The first function accounted for the majority of the relative percentage of the variance (69.6%). The second function accounted for 27.3% of the variance. The contribution of the remaining function explained only 2.8% of the among-groups variance.

TABLE 5

DISCRIMINATING POWER OF THE DISCRIMINANT FUNCTIONS

Discriminant Function	Eigenvalue	Relative Percentage	Canonical Correlation
1	.54	69.9	.59
2	.21	27.3	.42
3	.02	2.8	.14

The standardized coefficients for the three discriminant functions are presented in Table 6. The coefficients indicated the relative importance of each of the variables in the construction of the specific discriminant function. The variables that were highest as predictors for the first function were in rank order from highest to lowest: composite ACT, overall college grade average, degree expectations, interest in intramural participation, attitude toward pornography, natural science ACT, mathematics ACT, social science ACT, interest in Greek life, and interest in helping people. Variables that had the highest coefficients for the second discriminant function were: overall college grade average, interest in Greek life, degree expectations, attitude toward law enforcement, attitude toward pornography, interest in helping people, interest in intramural participation, and the influence of the college recruiter in the students' decision to attend the University. Inspection of the standardized discriminant weights indicated that the first discriminant function was the basis for prediction of sex classification. The basis for categorization into the persister and nonpersister groups was reflected by the discriminant weights of the second function.

TABLE 6

STANDARDIZED DISCRIMINANT
FUNCTION COEFFICIENTS

Variable		Discriminant Function I	II	III
	English ACT	.04	-.08	-.03
	Mathematics ACT	.23	.01	.04
	Social Sciences ACT	.22	.02	.02
	Natural Science ACT	.25	.01	-.02
	Composite ACT	-.72	.01	.04
9.	Population of hometown	-.02	.09	.00
11.	Mothers' education	-.03	.07	.19
14.	Ease in talking with parents	.09	-.01	-.35
15.	Family income level	-.07	-.01	.23
17.	Past church attendance	.11	.04	-.16
21.	Reason for college choice-friends	-.08	-.06	.08
22.	Reason for college choice-good program in major	.02	-.02	.32
23.	Reason for college choice-cheaper	-.07	-.04	-.27
26.	Reason for college choice-athletic teams	-.15	.01	.25
27.	Reason for college choice-parents	.16	.01	-.14
28.	Reason for college choice-fit in	.07	-.06	-.31
29.	Reason for college choice-recruiter	-.04	-.15	.16
31.	Degree expectations	.46	.21	-.24
36.	Interest in Greek life	.20	-.24	.03
38.	Interest in intramurals	-.33	-.15	.16
40.	Interest in fine arts activities	.05	.03	-.22
44.	Interest in working in a helping relationship	.20	.16	-.19
45.	Interest in taking a foreign language	.10	-.02	-.08
46.	Interest in living in dorms	.08	-.01	-.05
48.	Interest in meeting different ethnic groups	.15	.09	-.15
49.	Interest in living away from home	.11	-.01	-.01
53.	Attitude toward law and order	-.09	.04	-.15
54.	Attitude toward pornography	.26	.17	.32
55.	Attitude toward American way of life	-.11	-.02	.02
57.	Attitude toward trial marriage	-.05	.06	-.19
59.	Attitude toward having parents' kind of life	-.10	-.08	-.19
62.	Attitude toward premarital sex	.03	-.02	-.37
65.	Attitude toward drug law enforcement	-.05	-.08	-.10
67.	Attitude toward law enforcement	.11	.19	.21
68.	Attitude toward academic effort being required	-.07	.02	-.22
	Overall college grade average	-.57	1.14	-.45

The discriminant function centroid data for the four groups are presented in Table 7. The results indicated that the first and largest discriminant function separated the sexes and the second function separated the persisters from the nonpersisters. This can be better visualized in Figure 1.

TABLE 7

DISCRIMINANT FUNCTION CENTROIDS FOR MALE AND FEMALE PERSISTER AND NONPERSISTER

Group	Function I	Function II	Function III
Male persisters	.54	.56	-.10
Male nonpersisters	.78	.47	.12
Female persisters	-.97	.35	.21
Female nonpersisters	-.69	-.40	-.16

The multivariate F-matrix shown in Table 8 reports tests of the differences between centroids of all combinations of paired groups in the multivariate space. The results revealed that the locations of the groups were different from one another at statistically significant levels $df(108,7754), p < .001$.

TABLE 8

MULTIVARIATE F-MATRIX FOR PAIRS OF CENTROIDS

	Male Persisters	Male Nonpersisters	Female Persisters
Male nonpersisters	11.43		
Female persisters	19.83	29.42	
Female nonpersisters	23.96	20.97	6.12

Table 9 shows the degree to which the discriminant analysis results can be used to predict the students' actual enrollment status and serves as an indication of the effectiveness of the analysis. Overall, 54.5% of the 2628 students were correctly classified in the group of their own membership. Classificatory accuracy was highest for the male persisters and lowest for the female persisters. No differences were found between the male and female nonpersister groups in the accuracy of predicting membership in these groups.

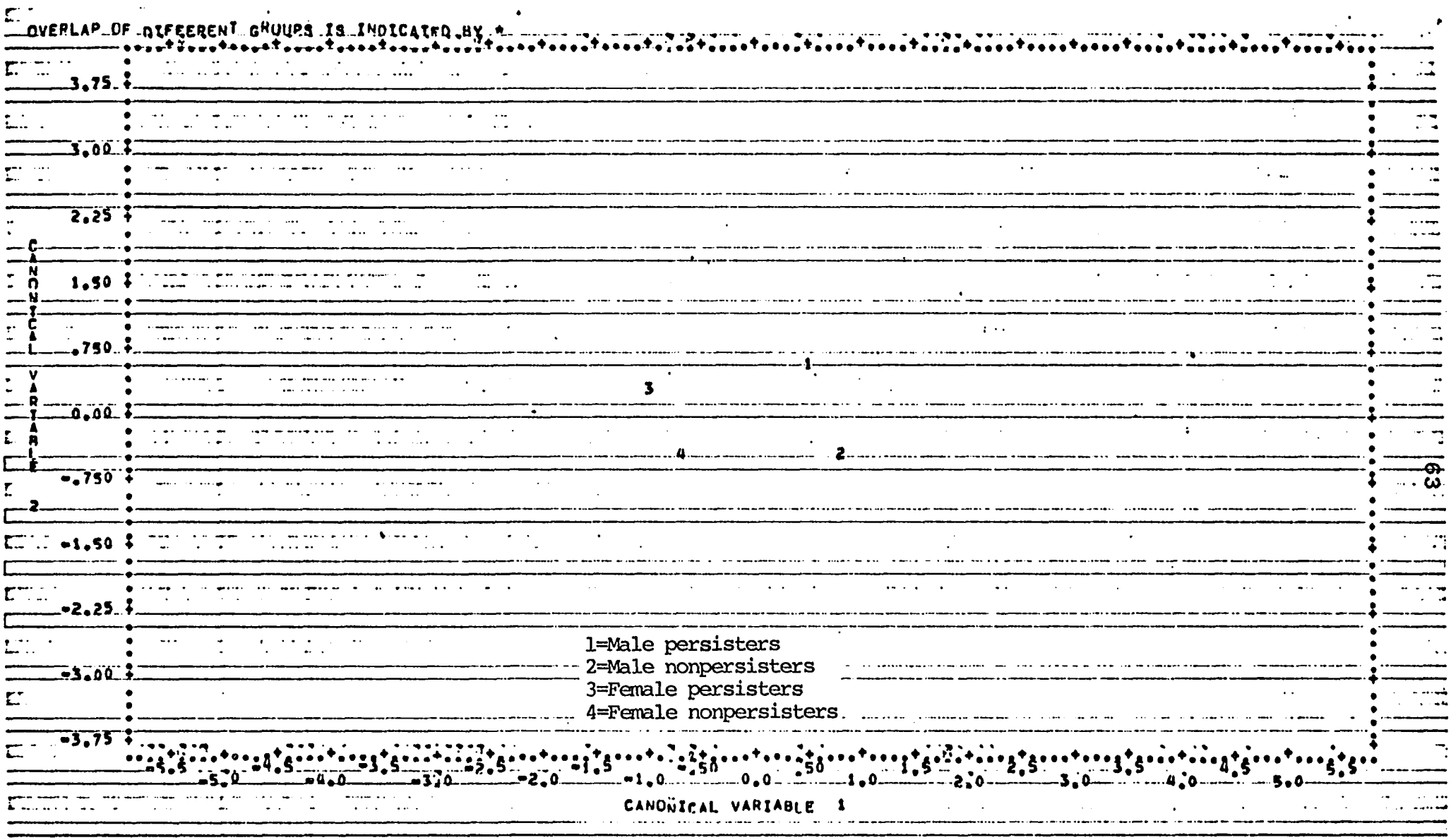

Fig. 1. Centroids of Groups in Discriminant Space.

TABLE 9

CLASSIFICATION RESULTS FOR MALE AND FEMALE PERSISTERS AND NONPERSISTERS

	Predicted Group			
Actual Group	Male Persisters	Male Nonpersisters	Female Persisters	Female Nonpersisters
Male persisters	493 (64.6%)	123 (16.1%)	42 ((5.5%)	105 (13.8%)
Male nonpersisters	183 (26.6%)	363 (52.8%)	22 ((3.2%)	119 (17.3%)
Female persisters	97 (19.6%)	18 (3.6%)	214 (43.2%)	166 (33.5%)
Female nonpersisters	102 (14.9%)	111 (16.3%)	109 (16.0%)	361 (52.9%)
	Overall Correct Classification = 54.5%			

Characteristics of Persisters and Nonpersisters

The multiple discriminant function coefficients for the male and female persister and nonpersister groups for the 36 variables are presented in Table 10. The higher the positive value of a coefficient for a particular variable, the more likely it was to be characteristic of the group associated with that coefficient. For a negative coefficient the implication was the opposite. The higher the negative value, the less likely an individual would be classified to that group. An inspection of these high positive and high negative coefficients in Table 10 and the significant mean

differences between the groups produced the following profiles or types of students within the four groupings.

Male persisters. The male persisters were highly degree-oriented, and a good program in their major entered into their decision to attend the university. Their above average mathematics, natural science and composite ACT scores contributed to being classified in this group. Even though this group appeared to be academically oriented, they were less interested in studying a foreign language than women students. Males who persisted had an overall college grade average higher than male and female nonpersisters, but not as high as female persisters. These students were from larger cities and from higher income families. The mothers of male persisters had a higher level of formal education than did students who were nonpersisters. Although, they expressed less ease in talking with their parents, they stated that they would like to have the kind of life their parents had more than the women students. Parental influence to attend the university was less for male persisters than was found for the female students. This type of student was characterized by strong interests in Greek life and intramurals, but less interest in meeting people from other ethnic backgrounds, and living in the residence halls. The importance of friends in their decision to attend the university was characteristic of these students. The male persister was more influenced by

TABLE 10

MULTIPLE DISCRIMINANT CLASSIFICATION
GROUP COEFFICIENTS

	Variable	Group			
		Male Persisters	Male Non-persisters	Female Persisters	Female Non-persisters
	English ACT	.98	1.07	.93	1.01
	Math ACT	.01	.06	-.32	-.28
	Social Science ACT	-.13	-.10	-.47	-.43
	Natural Science ACT	.41	.46	.03	.10
	Composite ACT	-.33	-.51	.77	.54
9.	Population of hometown	3.04	2.94	3.05	2.98
11.	Mothers' educational level	3.67	3.63	3.75	3.62
14.	Ease in talking with parents	3.25	3.21	3.01	3.17
15.	Family income level	2.97	3.02	3.14	3.05
17.	Past church attendance	3.56	3.51	3.34	3.40
21.	Reason for college choice-friends	2.04	2.09	2.20	2.19
22.	Reason for college choice - good program in major	2.14	2.23	2.21	2.11
23.	Reason for college choice - cheaper	4.75	4.71	4.77	4.88
26.	Reason for college choice - athletic teams	-0.01	-0.01	.29	.15
27.	Reason for college choice - parents	1.34	1.33	1.06	1.14
28.	Reason for college choice - to "fit in" campus life	-.29	-.27	-.47	-.29
29.	Reason for college choice - recruiter	5.58	5.75	5.71	5.76
31.	Degree expectations	12.10	11.94	11.29	11.34
36.	Interest in Greek life	2.26	2.55	2.00	2.22
38.	Interest in intramurals	1.32	1.43	1.90	1.86
40.	Interest in fine arts activities	2.60	2.54	2.45	2.53
44.	Interest in working in a helping relationship	.12	-.03	-.27	-.26
45.	Interest in taking a foreign language	4.66	4.69	4.48	4.56
46.	Interest in living in dorms	.81	.83	.68	.73
48.	Interest in meeting people from different ethnic groups	1.10	1.01	.82	.84
49.	Interest in living away from home	2.05	2.09	1.88	1.92
53.	Attitude toward law and order	.89	.79	.97	.96
54.	Attitude toward pornography	3.24	3.20	2.92	2.74
55.	Attitude toward American life	.63	.63	.81	.79
56.	Attitude toward trial marriage	6.46	6.34	6.45	6.46
59.	Attitude toward having parents' kind of life	.36	.37	.47	.56
62.	Attitude toward premarital sex	2.92	2.87	2.76	2.92
65.	Attitude toward enforcement of drug laws	.91	.96	.97	1.05
67.	Attitude toward law enforcement	1.58	1.46	1.44	1.25
68.	Attitude toward academic effort being required	3.61	3.52	3.64	3.68
	Overall college grade average	3.18	1.78	3.66	2.81
	Constant	-120.56	-117.89	-117.91	-117.13

the college recruiter to attend the university than other students. Students in this group had not attended church as regularly as the women students, but more frequently than male nonpersisters. Compared to other students, male persisters were more positive toward the American way of life and pornography, but were more negative in their attitude toward law enforcement. Like the male nonpersister, they expressed more favorable attitudes toward trial marriage and premarital sex than did the women students.

Male nonpersisters. The male nonpersisters were more advanced-degree oriented than female students, but were not as degree-oriented as male persisters. Their below average English ACT contributed more to being in this group than any other of their ACT scores. Of all the groups, the male nonpersisters had the lowest ACT English mean. Compared to other group members, these students were the least likely to be influenced by a good academic program in their major to attend the university, and were the least likely to take a foreign language. Making good grades was not characteristic of members of this group. Of all the groups, the male nonpersisters had the lowest overall grade point average. They were from smaller towns and from lower income families. Compared to other groups, the mothers of members of this group, had the lowest level of formal education, and the group members, on the average, were the least likely to be influenced

by their parents to attend the university. The male nonpersisters expressed more problems in communication with their parents than did other group members. The influence of the college recruiter was less for this group than for any other and the members were not as Greek-organization oriented as others. They expressed the least interest in residence hall living. This group was more positive toward trial marriage and premarital sex and had not attended church in the past as frequently as other students. Compared to other groups, the male nonpersister group had the most negative attitude toward the university enforcing drug laws.

Female persisters. Members of this group had the highest overall grade-point average and were the most positive about high academic effort being required for good grades. These students were not as advanced-degree oriented as male students. The female persisters' ACT scores in mathematics, social sciences, and natural sciences were not as high as the male persister and nonpersister students. Of all the groups, this group had the highest English ACT. Members of this group were the least likely to be influenced by a good program in their major to attend the university. The women who persisted expressed more interest in taking a foreign language than did members of other groups. The women persisters were from larger cities and from families with higher incomes. Of all the groups,

this group expressed the least problems in talking with their parents and were influenced the most by parents to attend the university. They also expressed the most interest in living away from home and in living in the residence halls. The mothers of the female persisters had more formal education than did the mothers of any other group. The members of this group were the most influenced by believing they would "fit in" campus life than were other students. This group was the most Greek-oriented organization of all the groups and expressed more interest in fine arts activities. Working in a helping relationship was more characteristic of the women who persisted than for other students. The female who persisted had attended church more frequently in the past than had other students. Compared to other students women persisters had the most negative attitudes toward pornography, trial marriage and premarital sex, and the most positive attitudes toward the university enforcing drug laws. Of all the groups, the female persister group expressed more interest in meeting people from other ethnic backgrounds. Compared to male students, the female persisters expressed more negative attitudes toward the superiority of the American way of life.

Female nonpersisters. Of all the groups, the female nonpersister group had the lowest mathematics, social science, natural science, and composite ACT scores.

The female nonpersisters were less advanced-degree oriented than were all other students. Compared to other groups, this group was the most negative about high academic effort being required for good grades. The female nonpersisters' overall college grade-point average was higher than the male nonpersisters'. The female nonpersisters were from the smallest hometown backgrounds and from the lowest family income levels compared to students in other groups. The mothers of female nonpersisters had less formal education than did the mothers of male and female persisters. Of all the groups, the female nonpersister group was the least influenced by friends to attend the university. Compared to women who persisted, the female who dropped out was less likely to be influenced in her decision to attend the university by feeling that she would "fit in" campus life and by her parents. The woman who was a nonpersister was also less likely to state that she would like the kind of life her parents have when compared to other students. Compared to the women persisters, the women nonpersister group expressed less interest in taking a foreign language, Greek life, fine arts activities, meeting people from different ethnic backgrounds, and in residence hall living. She was also less likely to state that she was interested in living away from home than the woman student who persisted. Of all the groups, the female nonpersister was the most negative toward the American way of life, but was the

most positive concerning law enforcement and law and order. Compared to the female persister, the student in this group was more positive toward premarital sex and trial marriage. They also had attended church less frequently than had the female persister, but more frequently than the male students.

Variables that tended to discriminate between the male persister and nonpersister included the following: overall college grade average, composite ACT, English ACT, hometown population, influences of good program in academic major and college recruiter in the students' decision to attend the university, degree expectations, interest in Greek life intramural participation, meeting people from other ethnic backgrounds, and attitudes toward law and order, law enforcement, and trial marriage.

Variables that discriminate between the two groups of female students were: overall college grade average, English ACT, composite ACT, hometown population, mothers' formal educational level, ease in talking with parents, family income level, influences of costs, athletic teams, parents, and fitting in campus social life in the students' decision to attend the university, interest in Greek life, and attitudes toward pornography, desire to have parents' kind of life, premarital sex, drug law enforcement, and law enforcement.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The primary purpose of this investigation was to determine if there were types of male and female freshman students who persisted or dropped out over a period of eight semesters at a large, southwest, state-supported university. The population consisted of 2,628 freshmen who initially enrolled at the university the 1975-76 fall semester.

The aim of this study was to examine the properties of academic and nonacademic data as discriminators among male and female persisters and nonpersisters. Academic data included such variables as the American College Test scores, degree expectations, attitude toward academic effort being required for good grades, degree of self-assessed academic preparation, certainty of major, and overall college grade-point average. Nonacademic data included variables related to reasons for choosing the university, family socio-economic background, interest in campus life, and attitudes toward social and political issues.

Fifty-two percent of the population had dropped out between the first semester of their freshman year and the last semester of their senior year. A higher percentage of female students (58%) were in the non-persisting population than male students (47%).

The male and female persister and nonpersister groups differed significantly in terms of mean scores on the ACT, population of hometown, educational level of parents, relationship with parents, family income level, church attendance, interest in campus life, interest in residence hall living, and social and political attitudes. The F-ratio statistics indicated the greatest differences in mean scores among the four groups were the ACT scores, mothers' educational background, past church attendance, degree expectations, interest in Greek life, intramural participation, interest in working in a helping relationship with people, interest in meeting other ethnic groups, attitudes toward pornography and premarital sex, and overall college grade-point average. These results reflected significant differences in the academic backgrounds, socio-economic backgrounds, degree of goal directedness, interest in campus life, and social and political attitudes of students who persisted and those who did not.

The R-technique factor analyses indicated that the measures used accounted for 58 to 64 percent of the total

variance within each of the four groups of male and female persisters and nonpersisters. A lower level of variance was explained by the measures for the female nonpersisters (58%). Since 18-20 factors with eigenvalues greater than one were extracted to explain this variance, these results implied that no one single factor could explain the majority of the variance within each group. In fact, the first factor extracted which explained the most variance for each of the four groups was related to academic background as measured by ACT scores, self-assessed preparation for college, degree expectations and attitude toward academic effort. The total amount of variance explained by this factor was only 8 to 9 percent depending on the group analyzed.

The R-technique factor analysis findings did accomplish the goal of grouping items that tended to measure the same thing into factors or clusters. This data-reducing quality can lead to deleting items that had originally been included in the New Freshman Survey, thereby, leaving room for the adding of new variables that could assist in explaining more of the variance within the groups. The findings from the factor analysis did demonstrate that the New Freshman Survey, the scores from the ACT, and the overall college grade-point average could explain a significant level of variance within each group to be used in determining if these variables could accurately

classify people into male and female persisting and nonpersisting groups. The high promise of these variables for discrimination as indicated by its success in this study, led to a recommendation that follow-up field trials should be conducted to determine if similar results could be achieved.

The results of the multiple discriminate function analysis indicated that it was possible to classify correctly 55% of the students into the correct category of male and female persisters or nonpersisters with the items from the New Freshman Survey, ACT scores, and college grade-point average. Two of the three disciminant functions derived from the analysis accounted for 97% of the total variance. Included in these two functions were a combination of academic and non-academic variables such as ACT scores, college academic performance, interest in campus life, degree expectations, and social political attitudes. The findings also indicated that the discriminant functions obtained did separate the four groups at a significant level. A higher degree of accuracy was obtained for predicting membership in the male persister group than for the other groups. The group having the lowest level of classificatory accuracy was the female persister group.

Conclusions and Discussion

The present study established that it was possible to use multivariate analyses in the study of attrition with

much success in terms of classifying students into male and female persister and nonpersister groups. The findings also indicated that multiple factors operated in the attrition process lending support for the use of this type of analysis as being one of the most productive approaches to research in this area. The longitudinal nature of this study could be the key factor in the success of the method of data analysis used. It seemed appropriate that the university develop its own measuring instrument for the successful study of attrition in individual setting.

The results of this study indicated that it was not only possible to discriminate among groups of male and female persisters and nonpersisters, but more importantly, that this differentiation was based on two underlying dimensions. These two dimensions encompassed both academic and nonacademic variables and reflected the importance of the students' academic background, parental socio-economic level, reasons for choosing the university, interests in campus life, goal directedness, and personal attitudes in providing a conceptual framework for a better understanding of the attrition process.

One of the important findings was the moderate overlap among the four classified groups, especially the female persister group. One possible interpretation was students who were classified in one group shared characteristics in varying degrees with other groups, e.g., women persister students (20%) who were classified as male

persisters, shared some of the characteristics of male students. A dominant type for each of the groups was evident though there was overlap among the groups.

Another explanation for the observed overlap may be related to weakness in the measuring instrument itself. Acknowledging that the selection of variables used in this study may be open to questions of validity, the overlap may be due to measurement errors, both systematic and chance.

A question arose as to the nonacademic effects of students from smaller towns when entering and continuing at a large university. These students may be accustomed to greater opportunity for participation in a smaller social system. Do these students want or need the types of social and interpersonal interactions that they had before they enrolled on campus? The findings would suggest that the change from a small town to a large campus manifests itself in higher nonpersistence for students from smaller towns.

The data related to ACT scores suggested the need to look at the basic skills issue. The students who were poorly trained in reading, writing, and mathematics were higher risk students than students who were better prepared in these areas. Have admissions policies created a need for basic skills programs for students lacking in skills necessary for them to perform well academically? Two key concerns were related to basic skills programs. First,

was there a need to identify students early in their college careers for involving them in these programs? Second, was there a need for conducting valid evaluative research on basic skills program to determine if they were really successful for the basic skills student? Many professionals in the field had defined the basic skills student as one deficient in reading, writing, and arithmetic and who was culturally, economically, socially, and educationally handicapped. This definition may be an appropriate description of the student found to be the nonpersister in this investigation.

The data revealed that women students had higher attrition rates than men students. The findings also indicated that women's dropout behavior was less accurately categorized by the variables used. The data suggested that women students apparently left the institution more for nonacademic reasons that did men students as reflected in the higher overall college-grade average of women nonpersisters than male nonpersisters. The discriminant analysis data indicated that women students who persisted were a more heterogeneous group as shown by the overlap in the women students tending to be categorized more in other groups than was evident for other students. Although the women made higher grades in college, they were less likely to believe that they were prepared to do college work.

The wide differences in male and female persisters' social and political attitudes, especially related to trial marriage and premarital sex, would suggest value conflicts that might lead to communication problems between the two groups. The research also verified that more college women tended to come from homes of higher socio-economic levels than did the college men. Both mothers and fathers of women were better educated and the family income for women was slightly higher. Upon consideration of all the research data in general, the pattern indicated differences between the sexes on the majority of variables, i.e., academic background, goal orientedness, family background, involvement in campus life, and the individual's personal and social attitudes which were more critical factors in the attrition of women than of men. Are women more external-oriented as defined by the locus of control concept? Are women who persisted more internal-oriented? Are women students more dependent, do they have stronger needs for affiliation, and do they conform more to the prevailing dominant views of male students with the end result being higher attrition rates?

In many research studies on attrition, students consistently rank finances high in their reasons for leaving an institution. However, the findings of this study indicated that financial concerns were not a contributing factor in the classification of persistence or nonpersistence

but level of family income was a discriminating variable. These results would suggest that incoming freshmen may not be fully cognizant of the financial demands that might face them during the course of their academic careers.

Additional findings indicated that living in an organized living unit was a significant factor in retention. Even though it was not a primary factor, the data revealed that residence halls could serve as a valuable socialization function that facilitated students' involvement in campus life. Interest in Greek life, which was a discriminating variable that significantly discriminated between the persister and nonpersister students, would further reinforce this conclusion. Other social factors such as interest in intramurals and influence of friends at the university to initially choose the institution were found to be discrimating variables, also. All these findings suggested institutional interventions that could facilitate the formation of positive identification groups and very likely decrease the rate of attrition.

One of the highest contributers to being classified into one of the four groupings was degree expectations, which suggested that this was a prime factor in attrition rate. The differences between male and female students' degree expectations suggested that this might be more of a problem for women students than for men. Since a high

percentage of students did enter the university expecting to get a bachelor's degree or an advanced degree, the university should assist the student in strengthening this commitment. Inherent in these findings, was the need to obtain a better understanding of what factors within the institution led to the person changing commitments to the goal of college completion. What factors led the person to perceiving that an alternative form of investment of time, energy, and resources would yield greater benefits than the original goal of a college degree? More research is warranted in this area.

Other studies have found that the dominant features of the environment were determined by the typical characteristics of the students in that environment. The typology of the various groups found in this study added more weight to the theory that the college student may seek to achieve and maintain a congruence within the institutional environment. Do the males who persisted set the tone for the environment in this particular institution? If so, what incongruence effects were created which led to the attrition of other male students and female students? The findings herein clearly point to larger significant differences between male persisters and female nonpersisters which suggested that this may be more of a problem for female than for male students.

The differences in the four groups' responses to reasons why those chose the university points to differences in the way the students perceived the institution before they arrived on campus. It was also obvious that members of the four groups had different motivations that led them to select the college they chose to attend.

The foremost implication developed in this study was the importance of academic, environmental, and personal variables, which in combination, can be used to describe students who persist or drop out. These findings indicated that multivariate analyses was a very productive tool. The significant results of this study can be very useful for other institutions, particularly large, state-supported institutions as a model for conducting a longitudinal study of retention. The results did support the general hypothesis presented that data collected for this study could be used to designate various types of male and female persisters and dropouts. The findings presented did allow for defensible conclusions to be made.

Recommendations for Further Research

The numerous empirical findings of this study suggested promising directions for future research in leading to a better understanding of the attrition process. There were many questions that the findings of this study and others have not answered.

Of all the variables used in this study, the students' degree expectation was the one which most warranted further

consideration. Under this area future study should place importance on the students' attitude toward the importance of a college education, the value to and the expectation of the student doing well academically, certainty of major and future vocational plans, and perception of locus of control as it relates to academic achievement and persistence.

The high promise of the measuring instrument used in this study to obtain the necessary data for the research, led to the recommendation that it should be revised with an aim toward standardization and to include items related to assessing students' preparedness in the skills area, personality factors, and items related to students' motivation to acquire a college education. Included in this recommendation was the need for follow-up field trials to be conducted using an instrument of this type to determine if there were significant differences among types of institutions.

Possible future research might include measures that relate to student involvement in the academic and nonacademic life of the institution, the students' reported needs for involvement, and individual differences among students. Data provided by such research could provide a framework for identifying students who may need to be more involved in campus life, whether it be academic or nonacademic.

The findings related to the four typologies of students suggested that more research was needed in this area. It was clear from the results that there were differences in

the types of students, but more definitive measures may lead to an even better understanding of the type of student who persisted in view of the one who did not.

The present study should extend beyond the four year period, because the normal progression to graduation for some students is longer than the original estimation of eight semesters. Included within this recommendation is the need to follow-up those students who did not persist in order to determine the reasons why students left the institution. This would give credence and validity to the findings herein.

Additional information should be obtained regarding the impact of the institutional academic and nonacademic environment on students. What were the obstacles in the institutional environment that led to some students persisting and others not? In addition to information gathered upon entry into the institution, it seemed important to obtain data related to student satisfaction and with campus environment with respect to the students' sense of belonging. Such research might lead to an even better understanding of the student who dropped out for nonacademic reasons.

REFERENCE NOTES

1. Carney, M. L., & Geis, L. Good readers, poor readers and college attrition. Paper presented at the meeting of the Region IV West National Association of Student Personnel Administrators, Tulsa, October, 1978.

2. Fidler, P. P., & Ponder, E., A comparative study of USC student survival rates by race, 1973-76. (Research Notes 33-77). University of South Carolina, Academic Planning Office, January, 1977.

REFERENCES

Abe, C., & Holland, J. L. A description of college freshmen I. Students with different choice of major field. American College Testing Program Research Report, 1965, p. 3.

Anderson, L. O. Small rural high schools and college completion. Journal of College Student Personnel, 1974, 15, 191-193.

Astin, A. W. Differential affects on the motivation of talented students to obtain the Ph.D. Journal of Educational Psychology, 1963, 54, 63-71.

Astin, A. W. Personal and environmental factors associated with college dropouts among high-aptitude students. Journalof Educational Psychology, 1964, 55, 219-227.

Astin, A. W. College dropout: A national profile. American Council on Education Research Reports, 1972, 7.

Astin, A. W. Student persistence: Some stay, some don't--why? College and University, 1973, 48, 298-306.

Astin, A. W. Preventing students from dropping out. San Francisco: Jossey-Bass, 1975.

Astin, A. W. Four critical years. San Francisco: Jossey-Bass Publishers, 1977.

Brown, M. B. (Ed.). 1977 edition. BMDP-77-Biomedical computer programs P-series Berkeley: University of California Press, 1977.

Chickering, A. Dimensions of independence. Journal of Experimental Education, 1964, 32, 313-316.

Chickering, A. W. Education and identity. San Francisco: Jossey-Bass, 1969.

Chickering, A. Institutional differences and student characteristics. Journal of the American College Health Association, 1966, 14, 168-181.

Chickering, A. Commuting versus resident students: Overcoming education inequities of living off-campus. San Francisco: Jossey-Bass Publishers, 1974.

Clark, B. R., & Trow, M. The organizational context. In T. M. Newcomb and E. R. Wilson (Eds.), College Peer Groups. Chicago: Aldine Publishing Company, 1966.

Cooley, W. W., & Lohnes, P. R. Multivariate data anlaysis. New York: John Wiley and Sons, 1971.

Cope, R. G., Pailthorp, K. G., Skaling, M., & Hewitt, R. G. An investigation of entrance requirements related to types of college dropouts. Washington, D.C.: Office of Education Report, 1968, BR-0-1-068, 1971. (ERIC Document Reproduction Service No. ED 052 749).

Cope, R. G. Are students more likely to drop out of large colleges? College Student Journal, 1972. 6, 92-97.

Cope, R. G. Why students stay, why they leave. In U. Delworth & G. R. Hanson (Eds.). Reducing the drop-out rate: New directions for student services. San Francisco: Jossey-Bass Publishers, 1978.

Darley, J. G., & Hagenah, T. Vocational interest measurement. Minneapolis: University of Minnesota Press, 1955.

Douvan, E. & Kaye, C. Why people go to college: Motivational factors. In N. Sanford (Ed.) College and Character, New York: Wiley, 1964.

Demitroff, J. F. Student persistence. College and University, 1974, 49, 479-486.

Demos, G. D. Analysis of college dropouts--some manifest and covert reasons. Personnel and Guidance Journal, 1968, 46, 681-684.

Eckland, B. K. A source of error in college attrition studies. Sociology of Education, 1964, 38, 60-72

Eckland, B. K. Social class and college graduation: Some misconceptions corrected. American Journal of Sociology, 1965, 70, 36-50.

Ellison, A., & Simon, B. Does college make a person healthy and wise? In L. C. Solomon and P. J. Taubman (Eds.), Does College Matter. New York: Academic Press, 1973.

Feldman, K. A., & Newcomb, T. M. The impact of college on students. San Francisco: Jossey-Bass Publishers, 1969.

Hackman, J. R., & Dysinger, W. S. Commitment to college as a factor in student attrition. Sociology of Education, 1970, 43, 311-324.

Hannah, W. Withdrawal from college. Journal of College Student Personnel, 1969, 10, 397-402.

Henrysson, S. Applicability of factor analysis in the behavioral sciences. Stockholm: Almquist and Wiksell, 1960.

Heilbrun, A. B., Personality factors in college dropouts. Journal of Applied Psychology, 1965, 49, 1-7.

Hoyt, D. P. A retrospective and prospective examination of retention-attrition research. In U. Delworth & G. R. Hanson (Eds.), Reducing the dropout rate: New directions for student services. San Francisco: Jossey-Bass Publishers, 1978.

Jex, F. B., & Merrill, R. M. A study of persistence. Personnel and Guidance Journal, 1962, 40, 762-769.

Johansson, C. B., & Rossmann, J. E. Persistence at a liberal arts college: A replicated, five-year longitudinal study, Journal of Counseling Psychology, 1973, 20, 1-9.

Kamens, D. H. The college "charter" and college size: Effects on occupational choice and college attrition. Sociology of Education, 1971, 44, 270-296.

Little, J. K. The persistence of academically talented youth in university studies. Educational Record, 1959, 40, 237-241.

Newcomb, T. M. Student peer-group influence. In N. Sanford (ed.), The American College. New York: John Wiley and Sons, Inc., 1962.

Panos, R., & Astin, A. W. Attrition among college students. American Educational Research Journal, 1968, 5, 57-72.

Pantages, T. J., & Creedon, C. F. Studies of college attrition: 1950-1975. Review of Educational Research, 1978, 48, 49-101.

Rossman, J. E., & Kirk, A. B. Factors related to persistence and withdrawal among university students. Journal of Counseling Psychology, 1970, 17, 56-62.

Rummel, J. F. An introduction to research procedures in education. New York: Harper Bros., 1958.

Sewell, W., & Shah, V. Socioeconomic status, intelligence and the attainment of higher education. Sociology of Education, 1967, 40, 1-23.

Sexton, V. S. Factors contributing to attrition in college populations: Twenty-five years of research. Journal of General Psychology, 1965, 72, 301-326.

Spady, W. Dropouts from higher education: An interdisciplinary review and synthesis. Interchange, 1970, 1, 64-85.

Spady, W. Dropouts from higher education: Toward an empirical model. Interchange, 1971, 2, 38-62.

Summerskill, J. Dropouts from college. In N. Sanford (ed.). The American College. New York: Wiley, 1962.

Tinto, V. Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 1975, 45, 89-125.

Tinto, W., & Cullen, J. Dropout in higher education: A review and theoretical synthesis of recent research. Washington, D.C.: Department of Health, Education, and Welfare, 1973. (ERIC Document Reproduction Service No. 078 802).

Wegner, E., & Sewell, W. Selection and contect as factors affecting the probability of graduation from college. American Journal of Sociology, 1970, 75, 665-679.

Wiersma, W. Research methods in education. Philadelphia: J. B. Lippincott, 1969.

APPENDIX A

New Freshman Survey

New Freshman Survey

This questionnaire is being used to collect information about the students who come to the University

It will not become a part of your record, and your responses will not be identified with you personally or released to anyone. It is necessary to have your student identification number on the form to be able to relate the information to future surveys which might again involve you.

We would like to have you respond as honestly and accurately as possible, and please do not share your responses with others who are also completing the questionnaire. We want your confidential responses, and we will treat them confidentially.

Part I: Background Information

1. Student Identification Number (Social Security Number)

_____.

2. Age _____ 3. Sex: M____F____ 4. Marital Status: S____

M____Other____

5. Veteran: Yes____No____

6. Ethnic Background: Caucausian____American Indian____

Black/Afro-American____Chicano/Mexican American____Other ____

7. Month and year of high school graduation _____
Month Year

8. My hometown is located

1. In
2. In another state
3. Not in the U.S.A.

9. The population of my hometown is

   1. Under 2500
   2. 2500-9,999
   3. 10,000-49,000
   4. 50,000-100,000
   5. Over 100,000

10. My father (indicate highest level):

   1. Did not complete high school
   2. Graduated from high school
   3. Did some college work
   4. Received a bachelor's degree
   5. Received a degree beyond the bachelor's

11. My mother (indicate highest level):

   1. Did not complete high school
   2. Graduated from high school
   3. Did some college work
   4. Received a bachelor's degree
   5. Received a degree beyond the bachelor's

12. Number of brothers or sisters:

   1. None
   2. One
   3. Two
   4. Three
   5. Four or more

13. I am

   1. An only child
   2. The oldest child
   3. The youngest child
   4. In between child

14. I have found talking with my parent(s):

   1. To be very easy
   2. To be somewhat easy
   3. To be somewhat difficult
   4. To be very difficult

15. I would guess that my parents' income

    1. Is above $30,000 per year
    2. Is between $20,00 and $30,000 per year
    3. Is between $10,000 and $20,000
    4. Is below $10,000
    5. I haven't any idea

16. My parents

    1. Have insisted that I go to college
    2. Have left the decision totally up to me
    3. Have discouraged me from entering college

17. Throughout my life

    1. I have regularly attended religious services
    2. I have occasionally attended religious services
    3. I have rarely attended religious services
    4. I have never attended religious services

18. Have you received any kind of scholarship for financial aid?

    1. Yes
    2. No

19. With regard to the financial needs for my college education:

    1. I have no real concerns
    2. I am somewhat concerned that I may not have enough money
    3. I am very worried about not having enough money

(Circle the response which best describes your reason for choosing to attend the University to indicate:

    1. Very important factor
    2. Somewhat important
    3. Minor factor
    4. No influence

		Very Important Factor	Somewhat Important Factor	Minor Factor	No Influence
20.	Close to home	1	2	3	4
21.	Friends	1	2	3	4
22.	Good program in my major	1	2	3	4

		Very Important Factor	Somewhat Important Factor	Minor Factor	No Influence
23.	Cheaper than other colleges I considered	1	2	3	4
24.	Financial Aid given me	1	2	3	4
25.	Thought . to be a liberal university	1	2	3	4
26.	Athletic teams	1	2	3	4
27.	Parents' desire	1	2	3	4
28.	Thought I would "fit in" campus life	1	2	3	4
29.	. recruiter or representative	1	2	3	4

Part II: College Expectations

30. In general I feel

    1. Very well prepared for college work
    2. Somewhat prepared for college work
    3. I have about average preparation
    4. Somewhat poorly prepared for college work
    5. Poorly prepared for college work

31. I expect

    1. To take some courses but not pursue a degree
    2. To acquire a bachelor's degree
    3. To do graduate or professional study beyond the bachelor's

32. With regard to my major

    1. I feel certain about my choice
    2. I feel fairly certain
    3. I am not sure
    4. I have no idea

33. &
34. I will probably have the greatest difficulty in (select no more than two)

1. Courses requiring a lot of writing, such as English
2. Mathematics and/or science courses
3. Courses where I must speak in class
4. Foreign language
5. Courses which require me to read a great deal

For each of the following statements circle the appropriate number to indicate:

1. Very interested
2. Somewhat interested
3. Not at all interested
4. Uncertain

		Very Interested	Somewhat Interested	Not at all interested	Uncertain
35.	Getting help in planning my college career	1	2	3	4
36.	Pledging a fraternity or sorority	1	2	3	4
37.	Participating in student government	1	2	3	4
38.	Participating in intramural sports	1	2	3	4
39.	Being a member of a campus religious group	1	2	3	4
40.	Plays, concerts, and other fine art activities	1	2	3	4
41.	Getting a broad, liberal education	1	2	3	4
42.	Becoming a specialist in a certain field or career	1	2	3	4
43.	Developing a philosophy of life	1	2	3	4
44.	Working in a helping relationship with other people	1	2	3	4
45.	Taking a foreign language	1	2	3	4
46.	Living in University housing	1	2	3	4
47.	Finding someone to marry	1	2	3	4
48.	Meeting people from different ethnic or racial backgounds	1	2	3	4
49.	Living away from home	1	2	3	4

33. &
34. I will probably have the greatest difficulty in (select no more than two)

1. Courses requiring a lot of writing, such as English
2. Mathematics and/or science courses
3. Courses where I must speak in class
4. Foreign language
5. Courses which require me to read a great deal

For each of the following statements circle the appropriate number to indicate:

1. Very interested
2. Somewhat interested
3. Not at all interested
4. Uncertain

		Very Interested	Somewhat Interested	Not at all interested	Uncertain
35.	Getting help in planning my college career	1	2	3	4
36.	Pledging a fraternity or sorority	1	2	3	4
37.	Participating in student government	1	2	3	4
38.	Participating in intramural sports	1	2	3	4
39.	Being a member of a campus religious group	1	2	3	4
40.	Plays, concerts, and other fine art activities	1	2	3	4
41.	Getting a broad, liberal education	1	2	3	4
42.	Becoming a specialist in a certain field or career	1	2	3	4
43.	Developing a philosophy of life	1	2	3	4
44.	Working in a helping relationship with other people	1	2	3	4
45.	Taking a foreign language	1	2	3	4
46.	Living in University housing	1	2	3	4
47.	Finding someone to marry	1	2	3	4
48.	Meeting people from different ethnic or racial backgounds	1	2	3	4
49.	Living away from home	1	2	3	4

Part III: Attitudes

The following statements have been taken from other surveys which have been used nationally in order for the University to make comparisons of its students with students nationwide. Please indicate how you feel about the following statements, by circling the appropriate number to indicate:

1. Strongly agree
2. Agree somewhat
3. Mixed feelings
4. Disagree somewhat
5. Strongly disagree

		Strongly Agree	Agree Somewhat	Mixed Feelings	Disagree Somewhat	Strongly Disagree
50.	Marijuana should be legalized	1	2	3	4	5
51.	Wealth is unjustly distributed in American society.	1	2	3	4	5
52.	Organized religion is losing its importance.	1	2	3	4	5
53.	There is too much concern for equality and too little for law and order.	1	2	3	4	5
54.	There should be stiffer laws against pornography.	1	2	3	4	5
55.	The American way of life is superior to that of any other country.	1	2	3	4	5
56.	Trial marriage (living together without being married) is an acceptable alternative to traditional marriage.	1	2	3	4	5
57.	There is too little discipline in the American way of life.	1	2	3	4	5
58.	In general, politicians are primarily out for themselves.	1	2	3	4	5
59.	I would be happy if I have the kind of life my parents have.	1	2	3	4	5

		Strongly Agree	Agree Somewhat	Mixed Feelings	Disagree Somewhat	Strongly Disagree
60.	Students should be allowed to hear any speaker regardless of what the speaker advocates.	1	2	3	4	5
61.	Racial prejudice is basically immoral.	1	2	3	4	5
62.	Premarital sexual relations are morally wrong.	1	2	3	4	5
63.	My political beliefs are much like my parents' political beliefs.	1	2	3	4	5
64.	The use of illegal drugs is a very big problem among people my age.	1	2	3	4	5
65.	The university should enforce laws on the use of drugs by students on campus.	1	2	3	4	5
66.	Programs on sexuality and sexual behavior should be provided for students by the university.	1	2	3	4	5
67.	Law enforcement should be the same for students as for citizens outside the university.	1	2	3	4	5
68.	High quality academic effort should be required for high grades.	1	2	3	4	5

69. I would characterize my political views as

1. Very liberal
2. Liberal
3. Middle of the road
4. Conservative
5. Very conservative

APPENDIX B

Factor Analysis Tables

Coding Scheme for Variable Names Used in Factor Analysis and Stepwise Discriminant Function Analysis Tables

Table Variable Name and no.		Corresponding Variable Name on New Student Survey No.
Engact	1	English ACT
Mathact	2	Math ACT
Socact	3	Social Science ACT
Natsact	4	Natural Science ACT
Comact	5	Composite ACT
Townpop	7	Population of home town-Item 9
Educdad	8	Father's education- Item 10
Educmom	9	Mother's education- Item 11
Talking	10	Communication with parents- Item 14
Income	11	Family income level- Item 15
Church	12	Past church attendance- Item 17
Fincon	13	Financial concerns - Item 19
Close	14	College-close to home- Item 20
Friends	15	Friends as reason- Item 21
Goodprog	16	Good program in major - Item 22
Cheaper	17	College was cheaper - Item 23
Aid	18	Financial aid received- Item 24
Lib	19	College was liberal - Item 25
Teams	20	Teams as a reason for choice - Item 26
Parents	21	Parents wishes - Item 27
Fitin	22	Would fit in - Item 28
Recruit	23	Influence of college recruiter- Item 29
Prepared	24	Degree of preparation - Item 30
Degree	25	Degree expectations - Item 31
Suremaj	26	Sureness of major- Item 32
Career	27	Help in career plans - Item 35
Greek	28	Interest in Greek life - Item 36
Stugov	29	Interest in student govt. - Item 37
Intram	30	Interest in intramurals - Item 38
Relorgan	31	Interest in religious organ. - Item 39
Finearts	32	Interest in fine arts activiti.- Item 40
Libeduc	33	Interest in liberal education - Item 41
Speacia	34	Interest in being a specialist - Item 42
Philos	35	Interest in develop. life phil.-Item 43
Helping	36	Interest in helping people - Item 44
Lang	37	Interest in taking languages - Item 45
Reshall	38	Interest in dorm living - Item 46
Marry	39	Interest in marrying - Item 47
Ehnic	40	Interest in ethnic groups- Item 48
Away	41	Interest in living away from home-Item 49
Marij	42	Legalization of marijuana - Item 50
Wealth	43	Distribution of wealth - Item 51
Imprel	44	Importance of organized religion- Item 52
Order	45	Law and order vs. equality - Item 53
Porno	46	Pornography laws - Item 54
America	47	American way of life - Item 55
Traial	48	Trial marriage - Item 56
Discip	49	Attitude toward discipline - Item 57
Polit	50	Attitude toward politicians - Item 58
Happy	51	Parents kind of life - Item 59
Speacker	52	Hear any speaker - Item 60
Bigot	53	Racial prejudice - Item 61
Presex	54	Premarital sex - Item 62
Beliefs	55	Like parents' views - Item 63
Drugs	56	Drugs are a big problem - Item 64
Druglaw	57	Drug law enforcement - Item 65
Sexprog	58	Programs on sexuality - Item 66
Law	59	Enforcement of laws - Item 67
Effort	60	Academic effort should be requir.-Item 68
Views	61	Political self-description - Item 69
GPA	62 or 77	Overall college grade average

TABLE 11

MALE PERSISTER INTERCORRELATION MATRIX OF ITEMS

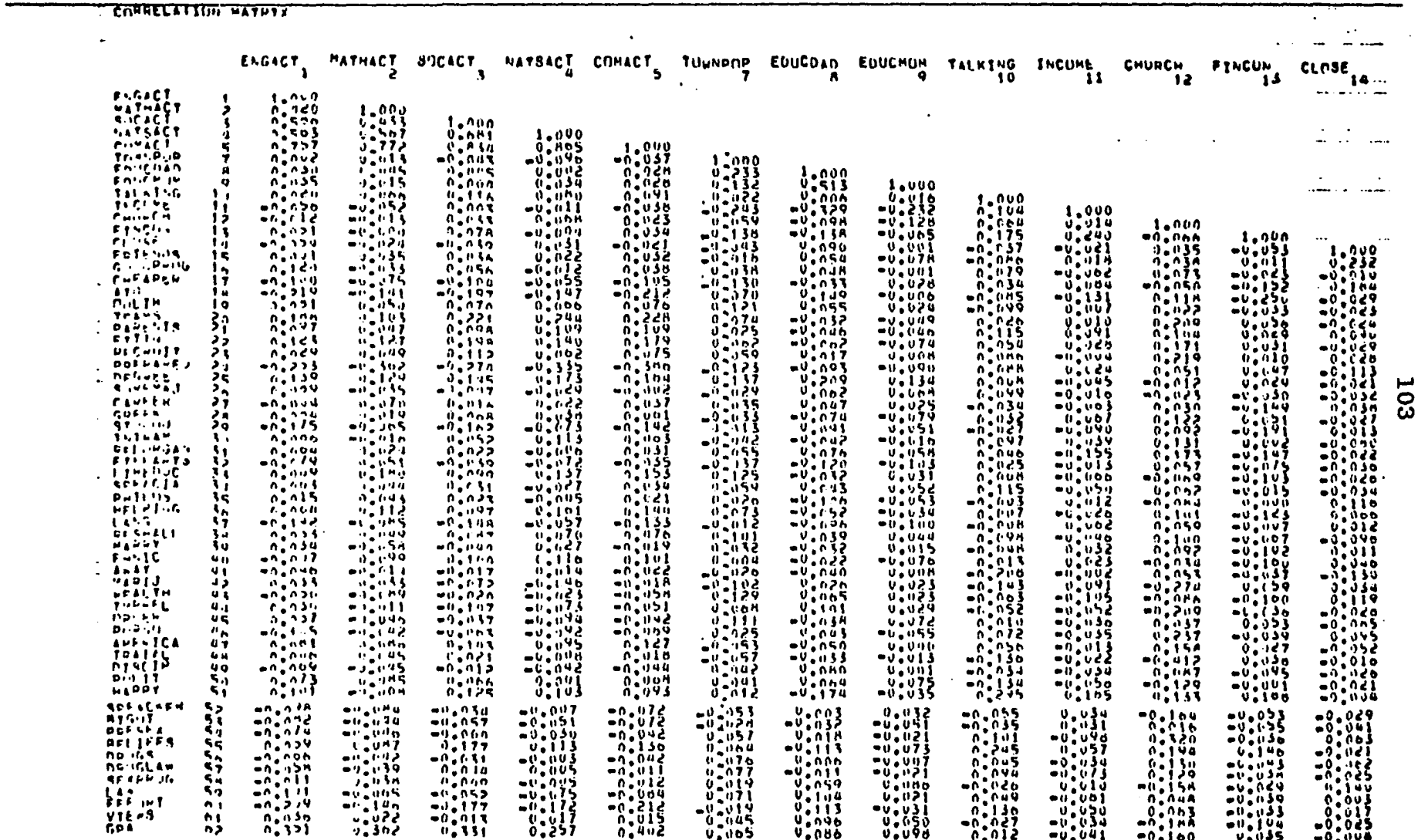

TABLE 11 - Continued

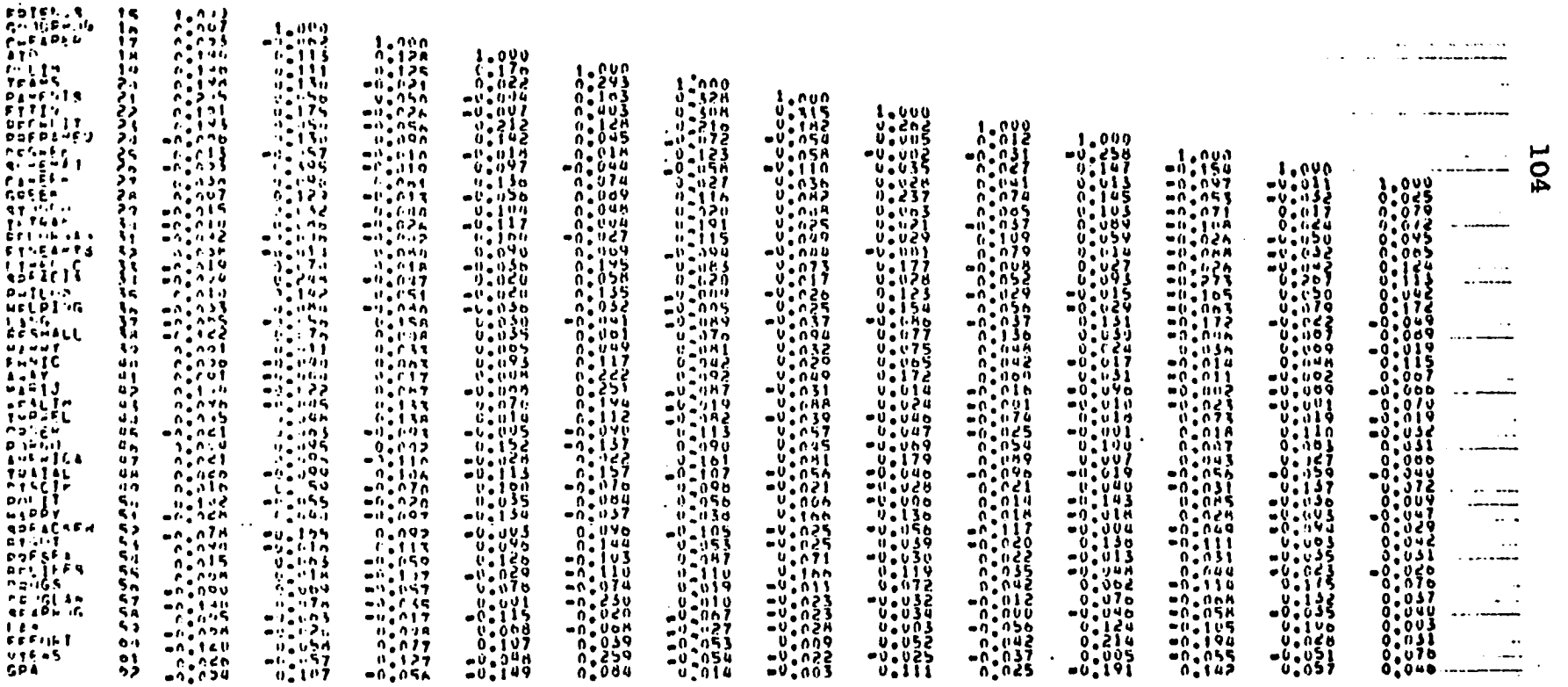

TABLE 11 - Continued

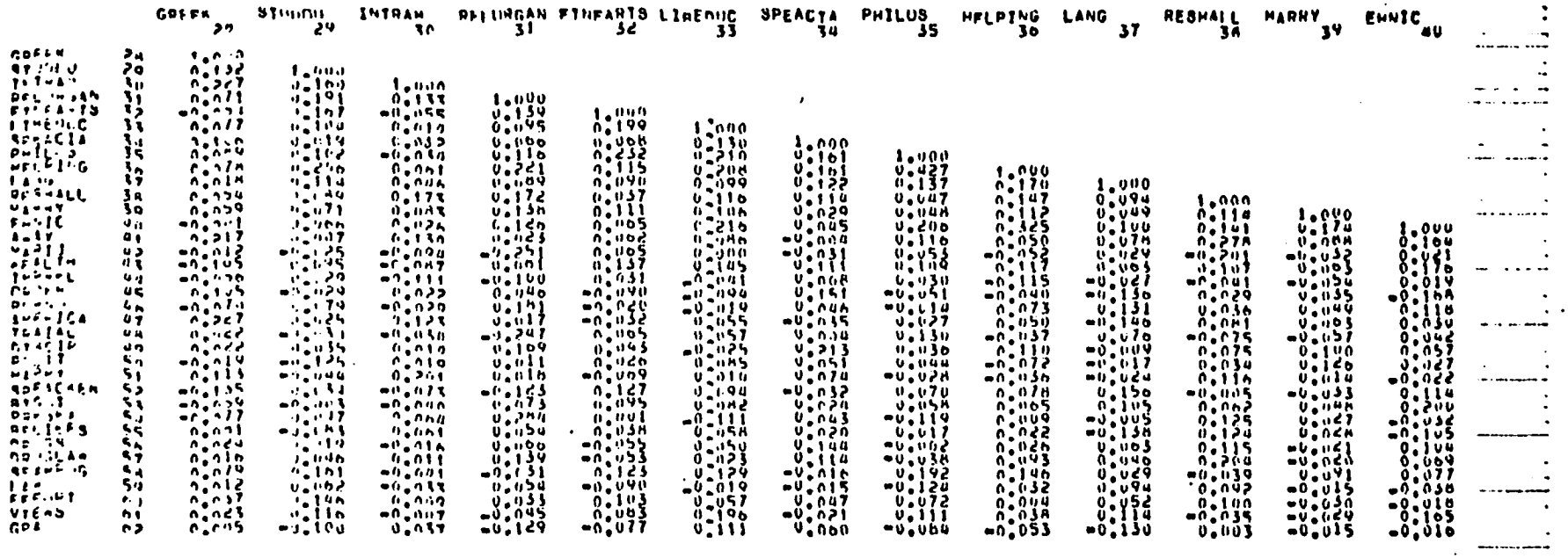

TABLE 11 - Continued

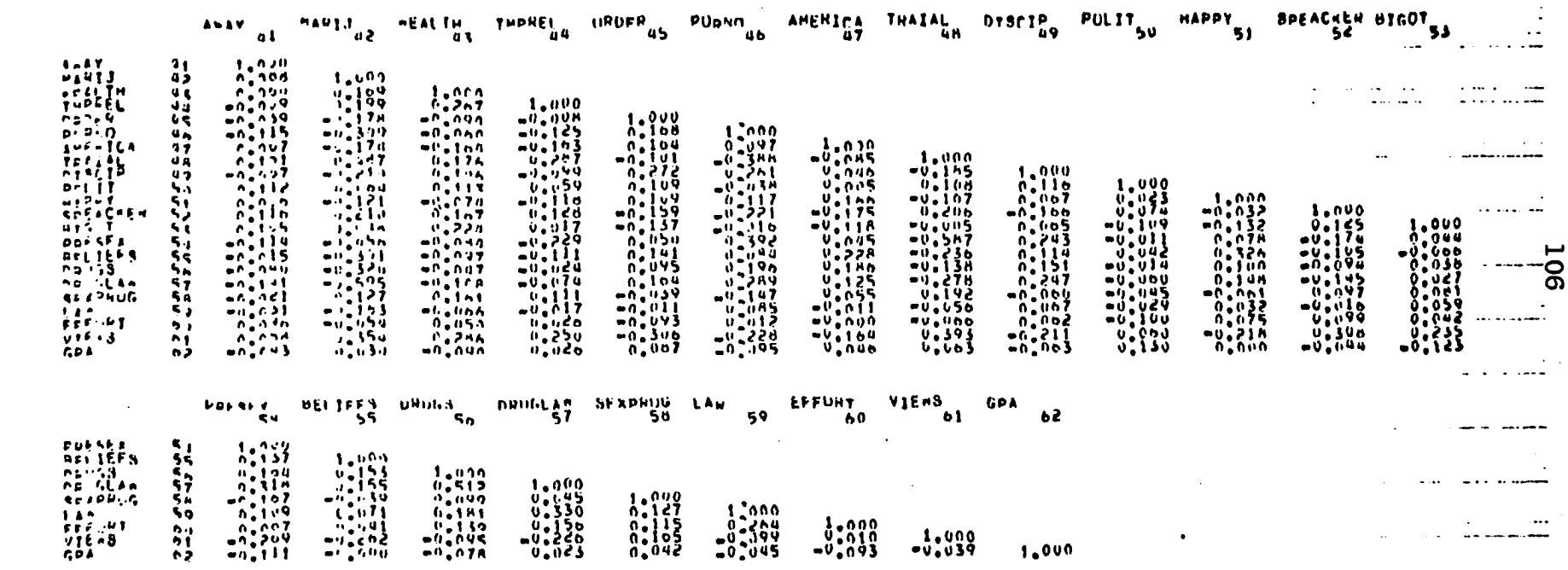

TABLE 12

MALE PERSISTER UNROTATED FACTOR LOADINGS (PATTERN)

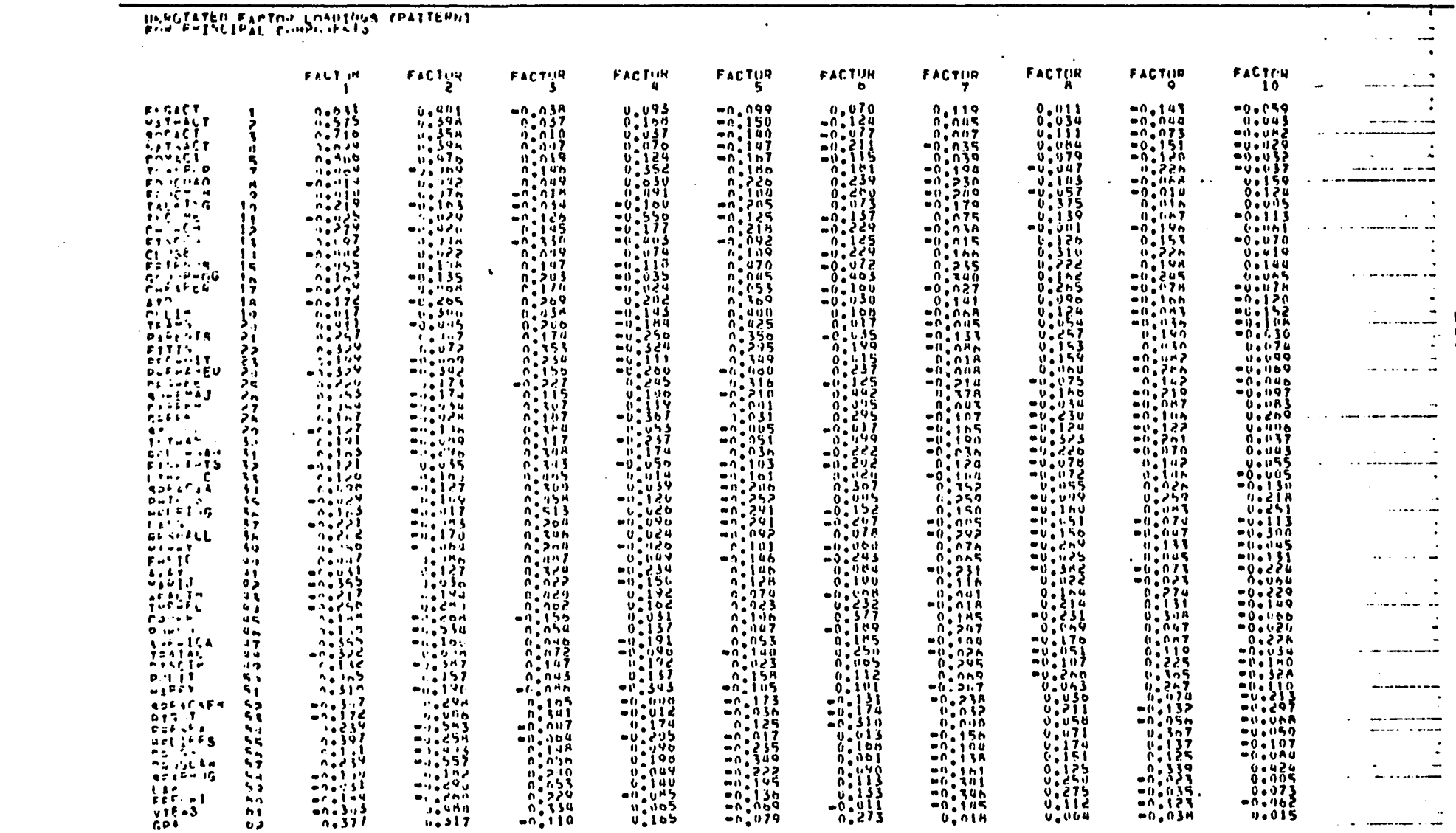

TABLE 12 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	
ENGACT	1	0.051	0.075	-0.042	-0.117	0.036	0.094	-0.057	-0.020	-0.120	
MATHACT	3	-0.068	-0.120	0.158	-0.056	0.037	0.022	-0.168	0.003	0.105	
SOCACT	4	-0.034	0.001	0.004	-0.003	0.033	0.107	0.032	0.003	-0.024	
NATSACT	5	-0.052	0.099	0.037	-0.001	0.018	0.066	0.004	0.070	0.056	
ARTACT	6	-0.037	0.007	0.073	-0.052	0.019	0.070	0.043	0.113	0.019	
TOGETHER	7	0.158	-0.208	0.348	-0.123	0.038	0.108	0.047	0.047	0.058	
FRIENDLY	8	0.103	0.123	0.111	-0.194	0.134	0.043	0.053	0.065	0.113	
FRIENDSH	9	0.219	0.150	0.231	-0.255	0.089	0.081	0.001	0.133	0.150	
TALKING	10	0.508	0.013	0.070	-0.074	0.218	0.020	0.047	0.057	0.209	
TACTFUL	11	0.033	0.106	0.034	-0.177	0.096	0.055	0.004	0.034	0.055	
CONSIDER	12	0.047	0.113	0.024	-0.065	0.096	0.053	0.076	0.131	0.148	
ATTENTN	13	0.127	0.085	0.140	-0.100	0.188	0.107	0.016	0.151	0.220	
CLINIC	14	0.120	0.351	0.052	-0.040	0.228	-0.108	0.036	0.067	0.183	
NOTEBOOK	15	0.150	0.164	0.059	-0.110	0.115	0.100	0.157	0.055	0.157	
COMPHOUS	16	0.120	0.324	0.007	-0.049	0.107	0.177	0.031	0.050	0.220	
CLEANED	17	0.024	0.406	0.013	-0.075	0.197	0.281	0.200	0.075	0.249	
AID	18	0.119	0.181	0.285	-0.118	0.082	0.019	0.048	0.126	0.049	
PULIB	19	0.030	0.105	0.070	-0.013	0.013	0.136	0.063	0.209	0.079	
TEARS	20	0.066	0.109	0.207	-0.182	0.001	0.057	0.004	0.113	0.014	
PARENTS	21	0.107	0.116	0.072	-0.130	0.053	0.195	0.018	0.041	0.018	
SITIN	22	0.116	0.177	0.134	-0.047	0.029	0.057	0.128	0.095	0.078	
RECRUIT	23	0.019	0.212	0.138	-0.147	0.136	0.236	0.167	0.390	0.247	
PREPARED	24	0.011	0.032	0.008	-0.061	0.147	0.049	0.010	0.155	0.124	
DEGREE	25	0.008	0.028	0.151	-0.201	0.355	0.102	0.147	0.008	0.052	
HIGHMAJ	26	0.000	0.000	0.026	-0.295	0.117	0.110	0.028	0.041	0.107	
CAREER	27	0.112	0.036	0.096	-0.105	0.018	0.308	0.008	0.022	0.111	
GRADUA	28	0.120	0.140	0.055	-0.154	0.009	0.063	0.093	0.052	0.072	
STUDIED	29	0.112	0.068	0.229	-0.192	0.173	0.103	0.115	0.134	0.065	
TEACHER	30	0.142	0.053	0.220	-0.184	0.036	0.056	0.208	0.027	0.017	
RELIGION	31	0.217	0.048	0.219	-0.191	0.055	0.198	0.048	0.000	0.071	
ELEMENTS	32	0.150	0.358	0.025	-0.080	0.184	0.108	0.128	0.047	0.026	
LITERATU	33	0.335	0.180	0.037	-0.112	0.200	0.004	0.060	0.332	0.026	
SCIENCE	34	0.240	0.088	0.064	-0.153	0.200	0.002	0.031	0.038	0.026	
PHILOS	35	0.122	0.117	0.000	-0.111	0.054	0.126	0.032	0.000	0.137	
HELPING	36	0.036	0.000	0.252	-0.144	0.081	0.001	0.015	0.075	0.112	
LANG	37	0.143	0.130	0.000	-0.042	0.268	0.115	0.003	0.105	0.209	
OFFHALL	38	0.072	0.000	0.000	-0.101	0.050	0.007	0.254	0.000	0.192	
HARMNY	39	0.017	0.251	0.019	-0.245	0.269	0.239	0.252	0.135	0.070	
ETHNIC	40	0.145	0.175	0.342	-0.224	0.168	0.107	0.114	0.130	0.104	
AWAY	41	0.170	0.032	0.076	-0.274	0.232	0.224	0.033	0.061	0.210	
UNIV	42	0.113	0.029	0.003	-0.074	0.048	0.000	0.051	0.023	0.000	
HEALTH	43	0.155	0.004	0.057	-0.170	0.057	0.137	0.150	0.112	0.155	
TRAVEL	44	0.049	0.000	0.003	-0.270	0.311	0.017	0.048	0.201	0.152	
ADULT	45	0.220	0.045	0.000	-0.220	0.004	0.033	0.045	0.007	0.022	
PROUD	46	0.227	0.140	0.102	-0.037	0.061	0.183	0.130	0.000	0.237	
AMERICA	47	0.222	0.047	0.077	-0.151	0.228	0.050	0.101	0.000	0.129	
TOGETHR	48	0.150	0.000	0.000	-0.102	0.010	0.030	0.002	0.204	0.074	
DISEID	49	0.120	0.093	0.077	-0.102	0.050	0.228	0.053	0.107	0.092	
PALIT	50	0.055	0.150	0.274	-0.021	0.182	0.023	0.070	0.003	0.107	
HAPPY	51	0.240	0.155	0.253	-0.040	0.004	0.087	0.008	0.131	0.000	
SPEAKER	52	0.179	0.001	0.005	0.005	0.120	-0.006	0.101	-0.035	-0.050	
RIGHT	53	0.108	0.004	0.213	-0.021	0.057	-0.313	0.316	-0.316	-0.017	
PRESEA	54	0.135	0.027	0.069	-0.017	0.103	-0.023	0.023	-0.050	-0.050	
BELIEFS	55	0.111	0.150	0.134	-0.017	0.001	-0.058	0.130	-0.021	-0.150	
PROUD	56	0.328	0.055	0.027	-0.007	0.017	-0.012	0.072	-0.103	-0.196	
ENGLAN	57	0.305	0.050	0.073	-0.097	0.035	-0.047	0.041	-0.030	-0.028	
SEXPROG	58	0.100	0.078	0.039	-0.005	0.050	-0.115	0.070	-0.005	-0.007	
LAW	59	0.279	0.107	0.024	-0.023	0.208	-0.114	0.048	-0.133	-0.160	
FREIGHT	60	0.243	0.091	0.247	-0.071	0.130	-0.044	0.078	-0.142	-0.169	
VIEWS	61	0.060	0.028	0.155	-0.159	0.091	-0.040	0.105	-0.004	-0.092	
GOA	62	-0.060	0.021	0.152	0.001	0.021	-0.210	0.187	-0.183	0.067	
	VP	8.441	4.043	3.441	2.622	2.326	2.104	1.752	1.092	1.031	1.554
		1.441	1.336	1.928	1.170	1.155	1.142	1.112	1.056	1.037	

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR LOADING MATRIX CORRESPONDING TO THAT FACTOR. THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 13

MALE PERSISTER VARIANCE EXPLAINED BY FACTORS

FACTOR	VARIANCE EXPLAINED	CUMULATIVE PROPORTION OF TOTAL VARIANCE
1	0.811151	0.297707
2	0.442044	0.459916
3	0.296018	0.568619
4	0.223375	0.650609
5	0.124419	0.696287
6	0.113983	0.738113
7	0.751081	0.765677
8	0.492643	0.783765
9	0.430376	0.799570
10	0.351027	0.812455
11	0.311229	0.823892
12	0.233653	0.832467
13	0.224438	0.840711
14	0.193779	0.847830
15	0.154098	0.853482
16	0.141845	0.858690
17	0.111584	0.863784
18	0.095704	0.868512
19	0.084432	0.872410
20	0.074488	0.875797
21	0.063567	0.878135
22	0.058159	0.880268
23	0.051453	0.882153
24	0.049092	0.883953
25	0.047836	0.885708
26	0.042045	0.887346
27	0.035671	0.888653
28	0.034141	0.889909
29	0.031411	0.891064
30	0.027368	0.892069
31	0.026048	0.893026
32	0.025028	0.893945
33	0.024033	0.894829
34	0.022520	0.895657
35	0.021485	0.896447
36	0.020145	0.897187
37	0.019292	0.897896
38	0.018946	0.898592
39	0.018311	0.899265
40	0.017013	0.899891
41	0.016346	0.900492
42	0.015716	0.901070
43	0.015112	0.901625
44	0.014771	0.902168
45	0.014150	0.902688
46	0.013156	0.903172
47	0.012779	0.903642
48	0.012520	0.904102
49	0.011984	0.904543
50	0.011584	0.904969
51	0.011292	0.905384
52	0.010946	0.905787
53	0.010311	0.906166
54	0.010163	0.906540
55	0.009546	0.906892
56	0.009210	0.907231
57	0.008990	0.907561
58	0.008771	0.907884
59	0.008614	0.908200
60	0.008156	0.908500
61	0.007945	0.908792
62	0.007513	0.909068
63	0.007384	0.909340
64	0.007187	0.909604
65	0.006951	0.909860
66	0.006851	0.910112
67	0.006792	0.910362
68	0.006546	0.910603
69	0.006311	0.910835
70	0.006163	0.911062
71	0.005946	0.911281
72	0.005811	0.911495
73	0.005738	0.911706
74	0.005546	0.911902
75	0.005418	0.912101
76	0.005290	0.912296
77	0.005112	0.912484
78	0.004908	0.912665
79	0.004761	0.912840
80	0.004650	0.913012
81	0.004578	0.913181
82	0.004450	0.913345
83	0.004272	0.913502
84	0.004156	0.913655
85	0.004033	0.913804
86	0.003978	0.913951
87	0.003850	0.914093
88	0.003672	0.914229
89	0.003556	0.914360
90	0.003433	0.914487
91	0.003378	0.914611

THE VARIANCE EXPLAINED BY EACH FACTOR IS THE EIGENVALUE FOR THAT FACTOR.

TOTAL VARIANCE IS DEFINED AS THE SUM OF THE DIAGONAL ELEMENTS OF THE CORRELATION (COVARIANCE) MATRIX.

TABLE 14

MALE PERSISTER ROTATED FACTOR LOADINGS (PATTERN)

ROTATED FACTOR LOADINGS (PATTERN)

		FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
[illegible]	1	0.781	0.024	0.085	-0.021	0.044	0.015	0.065	0.162	0.090	-0.019
[illegible]	2	0.740	0.047	0.028	0.103	0.002	0.022	-0.036	-0.090	-0.070	0.000
[illegible]	3	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	4	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	5	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	6	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	7	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	8	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	9	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	10	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	11	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	12	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	13	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	14	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	15	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	16	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	17	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	18	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	19	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	20	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	21	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	22	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	23	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	24	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	25	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	26	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	27	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	28	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	29	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	30	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	31	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	32	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	33	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	34	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	35	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	36	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	37	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	38	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	39	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	40	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	41	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	42	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	43	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	44	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	45	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	46	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	47	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	48	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	49	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	50	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	51	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	52	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	53	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	54	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	55	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	56	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	57	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	58	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	59	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	60	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	61	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	62	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	63	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	64	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	65	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	66	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	67	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	68	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	69	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	70	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	71	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	72	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	73	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	74	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	75	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	76	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	77	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	78	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	79	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	80	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	81	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	82	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	83	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	84	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	85	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	86	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	87	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	88	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	89	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	90	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	91	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	92	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	93	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	94	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	95	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	96	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	97	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	98	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	99	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	100	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	101	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	102	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	103	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	104	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	105	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	106	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	107	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	108	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	109	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	110	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	111	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	112	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	113	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	114	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	115	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	116	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	117	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	118	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	119	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	120	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	121	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	122	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	123	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	124	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	125	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	126	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	127	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	128	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	129	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	130	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	131	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	132	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	133	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	134	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	135	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	136	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	137	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	138	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	139	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	140	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	141	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	142	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	143	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	144	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	145	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	146	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	147	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	148	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	149	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	150	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	151	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	152	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	153	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	154	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	155	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]
[illegible]	156	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	0.[ill

TABLE 14 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	83	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	89	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
GPA	93	0.134	0.120	0.015	0.001	0.121	0.103	0.008	0.004	0.005	
	VP	4.316	3.024	2.343	2.262	2.188	2.076	1.900	1.881	1.808	1.042
		1.007	1.005	1.538	1.521	1.469	1.448	1.425	1.396	1.282	

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR PATTERN MATRIX CORRESPONDING TO THAT FACTOR. WHEN THE ROTATION IS ORTHOGONAL, THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 15

MALE PERSISTER SORTED ROTATED FACTOR LOADINGS (PATTERN)

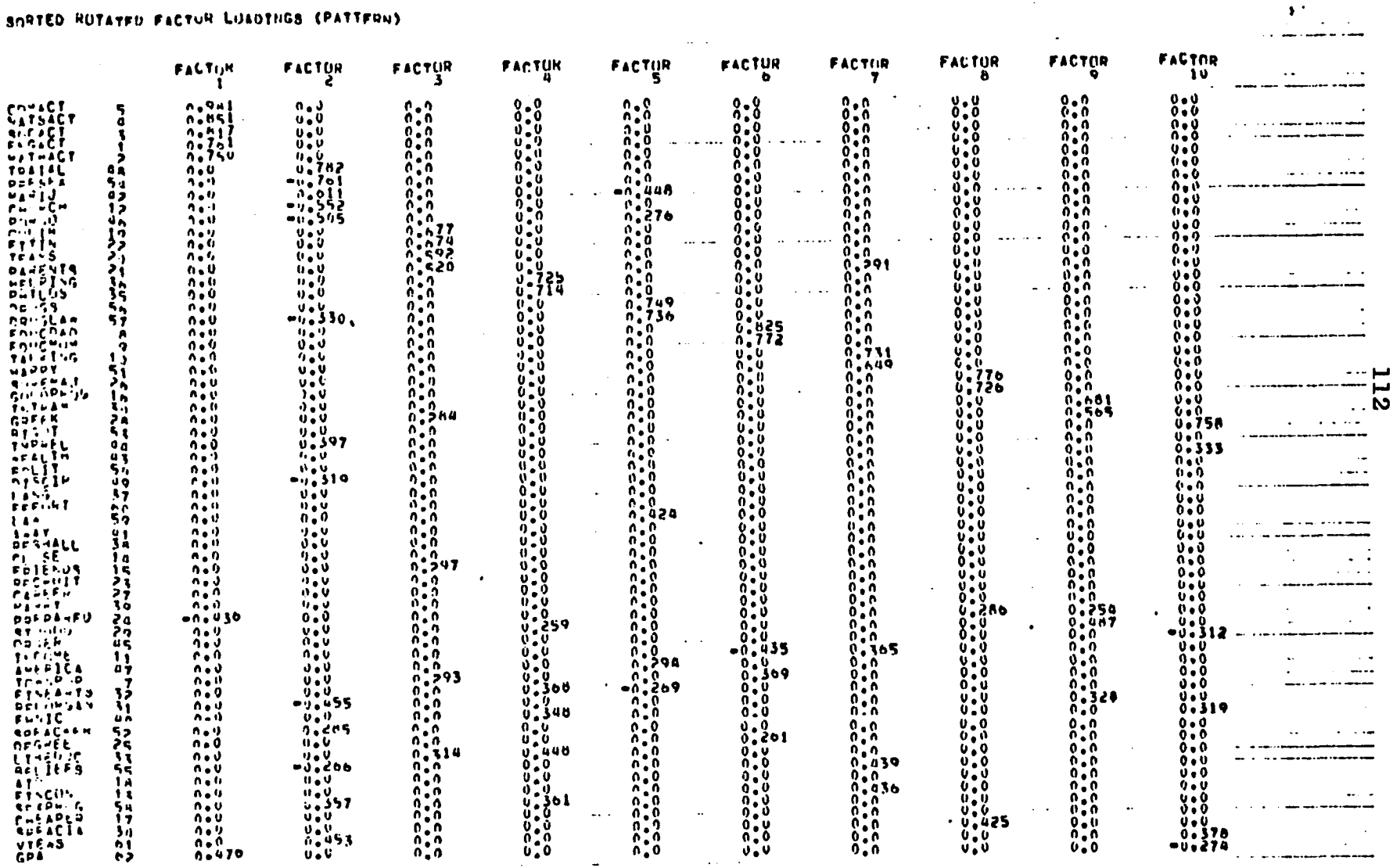

TABLE 15 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	
COMACT	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NATSACT	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SOCACT	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ENGACT	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MATHACT	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TRAIAL	48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PRESEA	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MARIJ	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CHURCH	12	0.0	0.0	0.0	0.0	0.0	0.0	0.272	0.0	0.0	
PORNO	46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OULIM	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FITIN	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TEAMS	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PARENTS	21	0.0	0.0	0.0	0.0	0.0	0.250	0.0	0.0	0.0	
HELPING	36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHILOS	35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DRUGS	56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DRUGLAW	57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EDUCDAD	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EDUCHOM	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TALKING	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HAPPY	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
[illegible]	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
GOD PROV	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTHAM	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
GREEK	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
RIGHT	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
IMPREL	44	0.618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HEALTH	43	0.609	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
POLIT	50	0.0	0.643	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DISCIP	49	0.0	0.554	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
LAWS	37	0.0	0.0	0.737	0.0	0.0	0.0	0.0	0.0	0.0	
EFFORT	60	0.0	0.0	0.0	0.665	0.0	0.0	0.0	0.0	0.0	
LAW	59	0.0	0.0	0.0	0.533	0.0	0.0	0.0	0.0	0.0	
ARMY	41	0.0	0.0	0.0	0.0	0.697	0.0	0.0	0.0	0.0	
RESHALL	38	0.0	0.0	0.0	0.0	0.601	0.0	0.0	0.0	0.0	
CLOSE	10	0.0	0.0	0.0	0.0	0.0	0.779	0.0	0.0	0.0	
FRIENDS	15	0.0	0.0	0.0	0.0	0.0	0.508	0.294	0.0	0.0	
RECHOIT	23	0.0	0.0	0.0	0.0	0.0	0.0	0.787	0.0	0.0	
CAREER	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.711	0.0	
HARRY	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.592	
PREPARED	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STRONG	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ORDER	45	0.0	0.499	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INCOME	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AMERICA	47	-0.275	0.0	-0.414	0.0	0.0	0.0	0.0	0.0	0.0	
TOMPOP	7	0.320	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FINEARTS	32	0.0	0.0	0.0	0.329	0.0	0.0	0.278	0.0	0.0	
RELIGION	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FHEIC	40	0.0	0.0	0.0	-0.243	0.0	0.0	0.0	0.0	0.341	
SPEACKER	52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEGREE	25	0.0	0.0	0.0	-0.260	0.0	0.0	0.0	0.0	0.422	
LIMEDUC	33	0.0	0.0	0.0	0.0	0.0	-0.267	0.0	0.307	0.0	
BELIEFS	55	0.0	0.0	-0.392	0.0	0.0	0.0	0.0	0.0	0.0	
ATO	18	0.0	0.0	0.0	0.0	0.0	0.0	0.452	0.287	0.0	
FINCON	13	-0.353	0.0	0.0	0.0	0.0	0.0	0.0	-0.322	0.0	
SEXPROG	54	0.0	0.0	0.0	0.275	0.0	0.0	0.0	0.0	0.0	
CHEAPER	17	0.0	0.0	0.345	0.253	0.0	0.257	0.0	0.301	0.395	
SPEACIA	34	0.0	0.401	0.0	0.0	0.0	0.0	0.0	0.0	-0.346	
VTEAS	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
GPA	62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	VP	0.302	3.028	2.293	2.262	2.188	2.076	1.900	1.881	1.698	1.642
		1.607	1.605	1.538	1.521	1.489	1.488	1.445	1.398	1.282	

THE ABOVE FACTOR LOADING MATRIX HAS BEEN REARRANGED SO THAT THE COLUMNS APPEAR IN DECREASING ORDER OF VARIANCE EXPLAINED BY FACTORS. THE ROWS HAVE BEEN REARRANGED SO THAT FOR EACH SUCCESSIVE FACTOR, LOADINGS GREATER THAN 0.5000 APPEAR FIRST. LOADINGS LESS THAN 0.2500 HAVE BEEN REPLACED BY ZERO.

TABLE 16

MALE PERSISTER INTERCORRELATION MATRIX OF ITEMS

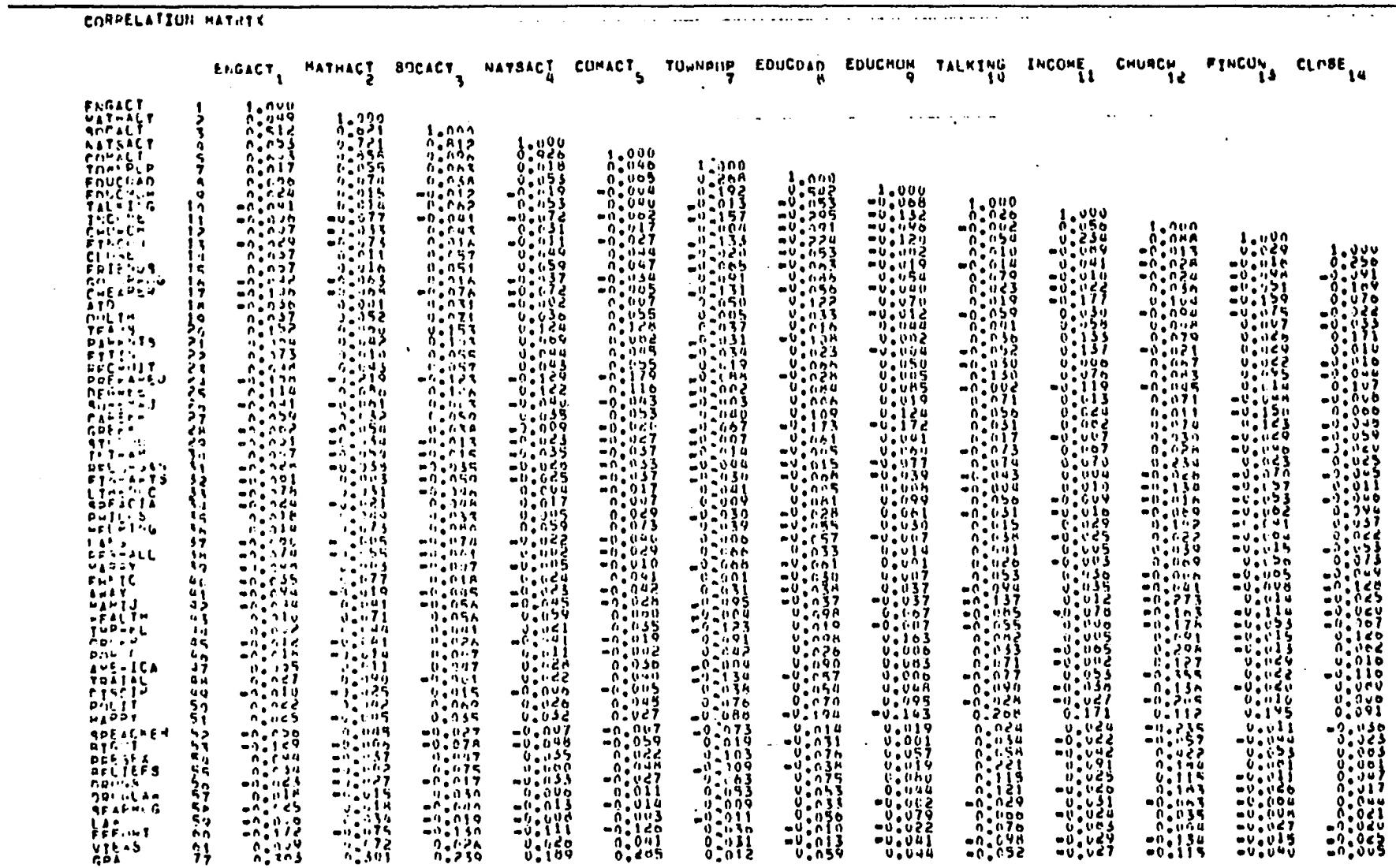

TABLE 16 - Continued

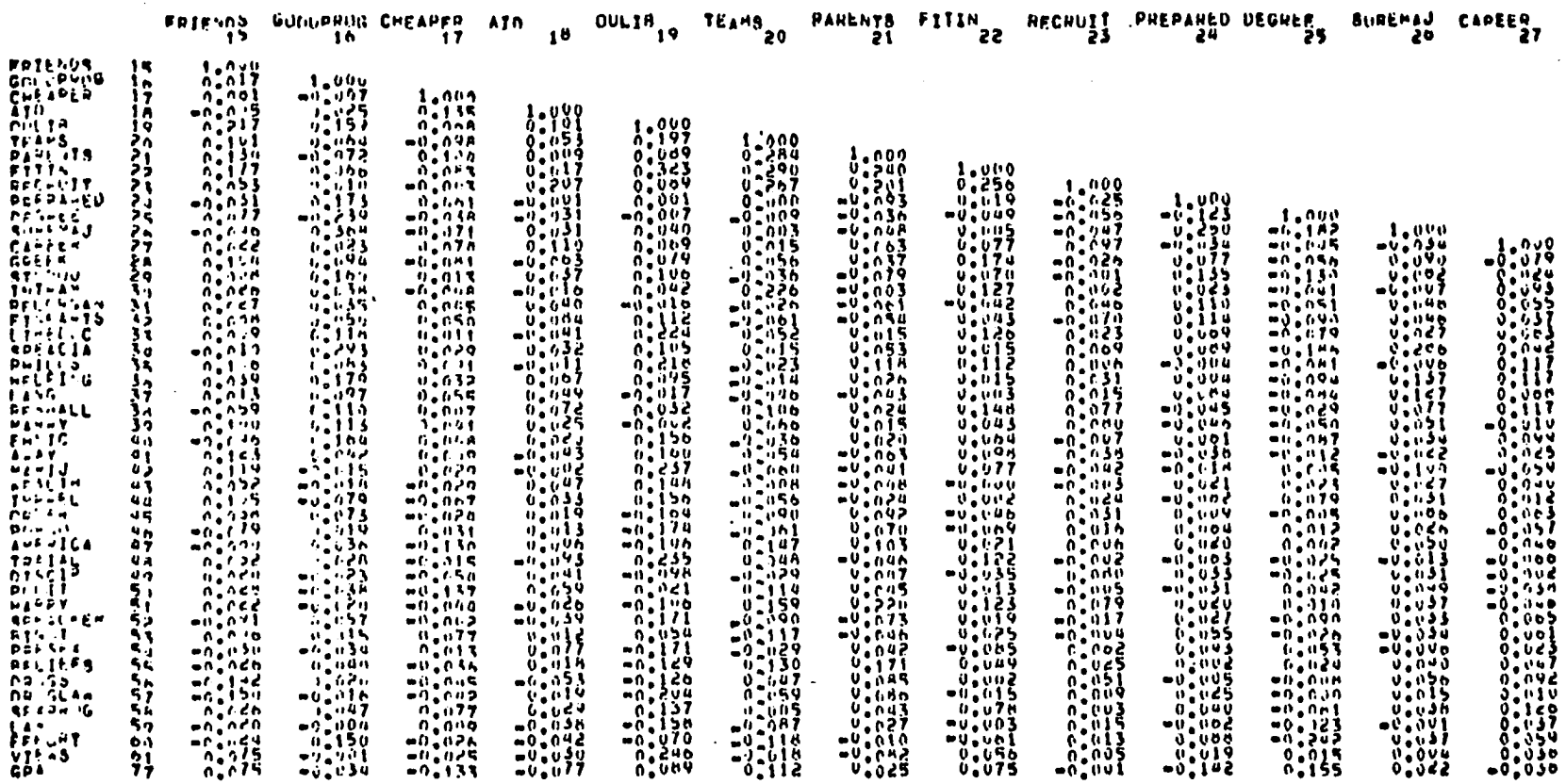

TABLE 16 - Continued

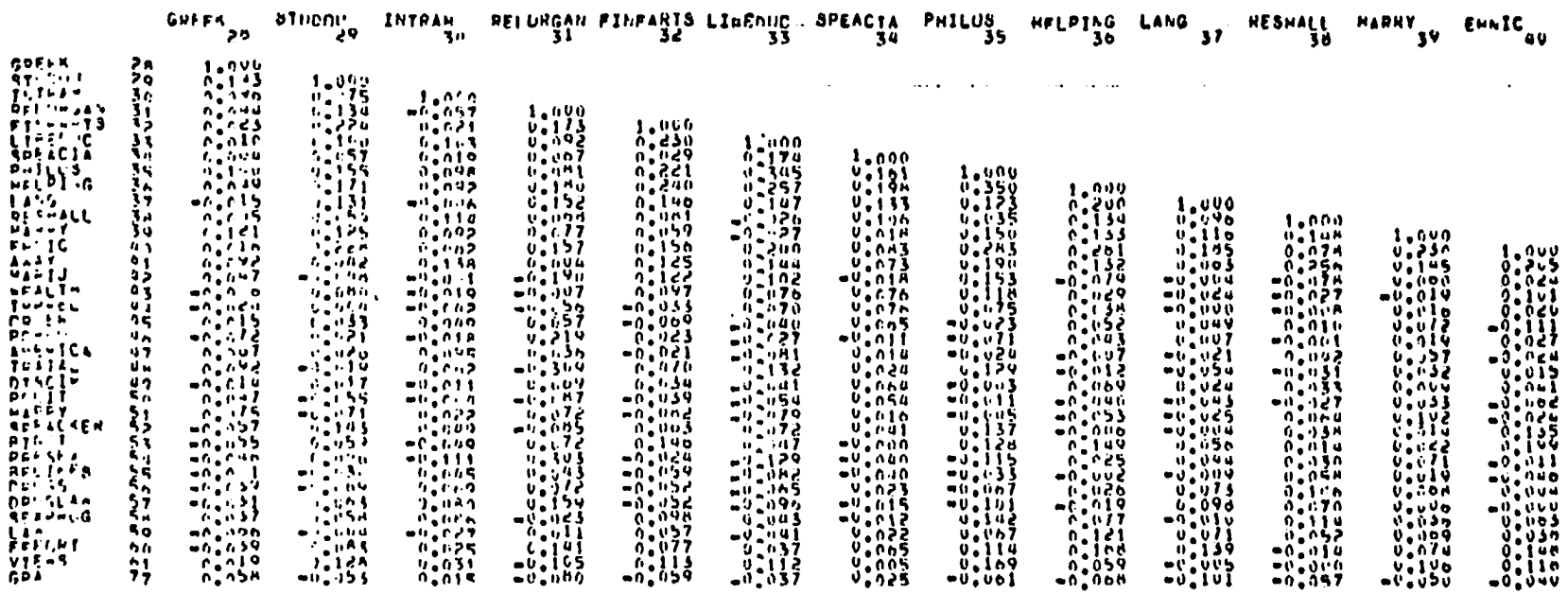

TABLE 16 - Continued

TABLE 17

MALE NONPERSISTER UNROTATED FACTOR LOADINGS (PATTERN)

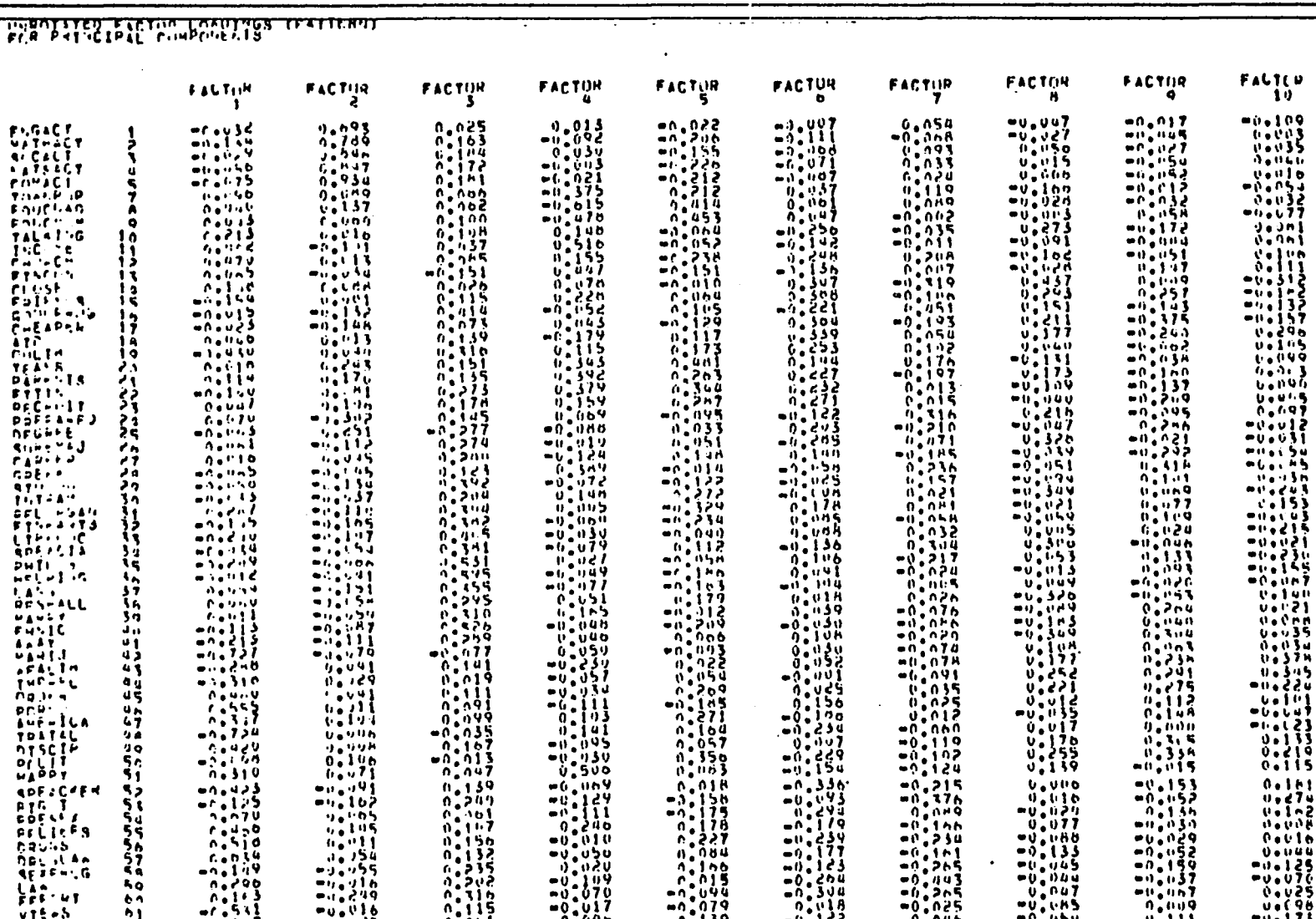

TABLE 17 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	FACTOR 20
ENGACT	1	0.000	-0.083	-0.062	-0.007	-0.190	0.100	-0.052	0.079	-0.095	0.088
MATHACT	2	-0.136	-0.103	-0.041	0.012	0.009	-0.059	-0.034	-0.025	0.066	0.005
SOCACT	3	-0.034	0.151	0.046	-0.012	-0.005	-0.058	0.110	-0.033	0.022	-0.075
NATSACT	4	-0.051	0.058	0.033	-0.013	0.018	-0.002	0.108	-0.054	0.119	-0.059
COMPACT	5	-0.136	0.126	-0.008	-0.004	-0.016	-0.055	0.073	-0.020	0.072	-0.037
TEACHING	7	-0.127	-0.004	-0.038	0.270	0.058	-0.214	0.029	0.183	-0.169	0.004
PROJECT	8	0.132	0.037	0.113	0.241	-0.119	0.050	0.079	0.018	0.041	0.026
PROJECT	9	0.027	-0.026	0.172	0.320	-0.262	0.037	0.143	-0.084	0.076	0.117
TALKING	10	-0.003	0.175	0.044	0.109	0.231	0.052	0.033	0.199	0.094	-0.169
TICRET	11	-0.010	-0.321	-0.026	0.020	-0.258	0.023	0.275	0.194	-0.093	0.083
PHJECT	12	0.040	0.111	-0.121	0.004	-0.094	-0.006	0.107	-0.075	-0.236	0.053
ETC	13	-0.103	-0.010	0.108	0.339	-0.141	-0.101	0.185	-0.091	0.047	0.249
CLOSE	14	0.050	0.205	0.017	0.090	0.017	0.026	-0.035	-0.048	-0.161	0.152
FRIENDS	15	0.071	0.009	-0.176	0.100	0.073	0.101	0.173	0.317	0.114	-0.125
GROUPING	16	-0.027	0.140	-0.130	0.160	0.117	0.112	0.042	0.001	-0.048	-0.151
CHEAPEN	17	-0.032	0.187	-0.015	-0.075	-0.046	0.144	0.138	-0.283	0.169	-0.084
ATP	18	-0.053	0.326	-0.057	-0.202	0.010	-0.260	-0.134	0.029	0.076	0.116
MOLIN	19	0.142	-0.142	0.023	-0.034	0.177	0.178	0.049	0.088	-0.085	-0.166
TEAMS	20	[illegible]	-0.081	0.001	-0.027	0.083	-0.082	-0.167	-0.014	0.080	-0.013
DEMANDS	21	[illegible]	-0.215	-0.058	0.071	0.027	-0.057	-0.152	-0.203	-0.165	-0.004
BETTER	22	[illegible]	-0.091	-0.050	0.062	0.078	0.140	0.020	0.010	0.205	-0.035
DEFMIT	23	-0.110	-0.135	-0.107	0.144	-0.126	-0.079	-0.095	0.006	0.169	0.121
DEFEND	24	0.306	0.098	0.218	0.010	-0.066	0.003	0.229	-0.055	0.177	0.040
RESHOP	25	0.042	0.140	0.368	-0.010	0.113	0.301	-0.020	0.057	-0.031	0.140
SOMEWAY	26	-0.113	0.128	-0.125	-0.123	0.013	0.202	0.015	-0.005	-0.173	0.122
CAREER	27	-0.144	0.002	0.183	-0.176	-0.262	-0.070	0.216	0.359	-0.209	-0.055
GREEN	28	0.120	0.177	-0.112	-0.057	0.091	-0.050	-0.027	0.080	0.024	-0.173
STUDY	29	0.355	0.177	0.081	0.066	-0.254	-0.059	-0.111	0.112	0.169	-0.107
TOTMAN	30	0.070	0.005	0.103	-0.240	-0.204	-0.123	0.030	-0.162	-0.025	-0.260
DELIVERY	31	0.112	-0.007	0.114	-0.032	-0.083	0.100	-0.044	0.250	-0.078	0.240
FIXFACTS	32	0.220	0.006	0.036	-0.214	0.110	-0.154	0.023	0.035	0.277	0.327
LITERIC	33	[illegible]	-0.429	0.317	-0.047	0.147	-0.008	-0.127	-0.075	0.098	0.064
SOCIALIA	34	-0.005	-0.153	-0.059	-0.026	-0.037	0.190	0.001	-0.212	-0.064	0.134
PHILOS	35	-0.114	-0.134	0.119	0.080	-0.029	-0.113	-0.060	-0.161	-0.109	0.010
HELPING	36	-0.175	-0.048	-0.028	-0.026	0.001	-0.119	-0.013	-0.010	-0.151	0.142
LANG	37	-0.237	0.057	0.056	-0.086	-0.057	0.065	-0.310	0.230	0.278	0.183
BESMALL	38	-0.303	0.310	0.017	-0.171	0.147	0.228	0.175	-0.042	-0.018	0.191
HAPPY	39	-0.206	0.404	-0.143	0.244	-0.198	0.033	-0.253	-0.073	-0.030	-0.071
FAMIL	40	-0.010	0.066	0.143	0.157	0.003	0.049	-0.140	-0.078	-0.147	-0.160
AWAY	41	-0.312	0.039	-0.009	-0.019	0.168	0.117	0.344	-0.098	0.115	-0.045
HEMJ	42	0.020	0.087	-0.054	0.108	-0.059	-0.098	0.026	-0.036	0.036	0.009
HEALTH	43	0.142	-0.120	-0.017	-0.191	-0.039	0.084	-0.040	-0.125	-0.120	-0.165
TURMOIL	44	-0.260	-0.125	0.077	-0.215	-0.230	0.124	-0.030	0.120	-0.169	-0.179
CONJEN	45	-0.115	-0.108	-0.010	-0.023	-0.180	-0.097	0.129	0.102	0.107	-0.053
[illegible]	46	0.185	-0.104	-0.037	0.020	0.059	0.048	0.020	-0.324	-0.061	-0.022
AMERICA	47	0.151	0.141	0.176	-0.037	-0.119	-0.230	-0.028	-0.117	-0.110	0.156
TOTAL	48	-0.137	0.038	0.009	0.000	-0.036	-0.063	-0.041	-0.090	0.104	0.057
DISCIP	49	0.014	-0.086	-0.125	-0.071	0.115	-0.125	0.256	-0.098	0.143	-0.077
POLIT	50	0.040	0.153	-0.089	-0.130	0.099	-0.235	-0.036	0.019	-0.024	0.182
HAPPY	51	-0.060	0.306	0.208	0.131	0.113	0.092	-0.135	-0.019	-0.059	0.060
SOFICAEN	52	0.110	0.086	0.083	0.053	-0.162	0.112	0.053	-0.097	-0.064	-0.004
ATS I	53	0.159	0.022	0.015	0.109	0.211	0.050	0.151	-0.094	-0.041	0.013
CUFSFE	54	0.047	-0.020	-0.019	0.103	-0.053	0.078	0.026	0.022	-0.092	0.015
RELIEFA	55	-0.011	0.073	0.186	-0.014	0.049	-0.119	0.097	0.039	-0.030	-0.036
CAJKS	56	-0.110	-0.034	0.020	-0.149	0.017	0.195	-0.067	-0.004	-0.014	-0.006
AMULAN	57	0.144	-0.027	-0.019	-0.100	0.006	0.105	-0.247	0.012	0.002	-0.162
RESPEO	58	0.271	0.221	-0.198	-0.204	0.043	-0.059	0.216	0.054	-0.163	0.194
ISA	59	0.027	-0.050	-0.310	0.088	-0.025	0.200	-0.027	-0.002	0.200	0.060
FEEDINT	60	0.011	-0.158	-0.289	0.188	0.002	-0.174	0.032	0.209	0.028	-0.147
VIEWS	61	0.132	0.146	0.010	0.102	0.023	-0.018	-0.116	0.107	-0.245	-0.006
GPA	77	0.251	-0.039	-0.147	-0.025	0.017	0.338	-0.121	0.080	-0.096	0.237
	VP	5.015	4.250	3.390	2.501	2.252	1.976	1.877	1.566	1.510	1.381
		1.324	1.315	1.195	1.140	1.121	1.117	1.075	1.046	1.012	1.000

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR LOADING MATRIX CORRESPONDING TO THAT FACTOR. THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 18

MALE NONPERSISTER VARIANCE EXPLAINED BY FACTORS

FACTOR	VARIANCE EXPLAINED	CUMULATIVE PROPORTION OF TOTAL VARIANCE
1	6.006359	0.086485
2	4.254171	0.151734
3	3.409949	0.247207
4	2.581192	0.300244
5	2.251788	0.332404
6	1.975006	0.360819
7	1.877181	0.387841
8	1.697041	0.412275
9	1.605014	0.435411
10	1.511268	0.457148
11	1.426279	0.477681
12	1.317994	0.496657
13	1.270789	0.514945
14	1.263459	0.533129
15	1.212169	0.550599
16	1.114782	0.566608
17	1.071026	0.582035
18	1.046794	0.597125
19	1.012569	0.611691
20	1.000000	0.626091
21	0.980000	0.640185
22	0.967310	0.654127
23	0.951356	0.667850
24	0.939966	0.681377
25	0.931107	0.694827
26	0.911651	0.708078
27	0.891356	0.721210
28	0.879966	0.734111
29	0.868854	0.746753
30	0.863504	0.759190
31	0.852044	0.771419
32	0.845 [illegible]	0.783719
33	0.837 [illegible]	0.796037
34	0.827 [illegible]	0.808178
35	0.826337	0.820302
36	0.816 [illegible]	0.832381
37	0.803 [illegible]	0.844308
38	0.797 [illegible]	0.856135
39	0.792379	0.868005
40	0.772751	0.879741
41	0.767419	0.891373
42	0.758312	0.902950
43	0.745904	0.914360
44	0.735 [illegible]	0.925511
45	0.721371	0.936511
46	0.711 [illegible]	0.947279
47	0.695111	0.957883
48	0.685 [illegible]	0.968205
49	0.673217	0.978291
50	0.658 [illegible]	0.988165
51	0.643 [illegible]	0.997845
52	0.626561	1.007242
53	0.607 [illegible]	1.016332
54	0.591 [illegible]	1.025211
55	0.572 [illegible]	1.033845
56	0.547 [illegible]	1.042158
57	0.531 [illegible]	1.050312
58	0.514 [illegible]	1.058212
59	0.485 [illegible]	1.065912
60	0.469 [illegible]	1.073412
61	0.453 [illegible]	1.080712
62	0.433 [illegible]	1.087812
63	0.414 [illegible]	1.094712
64	0.393 [illegible]	1.101412
65	0.375 [illegible]	1.107912
66	0.353 [illegible]	1.114212
67	0.331 [illegible]	1.120312
68	0.312 [illegible]	1.126212
69	0.294 [illegible]	1.131912
70	0.274 [illegible]	1.137412
71	0.253 [illegible]	1.142712
72	0.233 [illegible]	1.147812
73	0.213 [illegible]	1.152712
74	0.193 [illegible]	1.157412
75	0.173 [illegible]	1.161912
76	0.153 [illegible]	1.166212
77	0.133 [illegible]	1.170312
78	0.113 [illegible]	1.174212
79	0.093 [illegible]	1.177912
80	0.073 [illegible]	1.181412
81	0.053 [illegible]	1.184712
82	0.033 [illegible]	1.187812
83	0.013 [illegible]	1.190712
84	0.000000	1.193412
85	0.000000	1.195912
86	0.000000	1.198212
87	0.000000	1.200312
88	0.000000	1.202212
89	0.000000	1.203912
90	0.000000	1.205412
91	0.000000	1.206712
92	0.000000	1.207812
93	0.000000	1.208712
94	0.000000	1.209412
95	0.000000	1.209912
96	0.000000	1.210212
97	0.000000	1.210312
98	0.000000	1.210212
99	0.000000	1.209912
100	0.000000	1.209412
101	0.000000	1.208712
102	0.000000	1.207812
103	0.000000	1.206712
104	0.000000	1.205412
105	0.000000	1.203912
106	0.000000	1.202212
107	0.000000	1.200312
108	0.000000	1.198212
109	0.000000	1.195912
110	0.000000	1.193412
111	0.000000	1.190712
112	0.000000	1.187812
113	0.000000	1.184712
114	0.000000	1.181412
115	0.000000	1.177912
116	0.000000	1.174212
117	0.000000	1.170312
118	0.000000	1.166212
119	0.000000	1.161912
120	0.000000	1.157412
121	0.000000	1.152712
122	0.000000	1.147812
123	0.000000	1.142712
124	0.000000	1.137412
125	0.000000	1.131912
126	0.000000	1.126212
127	0.000000	1.120312
128	0.000000	1.114212
129	0.000000	1.107912
130	0.000000	1.101412
131	0.000000	1.094712
132	0.000000	1.087812
133	0.000000	1.080712
134	0.000000	1.073412
135	0.000000	1.065912
136	0.000000	1.058212
137	0.000000	1.050312
138	0.000000	1.042158
139	0.000000	1.033845
140	0.000000	1.025211
141	0.000000	1.016332
142	0.000000	1.007242
143	0.000000	0.997845
144	0.000000	0.988165
145	0.000000	0.978291
146	0.000000	0.968205
147	0.000000	0.957883
148	0.000000	0.947279
149	0.000000	0.936511
150	0.000000	0.925511
151	0.000000	0.914360
152	0.000000	0.902950
153	0.000000	0.891373
154	0.000000	0.879741
155	0.000000	0.868005
156	0.000000	0.856135
157	0.000000	0.844308
158	0.000000	0.832381
159	0.000000	0.820302
160	0.000000	0.808178
161	0.000000	0.796037
162	0.000000	0.783719
163	0.000000	0.771419
164	0.000000	0.759190
165	0.000000	0.746753
166	0.000000	0.734111
167	0.000000	0.721210
168	0.000000	0.708078
169	0.000000	0.694827
170	0.000000	0.681377
171	0.000000	0.667850
172	0.000000	0.654127
173	0.000000	0.640185
174	0.000000	0.626091
175	0.000000	0.611691
176	0.000000	0.597125
177	0.000000	0.582035
178	0.000000	0.566608
179	0.000000	0.550599
180	0.000000	0.533129
181	0.000000	0.514945
182	0.000000	0.496657
183	0.000000	0.477681
184	0.000000	0.457148
185	0.000000	0.435411
186	0.000000	0.412275
187	0.000000	0.387841
188	0.000000	0.360819
189	0.000000	0.332404
190	0.000000	0.300244
191	0.000000	0.247207
192	0.000000	0.151734
193	0.000000	0.086485

THE VARIANCE EXPLAINED BY EACH FACTOR IS THE EIGENVALUE FOR THAT FACTOR.

TOTAL VARIANCE IS DEFINED AS THE SUM OF THE DIAGONAL ELEMENTS OF THE CORRELATION (COVARIANCE) MATRIX.

TABLE 19

MALE NONPERSISTER ROTATED FACTOR LOADINGS (PATTERN)

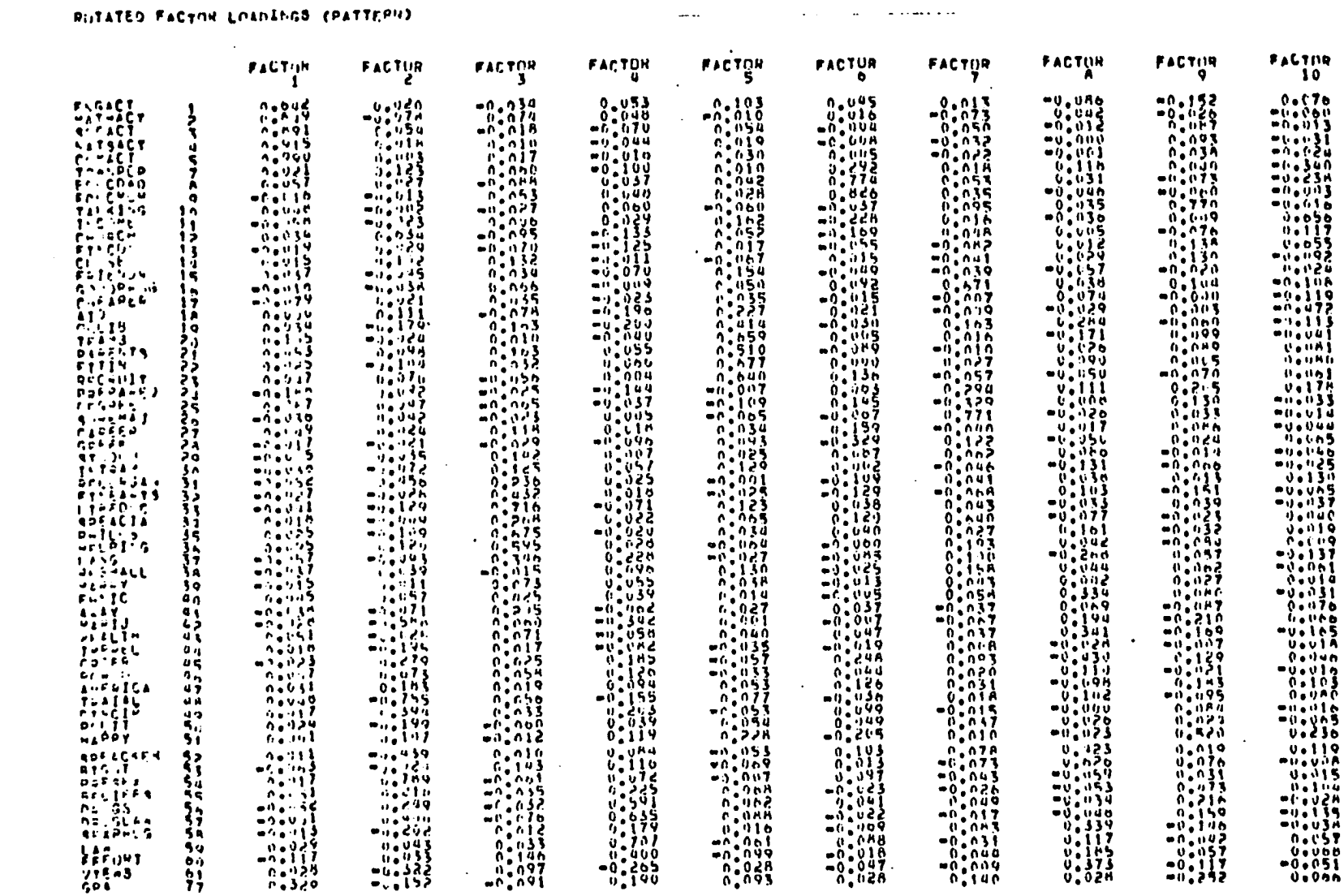

TABLE 19 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	FACTOR 20
[illegible]		[illegible]	[illegible]	[illegible]	0.039	[illegible]	[illegible]	0.238	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 20

MALE NONPERSISTER SORTED ROTATED FACTOR LOADINGS (PATTERN)

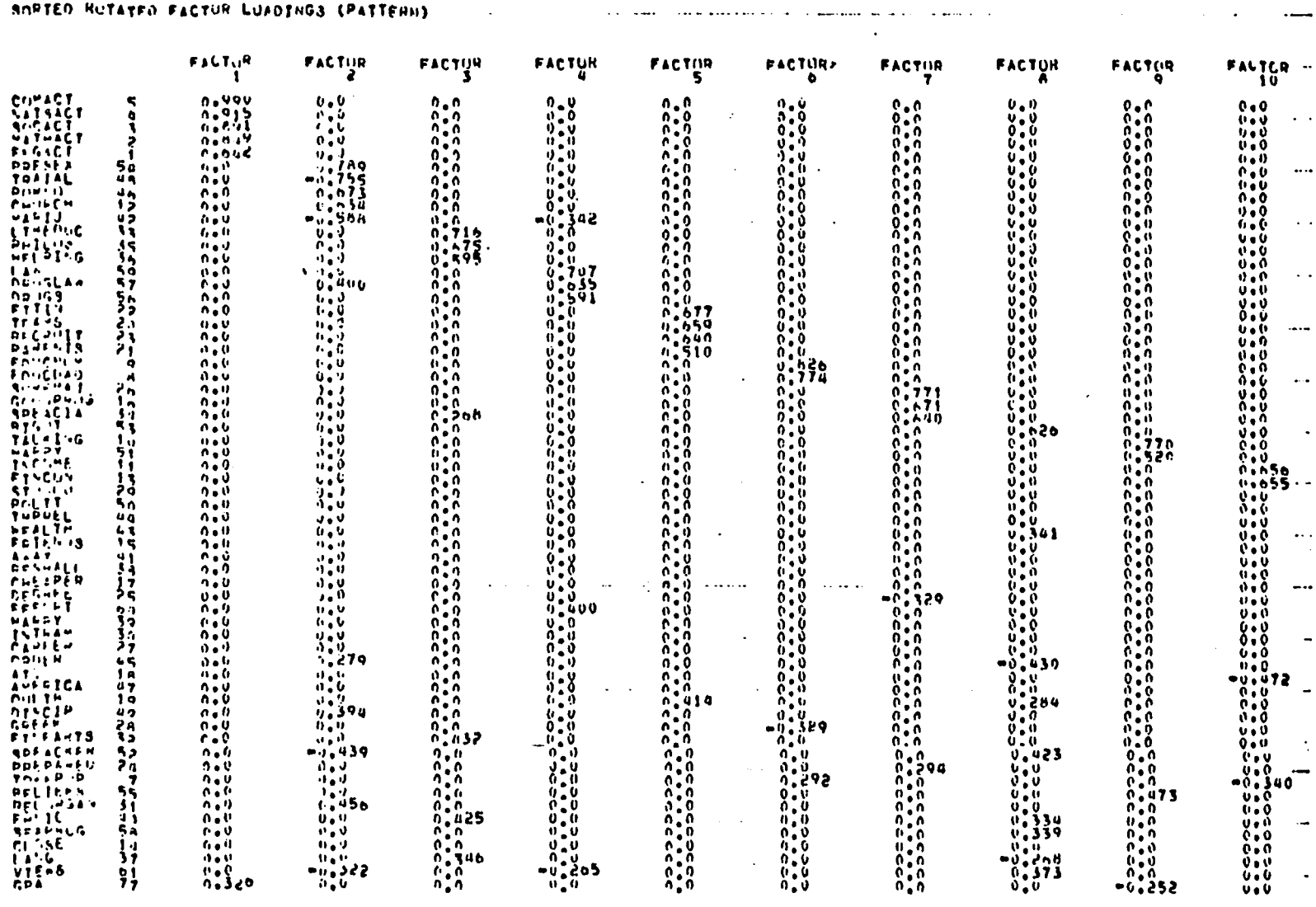

TABLE 20 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	FACTOR 20
[illegible]											
[illegible]											
[illegible]											

TABLE 21

FEMALE PERSISTER INTERCORRELATION MATRIX OF ITEMS

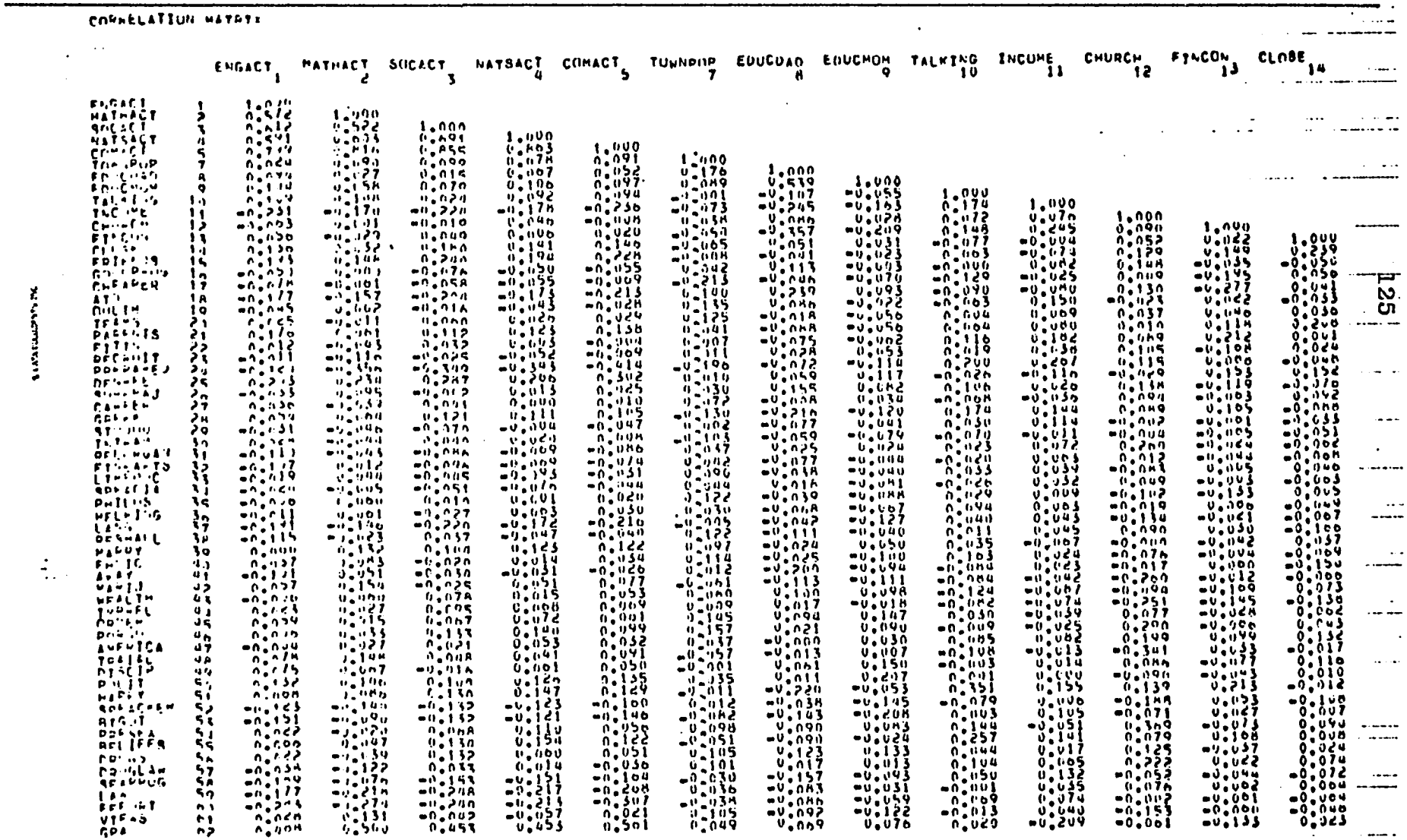

TABLE 21 - Continued

		FRIENDS 15	SHOPPING 16	CHEAPER 17	AID 18	HEALTH 19	TEAMS 20	PARENTS 21	FITIN 22	RECRUIT 23	PREPARED 24	DEGREE 25	BUREAU 26	CAREER 27
FRIENDS	15	1.000												
SHOPPING	16	-0.072	1.000											
CHEAPER	17	-0.032	0.151	1.000										
AID	18	-0.032	0.115	0.055	1.000									
HEALTH	19	-0.046	0.083	0.056	0.114	1.000								
TEAMS	20	-0.046	0.083	0.056	0.014	0.257	1.000							
PARENTS	21	-0.046	0.083	0.056	0.073	0.002	0.252	1.000						
FITIN	22	-0.253	0.469	0.056	0.000	0.220	0.246	0.237	1.000					
RECRUIT	23	-0.046	0.125	0.056	0.046	0.200	0.046	0.211	0.220	1.000				
PREPARED	24	-0.046	0.220	0.056	0.007	0.602	0.010	0.117	0.108	0.078	1.000			
DEGREE	25	-0.046	0.220	0.056	0.219	0.046	0.053	0.083	0.017	0.162	0.207	1.000		
BUREAU	26	-0.046	0.514	0.056	0.052	0.114	0.017	0.127	0.064	0.091	0.217	0.046	1.000	
CAREER	27	-0.046	0.514	0.056	0.153	0.135	0.121	0.051	0.165	0.131	0.268	0.046	0.056	1.000
		-0.046	0.055	0.056	0.195	0.046	0.170	0.078	0.250	0.121	0.268	0.046	0.125	0.154
		-0.046	0.055	0.056	0.097	0.046	0.053	0.023	0.144	0.139	0.070	0.212	0.154	0.121
		-0.046	0.055	0.056	0.228	0.046	0.249	0.033	0.019	0.061	0.268	0.046	0.046	0.129
		-0.046	0.055	0.056	0.046	0.046	0.087	0.009	0.113	0.145	0.112	0.046	0.046	0.056
FRIENDS	15	-0.046	0.055	0.056	0.046	0.156	0.087	0.009	0.105	0.059	0.047	0.150	0.046	0.117
		-0.046	0.055	0.056	0.046	0.046	0.046	0.076	0.140	0.096	0.007	0.151	0.046	0.125
		-0.046	0.331	0.056	0.046	0.135	0.135	0.012	0.082	0.117	0.097	0.265	0.354	0.154
		-0.046	0.055	0.056	0.046	0.046	0.046	0.046	0.140	0.046	0.046	0.046	0.046	0.046
		-0.046	0.057	0.056	0.153	0.090	0.046	0.050	0.126	0.360	0.221	0.046	0.046	0.046
		-0.046	0.071	0.056	0.070	0.046	0.101	0.015	0.049	0.033	0.210	0.046	0.046	0.046
		-0.046	0.135	0.056	0.077	0.071	0.186	0.044	0.149	0.100	0.110	0.046	0.046	0.032
		-0.046	0.222	0.056	0.047	0.047	0.176	0.027	0.117	0.013	0.134	0.046	0.046	0.011
		-0.046	0.055	0.056	0.046	0.095	0.095	0.046	0.046	0.046	0.046	0.046	0.046	0.046
		-0.046	0.111	0.056	0.046	0.147	0.117	0.132	0.145	0.046	0.155	0.046	0.046	0.073
		-0.046	0.222	0.056	0.046	0.200	0.108	0.046	0.072	0.046	0.131	0.046	0.046	0.073
		-0.046	0.225	0.056	0.046	0.046	0.124	0.046	0.032	0.102	0.046	0.046	0.046	0.114
		-0.046	0.055	0.056	0.073	0.046	0.052	0.051	0.078	0.029	0.113	0.046	0.046	0.046
		-0.046	0.554	0.056	0.027	0.046	0.173	0.004	0.143	0.151	0.046	0.046	0.046	0.137
		-0.046	0.055	0.056	0.046	0.046	0.135	0.046	0.018	0.099	0.132	0.046	0.046	0.058
		-0.046	0.055	0.056	0.013	0.196	0.046	0.111	0.176	0.045	0.046	0.046	0.046	0.070
		-0.046	0.055	0.056	0.046	0.043	0.046	0.034	0.000	0.165	0.118	0.046	0.046	0.110
		-0.046	0.099	0.056	0.077	0.100	0.046	0.046	0.043	0.067	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.027	0.046	0.046	0.029	0.013	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.079	0.019	0.115	0.046	0.046	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.046	0.046	0.071	0.046	0.116	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.027	0.143	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.057	0.207	0.097	0.046	0.081	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.046	0.046	0.046	0.046	0.054	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.092	0.046	0.204	0.046	0.046	0.046	0.046	0.046	0.046	0.046
		-0.046	0.055	0.056	0.046	0.046	0.046

PLEASE NOTE:

This page not included with original material. Filmed as received.

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TABLE 21 - Continued

		AWAY 41	MARIJ 42	WEALTH 43	IMPREL 44	DRUFR 45	PUBNO 46	AMERICA 47	TRIAL 48	DISCIP 49	PUBLIT 50	HAPPY 51	SPEACHFR 52	BIGOT 53
AWAY	41	1.000												
MARIJ	42	-0.199	1.000											
WEALTH	43	-0.250	-0.225	1.000										
IMPREL	44	-0.265	-0.211	-0.185	1.000									
DRUFR	45	-0.214	-0.251	-0.217	-0.112	1.000								
PUBNO	46	-0.249	-0.350	-0.276	-0.049	-0.316	1.000							
AMERICA	47	-0.123	-0.115	-0.225	-0.113	-0.209	-0.234	1.000						
TRIAL	48	-0.255	-0.195	-0.247	-0.242	-0.193	-0.255	-0.153	1.000					
DISCIP	49	-0.255	-0.176	-0.241	-0.256	-0.351	-0.255	-0.076	-0.101	1.000				
PUBLIT	50	-0.206	-0.091	-0.185	-0.070	-0.212	-0.122	-0.060	-0.091	-0.145	1.000			
HAPPY	51	-0.145	-0.121	-0.150	-0.124	-0.131	-0.119	-0.245	-0.147	-0.228	-0.009	1.000		
SPEACHFR	52	-0.200	-0.125	-0.156	-0.044	-0.144	-0.124	-0.136	-0.269	-0.048	-0.332	-0.043	1.000	
BIGOT	53	-0.227	-0.072	-0.087	-0.047	-0.214	-0.077	-0.101	-0.116	-0.057	-0.227	-0.079	-0.124	1.000
DOESFR	54	-0.177	-0.114	-0.103	-0.103	-0.183	-0.093	-0.096	-0.054	-0.156	-0.117	-0.042	-0.102	-0.087
BELIEFS	55	-0.107	-0.129	-0.058	-0.058	-0.140	-0.033	-0.078	-0.078	-0.059	-0.059	-0.044	-0.079	-0.157
DRUGS	56	-0.121	-0.124	-0.058	-0.111	-0.102	-0.066	-0.078	-0.174	-0.202	-0.118	-0.042	-0.102	-0.014
DRUGLAW	57	-0.227	-0.079	-0.088	-0.158	-0.308	-0.135	-0.053	-0.401	-0.302	-0.074	-0.079	-0.142	-0.129
SEXPROG	58	-0.221	-0.079	-0.088	-0.010	-0.094	-0.135	-0.053	-0.093	-0.050	-0.111	-0.079	-0.142	-0.129
LAW	59	-0.208	-0.077	-0.088	-0.123	-0.135	-0.107	-0.054	-0.149	-0.112	-0.179	-0.151	-0.142	-0.129
EFFORT	60	-0.052	-0.108	-0.058	-0.053	-0.048	-0.058	-0.108	-0.048	-0.057	-0.042	-0.043	-0.079	-0.072
VIEWS	61	-0.139	-0.103	-0.141	-0.000	-0.242	-0.002	-0.314	-0.061	-0.059	-0.102	-0.064	-0.102	-0.071
GPA	62	-0.249	-0.002	-0.061	0.010	0.039	-0.150	-0.090	0.061	-0.059	-0.102	-0.064	-0.102	-0.071

		DOESFR 54	BELIEFS 55	DRUGS 56	DRUGLAW 57	SEXPROG 58	LAW 59	EFFORT 60	VIEWS 61	GPA 62
DOESFR	54	1.000								
BELIEFS	55	0.163	1.000							
DRUGS	56	0.271	0.211	1.000						
DRUGLAW	57	0.243	0.241	0.041	1.000					
SEXPROG	58	0.100	0.091	0.017	0.031	1.000				
LAW	59	0.121	0.095	0.101	0.236	0.101	1.000			
EFFORT	60	-0.052	-0.060	-0.076	-0.138	-0.021	-0.261	1.000		
VIEWS	61	-0.130	-0.104	-0.163	-0.270	-0.174	-0.104	-0.048	1.000	
GPA	62	0.043	-0.057	0.008	0.004	-0.078	-0.174	-0.206	0.089	1.000

TABLE 22

FEMALE PERSISTER UNROTATED FACTOR LOADINGS (PATTERN)

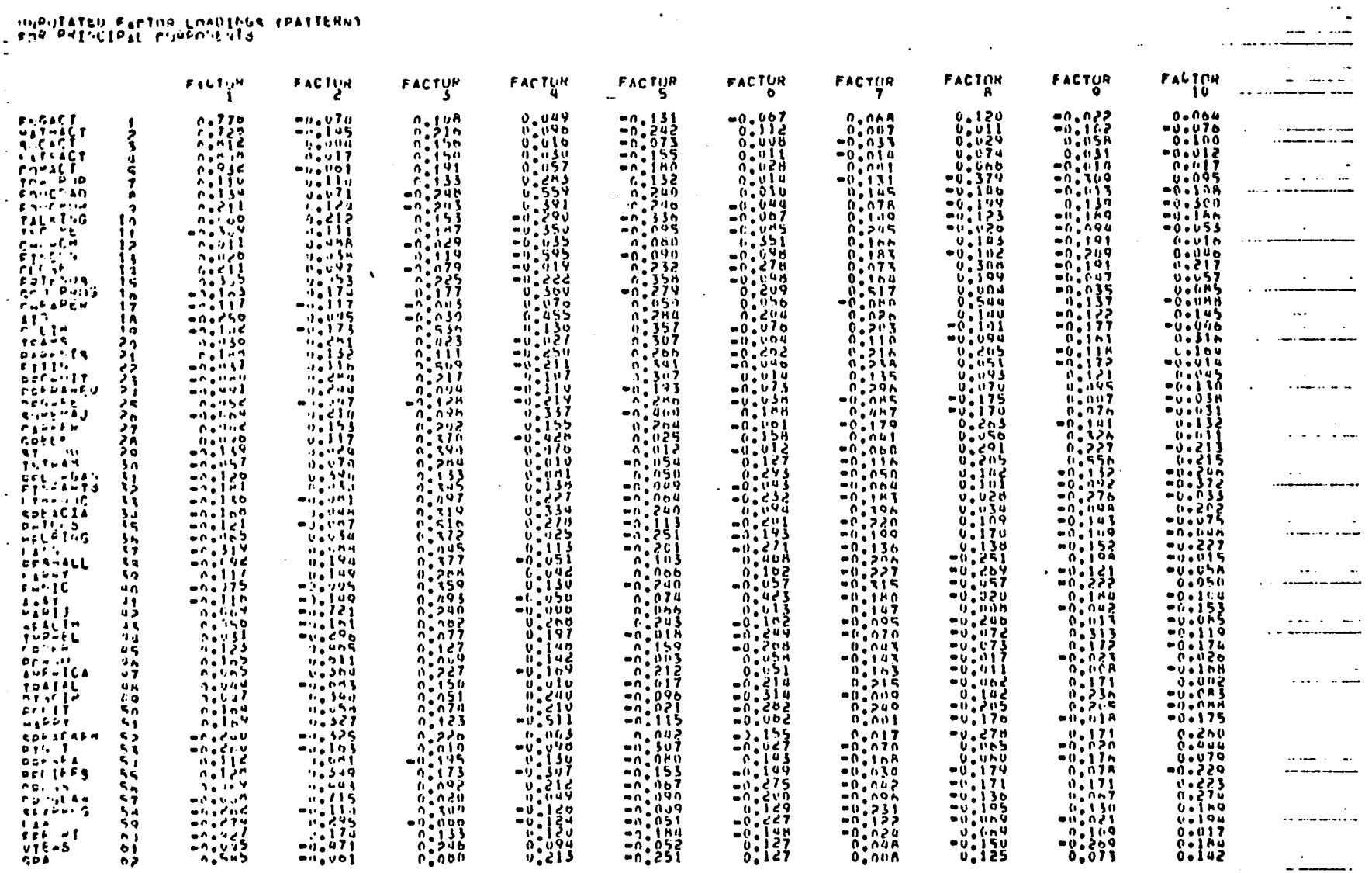

TABLE 22 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19
ENGACT	1	0.097	0.024	-0.035	0.010	-0.115	-0.063	-0.000	-0.020	-0.012
MATHACT	2	-0.030	0.048	0.058	0.093	-0.030	0.026	-0.012	0.102	0.016
SOCACT	3	-0.040	0.049	-0.021	-0.091	0.117	-0.020	0.067	-0.075	-0.002
NATSACT	4	0.032	-0.001	0.033	-0.004	0.051	-0.017	0.062	-0.007	0.044
COMACT	5	0.010	0.030	0.017	-0.004	0.025	-0.013	0.036	0.004	0.010
INCPOP	7	0.030	-0.075	-0.095	-0.225	-0.222	-0.008	0.045	0.065	0.173
EDUCLAD	8	0.262	-0.149	-0.120	0.245	0.069	-0.196	0.081	0.088	0.151
EDUCHIGH	9	0.102	-0.232	0.004	0.245	-0.116	-0.031	-0.052	0.065	0.210
TALKING	10	0.347	-0.025	0.145	0.077	-0.008	-0.040	-0.160	-0.073	-0.040
INCOME	11	0.004	-0.012	0.001	-0.051	0.135	0.271	-0.212	0.213	0.065
CHURCH	12	0.027	-0.170	0.040	0.084	0.140	0.207	0.132	0.087	0.043
FINCOM	13	-0.140	-0.290	-0.220	-0.154	-0.018	0.085	0.076	0.005	0.077
CLOSE	14	-0.150	0.041	0.031	0.432	0.186	0.047	-0.022	-0.206	-0.030
FRIENDS	15	-0.059	-0.060	0.039	0.075	0.090	0.121	0.077	-0.200	0.045
GOODPAY	16	-0.130	-0.011	-0.019	-0.050	0.123	-0.115	0.014	-0.040	-0.126
CHEAPER	17	-0.119	0.133	0.224	0.080	0.156	-0.135	0.191	0.280	-0.139
ATH	18	0.251	0.081	0.009	0.051	-0.070	0.093	0.035	-0.035	-0.068
COLIM	19	0.050	-0.004	-0.177	-0.034	0.098	0.049	-0.036	0.185	-0.082
TEAMS	20	0.300	0.111	-0.140	-0.131	0.052	-0.170	0.063	-0.084	0.155
PARENTS	21	0.175	0.333	0.152	-0.199	-0.041	-0.254	0.030	0.177	0.169
FITIN	22	0.072	-0.085	-0.009	-0.071	-0.068	-0.140	-0.116	0.127	-0.006
RECRUIT	23	0.341	0.319	0.200	-0.074	-0.103	-0.088	-0.124	-0.017	-0.063
PREPARED	24	0.020	0.027	-0.130	0.075	0.287	-0.123	-0.271	-0.018	-0.068
DEGREE	25	-0.224	-0.142	0.095	0.091	0.207	-0.203	-0.081	0.176	-0.018
SUPPMAI	26	-0.110	0.015	0.123	0.129	0.014	-0.099	0.090	-0.009	-0.075
CAREER	27	0.032	-0.300	0.106	-0.105	-0.197	0.055	0.070	-0.070	-0.348
GOFER	28	0.134	-0.086	0.047	0.059	-0.156	0.109	-0.101	0.000	-0.051
STUDY	29	0.250	-0.164	0.047	-0.035	-0.166	0.196	-0.097	-0.243	0.215
INTRAM	30	0.119	-0.000	-0.241	0.103	0.057	-0.056	-0.011	-0.124	0.199
RELIGION	31	-0.075	0.135	0.128	-0.064	0.151	0.028	0.260	0.244	0.302
EXPECTS	32	-0.150	0.359	-0.155	0.051	-0.085	0.118	0.320	0.103	0.101
ETHNIC	33	0.023	0.114	-0.226	0.159	-0.007	0.137	-0.108	-0.062	-0.021
SPEACTS	34	-0.203	-0.044	0.062	-0.042	-0.099	-0.008	0.172	-0.045	-0.122
PHILOS	35	-0.053	-0.194	-0.128	0.037	0.127	-0.107	-0.050	-0.053	-0.040
HELPING	36	0.040	-0.345	-0.004	-0.031	0.149	-0.154	0.018	0.127	0.237
FAM	37	-0.024	0.347	-0.135	-0.030	-0.096	-0.111	-0.165	-0.092	-0.021
RESMALL	38	-0.004	0.138	-0.023	-0.060	-0.011	-0.033	-0.082	-0.010	-0.011
MARRY	39	-0.173	0.218	-0.179	0.250	0.013	-0.168	-0.057	-0.208	-0.095
EMPIC	40	0.170	-0.178	0.290	0.009	0.067	-0.190	-0.032	0.083	0.042
ARMY	41	-0.244	-0.140	0.002	-0.016	-0.066	-0.034	0.002	-0.020	-0.014
MAJOR	42	-0.045	0.008	0.152	0.020	0.015	0.064	-0.045	-0.071	-0.066
WEALTH	43	-0.074	0.140	0.345	0.005	0.349	0.158	-0.083	-0.201	0.053
TOPPEL	44	0.019	-0.152	0.140	-0.423	0.296	0.018	0.078	0.077	-0.167
ORDER	45	-0.215	-0.063	0.025	-0.009	-0.201	-0.123	-0.111	0.141	-0.219
[illegible]	46	-0.221	0.022	0.130	-0.125	0.081	0.175	-0.236	0.198	0.031
AMERICA	47	-0.260	-0.171	0.157	0.188	0.111	-0.054	0.002	-0.164	-0.002
TOTAL	48	-0.030	-0.327	0.005	0.100	-0.026	0.027	0.080	0.074	0.052
DISCIP	49	-0.130	-0.100	-0.080	0.103	-0.186	0.351	-0.057	0.266	-0.095
QUIT	50	-0.312	0.150	0.232	-0.004	-0.141	0.100	-0.180	-0.046	0.236
HAPPY	51	0.172	0.087	0.283	0.084	-0.112	-0.022	0.168	-0.000	-0.068
SPEACHER	52	0.011	0.271	-0.058	0.074	-0.052	0.117	0.320	0.099	0.031
RIGHT	53	-0.120	0.010	0.117	0.174	0.042	-0.043	-0.118	0.077	0.341
DEGREE	54	0.038	0.036	0.054	-0.102	0.053	0.127	-0.016	-0.110	0.021
RELIEFS	55	0.190	0.076	-0.136	0.107	0.109	0.101	0.360	-0.120	-0.139
NEEDS	56	0.180	-0.080	0.000	-0.105	0.262	0.174	0.165	-0.014	-0.020
REGULAR	57	-0.008	0.101	-0.144	-0.000	0.061	0.019	-0.047	0.103	-0.034
SERVING	58	0.140	0.098	0.139	0.350	0.111	0.045	-0.083	0.307	-0.164
LAW	59	-0.107	-0.092	0.253	0.200	-0.288	-0.101	0.193	0.020	-0.054
EFFORT	60	-0.130	-0.126	0.273	-0.044	-0.062	-0.220	0.093	-0.258	0.101
VIEWS	61	0.040	0.036	0.237	0.009	-0.049	0.263	-0.058	-0.002	-0.065
GPA	62	0.009	0.127	-0.001	0.033	-0.113	0.011	-0.211	0.149	-0.047
	VP	5.403	4.873	3.626	3.157	2.207	1.936	1.885	1.727	1.714
		1.421	1.332	1.273	1.227	1.172	1.103	1.065	1.034	1.008

1.556

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR LOADING MATRIX CORRESPONDING TO THAT FACTOR. THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 23

FEMALE PERSISTER VARIANCE EXPLAINED BY FACTORS

FACTOR	VARIANCE EXPLAINED	CUMULATIVE PROPORTION OF TOTAL VARIANCE
1	5.[illegible]	0.[illegible]
2	0.[illegible]	0.[illegible]
3	0.[illegible]	0.[illegible]
4	0.[illegible]	0.[illegible]
5	0.[illegible]	0.[illegible]
6	0.[illegible]	0.[illegible]
7	0.[illegible]	0.[illegible]
8	0.[illegible]	0.[illegible]
9	0.[illegible]	0.[illegible]
10	0.[illegible]	0.[illegible]
11	0.[illegible]	0.[illegible]
12	0.[illegible]	0.[illegible]
13	0.[illegible]	0.[illegible]
14	0.[illegible]	0.[illegible]
15	0.[illegible]	0.[illegible]
16	0.[illegible]	0.[illegible]
17	0.[illegible]	0.[illegible]
18	0.[illegible]	0.[illegible]
19	0.[illegible]	0.[illegible]
20	0.[illegible]	0.[illegible]
21	0.[illegible]	0.[illegible]
22	0.[illegible]	0.[illegible]
23	0.[illegible]	0.[illegible]
24	0.[illegible]	0.[illegible]
25	0.[illegible]	0.[illegible]
26	0.[illegible]	0.[illegible]
27	0.[illegible]	0.[illegible]
28	0.[illegible]	0.[illegible]
29	0.[illegible]	0.[illegible]
30	0.[illegible]	0.[illegible]
31	0.[illegible]	0.[illegible]
32	0.[illegible]	0.[illegible]
33	0.[illegible]	0.[illegible]
34	0.[illegible]	0.[illegible]
35	0.[illegible]	0.[illegible]
36	0.[illegible]	0.[illegible]
37	0.[illegible]	0.[illegible]
38	0.[illegible]	0.[illegible]
39	0.[illegible]	0.[illegible]
40	0.[illegible]	0.[illegible]
41	0.[illegible]	0.[illegible]
42	0.[illegible]	0.[illegible]
43	0.[illegible]	0.[illegible]
44	0.[illegible]	0.[illegible]
45	0.[illegible]	0.[illegible]
46	0.[illegible]	0.[illegible]
47	0.[illegible]	0.[illegible]
48	0.[illegible]	0.[illegible]
49	0.[illegible]	0.[illegible]
50	0.[illegible]	0.[illegible]
51	0.[illegible]	0.[illegible]
52	0.[illegible]	0.[illegible]
53	0.[illegible]	0.[illegible]
54	0.[illegible]	0.[illegible]
55	0.[illegible]	0.[illegible]
56	0.[illegible]	0.[illegible]
57	0.[illegible]	0.[illegible]
58	0.[illegible]	0.[illegible]
59	0.[illegible]	0.[illegible]
60	0.[illegible]	0.[illegible]
61	0.[illegible]	1.000000

THE VARIANCE EXPLAINED BY EACH FACTOR IS THE EIGENVALUE FOR THAT FACTOR.

TOTAL VARIANCE IS DEFINED AS THE SUM OF THE DIAGONAL ELEMENTS OF THE CORRELATION (COVARIANCE) MATRIX.

TABLE 24

FEMALE PERSISTER ROTATED FACTOR LOADINGS (PATTERN)

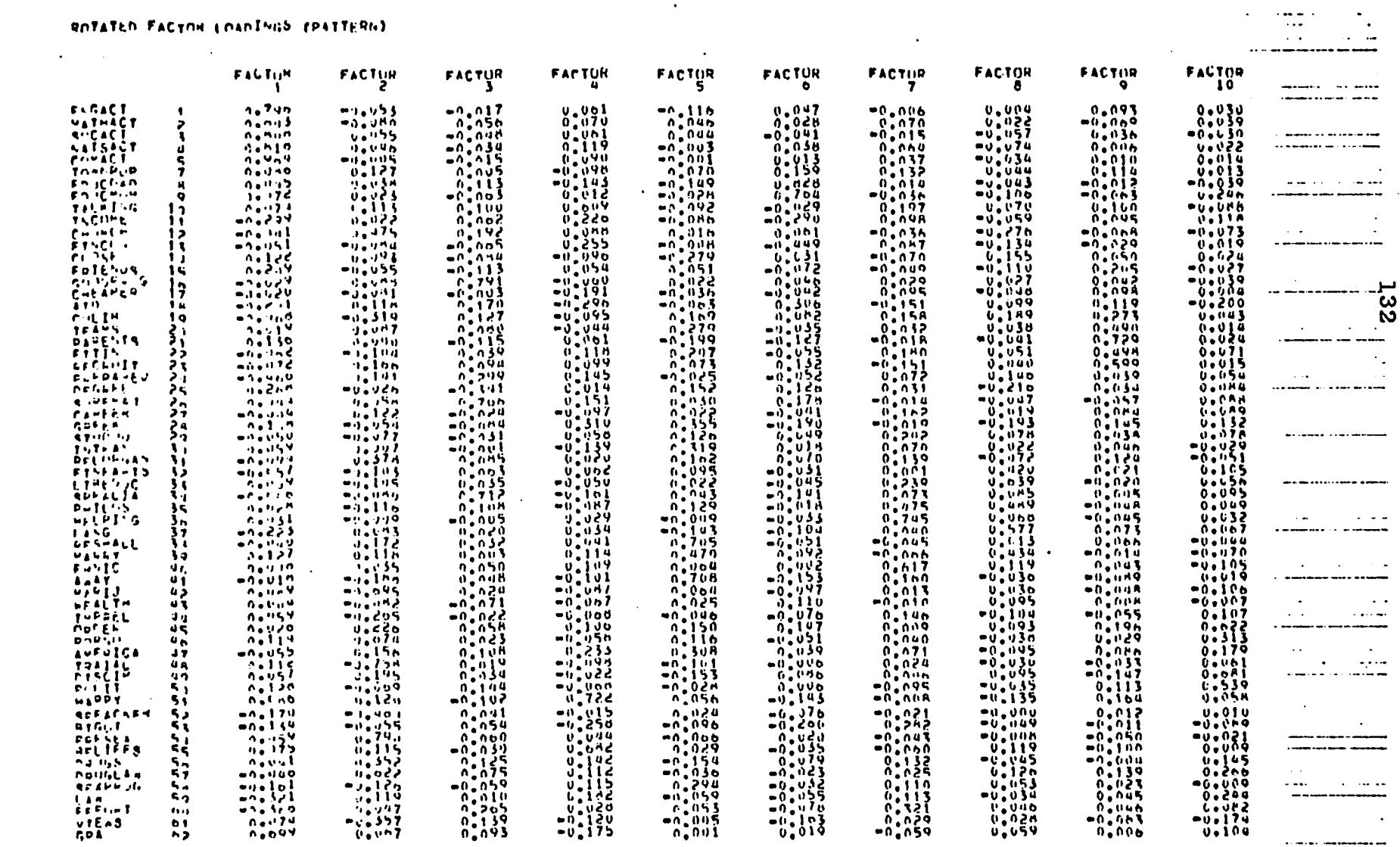

TABLE 24 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	
ENGACT	1	0.040	-0.003	0.021	-0.070	-0.038	-0.079	0.038	-0.020	-0.098	
MATHACT	2	0.124	-0.152	-0.053	0.015	-0.052	0.076	-0.047	0.030	0.042	
SOCACT	3	0.105	0.152	-0.066	0.114	-0.011	-0.116	0.043	0.012	-0.063	
NATSACT	4	0.045	0.044	-0.003	0.048	0.005	-0.088	-0.013	-0.006	0.016	
PHYSCI	5	0.076	0.040	-0.038	0.046	-0.025	-0.059	0.006	0.013	-0.044	
TORNPLD	7	-0.150	0.020	-0.117	0.051	-0.609	0.014	0.161	-0.029	0.117	
ENGCLAS	8	[illegible]	0.040	-0.091	0.009	-0.071	-0.054	0.020	0.041	0.046	
ENGCOMP	9	0.069	-0.051	0.065	0.039	-0.123	-0.058	-0.053	-0.007	0.010	
TALKING	10	-0.050	-0.191	0.114	-0.064	-0.066	0.068	-0.126	0.096	-0.173	
INCOME	11	0.051	-0.040	0.108	-0.045	-0.038	0.108	-0.190	0.439	0.044	
CHURCH	12	0.239	-0.142	0.055	-0.130	-0.001	0.049	0.123	0.210	0.258	
ETHICS	13	0.221	0.004	-0.103	-0.301	-0.254	-0.202	-0.107	0.223	0.004	
CLOSE	14	0.060	0.020	-0.060	0.046	0.162	0.049	0.035	-0.087	-0.104	
FRIENDS	15	0.553	0.008	0.108	0.042	-0.021	-0.107	0.107	0.104	0.053	
GOODPARTS	16	-0.040	0.026	0.015	0.000	0.044	-0.047	-0.017	0.120	-0.020	
CHEAPEN	17	-0.019	-0.095	-0.041	0.031	0.652	0.008	0.152	-0.105	0.301	
ATD	18	-0.120	-0.003	0.195	0.030	-0.027	0.217	0.318	0.019	0.065	
GUILTH	19	0.127	0.115	-0.077	0.059	-0.166	0.095	0.231	0.461	0.087	
TEAMS	20	0.170	0.406	0.037	0.009	-0.156	-0.063	-0.007	0.041	-0.020	
PARENTS	21	0.149	0.000	-0.103	-0.065	0.034	-0.044	-0.050	-0.038	0.114	
FITIN	22	0.222	-0.021	0.010	-0.159	-0.110	-0.030	0.158	0.347	0.016	
RECRUIT	23	-0.055	0.001	0.205	0.173	0.082	0.138	0.157	0.040	-0.018	
COMPARED	24	0.015	-0.001	0.044	-0.030	0.305	-0.082	-0.295	0.254	-0.142	
DEGREE	25	0.214	-0.030	-0.071	0.059	0.037	-0.090	-0.081	0.042	-0.130	
SUMMERJ	26	-0.088	-0.009	0.001	0.012	0.018	0.048	-0.140	-0.067	0.029	
CAREER	27	0.110	-0.090	0.106	-0.036	-0.021	0.003	0.703	-0.048	-0.061	
GOPPA	28	0.069	0.072	0.321	-0.194	0.090	0.134	0.012	0.114	-0.106	
STUDY	29	0.047	0.003	0.731	0.021	0.020	-0.073	0.049	0.050	0.065	
INTMAN	30	0.112	0.400	0.129	-0.153	0.251	0.024	-0.184	-0.058	-0.089	
RELIGUAT	31	0.011	-0.080	0.026	0.034	0.081	-0.008	-0.068	0.076	0.610	
FINANTS	32	-0.031	0.038	0.043	-0.011	0.021	-0.047	-0.041	0.003	0.067	
LIMSCIC	33	0.015	0.095	0.133	0.037	-0.152	0.192	0.090	0.140	0.000	
SOCIAL	34	0.162	0.070	-0.002	-0.074	-0.098	0.014	0.136	-0.061	0.105	
PHILOS	35	0.029	0.081	0.059	0.090	0.038	0.009	0.176	0.085	0.011	
HELPING	36	0.017	0.085	0.108	-0.010	0.021	-0.054	-0.012	0.065	0.080	
LAW	37	-0.164	-0.110	0.007	0.007	0.091	-0.121	-0.083	-0.090	0.097	
PERSHALL	38	-0.110	0.075	0.007	0.036	-0.081	0.124	-0.013	0.051	0.073	
MANEY	30	0.140	0.024	-0.194	0.024	-0.137	0.003	-0.007	-0.086	-0.023	
ETHNIC	40	-0.103	-0.076	0.024	0.125	-0.086	0.248	0.107	-0.122	-0.068	
ARMY	41	0.026	-0.009	0.117	-0.017	0.026	0.033	0.105	0.001	0.142	
VAMIJ	42	0.051	-0.255	0.007	0.223	0.007	0.007	0.048	0.116	0.018	
HEALTH	43	0.150	0.012	-0.040	0.770	-0.075	0.087	-0.052	-0.005	0.020	
TUDWEL	44	-0.130	0.213	-0.025	0.511	0.161	-0.177	0.148	0.114	-0.036	
DRINK	45	0.021	0.027	-0.144	0.004	0.034	-0.168	0.181	-0.039	-0.063	
DRUG	46	0.004	-0.040	-0.021	0.102	-0.073	0.023	-0.007	0.053	0.051	
AMERICA	47	0.442	-0.072	-0.049	0.064	0.043	-0.144	0.018	0.004	0.035	
TOTAL	48	-0.011	0.004	0.021	0.083	0.008	0.075	-0.108	0.040	-0.019	
DISCIP	49	0.020	0.151	0.159	-0.047	0.106	0.115	0.098	0.056	0.045	
POLIT	50	0.047	-0.069	0.115	0.303	-0.254	-0.107	-0.253	-0.127	0.022	
HAPPY	51	0.051	-0.047	-0.030	-0.040	-0.029	0.008	-0.023	-0.128	0.072	
SPEECH	52	-0.073	0.422	-0.030	0.042	-0.164	0.280	0.008	-0.095	0.117	
ATGOT	53	0.063	0.040	0.040	-0.122	-0.021	0.326	-0.006	-0.229	-0.066	
PROFSSA	54	0.015	0.005	0.035	0.025	-0.089	-0.041	0.084	-0.092	0.063	
BELIEFS	55	0.074	0.345	0.091	-0.028	0.034	-0.078	0.030	0.029	0.140	
DRUGS	56	-0.113	0.553	0.154	0.250	-0.050	0.055	0.088	0.030	-0.050	
PROGLAM	57	-0.010	0.491	-0.106	-0.008	-0.067	0.091	-0.062	-0.026	-0.068	
SEARCHG	58	-0.062	0.112	-0.070	0.019	0.154	0.070	-0.029	0.052	-0.051	
LAW	59	0.122	0.055	-0.134	-0.174	-0.057	0.144	0.042	-0.495	-0.016	
EFF-WT	60	[illegible]	0.031	0.174	0.105	0.047	-0.144	-0.006	-0.010	-0.018	
VIEWS	61	0.152	-0.190	0.089	0.195	-0.302	0.420	0.072	0.044	0.027	
GPA	62	-0.130	-0.054	0.047	-0.102	0.050	0.131	-0.071	0.039	-0.107	
	VP	5.055	4.034	2.323	2.209	2.216	2.104	1.836	1.827	1.816	1.755
		1.719	1.003	1.548	1.542	1.532	1.404	1.056	1.019	1.330	

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR PATTERN MATRIX CORRESPONDING TO THAT FACTOR. WHEN THE ROTATION IS ORTHOGONAL, THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 25

FEMALE PERSISTER SORTED ROTATED FACTOR LOADINGS (PATTERN)

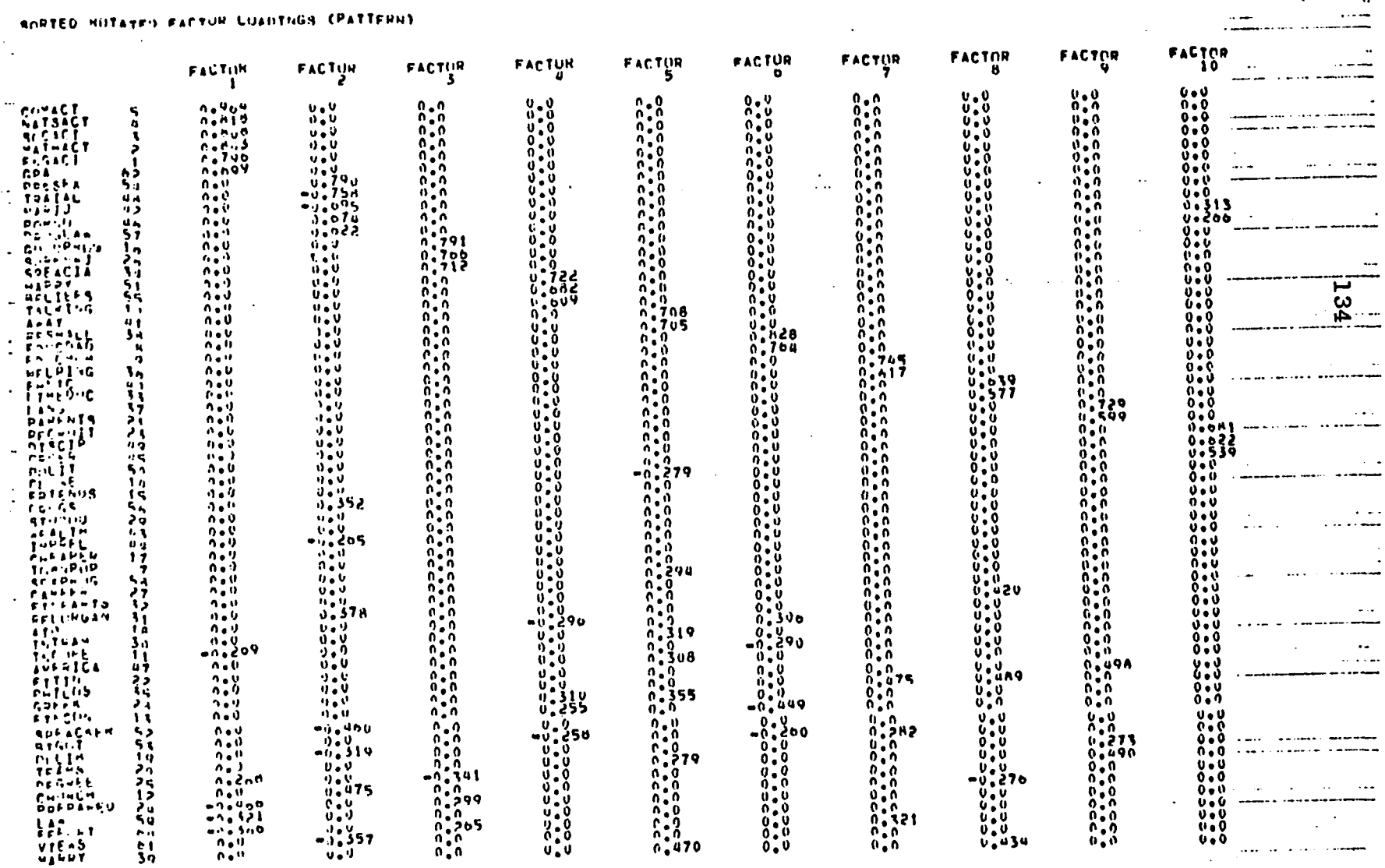

TABLE 25 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	
[illegible]	5										
[illegible]	5										
[illegible]	5										

TABLE 26

FEMALE NONPERSISTER INTERCORRELATION MATRIX OF ITEMS

CORRELATION MATRIX

	ENGACT 1	MATHACT 2	SOCACT 3	NATSACT 4	COMACT 5	TOWNBGD 7	EDUCDAD 8	EDUCMOM 9	TALKING 10	INCOME 11	CHURCH 12	FINCON 13	CLOSE 14
ENGACT 1	1.000												
MATHACT 2	.653	1.000											
SOCACT 3	.708	.723	1.000										
NATSACT 4	.662	.711	.716	1.000									
COMACT 5	.425	.422	.411	.425	1.000								
TOWNBGD 7	.022	.023	.022	.022	.036	1.000							
EDUCDAD 8	.188	.211	.188	.188	.213	.267	1.000						
EDUCMOM 9	.194	.211	.194	.194	.208	.155	.350	1.000					
TALKING 10	.119	.119	.119	.119	.119	.108	.215	.222	1.000				
INCOME 11	.099	.108	.099	.099	.108	.215	.350	.064	.157	1.000			
CHURCH 12	.056	.056	.056	.056	.056	.152	.207	.170	.157	.101	1.000		
FINCON 13	.044	.044	.044	.044	.044	.055	.055	.038	.038	.025	.055	1.000	
CLOSE 14	.087	.087	.087	.087	.087	.088	.088	.032	.032	.088	.088	.088	1.000
FATHJOB	.039	.039	.039	.039	.039	.039	.159	.120	.102	.039	.039	.039	.039
MOMJOB	.022	.022	.022	.022	.022	.022	.156	.093	.069	.022	.022	.022	.022
CHEAPCH	.033	.033	.033	.033	.033	.033	.121	.033	.051	.033	.033	.033	.033
AID	.107	.107	.107	.107	.107	.107	.179	.107	.051	.107	.107	.107	.107
COLLEGE	.056	.056	.056	.056	.056	.056	.179	.056	.051	.056	.056	.056	.056
TEACHERS	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035
EARNERS	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036
PTTIN	.071	.071	.071	.071	.071	.071	.071	.071	.071	.071	.071	.071	.071
CCCCLIFE	.052	.052	.052	.052	.052	.052	.052	.052	.052	.052	.052	.052	.052
PPPPPPPP	.116	.116	.116	.116	.116	.116	.116	.116	.116	.116	.116	.116	.116
PPPPPPPJ	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077
CARPENT	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	136
CCCCPA	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032
STUDENT	.161	.161	.161	.161	.161	.161	.161	.161	.161	.161	.161	.161	.161
TUTTAP	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023
DELLCHAP	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032
FTTPAPTP	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
LTTPCLCA	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
EDPACLCA	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035
PHILTPG	.054	.054	.054	.054	.054	.054	.054	.054	.054	.054	.054	.054	.054
MELPTPG	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011
LANG	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022
OCSMALL	.139	.139	.139	.139	.139	.139	.139	.139	.139	.139	.139	.139	.139
LAWYY	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030
ENGIC	.055	.055	.055	.055	.055	.055	.055	.055	.055	.055	.055	.055	.055
LAWAT	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077
MARRIJ	.118	.118	.118	.118	.118	.118	.118	.118	.118	.118	.118	.118	.118
FTALIN	.072	.072	.072	.072	.072	.072	.072	.072	.072	.072	.072	.072	.072
TUPPIL	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
FACULTY	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017
PUBLIC	.042	.042	.042	.042	.042	.042	.042	.042	.042	.042	.042	.042	.042
AMERICA	.059	.059	.059	.059	.059	.059	.059	.059	.059	.059	.059	.059	.059
TRAIAL	.112	.112	.112	.112	.112	.112	.112	.112	.112	.112	.112	.112	.112
DTSCIP	.097	.097	.097	.097	.097	.097	.097	.097	.097	.097	.097	.097	.097
PSYLIT	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053	.053
HAPPY	.109	.109	.109	.109	.109	.109	.109	.109	.109	.109	.109	.109	.109
SOFACHEM	.127	.127	.127	.127	.127	.127	.127	.127	.127	.127	.127	.127	.127
BIG T	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008
BBESEX	.110	.110	.110	.110	.110	.110	.110	.110	.110	.110	.110	.110	.110
RELIFES	.142	.142	.142	.142	.142	.142	.142	.142	.142	.142	.142	.142	.142
FOMES	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068
POMSLAW	.037	.037	.037	.037	.037	.037	.037	.037	.037	.037	.037	.037	.037
ECNOMG	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007
LAW	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007
FREIGHT	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077	.077
VTEAS	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009
GPA	.065	.065	.065	.065	.065	.065	.065	.065	.065	.065	.065	.065	.065

TABLE 26 - Continued

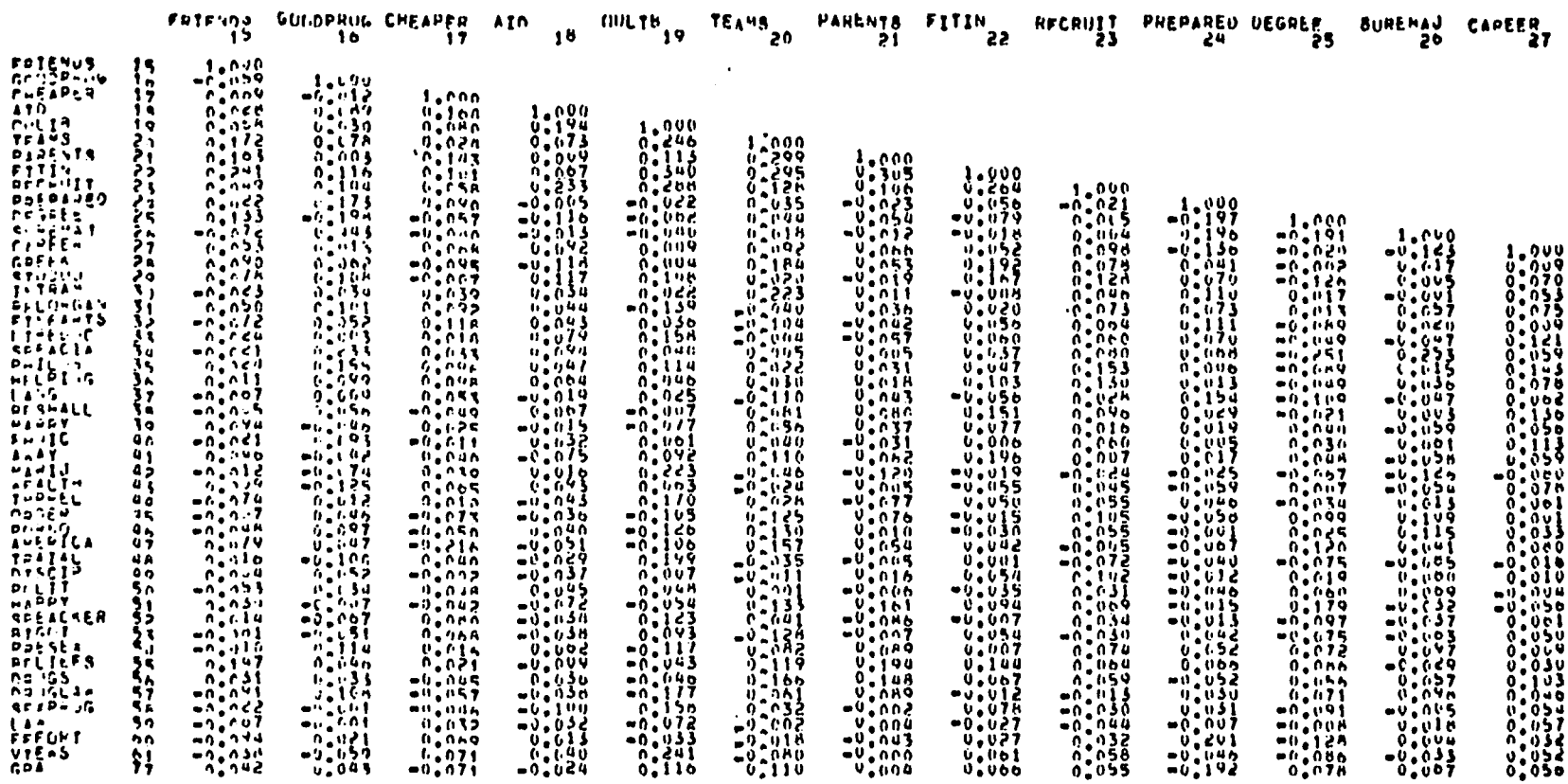

TABLE 26 - Continued

		GREEK 28	STUDIO 29	INTRAM 30	RELURGAN 31	FINFARTS 32	LIBEDUC 33	SPEACIA 34	PHILUS 35	HELPING 36	LANG 37	RESHALL 38	MARRY 39	EHNIC 40
GREEK	28	1.000												
STUDIO	29	0.155	1.000											
INTRAM	30	0.076	0.192	1.000										
RELURGAN	31	-0.026	0.246	0.184	1.000									
FINFARTS	32	-0.010	0.196	0.064	0.167	1.000								
LIBEDUC	33	-0.008	0.185	0.008	0.027	0.260	1.000							
SPEACIA	34	-0.005	0.133	0.037	0.149	0.028	0.117	1.000						
PHILUS	35	0.093	0.172	0.070	0.063	0.208	0.301	0.271	1.000					
HELPING	36	0.055	0.106	0.028	0.107	0.135	0.178	0.176	0.368	1.000				
LANG	37	0.050	0.013	0.042	0.055	0.131	0.049	0.012	0.129	0.083	1.000			
RESHALL	38	0.110	0.044	0.099	0.067	0.019	0.012	0.122	0.101	0.122	0.076	1.000		
MARRY	39	0.079	0.082	0.027	0.103	0.079	0.060	0.004	0.135	0.084	-0.022	0.158	1.000	
EHNIC	40	0.025	0.076	0.131	0.058	0.044	0.143	0.102	0.260	0.299	0.112	0.135	0.060	1.000
AMAY	41	0.132	0.127	0.128	0.057	0.133	0.084	0.028	0.160	0.076	0.076	0.288	0.176	0.221
MARTJ	42	-0.028	-0.000	-0.055	-0.196	0.123	0.150	-0.007	0.106	-0.017	0.044	-0.098	-0.062	-0.034
AFALTH	43	-0.116	-0.052	0.013	-0.017	0.046	0.074	-0.007	0.091	0.046	0.023	-0.020	-0.001	0.119
TAPHEL	44	-0.022	-0.079	0.116	-0.104	-0.035	0.025	-0.030	0.033	0.014	0.062	0.041	-0.046	0.124
[illegible]	45	0.006	-0.060	0.090	0.079	-0.027	-0.077	0.053	-0.025	-0.036	-0.046	0.078	0.101	-0.014
[illegible]	46	0.078	-0.001	0.010	0.175	-0.020	-0.082	0.038	-0.007	0.065	-0.036	0.086	0.179	-0.023
AMERICA	47	0.005	0.010	-0.007	0.036	-0.115	-0.017	0.036	-0.061	-0.111	-0.084	0.024	0.062	-0.096
TRAIAL	48	-0.006	-0.067	-0.039	-0.300	0.015	-0.007	-0.106	0.019	-0.077	0.041	-0.111	-0.054	-0.012
DISCIP	49	0.049	-0.023	0.038	0.058	-0.015	0.018	0.062	-0.007	0.013	-0.028	0.045	-0.016	-0.008
POLIT	50	-0.009	-0.113	0.080	-0.072	0.015	-0.095	-0.005	0.019	-0.086	-0.027	0.017	-0.024	-0.026
MARRY	51	0.157	-0.031	0.068	-0.021	-0.095	-0.088	0.025	-0.053	-0.020	-0.057	0.014	0.040	-0.057
SPEACKEN	52	-0.032	0.044	0.030	-0.140	0.103	0.147	0.074	0.120	0.057	0.024	-0.048	-0.045	0.088
BIGOT	53	-0.003	0.019	0.015	-0.007	0.190	0.088	0.002	0.138	0.050	0.177	-0.070	0.036	0.240
PRESEX	54	0.013	0.023	0.029	0.205	-0.004	-0.043	0.090	-0.041	-0.004	-0.040	0.083	0.090	-0.029
RELIEFS	55	0.141	0.013	0.060	-0.027	-0.040	-0.048	0.012	0.021	0.059	0.038	0.109	0.079	0.021
DRUGS	56	-0.005	-0.020	0.033	0.053	-0.063	0.028	0.024	0.003	0.046	0.044	0.080	0.076	0.116
DRUGLAW	57	0.025	-0.041	0.031	0.003	-0.112	-0.055	0.083	-0.062	0.061	-0.064	0.051	0.060	0.099
SEXPHLG	58	0.005	0.031	0.007	-0.058	0.091	0.073	0.038	0.128	0.074	0.025	0.029	0.007	0.133
LAW	59	-0.032	-0.053	0.002	0.007	-0.001	0.013	0.005	0.006	-0.005	0.041	0.022	0.008	0.086
EFFORT	60	0.031	0.117	0.007	0.065	0.031	0.077	0.046	0.108	0.007	0.100	0.020	0.044	0.075
VIEWS	61	-0.104	0.040	0.010	-0.072	0.111	0.204	0.055	0.139	0.029	0.011	-0.049	-0.102	0.041
GPA	77	0.037	-0.059	0.032	-0.054	-0.148	-0.002	0.036	0.013	-0.044	-0.136	-0.009	-0.031	0.105

TABLE 26.- Continued

		AWAY 41	MARIJ 42	WEALTH 43	IMPREL 44	ORDER 45	PUBNO 46	AMERICA 47	TRAIAL 48	DISCIP 49	POLIT 50	HAPPY 51	SPEACHER 52	BIGOT 53
AWAY	41	1.000												
MARIJ	42	0.123	1.000											
WEALTH	43	0.015	0.199	1.000										
IMPREL	44	0.090	0.226	0.185	1.000									
ORDER	45	0.002	-0.330	-0.101	0.017	1.000								
PUBNO	46	-0.075	-0.384	-0.060	-0.124	0.359	1.000							
AMERICA	47	-0.029	-0.218	-0.092	-0.117	0.257	0.193	1.000						
TRAIAL	48	0.058	0.522	0.170	0.240	-0.205	-0.373	-0.149	1.000					
DISCIP	49	-0.038	-0.163	0.056	0.063	0.272	0.192	0.028	-0.112	1.000				
POLIT	50	0.044	0.057	0.180	0.173	0.108	0.024	-0.029	0.089	0.115	1.000			
HAPPY	51	0.032	-0.098	-0.120	-0.062	0.124	0.115	0.102	-0.101	0.046	0.030	1.000		
SPEACHER	52	0.115	0.262	0.126	0.204	-0.065	-0.213	-0.096	0.274	-0.158	0.200	-0.053	1.000	
BIGOT	53	0.040	0.050	0.169	0.076	-0.078	-0.091	-0.097	0.019	-0.031	0.017	-0.083	0.101	1.000
PRESEX	54	-0.118	-0.428	-0.090	-0.174	0.277	0.406	0.245	-0.552	0.148	-0.012	0.128	-0.271	-0.023
BELIEFS	55	0.003	-0.106	-0.086	-0.060	0.003	0.138	0.093	-0.137	0.007	-0.029	0.323	-0.049	-0.092
DRUGS	56	0.042	-0.272	0.016	-0.014	0.233	0.240	0.158	-0.161	0.153	0.003	0.072	-0.063	0.076
DRUGLAW	57	-0.076	-0.497	-0.110	-0.045	0.287	0.340	0.251	-0.326	0.179	-0.028	0.068	-0.142	0.028
SEXPRUG	58	0.003	0.083	0.035	0.039	-0.043	-0.054	-0.029	0.108	0.005	0.034	-0.063	0.159	0.074
LAW	59	-0.032	-0.171	0.043	-0.029	0.116	0.137	0.055	-0.087	0.069	0.065	0.043	0.027	0.069
EFFURT	60	0.027	-0.011	0.015	0.021	0.030	0.044	0.043	-0.041	0.029	0.021	-0.084	0.009	0.097
VIEWS	61	0.008	0.314	0.221	0.178	-0.203	-0.319	-0.195	0.324	-0.109	0.023	-0.206	0.223	0.053
GPA	77	0.001	0.065	0.007	0.067	0.026	-0.077	0.025	0.082	-0.014	0.007	0.003	0.050	-0.076

		PRESEX 54	BELIEFS 55	DRUGS 56	DRUGLAW 57	SEXPRUG 58	LAW 59	EFFURT 60	VIEWS 61	GPA 77
PRESEX	54	1.000								
BELIEFS	55	0.149	1.000							
DRUGS	56	0.171	0.192	1.000						
DRUGLAW	57	0.347	0.171	0.006	1.000					
SEXPRUG	58	-0.109	0.005	0.071	0.030	1.000				
LAW	59	0.115	0.050	0.156	0.214	0.175	1.000			
EFFURT	60	0.073	0.037	0.001	0.038	0.067	0.216	1.000		
VIEWS	61	-0.202	-0.201	-0.155	-0.275	0.143	-0.049	0.014	1.000	
GPA	77	-0.044	-0.128	-0.031	-0.062	0.001	-0.063	-0.138	0.145	1.000

TABLE 27

FEMALE NONPERSISTER UNROTATED FACTOR LOADINGS (PATTERN)

UNROTATED FACTOR LOADINGS (PATTERN)
FOR PRINCIPAL COMPONENTS

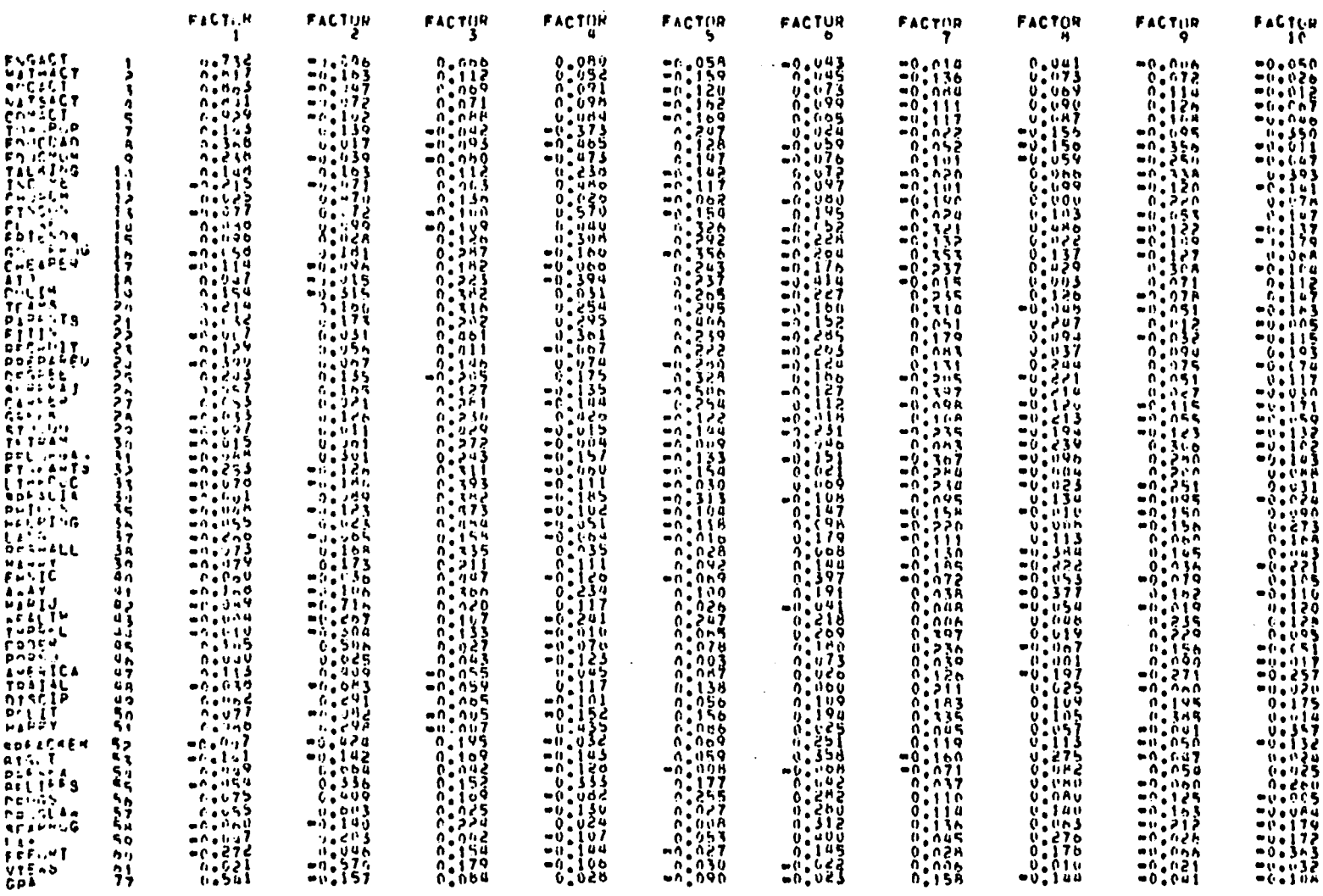

TABLE 27 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18		
ENGACT	1	-0.032	-0.112	-0.057	-0.072	-0.017	-0.069	-0.040	0.037		
MATHACT	2	0.009	-0.019	0.018	0.059	0.005	0.069	0.034	-0.006		
SOCACT	3	-0.030	0.003	0.045	0.093	0.031	-0.001	0.056	-0.053		
NATSACT	4	0.044	-0.034	0.057	0.119	-0.021	0.053	0.115	-0.009		
COMACT	5	0.036	-0.033	0.048	0.085	0.069	0.037	0.073	-0.017		
TRANSPUP	7	0.211	-0.181	0.053	-0.123	-0.276	-0.044	0.203	0.002		
ENLCEAD	8	0.033	0.206	0.167	-0.053	0.041	0.147	0.080	-0.028		
ENGCHEM	9	-0.074	0.175	0.122	-0.047	0.049	0.394	0.069	0.108		
TALKING	10	-0.053	0.073	0.229	-0.004	0.072	-0.132	-0.240	-0.054		
INCOME	11	0.120	0.119	-0.018	-0.098	0.123	-0.061	0.180	0.021		
CHURCH	12	0.155	-0.104	-0.029	0.023	-0.179	0.006	-0.086	-0.050		
ETHNIC	13	0.115	0.011	-0.031	-0.170	-0.032	0.204	-0.091	0.152		
CLOSE	14	-0.100	0.243	0.068	-0.133	0.039	0.009	0.077	0.103		
FRIENDS	15	-0.040	0.217	-0.072	-0.100	0.029	-0.109	0.057	-0.210		
GUIDPROG	16	-0.120	0.125	-0.041	-0.115	-0.040	-0.019	0.070	0.038		
CHFAPER	17	-0.205	0.153	0.016	0.090	-0.027	-0.020	0.008	-0.076		
ATU	18	-0.013	-0.035	0.079	0.298	-0.046	-0.023	-0.072	-0.221		
OULTH	19	0.144	-0.246	0.033	-0.071	0.121	0.231	-0.103	0.067		
TRANS	20	-0.044	-0.015	0.210	-0.084	-0.098	0.019	0.011	-0.140		
PARENT19	21	-0.174	-0.108	-0.108	-0.154	-0.232	0.014	0.091	0.210		
ETTIN	22	0.062	-0.149	-0.153	-0.034	0.161	0.104	-0.136	-0.010		
RECRUIT	23	0.190	-0.128	-0.004	0.105	0.265	0.014	-0.008	0.183		
PREPARED	24	-0.003	0.008	0.324	-0.059	0.069	0.064	0.031	-0.258		
DEGREE	25	-0.009	0.210	0.003	-0.224	0.047	0.001	-0.060	-0.008		
SUPERAJ	26	-0.079	0.123	-0.131	-0.190	-0.147	0.046	0.051	-0.053		
CAREER	27	-0.140	-0.033	-0.051	0.192	0.031	-0.443	-0.012	0.260		
GREEK	28	0.067	-0.073	0.071	0.197	0.150	-0.133	0.175	0.015		
STUDU	29	0.242	-0.019	0.277	-0.090	0.065	-0.019	0.066	0.028		
TITMAN	30	-0.131	-0.042	0.536	-0.206	-0.135	-0.130	0.072	-0.010		
RELURBAN	31	-0.002	0.010	0.071	-0.265	-0.075	-0.110	0.009	0.137		
FISEWTS	32	0.377	0.010	-0.002	-0.110	-0.159	0.090	0.105	0.018		
LIBELIC	33	0.249	0.073	-0.040	-0.080	0.079	-0.131	-0.088	-0.006		
SOFACIA	34	-0.065	0.236	-0.179	0.055	-0.104	-0.077	-0.098	0.219		
PHILOS	35	0.026	0.205	-0.146	0.040	0.012	0.014	0.074	0.114		
HELPING	36	-0.103	0.137	-0.140	0.021	0.066	-0.031	0.083	-0.179		
LANG	37	-0.159	-0.178	0.186	0.047	0.097	0.127	0.363	0.397		
DESMALL	38	-0.277	-0.034	-0.144	0.313	-0.004	0.180	-0.100	0.076		
MANNY	39	[illegible]	0.234	-0.211	0.060	0.055	0.246	-0.043	-0.267		
ENSTC	40	-0.339	-0.159	0.005	-0.149	0.067	0.048	-0.020	-0.156		
AWAY	41	-0.137	0.046	-0.062	-0.059	-0.117	0.294	-0.007	0.079		
MARIJ	42	0.122	0.170	0.033	0.035	-0.028	0.027	0.012	-0.030		
HEALTH	43	0.054	0.032	-0.115	-0.101	-0.036	-0.257	-0.100	-0.236		
TUPEEL	44	-0.072	0.057	0.111	-0.142	0.300	-0.197	-0.050	0.009		
OOUEN	45	0.244	0.175	-0.057	-0.100	0.130	-0.016	0.070	0.138		
DUNNO	46	0.111	0.098	-0.099	0.111	0.114	0.036	0.027	-0.132		
AMERICA	47	0.238	0.080	0.014	-0.058	-0.059	-0.136	-0.111	0.185		
TRAIAL	48	0.000	0.041	-0.028	0.020	-0.051	-0.062	0.242	-0.062		
DISCIP	49	0.277	0.058	-0.196	-0.060	0.351	-0.132	0.257	-0.014		
POLIT	50	0.107	0.375	0.018	0.037	-0.140	0.104	-0.077	0.082		
HAPPY	51	0.077	0.218	0.180	0.150	-0.205	-0.015	-0.130	0.132		
SOFACAEM	52	0.100	0.251	0.190	0.100	-0.149	-0.102	-0.122	0.043		
RIGHT	53	-0.093	-0.210	0.099	-0.192	0.161	0.133	-0.231	0.053		
DEFSEX	54	0.259	-0.046	0.036	-0.023	0.050	0.047	-0.318	0.053		
RELIEFB	55	-0.039	0.113	0.104	0.201	-0.203	-0.072	0.152	-0.117		
DRUGS	56	-0.030	-0.152	-0.069	-0.130	-0.112	-0.009	0.265	-0.125		
DRUGLAW	57	-0.100	-0.093	-0.012	-0.078	0.026	-0.052	0.030	-0.100		
SEXPLNG	58	0.200	-0.227	-0.140	0.048	-0.249	0.003	0.108	-0.150		
LAP	59	0.157	-0.198	0.042	0.227	-0.205	0.001	-0.135	-0.021		
EFFORT	60	0.181	0.020	0.294	0.265	0.201	0.079	-0.055	0.072		
VIEWS	61	0.095	-0.143	-0.121	-0.136	-0.108	-0.059	-0.158	0.120		
GPA	77	-0.123	-0.036	-0.103	-0.133	0.050	-0.120	-0.132	0.091		
	VP	6.411	4.660	3.233	2.802	2.121	1.975	1.875	1.662	1.933	1.383
		1.303	1.265	1.224	1.160	1.123	1.107	1.056	1.041		

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR LOADING MATRIX CORRESPONDING TO THAT FACTOR. THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 28

FEMALE NONPERSISTER VARIANCE EXPLAINED BY FACTORS

FACTOR	VARIANCE EXPLAINED	CUMULATIVE PROPORTION OF TOTAL VARIANCE
1	0.[illegible]	0.[illegible]
2	0.[illegible]	0.[illegible]
3	0.[illegible]	0.[illegible]
4	0.[illegible]	0.[illegible]
5	0.[illegible]	0.[illegible]
6	0.[illegible]	0.[illegible]
7	0.[illegible]	0.[illegible]
8	0.[illegible]	0.[illegible]
9	0.[illegible]	0.[illegible]
10	0.[illegible]	0.[illegible]
11	0.[illegible]	0.[illegible]
12	0.[illegible]	0.[illegible]
13	0.[illegible]	0.[illegible]
14	0.[illegible]	0.[illegible]
15	0.[illegible]	0.[illegible]
16	0.[illegible]	0.[illegible]
17	0.[illegible]	0.[illegible]
18	0.[illegible]	0.[illegible]
19	0.[illegible]	0.[illegible]
20	0.[illegible]	0.[illegible]
21	0.[illegible]	0.[illegible]
22	0.[illegible]	0.[illegible]
23	0.[illegible]	0.[illegible]
24	0.[illegible]	0.[illegible]
25	0.[illegible]	0.[illegible]
26	0.[illegible]	0.[illegible]
27	0.[illegible]	0.[illegible]
28	0.[illegible]	0.[illegible]
29	0.[illegible]	0.[illegible]
30	0.[illegible]	0.[illegible]
31	0.[illegible]	0.[illegible]
32	0.[illegible]	0.[illegible]
33	0.[illegible]	0.[illegible]
34	0.[illegible]	0.[illegible]
35	0.[illegible]	0.[illegible]
36	0.[illegible]	0.[illegible]
37	0.[illegible]	0.[illegible]
38	0.[illegible]	0.[illegible]
39	0.[illegible]	0.[illegible]
40	0.[illegible]	0.[illegible]
41	0.[illegible]	0.[illegible]
42	0.[illegible]	0.[illegible]
43	0.[illegible]	0.[illegible]
44	0.[illegible]	0.[illegible]
45	0.[illegible]	0.[illegible]
46	0.[illegible]	0.[illegible]
47	0.[illegible]	0.[illegible]
48	0.[illegible]	0.[illegible]
49	0.[illegible]	0.[illegible]
50	0.[illegible]	0.[illegible]
51	0.[illegible]	0.[illegible]
52	0.[illegible]	0.[illegible]
53	0.[illegible]	0.[illegible]
54	0.[illegible]	0.[illegible]
55	0.[illegible]	0.[illegible]
56	0.[illegible]	0.[illegible]
57	0.[illegible]	0.[illegible]
58	0.[illegible]	0.[illegible]
59	0.[illegible]	0.[illegible]
60	0.[illegible]	0.[illegible]
61	0.[illegible]	1.000000

THE VARIANCE EXPLAINED BY EACH FACTOR IS THE EIGENVALUE FOR THAT FACTOR.

TOTAL VARIANCE IS DEFINED AS THE SUM OF THE DIAGONAL ELEMENTS OF THE CORRELATION (COVARIANCE) MATRIX.

TABLE 29

FEMALE NONPERSISTER ROTATED FACTOR LOADINGS (PATTERN

ROTATED FACTOR LOADINGS (PATTERN)

		FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
ENGACT	1	0.710	-0.035	0.075	0.131	-0.033	0.037	0.028	0.037	0.040	0.011
MATHACT	2	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIACT	3	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSACT	4	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPACT	5	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTACT	6	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGGRAD	7	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHGRAD	8	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIGRAD	9	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSGRAD	10	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPGRAD	11	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTGRAD	12	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGCUM	13	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHCUM	14	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCICUM	15	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSCUM	16	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPCUM	17	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTCUM	18	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGGPA	19	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHGPA	20	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIGPA	21	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSGPA	22	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPGPA	23	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTGPA	24	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGRANK	25	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHRANK	26	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIRANK	27	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSRANK	28	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPRANK	29	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTRANK	30	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGPCTL	31	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHPCTL	32	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIPCTL	33	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSPCTL	34	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPPCTL	35	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTPCTL	36	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTAN	37	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTAN	38	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTAN	39	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTAN	40	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTAN	41	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTAN	42	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGZ	43	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHZ	44	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIZ	45	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSZ	46	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPZ	47	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTZ	48	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSCORE	49	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSCORE	50	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISCORE	51	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSCORE	52	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSCORE	53	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSCORE	54	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTEN	55	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTEN	56	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTEN	57	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTEN	58	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTEN	59	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTEN	60	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGT	61	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHT	62	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIT	63	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATST	64	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPT	65	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTT	66	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGC	67	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHC	68	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIC	69	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSC	70	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPC	71	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTC	72	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGPCT	73	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHPCT	74	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIPCT	75	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSPCT	76	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPPCT	77	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTPCT	78	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTAN	79	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTAN	80	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTAN	81	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTAN	82	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTAN	83	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTAN	84	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGZ	85	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHZ	86	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIZ	87	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSZ	88	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPZ	89	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTZ	90	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSCORE	91	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSCORE	92	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISCORE	93	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSCORE	94	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSCORE	95	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSCORE	96	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTEN	97	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTEN	98	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTEN	99	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTEN	100	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTEN	101	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTEN	102	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGT	103	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHT	104	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIT	105	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATST	106	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPT	107	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTT	108	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGC	109	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHC	110	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIC	111	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSC	112	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPC	113	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTC	114	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGPCT	115	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHPCT	116	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIPCT	117	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSPCT	118	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPPCT	119	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTPCT	120	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTAN	121	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTAN	122	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTAN	123	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTAN	124	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTAN	125	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTAN	126	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGZ	127	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHZ	128	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIZ	129	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSZ	130	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPZ	131	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTZ	132	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSCORE	133	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSCORE	134	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISCORE	135	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSCORE	136	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSCORE	137	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSCORE	138	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTEN	139	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTEN	140	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTEN	141	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTEN	142	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTEN	143	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTEN	144	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGT	145	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHT	146	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIT	147	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATST	148	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPT	149	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTT	150	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGC	151	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHC	152	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIC	153	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSC	154	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPC	155	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTC	156	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGPCT	157	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHPCT	158	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIPCT	159	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSPCT	160	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPPCT	161	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTPCT	162	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTAN	163	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTAN	164	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTAN	165	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTAN	166	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTAN	167	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTAN	168	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGZ	169	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHZ	170	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIZ	171	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSZ	172	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPZ	173	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTZ	174	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSCORE	175	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSCORE	176	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISCORE	177	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSCORE	178	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSCORE	179	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSCORE	180	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTEN	181	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTEN	182	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTEN	183	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTEN	184	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTEN	185	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTEN	186	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGT	187	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHT	188	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIT	189	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATST	190	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPT	191	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTT	192	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGC	193	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHC	194	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIC	195	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSC	196	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPC	197	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTC	198	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGPCT	199	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHPCT	200	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIPCT	201	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSPCT	202	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPPCT	203	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTPCT	204	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSTAN	205	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSTAN	206	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCISTAN	207	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSSTAN	208	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPSTAN	209	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTSTAN	210	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGZ	211	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHZ	212	0.776	-0.042	0.076	0.035	-0.026	0.071	0.006	0.019	0.029	0.017
SCIZ	213	0.757	-0.017	0.076	0.015	-0.026	0.033	0.025	0.075	0.052	0.037
SATSZ	214	0.829	-0.029	0.036	0.029	-0.036	0.033	0.033	0.075	0.052	0.037
COMPZ	215	0.823	-0.022	0.020	0.020	-0.023	0.055	0.018	0.020	0.035	0.057
TOTZ	216	0.911	-0.026	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
ENGSCORE	217	0.742	-0.021	0.060	0.030	-0.030	0.055	0.025	0.060	0.045	0.057
MATHSCORE	218	0.776

TABLE 29 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18		
[illegible]											
	VP	4.450	3.922	2.105	2.029	2.008	1.935	1.862	1.840	1.708	1.698
		1.063	1.387	1.526	1.520	1.412	1.406	1.397	1.319		

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR PATTERN MATRIX CORRESPONDING TO THAT FACTOR. WHEN THE ROTATION IS ORTHOGONAL, THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

TABLE 30

FEMALE NONPERSISTER SORTED ROTATED FACTOR LOADINGS (PATTERN)

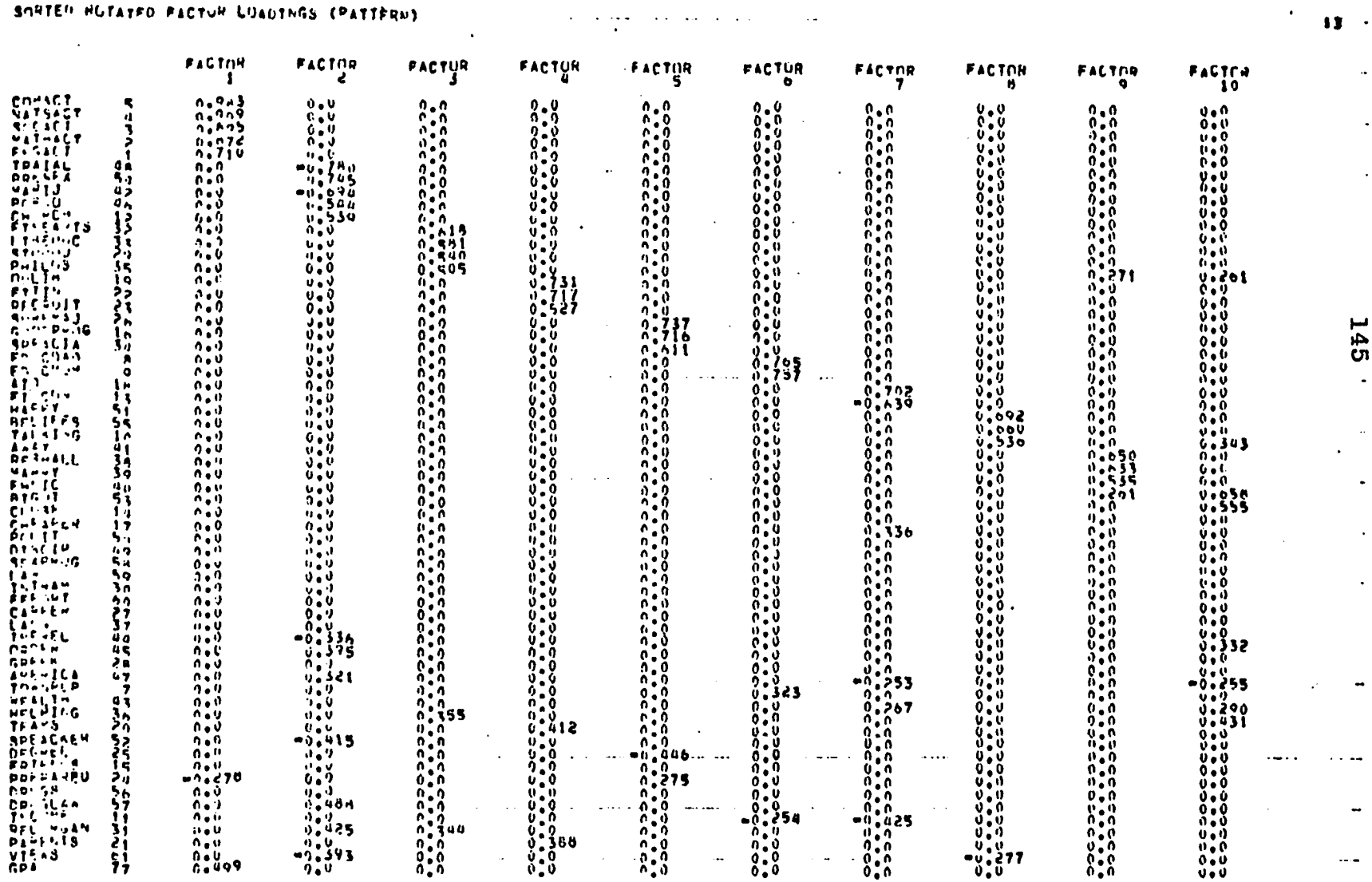

TABLE 30 - Continued

		FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18		
[illegible]	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5			.355							
[illegible]	5										
[illegible]	5					.327					
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5										
[illegible]	5				