



DOCUMENT RESUME

ED 236 206

TM 830 715 😳

AUTHOR TITLE

PUB DATE NOTE PUB TYPE Reed, Jeffrey G.; And Others The College Descriptive Index (C.D.I.): Development and Background Information. Technical Manual. Aug 83 54p. Tests/Evaluation Instruments (160)

EDRS PRICE

MF01/PC03 Plus Postage. Adjectives; *Check Lists; *College Students; Factor Structure; Higher Education; *Participant Satisfaction; *Student Attitudes; *Test Construction; Test Manuals; Test Norms; Test Reliability; Test Validity *College Descriptive Index

IDENTIFIERS

DESCRIPTORS

ABSTRACT

Development of the College Descriptive Index (CDI; Form C) is reported. The CDI is an adjective check list that measures eight dimensions of students' satisfaction with college. The instrument was completed by 601 students at four colleges providing information on satisfaction in each of the eight areas. Scoring procedures and a copy of the instrument are included. Evidence is presented for CDI multidimensionality, scale homogeneity, and criterion related validity. (Author)

Reproductions supplied by EDRS are the best that can be made from the original document. **************



The <u>College</u> <u>Descriptive</u> <u>Index</u> (<u>C.D.I.</u>):

Development and Background Information

ED236206

JM 830

Technical Manual

Jeffrey G. Reed Psychology Department State University of New York at Geneseo

> Mary Anne Lahey Psychology Department Kansas State University

Kathleen D. Ferguson Psychology Department Utica College of Syracuse University

Ronald G. Downey Office of Educational Resources Kansas State University

Donn L. Kaiser Psychology Department Southwest Missouri State University

> Richard L. Pringle Psychology Department Goucher College

> > August 1983

12

U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION EDUCATIONAL RESOURCES (NFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily ropresent official NIF, position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. G. D.A

TC THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ABSTRACT

Development of the <u>College Descriptive Index</u> (Form C) is reported. The <u>C.D.I.</u> is an adjective check list that measures eight dimensions of students' satisfaction with college. The instrument was completed by 601 students at four colleges providing information on satisfaction in each of the eight areas. Scoring procedures and a copy of the instrument are included. Evidence is presented for <u>C.D.I.</u> multidimensionality, scale homogeneity, and criterion related validity.

Notes

For further information concerning the <u>C.D.I.</u>, contact Ronald G. Downey, Office of Educational Resources, 215 Fairchild Hall, Kansas State University, Manhattan, Ks 66506.

The authors would like to thank the following persons for their assistance with this project: Don Ash, Terry Conley, John Guarracino, Rick Lennox, Marisa Melecca, Mary Riley, Tony Roig, Lee VanDusen.

3

REPORT CONTENTS

Title 1
Abstract 2
Report Contents and List of Tables
Introduction 4
Definition of satisfaction 4
Measurement of satisfaction5
Development of the College Descriptive Index (C.D.I.)
Sample
Administration and Scoring
Preliminary Norms 10
Reliability
Scale Intercorrelations 10
C.D.I. Dimensionality 14
Validity
References 21
Appendix

LIST OF TABLES

Table

Page

3

Page

1.	Centile Distribution of C.D.I. Scale Scores	11
2.	Cuefficients of Internal Consistency	12
3.	Intercorrelations between C.D.I. Scales	13
4.	Questions used as Criterion Items	16
5.	Stepwise Multiple-Regression Analyses	17
6.	Correlations between C.D.I. Scale Scores and Criteria	19
7.	C.D.I. differentiation based on Discriminant Analysis	20

Appendix Table

	C.D.I. Reliability:	Teachers
	C.D.I. Reliability:	Parents 27
	C.D.I. Reliability:	Your Self 28
11.	C.D.I. Reliability:	Other Students 29
	C.D.I. Reliability:	Courses
13.	C.D.I. Reliability:	Finances
	<u>C.D.I.</u> Reliability:	Administrators 32
15.	C.D.I. Reliability:	Non-Course Activities
16.	Factor Analysis I	
17.	Factor Analysis II	
18.	Factor Analysis III	
19.	Criterion Intercorre	lations 44



The <u>College Descriptive Index</u> (<u>C.D.I.</u>): Development and Background Information Technical Manual - 1983

INTRODUCTION

The <u>College Descriptive Index</u> (<u>C.D.I.</u>) was developed as a research instrument for the assessment of students' satisfaction with their college experience. The intent was to provide a measure which is standardized, multidimensional, simple to understand and complete, reliable and valid. The <u>C.D.I.</u> is structurally similar to the <u>Job Descriptive Index</u> (Smith, Kendall & Hulin, 1969). The <u>C.D.I.</u> taps eight aspects of the college experience:

- 1. Teachers
- 2. Parents
- 3. Your Self
- 4. Other Students
- 5. Courses
- 6. Finances
- 7. Administrators
- 8. Non-Course Activities

DEFINITION OF SATISFACTION

Satisfaction/dissatisfaction is the subjective reaction of an individual to particular facets of his or her situation. In a college or university setting, satisfaction and dissatisfaction represent responses to the intellectual, social, emotional and physical environment in which the college student participates.

Satisfaction is a complex phenomenon in a complex milieu. College students are exposed to many new, different, and sometimes unsettling experiences. Often the stability of the familiar home, family, friends, and activities are absent. Students are simultaneously attempting to understand and respond to academic challenges, living arrangements, new acquaintances, sexual relationships, personal growth, and career exploration. Given this diversity of environmental influences, it is likely that satisfaction with college will be multifaceted.

Astin (1977) has discussed in detail the importance of satisfaction as an educational outcome variable. A psychometrically respectable measure should prove useful for both administrators (who could use a satisfaction measure as one type of quality control indicator) and investigators (who could use a satisfaction measure to compare colleges, groups of students, and

relate the college experience to later life experience). To accurately describe satisfaction, students' subjective reactions to an evaluations of their experience must be carefully assessed. The stumbling block, however, has been accurate measurement of satisfaction.

MEASUREMENT OF SATISFACTION

Measurement of college satisfaction has taken many forms, but the literature has been dominated by two basic types. The approach most commonly used involves a single item (or small number of items) contained in a larger survey (e.g., "How satisfied are you with your college experience?"). A second approach involves several concerted attempts which have been made to develop procedures to assess college satisfaction in a standardized, reliable and valid fashion. These efforts have involved development of questionnaires, such as the <u>College</u> <u>Student Satisfaction Questionnaire</u>, <u>CSSQ</u> (Betz, Menne, & Klingensmith, 1970), or the <u>Transactional Analysis of Personality</u> and Environment, <u>TAPE</u> (Pervin, 1967).

Both of these approaches, however, are limited in several respects. In the most typical, single item case, responses are typically made on 3- to 5-point scales with scales which frequently either lack end anchoring, or use ambiguous response levels. Reliability and validity of these measures is frequently unavailable. And, the single question used fails to encompass the complexity of satisfaction.

While the second approach is clearly superior, it too has several limitations. The <u>CSSQ</u> lack generalizability across environments, uses somewhat ambiguous response options, and appears to contain both ambiguous and complex items. The <u>TAPE</u> is probably more generalizable, using a semantic differntial structure. However, it relies on a discrepancy scoring procedure which defines satisfaction or dissatisfaction as the degree of similarity between Self and Environment measures. We question the accuracy of this discrepancy scoring procedure, arguing that a student may report Self-Environment congruency, yet be dissatisfied, and vice versa.

The lack of consistency and comparability of satisfaction measures, coupled with the questionnable accuracy of so many measures, has led to contradictory results and confusion. While we are adding another measure to the long list, our specific purpose was to develop a new instrument which avoids problems noted above. The process began with the search for appropriate measurement criteria.

Smith, Kendall and Hulin (1969) proposed several general requirements for the measurement of satisfaction. They are:

б

ERIC Afull lext Provided by ERIC 1. Measures should be applicable to a wide spectrum of people. The general verbal level should be low. They should avoid long complicated attitude statements. Because of the ambiguity of interpretation of responses such as "strongly agree" and "strongly disagree," these types of response options should be avoided.

2. Measures should be reliable.

3. Measures should be standardized. Clear instructions should be provided. The format should be standardized.

4. Measures should be multidimensional. Since satisfaction is assumed to be a complex construct, separate scores should be available for each facet tapped.

5. Measures should be valid. They should allow for prediction of individual differences in behavior. They should be understandable, allowing development of general laws and theory (Smith et al., 1969, p. 3-6).

The C.D.I. was developed in light of these measurement criteria.

DEVELOPMENT OF THE COLLEGE DESCRIPTIVE INDEX

The C.D.I. was modeled after the Job Descriptive Index (Smith et al., 1969). The instrument collects students' reactions to their experience of college life. Eight areas or domains were thought to be the primary influences in a student's experience -- teachers, courses, peers, activities, finances, family, administrators, and the self. These were, therefore, selected for inclusion in the instrument. (The inclusion of two dimensions seemed somewhat questionable at this point. First, many students have little contact with college "administrators," thus the utility of this scale was questioned. Second, while "parents" provide considerable financial support for many students, the extent of their impact on students' experiences varies widely. Both of these dimensions, however, were included for the sake of completeness.) It was expected that there would be differences in response and in importance from student to student and from campus to campus on each of these variables.

A number of descriptive adjectives were selected to compose a scale for each dimension, based on the a priori judgment of the authors that each adjective might be relevant to a particular aspect of college life. Adjectives were assembled from such



sources as the <u>Job Descriptive Index</u> (Smith et al., 1969) and the <u>Adjective Check List</u> (Gough, 1952). Approximately half of the items in each dimension were positively worded (e.g., honest, creative, important); the remaining half were negatively worded (e.g., irrelevant, offensive, careless). We expected that students highly satisfied in an area would find most positive adjectives descriptive of that area and find most negative adjectives unlike their experiences. We expected the opposite with highly dissatisfied students. 7

Each <u>C.D.I.</u> dimension appears on a separate questionnaire page to minimize cross-dimensional carry-over effects. The eight dimensions and corresponding number of items are:

This manual presents information on Form C of the <u>College</u> Descriptive Index (Reed, Lahey, & Downey, 1980).

Form A was originally developed in 1978. It contained 211 descriptive adjectives distributed among the eight dimensions. Evaluation of the original instrument, based on a sample of Kansas'. students, focused on elimination of redundant items and improving the internal consistency of scales. The first revision yielded Form B, containing 129 items. A second evaluation of the C.D.I., with the same goals in mind, was based on a sample of students from New York. Form C is slightly longer than Form B, because items were added to several Form B scales to restore equal positive - negative item number balance. Additionally, several Form B items which appeared to be ambiguous or unclear were replaced with synonyms in Form C. (For detailed information on the development and evaluation of Forms A and B, see Reed, Lahey, & Downey, Reference Note 1.) The present version, Form C, contains 133 descriptive adjectives, grouped in eight areas. A copy of the C.D.I. is reproduced in the Appendix.

SAMPLE

Colleges

Usable data were received from 601 undergraduate students enrolled at four different colleges. The colleges may be described as follows:



(a) a medium sized, coeducational, primarily residential, public liberal arts college in the north eastern U.S.;

(b) a small, coeducational, primarily residential, private liberal arts college in the north eastern U.S.;

(c) a_small, primarily residential, private liberal arts college for women in the middle atlantic U.S.;

(d) a medium sized, coeducational, heavily commuter, public liberal arts college in the midwest.

Because of the request of one college that it not be explicitly identified, data are not identified with particular institutions in this report.

Students

Sixty-three percent (380) of the respondents were women, 37/ percent (221) were men. The average age was 20.5 years (s = 3.9 years; Median = 19.5 years). Students represented all four college classes, although the largest proportion (49%) were freshmen. The remainder of the sample included 19 percent sophomores, 14 percent juniors, and 18 percent seniors. Approximately 58 percent lived on campus; 42 percent lived off campus, approximately half of whom commuted from home. Thirty-six percent were attending a college within fifty miles of home.

ADMINISTRATION AND SCORING

The 9-page <u>C.D.I.</u> instrument contains explicit written instructions for respondents. These include both general instructions concerning the whole instrument on page one, and specific instructions for each dimension on the separate page which concerns that dimension. The <u>C.D.I.</u> may be administered individually, in groups, or as a mailed survey.

To complete the instrument, subjects are instructed (in part):

"...On the following pages you will see lists of adjectives which may or may not accurately describe your college experiences and your feelings about those experiences. The words are grouped in eight areas, concerning your Teachers, Parents, Self, Other Students, Courses, Finances,



College Administrators, and Non-Course Activities.

9

"... Think of your Teachers (Professors). How well does each of the following adjectives describe most of your Teachers this semester? Circle:

- Y for "yes" if the word does describe your teachers,
- N for "no" if it does not describe your teachers,
- ? if you cannot decide.

Item scoring

. . .

A high <u>C.D.I.</u> score indicates satisfaction; a low score indicates dissatisfaction. Both positive and negative adjectives appear in each scale dimension. Thus, they must be scored in different fashions for consistency. Included in homogeneity analysis tables described below (Appendix Tables 8 through 15), are type indicators; negative adjectives are identified by a minus (-) following the item number; positive adjectives have no indicator.

Each item is scored 1, 2, or 3-points; a 3 indicates satisfaction, a 1 indicates dissatisfaction. /For positive adjectives, a "yes" response (indicating that the item describes his/her experience) is scored 3-points (e.g., "yes" my teachers are "articulate"). A "no" response to a positive adjective is scored 1-point, representing dissatisfaction since the item is not descriptive of the student's experience (e.g., "no" my teachers are not "helpful"). Negative items are scored in the opposite fashion; 3-points for a "no" response to a negative adjective indicating satisfaction (e.g., "no" my teachers are not "inconsiderate"); 1-point for a "yes" response (e.g., "yes" my teachers are "conceited"). Item scoring is summarized below.

Item Scoring Key

Positive Adjectives

Negative Adjectives

Y = 3 points ? = 2 points N = 1 point

N = 3 points ? = 2 points Y = 1 point

Scale scoring

Because scales were of varying lengths, the Dimension or Scale Mean was selected as the most accruate expression of a subject's score on a dimension. A Scale Mean score was computed for each <u>C.D.I.</u> dimension for each subject. This was accomplished by (a) summing the scores for all items in the dimension to which the subject responded, and (b) dividing by the number of valid item responses. Blanks (failure to respond to an item) represent missing data and were omitted. If more than 25% of the items in a scale were omitted or otherwise invalid (e.g., multiple response), the dimension score was not computed.

PRELIMINARY NORMS

Combining subjects from the four-college sample described above, a preliminary norm distribution was constructed, as shown in Table 1. A Centile distribution is presented for scores in each <u>C.D.I.</u> Scale. Also included are group data for each dimension, including scale mean, standard deviation, median, and number of subjects on which the measures are based.

RELIABILITY

Coefficients of internal consistency were computed for each <u>C.D.I.</u> dimension using Cronbach's Coefficient Alpha (Cronbach, 1951). Alpha coefficients for the eight <u>C.D.I.</u> dimensions are presented in Table 2.

Detailed information on items and scale homogeneity are included in Appendix Tables 8 through 15. Item information includes: adjective and indicator (-) if it is negative; item mean and standard deviation; squared multiple correlation with other items in the scale. Scale statistics provided include summative scale mean and variance, mean item mean and variance, mean inter-item correlation, scale alpha, and number of items in the scale.

In general, homogeneity indices are moderately high to high, ranging from .77 to .93. They indicate that each resulting scale can be used with a moderate degree of confidence.

SCALE INTERCORRELATIONS

Intercorrelations of the eight <u>C.D.I.</u> scales were computed. The 28 correlations are presented in Table 3. In general, the correlations are moderately low. A striking exception is the relationship shown between the logically related scales Teachers and Courses (r = .53).

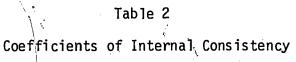
Centile	Teacher	Parents	Your Self	Other Stud.	Courses	Finances	Administr.	Non-Course	Centile
1.00	3.00	3.00	3.00		3.00	3.00	3.00	3.00	1.00
.90 ¢/	2.90	3.00	2.76	2.79	2.87	2.77	2.90	2.85	.90
•/ • 80	2.80	2.94	2.63	2.71	2.73	2.67	2.81	2.75	. 80
.70	2.75	2.93	2.56	2.61	2.67	2.43	2.75	2.69	.70
.60	2.69	2.86	2.47	2.55	2.56	2.24	2.61	2.61	.60
.50	2.64	2.77	2.39	2.43	2.44	2.00	2.48	2.52	.50
. 40	2.58	2.72	2.29	2.35	2.31	1.84	2.33	2.44	.40
30	2.48	2.55	2.16	2.24	2.16	1.54	2.15	2.31	.30
.20	2.37	2.41	2.02	2.06	1.98	1.28	1.98	2.11	.20
. 10	2.22	2.13	1.82	1.85	1.73	1.06	1.75	1.88	.10
Mean	2.595	2.676	2.352	2.398	2.379	2.021	2.400	2.459	Mean
s.d.	.28	.36	.36	.37	.43	.64	.46	.40	s.d.
Median	2.650	2.801	2.412	2.430	2.442	2.009	2.477	2.561	Median
, n	598 🚊	588	598	596	599	595	579	579	ñ

42

Centile Distribution of <u>College Descriptive Index</u> Scale Scores



922]



for Eight <u>C.D.I.</u> Dimensions

Scale		Alpha	 •
Teachers		.78	 <u> </u>
Parents		.85	
Your Self	•	.78	
Other Students		.84	
Courses	· .	. 87	
Finances	· · · · · ·	.84	
Administrators		.93	
Non-Course Activitie	es	.81	

14

Full Rext Provided By ERIC

Parents .25 Your Self .33 .31 Other Students .38 .21 .31 Courses .53 .14 .37 .29 Einances_ .05 .15 .22 .12 .12 Administrators .29 .22 .19 .34 .21 .08 Non-Course Act. .21 .19 .27 .36 .20 .11 Notes: Maximum N = 596 Minimum - 560 .50	
Other Students .38 .21 .31 Courses .53 .14 .37 .29 Einances .05 .15 .22 .12 .12 Administrators .29 .22 .19 .34 .21 .08 Non-Course Act. .21 .19 .27 .36 .20 .11 Notes: Maximum N = 596 Minimum / 560 .50	
Courses .53 .14 .37 .29 Einances_ .05 .15 .22 .12 .12 Administrators .29 .22 .19 .34 .21 .08 Non-Course Act. .21 .19 .27 .36 .20 .11 Notes: Maximum N $= 596$ 96 Minimum $= 560$ 96 Minimum $= 560$	че.
Finances.05.15.22.12.12Administrators.29.22.19.34.21.08Non-Course Act21.19.27.36.20.11Notes: Maximum N $=$ 596Minimum $=$ 560	
Administrators .29 .22 .19 .34 .21 .08 Non-Course Act. .21 .19 .27 .36 .20 .11 Notes: Maximum N = 596 .11 .11 .11 .11	
Non-Course Act. .21 .19 .27 .36 .20 .11 Notes: Maximum N = 596 .11	
Notes: Maximum N = 596 Minimum / 560	
Minimum / 560	.23
Minimum / 560	<u>.</u>
	•
	<i>.</i> .
15	

Intercorrelations Between College Descriptive Index Scales

Table 3

F.

C.D.I. DIMENSIONALITY

Dimensionality of the 133 items was assessed using factor analysis to determine whether (a) items assigned logically to a scale were empirically related to other items in the scale; and (b) whether clusters of items important for one scale were independent of other scales.

Because of the total number of items in the C.D.I. and available computer resources, it was not possible to include all items in a single factor analysis. Therefore, items were grouped by scales, and three factor analyses were computed. Each scale (and item) was included in two different analyses so that each scale was examined with each other scale at least once. Items within scales were grouped as follows: <u>Analysis I</u>, Teachers, Parents, Your Self, Other Students, Courses, Finances; <u>Analysis II</u>, Other Students, Courses, Finances, College Administrators, Non-Course Activities; <u>Analysis III</u>, Teachers, Parents, Your Self, College Administrators, Non-Course Activities. This analysis structure is illustrated conceptually in Appendix Figure 1. Attempting to enhance comparisons between the three analyses, each analysis was performed using Principal Axis factoring with communalities of 1.0 on the main diagonal of the correlation matrix, followed by varimax rotation.

Factor analysis results

Results of the factor analyses are included in Appendix Tables 16, 17, and 18. The three analyses were extremely consistent with each other. In each analysis, an approximation to simple structure was achieved. Most items on an a priori scale have high loadings on a factor common to other items on that scale, and relatively low loadings on all other factors.

The cleanest scales from the standpoint of low cross loadings and concentration of one scale on one factor were: Courses, Administrators, Parents, Non-Course Activities, Other Students, and Finances. The least clean scales were Teachers and Your Self, although there was little overlap between these scales and other C.D.I. scales. The Teachers scale, unifactorial in Analysis III (Table 18, Factor IV), composed a strong Factor IV in Analysis I (Table 16), but spilled over to a separate weak factor IX. The primary focus of this second factor appears to be a pleasanthelpful dimension which is tapped in Factor IV to some extent. The more critical problem, however, was with Your Self. Although unifactorial in Analysis III (Table 18), it split into two relatively strong factors, VI and VIII in Analysis I (Table 16). Subscales were constructed based on Analysis I results and homogeneity analyses were computed for each subscale. The maximum scale alpha computed for any Self subscale was .70, obtained by deleting items to form one 7-item partial subscale (less than the total Your Self scale alpha). Given these results, and no

convincing explanation for subscale composition, both the Teachers and Your Self scales were treated as single entities in all subsequent analyses.

Recalling the diverse nature of the sample used (students from four different colleges, inclusion of both public and private institutions, and representation of all four college classes) we are pleased with these factor analysis results. These analyses indicate that the instrument is multidimensional, and that the eight scales are relatively homogeneous and independent of each other.

VALIDITY

Three types of evidence for criterion-related validity of the <u>C.D.I.</u> were examined: (a) Regression analyses were performed relating <u>C.D.I.</u> scales to three general satisfaction measures; (b) Bivariate correlations were computed between the <u>C.D.I.</u> scales and each of twelve criterion questions; (c) Scales were evaluated in terms of their ability to differentiate between demographic groups -- e.g., gender differences, differences between colleges, and class-in-college differences.

The 12 items used as criteria are displayed in Table 4, which presents the text of each item, response options provided to the subject, and the point scoring system used for each item. These questions were contained in a survey accompanying the <u>C.D.I.</u> (see Reed, Lahey, & Downey, Note 1; Downey & Lynch, Note 2, for further details).

Criterion prediction results \setminus

Three separate stepwise multiple regression analyses were computed using the eight <u>C.D.I.</u> scales as predictors. General satisfaction criteria used were taken from an accompanying survey sent to each <u>C.D.I.</u> respondent. The three criterion questions were each scored on a 5-point scale. The wording of each of these General Satisfaction items (A, B, and C) is provided in Table 4. A total of 560 usable cases were included in each analysis.

Table 5 reports the results of these analyses. Six <u>C.D.I.</u> scales combined to significantly predict the most general criterion, overall satisfaction (item C); the most potent predictor was Courses. Four <u>C.D.I.</u> scales combined to significantly predict the second criterion, progress toward life goals (item B); the most important predictor was Your Self. Four <u>C.D.I.</u> scales combined to predict the third criterion, a measure of satisfaction with the particular institution (item A); the best predictor of the likelihood that one would reselect this college was Non-Course Activities. Three <u>C.D.I.</u> scales (Teachers, Courses, and Non-Course Activities) were significant predictors of



ſtem		•	Resp	onse	Opti	ions	
REA: <u>General satisfaction</u> .						•	· .
If you were to start college over likely would you be to come to come	r again, how ollege here?		DS	PS	U	PN	DN
B. Progress toward your life goals	- ,	,	VD	MD	N	MS	۷S
C. Overall satisfaction with college	e		VD	MD	N	MS	۷S
AREA: <u>Academic issues</u> .	v, − ¹ † 1895			· .		•	•
). Quality of teaching			DW	MW	Ι	MS	DS
. The intellectual challenge of yo	ur courses	e. A	. VD	MD -	N	MS [.]	VS
 Accessibility of instructors for AREA: <u>Students</u>. 	conferences		. VD	MD	N	MS	VS
G. The intellectual quality of othe	r students		VD	MD	N	MS	VS
I. Friendliness of students		•	DW	MW	I	MS	DS
I. Opportunity for extra-curricular	activities		DW	MW	I	MS -	, DS
AREA: <u>Other issues</u> .		· · · · ·					
J. Housing arrangements	•		٧D	MD	N	MS	V
K. Availability of financial assist	ance		DW	MW	I	MS	D
L. The way this college is run (adm	ninistration)		.VD	MD	N	MS	V\$
Response Key	Points	Res	sponse	Key			
DW = Definite Weakness MW = More a Weakness than a strength I = In between MS = More a Strength than a weakness DS = Definite Strength	3	VD = Ve MD = Me N = Ne MS = Me VS = Ve	oderate either oderate	ely D	issa atis	tisfi	ed

Response KeyPointsDS = Definitely select this college again.5PS = Probably select this college again.4U = Undecided.3PN = Probably not select this college again.2DN = Definitely not select this college again.1

19

l

18

Table 4

Stepwise Multiple Regression Analyses relating Eight <u>C.D.I.</u> Scales with Three Logical Satisfaction Criterion Measures

College Descriptive	Index Scal	es Entered	in Regress	ion	Overall	Regression	Results
Criterion & Scale Names	Simple <u>r</u>	B Weight	<u>Beta</u> Weight	F for Inclusion	Mult. <u>R</u>	Stand. <u>Error</u>	Regr <u>F</u>
CRITERION: Overall satisfaction	with colle	ge.	- <u> </u>	· · ·			
Courses Non-Course Activities Administrators Teachers	.37 .36 .31 .35	. 41 . 49 . 29 . 33	.20 .21 .15 .11	19.9 29.0 14.3 5.4			
Other Students Your Self (Regression Constant)	.32 .28	.18 .17 (80)	.08 .07	3.1 2.7	.52	.77	35.0
RITERION: <u>Progress toward life</u>			20	61 0		• 	s.
Your Self Courses Teachers Finances (Regression Constant)	.42 .36 .34 .04	.90 .40 .53 09 (59)	.32 .17 .15 06	61.8 14.4 11.3 2.4	.50	.87	45.2
CRITERION: Likelihood that you w	vould rese	lect this co	llege to a	ittend.		•	•
Non-Course Activities Other Students	.31	.61 .52	.21 .16	24.3 13.7			• •
Courses Administrators (Regression Constant)	.24 .21	.35 .21 (64)	.13 .08	9.9 3.8	.40	1.48	27.0

Note: <u>C.D.I.</u> Scales are listed in order of entry into Regression Equations.



each general criterion. One <u>C.D.I.</u> scale (Parents) did not significantly contribute to prediction of any criterion.

Correlations with other variables

In addition to the three general satisfaction questions discussed above, nine additional items were selected from an accompanying student survey. Those items represented specific aspects of the student experience and were thought to be somewhat indicative of satisfaction in each area. Those nine items are displayed in Table 4 in three general areas: academic issues, students, and other issues.

Bivariate correlations between <u>C.D.I.</u> scales and each of the 12 criterion questions are presented in Table 6. The Teachers and Courses scales were most strongly related to specific items in the general area of academic issues (items D, E, and F). Other Students and Non-Course Activities scales were most closely related to specific items concerning students (items G, H, and I). The Administrators scale was strongly related to item L, a measure of student satisfaction with the way the college is run. The Your Self scale was highly related to the question concerning progress toward life goals (item B). The Finances and Parents scales did not appear to be related to any of the criterion items used. (Relationships among the 12 criterion items, in the form of a bivariate correlation matrix, are presented in Appendix Table 19.)

Group discrimination

Three separate Stepwise Discriminant Analyses were computed using <u>C.D.I.</u> scales as discriminating variables. Group membership predicted was based on three demographic variables: (1) sex of the respondent, (2) college the student was attending, and (3) class standing in college. These results are presented in Table 7. Three scales contributed to significant discrimination between men and women. Five scales composed three discriminant functions to discriminate among the four colleges. Six scales aided in differentiation on the basis of college standing.





Correlations between <u>C.D.I.</u> Scale Scores and 12 Survey Questions used as Criteria

	College Descriptive Index Scales								
Criterion Items	Teachers	Courses	Your Self	Oth.Stud.	Non-C.Act.	Administ.	Finances	Parents	
. Reselect this college	.23	.24	.21	.30	.31	.21	.07	.12	
. Progress toward life goals	.34	.36	. 42	.24	.18	.17	.04	.19	
. Overall Satisfaction	.35	.37	.28	.32	.36	.31	.12	.13	
. Quality of teaching	.41	.38	.12	.16	.12	.15	.00	.09	
. Intellectual challenge courses	.29	. 40	.19	.17	.10	.14	.09	.13	
. Instructor accessibility	.42	.32	.17	.09	.09	.11	.09	.17	
Intellectual quality students	.12	.11	.12	.34	.19	.12	.02	.14	
. Student friendliness	.16	.14	.07	.39 -	.35	.19	02	.10	
. Opportun. extracurric. activ.	.06	.08	.07	.19	.44	.20	.05	.06	
. Housing	.10	.16	.16	.23	.17	.16	.12	.12	
. Availability financial aid	.11	.09	01	.08	.00	.15	.08	03	
., Way college is run	.16	.17	.26	.15	.20	.56	.09	.16	

ERIC 23

24

່ວ

Table 7:

ý.

25

ERIC

<u>C.D.I.</u> Scale differentiation between Groups based on Discriminant Analyses using 3 separate Criteria

Criteria and Significant <u>C.D.I.</u> Predictors	N of Functions		Group M	eans		Univariate <u>F</u>	Lambda
CRITERION: <u>Sex of respondent</u> .	1		Female	Male			
Teacher Other Students Your Self	•	•	2.63 2.44 2.37	2.53 2.32 2.30	× .	16.4 14.4 5.5	.97 .96 .95
CRITERION: <u>College attending</u> .	. 3	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	· .	ы. Че
Non-Course Activities Teachers Administrators Your Self Finances	, , , ,	2.29 2.54 2.38 2.35 1.89	2.58 2.59 2.55 2.37 2.11	2.48 2.75 2.31 2.41 2.11	2.51 2.55 2.32 2.26 2.06	17.1 13.0 8.6 4.0 4.2	.91 .86 .81 .79 .77
CRITERION: <u>Class standing</u> .	3	Fresh.	Soph.	Junior	Senior		
Non-Course Activities Your Self Administrators Courses Finances Other Students		2.52 2.31 2.46 2.34 2.08 2.41	2.49 2.40 2.37 2.51 2.10 2.39	2.41 2.32 2.39 2.37 1.94 2.32	2.32 2.40 2.26 2.37 1.91 2.42	6.7 2.6 4.9 4.0 2.5 1.1	.96 .94 .91 .90 .88 .87

26

REFERENCES

- Note 1. Reed, J. G., Lahey, M. A., & Downey, R. G. (1982). Development of the College Descriptive Index -- A measure of student satisfaction. Submitted for journal review. (author manuscript available)
- Note 2. Downey, R. G., & Lynch, M. L. (1978). The Kansas State University Student Survey. Manhattan, Ks: Kansas State University, Center for Student Development, Program Development and Evaluation Division.
- Astin, A. W. (1977). <u>Four critical years</u>. San Francisco, Ca: Jossey-Bass.
- Betz, E. L., Menne, J. W., & Klingensmith, J. E. (1971). The measurement and analysis of college student satisfaction. Measurement and Evaluation in Guidance, <u>4</u>, 99-106.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. <u>Psychometrika</u>, <u>16</u>, 297-334.
- Gough, H. G. (1952). <u>The Adjective Check List</u>. Palo Alto, Ca: Consulting Psychologists Press.

Pervin, L. A. (1967). Satisfaction and perceived self-environment similarity: A semantic differential study of studentcollege interaction. Journal of Personality, <u>35</u>, 623-634.

Reed, J. G., Lahey, M. A., & Downey, R. G. (1980). The <u>College Descriptive Index</u>. Copyright 1980 by the authors. (Note: the C.D.I. may be reproduced in limited quantities for use in research.)

Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). <u>The measurement of satisfaction in work and retirement:</u> <u>A strategy for the measurement of attitudes</u>. Chicago: <u>Rand McNally</u>.





APPENDIX

a de la compañía de l	Pag	e
Questionnai	e: The <u>College Descriptive Index</u>	;
Reliability	analyses for <u>C.D.I.</u> Scales:	
Table	. Teachers 26	,
Table	. Parents 27	
, Table	D. Your Self 28	3
Tab le	1. Other Students 29)
Tab le	2. Courses 30)
Tab le	3. Finances 31	L
Tab le	4. Administrators 32	2
Table	5. Non-Course Activities 33	3
Factor anal	ses:	•
Figure	1. Variable partitioning scheme	ļ
Table	6. Analysis I 35	5
Tab le	7. Analysis 11 38	3
Table	8. Analysis III 41	L
Table 19.	ritèrion intercorrelations	1
	1	

28

22

The College Descriptive Index

In this questionnaire you will be asked about your college experiences. On the following pages you will see lists of adjectives which may, or may not, accurately describe your college experiences and your feelings about those experiences. The words are grouped In eight areas, concerning your Teachers, Parents, Self, Öther Students, Courses, Finances, the College Administrators, and Non-Course Activities (extra-curricular activities). You should identify which of the adjectives accurately describes your situation in each area. Please answer each item.

C) 1980 Form C 10/80

Think of your Teachers (Professors), How well does each of the following adjectives describe most of your Teachers this semester? Circle: Y for "YES" if the word does describe your teachers, N for "NO" if it does NOT describe your teachers,	Think of your Parents (or Guardian). What are they like most of the time? How well does each of the following words describe your Parents' attitudes and relationship toward you and your college experience, in general? Circle:
? if you cannot decide.	Y for "YES"-If-the-word-does
	describe your parents, N for "NO" if it does NOT
TEACHERS (Professors)	describe your parents, ? if you cannot decide.
Y ? N Understanding	
Y ? N Inconsiderate	PARENTS (or Guardian)
Y ? N Competent	
Y ? N Articulate	Y ? N Intolerant
Y ? N Helpful	Y ? N Thoughtful
Y ? N Available	Y ? N Closed-minded
Y ? N Offensive	Y ? N Unrealistic
Y ? N Humorous	Y ? N Affectionate
Y ? N Conceited	Y ? N Trusting
Y ? N Knowledgeable	Y ? N Nosey
Y ? N Impractical	Y ? N Stubborn
Y ? N Flexible	Y ? N Concerned
Y. ? N. Blased	Y ? N Supportive
Y ? N Insensitive	Y ? N Fault-finding
Y ? N Enthusiastic	Y ? N Understanding
Y ? N Tactless	Y ? N Dependable
Y ? N Opinionated	Y ? N Sensible
Y ? N Dull	Y ? N Impatient
Y ? N Patient	
	N

Nitpicking

30

Think about Your Self. How do you feel most of the time this semester? Circle:

Y for "YES" if the word does describe Your Self, N for "NO" if it does NOT describe Your Self, ? if you cannot decide.

YOUR SELF

Y	?	N	Moody
Y	?	N	Relaxed
Y	?	N	Foolish
Y	?	N ·	Confident
Y	?	N	Aloof
Y	?	N·	Lazy
Y.	?	Ņ	Frustrated
Y	?	N	Eager
Y	?	N	Honest
Y	?	N	Optimistic
Y	?	N	Obstinate
Ŷ	?	N	Helpful
Y	?	Ň	Timid
Y	?	N	Successful
Ŷ	?,	N	Sarcastic
Y	?	N	Organized
Y	?	N	Careless
			1

Think of your Courses this semester. Think of the Other Students you What are they like most of the time? know and see regularly this semester. Circle: How well does each word describe most of those Students? Circle: Y for "YES" if the word does describe your Courses, Y for "YES" if the word does describe other students. N for "NO" if it does NOT describe other students, ? if you cannot decide. OTHER STUDENTS ? N Honest ? N ? N Sympathetic ? ? N Apathetic N Indifferent NĽ ? N ? N Lazy N ? ? N Responsible ? N Tolerant ?~ N. ? N Y ? N Obnoxious ? N Hard-to-meet Y ? N 2 N · Y ? N Friendly 2 N Y Stimulating ? N N ? Inconsiderate ? N N Y ? N Open-minded ? ? N ? N Complaining ? N N Ambitious ? ? N Imaginative ? N Confident 2 N Unreliable ? N Prejudiced N 2 Arrogant 2 N Y Studious ? N

N for "NO" if it does NOT describe your Courses, ? if you cannot decide. COURSES 1 Creative Irrelevant Routine Interesting Disappointing . Enjoyable Repetitive Disorganized Worthwhile Frustrating Boring Exciting Satisfying **Unpleasant** Challenging

Informative

32



Think of your Financial Situation this semester. How well does each of the following words describe your finances? Circle:

FINANCES

Y	?	N	Broke
Y	?	N	Inadequate
Y	?.	Ņ	Well off
Y	?	N	Secure
Y	?	N	Indebted
Y	?	N	Tight
Ŷ	?	N	Satisfactor

33

ERIC."

Think of the College Administrators with whom you have had contact (e.g., Deans, Department Heads, Registrar...). How well does each of the following words describe them? Circle: Y for "YES" if the word does describe Administrators, N for "NO" if it does NOT describe Administrators, ? if you cannot decide. COLLEGE ADMINISTRATORS Intelligent ? N Y Admirable. ? N Y Intolerant ? N Y Credible ? N Y Ambitious ? N Y Arrogant ? N Y Impractical ? N ? Deceptive ? N Y ? Respected ? N Y Unhelpful ? N Y٠ Impartial (fair) ? N Y Competent ? N Y Honest ? N Y Inconsistent ? N Y Inflexible Y ? N Y ? N Common-sensical ? N Conscientious ? N Concerned ? N Understanding ? N Stubborn ? N Disorganized Y ? N

Think of the Non-Course (extracurricular) Activities in which you have participated. How well does each word describe those activities? Circle: Y for "YES" if the word does

describe your activities, N for "NO" if it does NOT describe your activities, ? if you cannot decide. NON-COURSE ACTIVITIES Limited ? N Important ? N Tiring ? N Creative ? N Repetitive ? N Disorganized ? N Fun ? N Stimulating N Relaxing N Disappointing ? N Exciting ? N Worthless ? N Easily-accessible ? N Relevant ? N

? N The Pits ? N Enjoyable

C.A.

34

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

TEACHERS Scale

				•	
	Items	Mean	S.D.	R-sq.	
Т 1.	understanding	2.7	. 6	. 27	
т 2	inconsiderate	2.8	.5	.23	
т З.,		2.9	. 4	.24	
т4,	articulate	2.6	. 6	.12	
т 5.	helpful		. 4	. 25	
Т 6.	available	2.8	. 6	.17	
T 7	offensive	2,8	.5	. 26	
т 9.	humorous	2.6	. 6	.15	
т 9	conceited	2.7	. 6	.23	
T10.	knowledgeable	2.9	.2	.15	
T11	-	2.6	. 6	. 17	
T12.	flexible	2.5	.7	.19	
T13		2.4	.8 .	.20	
T14		2.8	.5	. 28	
	enthusiastic	2.6	.7	.23	
	tactless	2.7	.5	.23	
		1.8	.9	.16	
T17	- dull-	2:4	8		
	patient	2.6	.7	.27	
T20	nitpicking	2.2	.8	.17	
120	nr chicking	مشد 18 سنگ	• 0	/	
	Total Scale	Mean		52.1	
	Total Scale			28,9	
	·				
	Mean Item Me	an (Scale.Sco	ore)	2.61	
	Mean Item Va			.37	•
		tem Correlati	ion	. 16	
	Scale Alpha	•		.78	
	N of Items		.1	20	

Note: Scoring of negative items (--) reversed for consistency.

26

....

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

PARENTS Scale

	Items	Mean	S.D.	R-sq.
P 7 P 8 P 9. P10. P11 F12. P13.	intolerant thoughtful closed-minded unrealistic affectionate trusting nosey stubborn concerned supportive faultfinding understanding dependable sensible impatient	875788429948996 2222222222	458455893485447	. 25 . 39 . 50 . 34 . 40 . 21 . 32 . 32 . 32 . 37 . 50 . 47 . 46 . 38
- 	Total Scale Me Total Scale Va Mean Item Mean Mean Item Vari Mean Inter-Ite	riance (Scale Sco ance	•	40.4 26.3 2.69 .37 .29
1	Scale Alpha	. · ·		.85

N of Items

Note: Scoring of negative items (-) reversed for consistency.

36

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

YOUR SELF Scale

Ite	ms '	Mean	S.D.	R-sq.	
S 3 for S 4. cor S 5 alo S 6 laz S 7 fru S 8. ear S 9. hor S10. opt S11 obs S12. hel S13 tio S14. sur S15 sar S16. ord	axed olish offident oof y ustrated ger hest imistic stinate lpful nid cessful castic	1.8 1.5 4.5 2.8 5.8 5 7 8 3 4 2.5 2.8 5 8 5 7 8 3 4 2.5 2 8 5 7 8 3 4 2.5 2 8 5 8 5 7 8 5 8 5	99787997 - 7997 - 77587988 - 988	29 .26 .20 .34 .14 .32 .33 .24 .13 .22 .09 .13 .11 .33 .11 .33 .17 .30 .31	
	Total Scale M Total Scale V Mean Item Mea Mean Item Var Mean Inter-It Scale Alpha	'ariance An (Scale S iance		39.8 36.8 2.34 .58 .17 .78	····.p
	N of Items			17	

Note: Scoring of negative items (-) reversed for consistency.

ÎC

37

V.

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

OTHER STUDENTS Scale

ltems	Mean	S.D.	R
<pre>0 1. honest 0 2. sympathetic 0 3 apathetic 0 4 indifferent 0 5 lazy 0 6. responsible 0 7. tolerant 0 8 obnoxious 0 9 hard-to-meet 010. friendly 011. stimulating 012 inconsiderate 013. open-minded 014 complaining 015. ambitous 016. imaginative 017. confident 018 unreliable 019 prejudiced 020 arogant 021. studious</pre>	5611755675875605555742 2222222225555542 222222225555555555	77888778857779777887	. 29 . 29 . 19 . 30 . 39 . 39 . 39 . 39 . 39 . 39 . 29 . 29 . 29 . 29 . 29 . 29 . 29 . 2
Total Scale Me Total Scale Va		•	50.7 56.4
Mean Item Vari	n (Scale S iance em Correla		2.41 .53 .21
Scale Alpha N of Items	· · · · · · · · ·		. 84 21

Note: Scoring of negative items (-) reversed for consistency.

38

Ő.

Ta	61	e	1	2

1

ter.

30

Scal	<u>Collegé D</u> Le Descriptive S	<u>escriptive I</u> tatistics &	<u>ndex</u> Reliabi:	lities:	×
₽	COU	RSES Scale		:	•
	Items	Mean	S.D.	R-sq.	
C 8 C 9.	creative irrelevant routine interesting disappointing enjoyable repetitive disorganized worthwhile frustrating boring exciting satisfying unpleasant challenging informative	2.2 2.5 1.7 2.6 2.4 2.5 2.1 2.7 2.7 2.7 1.9 2.2 2.0 2.5 2.7 2.7 2.7 2.7 2.7	9 8 9 7 8 7 8 7 6 6 9 8 8 7 6 6 4	.33 .34 .32 .56 .44 .56 .16 .48 .22 .44 .38 .52 .30 .26	
	Total Scale Total Scale		· ·	38.2 46.1	· · ·
· · ·	Mean Item 🗸	1ean (Scale S Variance -Item Correla	. •	2.39 .53 .31	9
	Scale Alpha N of Items	a	· · ·	.87 14	

Scoring of negative items (-) reversed for Note: consistency.

ERIC

ĩ

المعدى المحرار

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

FINANCES Scale

FFF

F

ER

				· .
	Items	Mean	S.D.	R-sq.
5	broke inadequate well off secure indebted tight satisfactory	2.4 2.1 1.4 2.2 2.4 1.8 2.3	- 9 - 9 - 7 - 7 - 9 - 9 - 9 - 9	. 45 . 51 . 29 . 46 . 22 . 30 . 54
	Total Scale Total Scale			14.4 19.3
	Mean Item M Mean Item V Mean Inter-	ariance	`	2.06 .76 .43
	Scale Alpha N of Items		r	. 84 7

Noite: Scoring of negative items (-) reversed for consistency.

<u>College Descriptive Index</u> Scale Descriptive Statistics & Reliabilities:

ADMINISTRATORS Scale

.

· ·.		4 M		•	
•	Items	Mean	S.D.	R-sq.	
A 1. A 2. A 4. A 5. A 5. A 5. A 7. A 7. A 7. A 7. A 7. A 7. A 7. A 7	<pre>intelligent admirable intolerant credible ambitious arrogant impractical deceptive respected unhelpful impartial competent honest inconsistent inflexible common-sensical conscientious concerned understanding stubborn disorganized</pre>	2.6 2.1 2.5 3.3 2.4 2.2 2.3 4.4 5.4 6.6 2.3 4.4 5.4 2.2 2.2 2.4 2.2 2.2 2.4 2.2 2.4 2.2 2.4 2.2 2.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5	- 6 8 8 7 7 8 7 7 7 7 7 6 6 8 8 7 7 7 7 8 7 8	. 45 . 41 . 40 . 47 . 30 . 45 . 45 . 39 . 45 . 39 . 44 . 38 . 50 . 50 . 48 . 44 . 38 . 31 . 52 . 40 . 43 . 35	
·	Total Scale Mean Total Scale Vari			50.6 95.1	
	Mean Item Mean (Mean Item Varian Mean Inter-Item	ce ``		2,41 52 .38	
	Scale Alpha N of Items	•		.93 21	
*				-	

Note: Scoring of negative items (-) reversed for consistency.

41



33

<u>College</u> <u>Descriptive</u> <u>Index</u> Scale Descriptive Statistics & Reliabilities:

NON-COURSE ACTIVITIES Scale

					• , .
	Items	ļ. ·	Mean	/ S.D.	R-sq.
· .			· . : /		
N 1	limited /		2.0	.9	.28
N 2.	important /		2.4/	.8	.30
N 3	tiring 🛓 🖊		2./2	.8	.09
N 4.	creative/		2.4	.8	. 24
N 5	repetitive	. /	/2.2	.8	.16
	disorganized		2.4	.8	.20
N 7.	fun /		2.8	.5	. 66
N 8.	stimu(lating	• • /	2.6	. 6	. 55
N 9.	relaxing	· All	2.5	.7	.20
N10	disappointing	i /	2.6	.7	.44
N11.	exciting	1 - Carlos Carlo	2.5	. 7	52
N12	worthless		2.8	.6	.27 .10
N13.	easily-acces	sable	2.5	.7	.20
N14.	relevant		2.4 2.8	.5 ,	.45
	the pits		2.8	.5	. 62
N16.	enjoyable		4.0	" J P T	خداسا و .
	Total Sca	lo Moan			39.8
	Total Sca		2000		34.6
	TULAI SCO			· . ·	·
	Mean Iter	n Mean (Scale S	core)	2.49
		n Varian	•	• •	.51
		er-Item		tion	.24
			2		-
	Scale Alp	oha			.81
•	N of Iter	ns			16
	• • • •	•			

Note: Scoring of negative items (-) reversed for consistency.



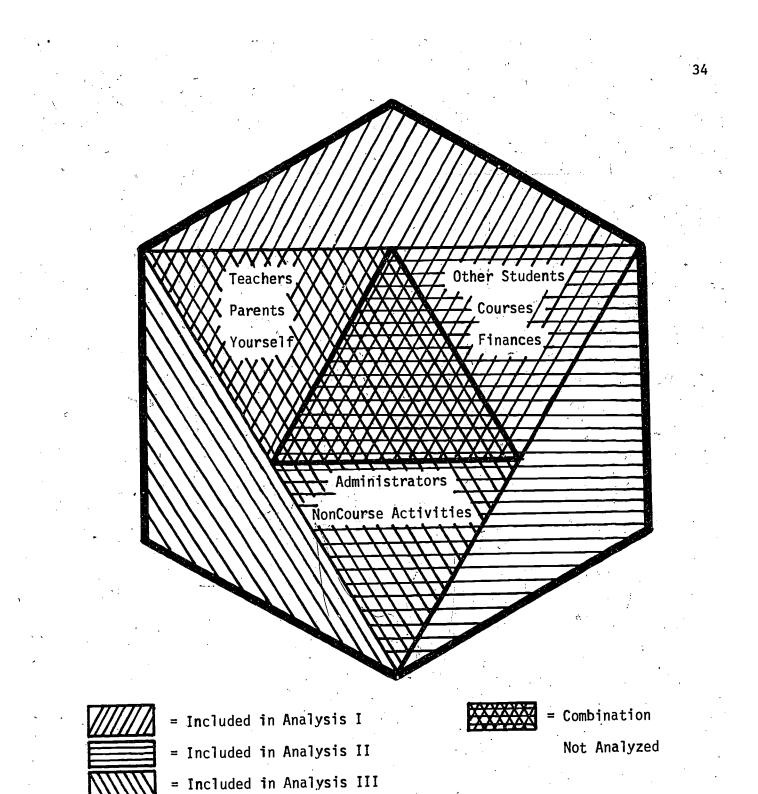


Figure 1. Schematic representation of partitioning of variablesset into three groups for factor analyses, showing overlap in analyses.

Factor Analysis I: College Descriptive Index Scales Six Varimax Rotated Factor Loadings VIII IX ν VI VII II III IV T TEACHERS Scale 03 38 -02-40 02 -09 -03 -08 , T1 13 understanding -06 -09 55 ÖÖ-ÕÕ -1.5 05 02 Τ2 inconsiderate -10 21 07 Ø2 09 06 -03 -45 26 -03 ТĴ competent -08 05 09 -24 -03 13 23 ÖÖ -07 **T4** articulate č -03 50 -03 -12-03 -03 02 -35 2í helpful Τ5 44 -05 -12ÖÖ -24 -06 18 -1700 T6 available - 05 -16 -01-07 16 -04 -04 1.1 58 **T7** offensive 31 -03 09 07 06 -06 -01 -08 20 TЗ humorous 19 06 -01 04 -05 18 49 ŌŎ 05 Τ9 conceited -13 07. 20 0105 -2415 06 T10 knowledgeable 19 -11 -02-0107 41 -01∝ −02 -14 14 impractical T11 -09 13 09 33 -41 -06 . 06 -13 -02 T12 flexible 03 00 07 09 51 08 14 -0206 biased T13 -26 53 Ö4 01 -05 -01 14 -03 11 T14 insensitive 27 03 14 15 06 -04 -08 36--01T15 enthusiastic 02 14 .06 01^{-1} -03 46 07 19 tactless -18 T16 04 1 Ö 20 19 25 32 -02 -07 03 T17 opinionated -15 -08 11 03 -1Ö 05 07 33 -46 dull' T18 14 24 00 -23 -38 10 -06 17 --08 T19 patient -01-02 16 -1338 Ö1 13 -20 13 T20 nitpicking FARENTS Scale -01 ŌŐ 0100 11 58 09 06 03 P1 intolerant. 14 28 10 -16 -02 03 -59 07 ÖÖ - F2 thoughtful -09 02 07 08 01 O1 13 -07 68 P3 closed-minded 07 -18 06 1.1 03 57 16 Ö1 P4 unrealistic -09 -01 21 19 -01<u>0</u>4 02 -06 01 -54 P5 affectionate 11 11 05 -08 -06 -02 -09 -01--64 P6 trusting 03 16 -02 20 12-04 48 07 . 1Ö P7 nosey 05 15 23 02 54 06 04 Ö4 -01 P8 stubborn 22 -09 -15 -03 02 32 -33 -01 1Ö P9 concerned -02 -07 15 04 24 -08 10 02 -61 F10 supportive -04 13 18 17 09 ŐŐ 10 **F11** fault-finding -0761 14 11

P12

P13

P14

P15

44

03

-04

02

·/ -08

03

01

11

-07

O1

-01

-08

08

-03

-01

04

-10

understanding

dependable

sensible

impatient

-74

-58

-66

62

-08

07

03

15

20

20

11

35

07

Õ6

06

-07

03

Ö1

-05

Table 16 (continued)

				•			. ·		•	
VOUR	SELF Scale				200 B (A)				•	,
$\sim 10^{-1}$				1 - A. A.				•		· ·
`S1	moody	-13	11	13	02	06	23	05	-46	11
S2 (relaxed	03	-06	-09	-07	-01	-03	17	64	01
S3	foolish.	<u>´00</u>	10	10	14	-02	45	12	-20	. 10 .
S4	confident	Õ6	~07	-04	00	-08	-28	14	58	10
55	aloof	-08	09	15	07	01	44	02 -	02	a - 06
56	lazy	-19	02	08	-03	09	70 /	-01	-01	-04
S7	frustrated	-16	11	08	10	18	10	11	-65	01
- S8	eager	22	00	12	19	-01	-44	25	01	24
.57	honest	03	-06	-07	-06	08	-40	07	16	07
S10	optimistic	19	-07	-01	-09	-02	-28	-15_		12
S11	obstinate	01	- 20	17	07	05	25	03	-01	09
S12	helpful	10	-06	-07	00	05	/-30	31	17	22
S13	timid	04	11	13	03	-06	17	14	-35	-09
S14	successful	14	-04	01	-03	-11	-38	10	46	14
S15	sarcastic	-17	11	22	14	06	39	06	-03	19
S16	organized	ο̈́δ	-07	08	01	-18	-51	03	22	04
S17	careless	01	07	04	11	16	54	-07	-20	-03
017	Laieress									
		· ·						•.		. ~
OTHE	R STUDENTS Scale	- ·	×				•	s. ,		
01110		•		*						1997 - A.
01	honest	-05	04 🔊	-59	-15	01 ·	-07	11	15	-06
02	sympathetic	<u>02</u>	-07	-57	~ -02	07	-07	12		20
03	apathetic	-06	09	35	02 "	-02	01	00	-02	22
04	indifferent	-06	03	54	Ó6	07	09 (-10	05	10
05,	lazy	-14	02	39	16	08	16	-22	11	26
05	responsible	-06	-07	-47	/-08	-04	-02	41	10	~-07
00	tolerant	04	-03	-53	-05	-04	00 -	09	05	09
08	obnoxious	-03	00	507	27	15	06	04	03	11
09	hard-to-meet	-08	04	48	-01	00	-05	10	-08	-36
010		12	-08	-63	07	04	10	02	05	38
010	stimulating	17	-09	-47	14	07	12	22	-03	24
011		-01	05	62	13	04	03	-05	-09	-07
		04	04	-54	-02	-08	-07	18	12	1.3
013	open minded	-07	05	44	19	01	-03-		-09	/20
014	complaining	15	-05	-27	00	02	-10	54	-09	-07
015	ambitious .		-03 / -02/	-23	10	02	-01	48	05	10
016	imaginative	10	-08	-23 -19	-05	-02	07	. 50	08	01
017	confident	14				-03	18	-09	-05	-06
018	unreliable (-14	Ó8 (07	57		07	23	01	10	06
019	prejudiced	00	/07	46	. 20			14	-08	06 06
020	arrogant	-09	/ 10	54	20	02	03		-08 -03	-09
021	studious (06	/ -08 _	/ -27	-02	00	-14	54	-03	
		1							1.1	



C1 creative 55 06 00 05 $-02 -01$ 14 06 C2 irrelevant -54 04 04 24 14 02 12 04 C3 routine -49 06 04 07 08 14 13 01 C4 interesting 77 $-03 -06 -07$ 00 01 07 11 C5 disappointing -60 08 15 30 05 -01 01 -14 C6 enjoyable 73 -04 01 $-03 -02 -09$ 14 18 C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 $-07 -22 -15$ C9 worthwhile 68 $-01 -05 -08$ 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 $-17 09$ 02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 $-02 -14$ C15 challenging 57 00 -06 04 $-01 -11$ 22 -15 C16 informative 49 02 $-03 -18 -03 -02 29$ 03 FINANCES Scale F1 broke $-01 07 10 05 73 05 02 -01$ F5 indebted $-05 07 -04 00 55 07 -12 -02$ F6 tight 04 $-03 03 -01 48 02 09 -05$ F7 satisfactory 04 $-06 -07 00 -80 -05 08$ F10 $-50 -05 08$ F1 undequate $-04 04 10 03 79 11 07 -05$ F7 satisfactory 04 $-06 -07 00 -50 05$ F7 satisfactory 04 $-06 -07 00 -80 -50 07$ F0 $-12 -02$ FA tight 04 $-03 03 -01 48 02 09$ FACTOR EIGENVALUE 11.5 5.4 4.4 $3.9 3.2 2.7 2.3 1.9$ X OF VARIANCE 12.0 5.6 4.5 4.0 $3.4 2.9 2.4 1.9$ Cumulative X Variance = 38.6	COURSES Scale					t e l'				
C1 C1 C4 C4 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>.</th><th>· ·</th></td<>									.	· ·
C2 irrelevant -54 04 04 24 14 02 12 04 C3 routine -49 06 04 07 08 14 13 01 C4 interesting 77 -03 -06 -07 00 01 09 11 C5 disappointing -60 08 15 30 05 -01 01 -14 C6 enjoyable 73 -04 01 -03 -02 -09 14 18 C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 -07 -22 -15 C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 indetquate -04 06 10 03 79 11 07 -05 F4 secure 06 -10 -02 -02 -77 -04 04 11 F5 indetted -65 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 X OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative X Variance = 38.6	C1 creative	55	06	00						1
C3 Interesting 77 -03 -04 -07 00 01 09 11 C5 disappointing -60 08 15 30 05 -01 01 -14 C6 enjoyable 73 -04 01 -03 -02 -09 14 18 C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 -07 -22 -15 C9 worthwhile 68 -01 -05 -08 00 -07 10 -50 C11 boring -48 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 07 00 -04 03 -01 11 11 12 14 unpleasant -51 02 15 30 09 00 -02 -14 05 14 107 <		-54	04	04	24		-02			0
C4 interesting 77 -03 -06 -07 00 01 09 11 C5 disappointing -60 08 15 30 05 -01 01 -16 C6 enjoyable 73 -04 01 -03 -02 -09 14 18 C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 -07 -22 -15 C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 .09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted $e05$ 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 Z 0F VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	C3 routine	-49	06	04						C
C6 enjoyable 73 -04 01 -03 -02 -09 14 18 C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 -07 -12 -15 C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C13 satisfying 72 -03 00 -04 00 -11 12 2 -15 C14 unpleasant -51 02 15 30 -02 27 03 C14 informative 49 02 -03 -18 -03 <td></td> <td>77</td> <td>-03</td> <td>-06</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>C</td>		77	-03	-06						C
C7 repetitive -45 06 15 16 03 07 13 08 C8 disorganized -29 05 10 34 03 -07 -22 -15 C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 11 22 -15 C14 informative 49 02 -03 -18 -03		-60								C
CB disorganized -29 05 10 34 03 -07 -22 -15 C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 F2 indeguate -04 04 10 09 -62 0	C6 enjoyable	73	-04							1
C9 worthwhile 68 -01 -05 -08 00 -07 11 07 C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 .02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -04 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 F2 indequate -04 06 10 03 77<	C7 repetitive									Ċ
C10 frustrating -29 01 04 23 09 -05 10 -50 C11 boring -68 02 12 16 01 09 14 -03 C12 exciting 59 -03 03 11 08 -17 09 02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 F2 inadeguate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 00 55 07	C8 disorganized	-29								t
Cili boring -68 02 12 16 01 09 14 -03 Cil2 exciting 59 -03 03 11 08 -17 09 02 Cil3 satisfying 72 -03 00 -06 00 -11 13 12 Ci4 unpleasant -51 02 15 30 09 00 -02 -14 Ci5 challenging 57 00 -06 04 -01 -11 22 -15 Ci6 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 Fi informative 49 02 -03 -18 -03 -02 29 03 Fi broke -01 07 10 05 73 05 02 -01 Fi adeduate -04 06 10 07 -02 -05 05 F4 secure	C9 worthwhile							·		-0
C11 DG1 ing 59 -03 03 11 08 -17 09 ,02 C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 05 07	C10 frustrating									C
C13 satisfying 72 -03 00 -06 00 -11 13 12 C14 unpleasant -51 02 15 30 09 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F7 satisfactory 04 -05 -07 00 -80	Cii boring		• •						• •	-0
C13 aupleasant -51 02 15 30 07 00 -02 -14 C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 47 02 -03 -18 -03 -02 29 03 FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 77 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F4 tight 04 -03 03 -01 68 02 07 -05 708 02 F7 satisfactory <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td>										1
C15 challenging 57 00 -06 04 -01 -11 22 -15 C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F4 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5										: C
C16 informative 49 02 -03 -18 -03 -02 29 03 FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 04 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F4 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6	C14 unpleasant									((
FINANCES Scale F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted -05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6										Ċ
F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 "08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	C16 informative	49	02	-03	-18	-03	-02	29	03	-0
F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 "08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6				•						•
F1 broke -01 07 10 05 73 05 02 -01 F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 "08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	•			•				•		
F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	FINANCES Scale			•	• •					•
F2 inadequate -04 06 10 03 79 11 07 -05 F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance 38.6	ma humanian		07	10	05	73	05	02	-01	ે ૯
F3 well off 03 -04 01 09 -62 02 -05 05 F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted +05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 708 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % 0F VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6										(
F4 secure 06 -10 -02 -02 -77 -04 06 11 F5 indebted -05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	•	•								Č (
F5 indebted -05 07 -04 00 55 07 -12 -02 F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % 0F VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6										Ċ
F6 tight 04 -03 03 -01 68 02 09 -05 F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6 3.4 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
F7 satisfactory 04 -06 -07 00 -80 -05 08 02 FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6 3.4				•						
FACTOR EIGENVALUE 11.5 5.4 4.4 3.9 3.2 2.7 2.3 1.9 % OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6								°õ8		C
% OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6	F/ Satisfactory	04			00		·	· W		·.
% OF VARIANCE 12.0 5.6 4.5 4.0 3.4 2.9 2.4 1.9 Cumulative % Variance = 38.6				• • •		• •				
Cumulative % Variance = 38.6	FACTOR EIGENVALUE	11.5	5.4	4.4	3.9	3.2	2.7	2.3	1.9	1.
	% OF VARIANCE	12.0	5.6	4.5	4.0	3.4	2.9	2.4	1.9	1
	Cumulative % Variand	e = 3	3.6		•			2	V.	
		; -		5			-			
					, ,	·				
NOTES: Method = Principal Components Analysis.		· · · ·			^ 7	1. E.			-	

Table 16 (continued)

37

1.0 used on main diagonal of correlation matrix. Decimal points omitted from factor loadings in t Min. N = 551, Max. N = 599, for correlations. Number of Factors Specified = 9.

ERIC

Factor Analysis II: Five <u>College Descriptive Index</u> Scales

i .	•	· ·	V I	'arimax II	Rotated III	Factor IV	Loadings V	VI	
OTHE	R STUDENTS Scale	* .	a.			· · ·		1	
$\begin{array}{c} 01\\ 02\\ 03\\ 04\\ 05\\ 06\\ 07\\ 08\\ 09\\ 010\\ 011\\ 012\\ 013\\ 014\\ 015\\ 014\\ 015\\ 014\\ 015\\ 014\\ 017\\ 018\\ 019\\ 020\\ \end{array}$	honest sympathetic apathetic indifferent lazy responsible tolerant obnoxious hard-to-meet friendly stimulating inconsiderate open minded complaining ambitious imaginative confident unreliable prejudiced arrogant		$\begin{array}{c} 09\\ -11\\ -01\\ -03\\ 12\\ 11\\ -11\\ -06\\ 12\\ 11\\ -19\\ 13\\ -16\\ 05\\ 12\\ -01\\ -05\\ -06\\ -13\\ 13\end{array}$	04 -08 13 08 15 -18 -04 -13	$ \begin{array}{r} 13\\03\\01\\05\\06\\07\\02\\-23\\32\\23\\-17\\11\\-06\\02\\14\\12\\-24\\-07\\-14\end{array} $	-62 -55 35 55 49 -51 -50 57 37 -47 -31 60 -48 47 -31 -16 -22 57 51 56 -33	00 06 -02 08 08 -04 -03 11 -01 05 07 02 -08 -01 00 02 -05 -01 07 00 -01	$\begin{array}{c} 05\\ 18\\ 00\\ -14\\ -10\\ 36\\ 13\\ 17\\ -01\\ 15\\ 42\\ 01\\ 27\\ 02\\ 51\\ 42\\ -07\\ 09\\ 24\\ 44\end{array}$	ĸ
021	studious		13-	U A			-01		-
COUR	SES Scale			· •	,			. •	
C1 C2 C3 C4 C5 C6 C7 C8 C7 C10 C11 C12 C13 C14 C15 C16	creative irrelevant routine interesting disappointing enjoyable repetitive disorganized worthwhile frustrating boring exciting satisfying unpleasant challenging informative		-92 -08 06 11 -15 03 -05 -12 09 -09 -09 00 -03 11 -13 05 12	-44 -34 49 -39 -70 57 74 -57	$ \begin{array}{c} 12 \\ -04 \\ 03 \\ -07 \\ 09 \\ -01 \\ -13 \\ -01 \\ -01 \\ -05 \\ 10 \\ 05 \\ -10 \\ 18 \\ \end{array} $	06 11 06 -03 22 03 17 18 -06 11 14 10 01 20 00 -05	01 10 00	28 16 11 15 14 19 16 03 11 18 13 25 18 10 21 17	

ERĬ

Table 17 (continued)

Б

					,		
FINANCES Scale							
F1 broke F2 inadequate F3 well off F4 secure F5 indebted F6 tight F7 satisfactory	-05 02 -03 06 -05 -02 05	-04 -06 01 09 -06 04 04	-02 -08 00 -01 -10 05 11	13 10 04 -05 -02 03 -06	73 81 -63 -78 56 68 -81	10 07 06 05 -02 10 05	
, satisfactory		· · ·	· · /	\			
ADMINISTRATORS Sca	ale	~*					
A1 intelligent A2 admirable A3 intolerant A4 credible A5 ambitious A6 arrogant A7 impractical A8 deceptive A9 respected A10 unhelpful A11 impartial (fa A12 competent A13 honest A14 inconsistent A15 inflexible A16 common sensio A17 conscientious A18 concerned A19 understanding A20 stubborn A21 disorganized	57 68 976 -64	$\begin{array}{c} 00\\ 05\\ -08\\ 07\\ 04\\ -14\\ -12\\ -02\\ -03\\ -07\\ 09\\ 06\\ 06\\ -09\\ 01\\ 02\\ 04\\ 09\\ 06\\ -04\\ 09\\ 06\\ -03\\ \end{array}$	05 04 02 07 00 -08 -05 -03 09 -11 11 05 04 -04 02 03 09 05 -08 -07	-14 -01 19 -13 02 20 13 27 00 13 -06 -07 -14 14 10 -02 -02 -05 -01 07 12	-03 -07 -01 -06 -05 -08 05 -06 -02 -03 06 -01 02 01 -03 -03 -03 -08 -03 01 02 01 02 01 -03 -03 -03 -03 -03 01 02 07	18 20 26 15 28 29 17 15 13 -02 -04 03 05 08 -03 07 07 07 07 07 03 00 17 -03	
NON-COURSE ACTIVI	TIES Scale	· · · ·		2 - 14			
N1 limited N2 important N3 tiring N4 creative N5 repetitive N6 disorganized N7 fun N8 stimulating N9 relaxing	-04 05 -07 01 -10 -03 05 10 08	01 02 -08 12 -13 -08 08 03 -01	-51 57 04 53 -40 -40 82 78 43	10 11 11 -03 18 30 -03 -01 -09	09 -06 07 02 02 00 -01 00 01	-04 11 27 23 21 05 01 07 10	

ERIC

48

Table 17 (continued)

.

Non-course Activities S	cale (con	tinued)	•		84 .	
N10 disappointing	-13	00	-64	23	03	07
N11 exciting	- 08	03	74	01	03	16
N12 worthless	-08	-06	-53	12	. 03	06
N13 easily-accessible	10	02	32	-13	-06	12
N14 relevant	-01	17	.45	00	-05	01
N15 the pits	· -04	- <u>`</u> 03	-68	. 17	-02	06
N16 enjoyable	05	07	79	°-08	00	-01
•	•			. *	т. н.	
FACTOR EIGENVALUE	12.1	6.0	4.8	3.8	3.6	2.4
% OF VARIANCE	15.0	7.4	6.0	4.7	4.4	3.0

Cumulative % Variance = 40.5

NOTES: Method = Principal Components Factor Analysis. 4.0 used on main diagonal of correlation matrix. Decimal points omitted from factor loading: table. Min. N = 551, Max N = 599 for correlation contactions. Number of Factors Specified = 6.

40

Factor Analysis III: Five <u>College Descriptive Index</u> Scales

1. J

	· · ·			arimax II	Rotated. III	Factor IV	Loading V	s VI
TEACI	HERS Scale				-		·	
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T14 T15 T14 T15 T16 T17 T18 T12 T12 T12 T12 T12 T20	understanding inconsiderate competent articulate helpful available offensive humorous conceited knowledgeable impractical flexible biased insensitive enthusiastic tactless opinionated dull patient nitpicking		03 07 13 04 10 10 10 10 10 14 02 15 10 15 10 15 10	03 -09 01 05 04 -01 -06 10 -07 -01 -01 -01 03 -04 -07 11 -03 04 -03 07 03	04 -01 03 -02 03 18 03 01 -03 -07 -12 15 -03 -13 01 -05 01 -05 01 -02 04 -10	-54 -51 -30 -51 -39 57 -28 -28 -27 43 -44 39 58 -39 -44 39 58 -39 535 439 550 41	$ \begin{array}{r} 10\\ 04\\ 03\\ -03\\ 14\\ 14\\ -05\\ 04\\ -05\\ -05\\ -05\\ -05\\ -05\\ -05\\ -06\\ -20\\ 18\\ 02\\ -06\\ -20\\ 14\\ -06\\ \end{array} $	04 11 04 -08 19 14 13 20 34 04 16 10 24 05 24 28 33 04 -05 27
PARE	NTS Scale	 -						
P1 P2 P3 P5 P5 P6 P7 P10 P11 P12 P13 P15	intolerant thoughtful closed-minded unrealistic affectionate trusting nosey stubborn concerned supportive fault-finding understanding dependable sensible impatient	· · · · · · · · · · · · · · · · · · ·	03 10 08 07 04 07 01 02 04 10 04 10 12 10 08	00 13 -08 -10 08 09 -03 -03 01 04 00 08 03 02 -11	-56 62 -65 -54 57 65 -43 -50 39 64 -56 75 61 67 -57	06 -16 03 02 -03 -06 06 00 -17 -02 05 02 -06 00 12	01 06 -10 -13 08 11 -09 -07 01 00 -12 11 02 05 -15	16 18 21 23 00 37 31 30 20 37 05 09 02 24

ERIC

. 50

ŗ

Table 18 (continued)

		,		、				
YOUR	SELF Scale			4	•		•	
S1 S2 S3 S4 S5 S6 S7 S8 S10 S11 S12 S14 S15 S14 S17	moody relaxed foolish confident aloof lazy frustrated eager honest optimistic obstinate helpful timid successful sarcastic organized careless	-05 13 -08 03 02 -01 -10 -04 02 00 -14 06 10 06 -10 05 -08	-06 22 02 15 -09 -01 -06 15 04 05 00 20 03 14 -11 -07 -05	-08 06 -05 08 -06 00 -07 01 06 08 -16 08 -14 08 -11 03 -06 06 -07	05 -09 04 -05 06 02 14 03 -06 -20 01 -10 09 -09 10 04 03	-46 40 -41 59 -29 -60 -48 45 40 48 -18 39 -34 61 -31 57 -51	18 07 36 08 29 18 14 26 -02 12 11 22 11 04 35 -10 21	
ADMI	NISTRATORS Scale					•		
A1 A2 A3 A4 A5 A7 A9 A10 A11 A12 A14 A15 A14 A15 A17 A18 A17 A18 A17 A120 A21	<pre>intelligent admirable intolerant credible ambitious arrogant impractical deceptive respected unhelpful impartial competent honest inconsistent inflexible conscientious conscientious concerned understanding stubborn disorganized</pre>	62 64 -56 66 52 -57 -64 -57 70 -63 61 72 .71 -68 -64 62 56 64 75 -64 -58	08 02 08 03 -06 -04 09 -10 10 04 04 04 06 -07 -04 03 02 07 03 -07 -07 -09	06 05 -07 12 -02 -04 -03 -09 07 -05 05 04 10 -05 04 10 -04 07 01 08 08 08 00 -02	-05 01 11 -10 -03 16 18 17 07 10 00 -12 -09 08 04 01 -09 -15 -12 06 08	03 03 02 -08 09 08 -01	-01 07 22 -01 21 27 17 14 07 -02 -03 03 -05 07 04 04 04 04 17 08	· · · · · · · · · · · · · · · · · · ·

Ś,

ý

51

ERIC

è.

NON-COURSE ACTIVITIES Scale

					,		•	
N1	limited	-04	-51	-05	01	04	05	
N2	important	04	54	03	09	13	14	
N3	tiring	-07	04	03	12	-09	- 19	•
N4	creative	03	55	-04	-05	05 -	12	÷
N5	repetitive	-12	-39	04	14	-08	23	
N6	disorganized	-05	-43	-11	11	-05	23	
N7	. fun	04	82	02	-07 ·	09	02	
NB	stimulating	10	. 77	-01	-01	07	01	
N9	relaxing	09	44	05	00	07	05	
.N10	disappointing	-14	-67	-07	04	-04	15	
N11	exciting	07	73	Ū4	-01	07	15 -	
N12	worthless	+09	-55	-11	03	-01	02	
N13	easily-accessible	10	32	10	-01	07	-01	
N14	relevant	-02	42	08	-11	12	.06	
N15		-04	-71	-04	12	08	10	
N16	enjoyable	05	78	05	-09	07	-01	
NTO	enjoyabie	· • • • • •						
FACT	OR EIGENVALUE	11.7	5.8	4.7	3.9	2.8	2.3	•
% OF	VARIANCE	13.1	6.6	5.3	4.4	3.2	2.6	

Cum % Variance = 35.2%

NOTES:

ES: Method = Principal Components Factor Analysis. 1.0 used on main diagonal of correlation matrix. Decimal points omitted from factor loadings in table. Min. N = 551, Max. N = 599 for correlations. Number of Factors Specified = 6.

52

	A`	B	C	D	E	F	G	H	Ι	J	K
A. Reselect this college	• •			-	1			4 4			
B. Progress toward life goals	.32	÷.	,				,				
C. Overall Satisfaction	.54	. 43					•				
D. Quality of teaching	.21	.24	.33					•			
E. Intellectual challenge of courses	.22	. 42	. 36	.34				• .			
F. Instructor accessibility	08	.25	.25	.33	.31	، میں بر					T
G. Intellectual quality of students	.23	.18	.36	.24	. 30	.16					
H. Student friendliness	.28	.15	.24	.09	.18	.07	.24			•	
I. Opportunity extracurricular activity	y .30	.12	.22	.03	.08	.03	.09	.33			
J. Housing	.24	.28	. 35	.12	.13	.06	.29	.08	.13		`
K. Availability of financial aid	.05	.13	.10	.12	. 12	.10	.11	.11	.14	. 12	
L. Way the college is run	.27	.24	.41	.18	.17	.00	.20	.18	27	.20	.1

12 Critarian Augstions

53

6

ERIC Pruil Text Provided by ERIC

54