

A MULTIVARIATE ANALYSIS OF SATISFACTION AMONG  
VIRGINIA COMMUNITY COLLEGE STUDENTS

by

Joan Hogg Biggs

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APPROVED:

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Steven K. Paulson, Chairman

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Richard L. Della Fave

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James H. Dorsett

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## CHAPTER I

### Introduction and Statement of Problem

The purpose of this thesis is to develop and test a causal theory of student satisfaction among two-year public college students. The topic of student satisfaction, e.g., whether or not the students are obtaining what they desire from their educational experiences, is relevant to both sociologists and educators. This study contributes to sociological theory by exploring the utility of social influences in explaining students' appraisals of their educational experiences. For educators, the primary contribution is in the area of evaluation of institutions of higher education and in understanding and explaining student needs and unrest. Despite the apparent importance of this topic, there appears to be a paucity of relevant research.

The public junior college as a subject for study seems important for additional reasons. First, large numbers of students are enrolled in public two-year colleges and enrollment is continuously expanding. For example, it has been predicted that by 1980 three-fourths of all college freshmen will be enrolled in two-year colleges (in Monroe, 1972).

Second, the public two-year college is generally viewed as having the unique function of serving anyone who can benefit from education beyond high school. As a result, it is faced with serving the needs of an extremely diverse group, which includes students ranging from the marginal or "high risk" student to the student who could be expected to do well in a four-year college or university.

Although there has been a considerable number of follow-up studies on public junior college students who transfer to four-year colleges, there has been little research on the students' appraisal of the public two-year college during enrollment. Research of this nature would appear to be worthwhile not only in answering the question of how well the college is able to serve these diverse groups, but also in providing faculty and administrators with information which could be helpful in meeting students' needs. Furthermore, research of this nature could be helpful to college administrators in their efforts to lower attrition rates, which in some cases exceed 50 percent (Monroe, 1972).

Third, public two-year colleges have been viewed by many educators as providing inferior or second-rate education (Riesman and Jencks, 1971). Inasmuch as the community college is viewed as serving unique functions in higher education, it appears that the criteria often used to evaluate institutions of higher education, such as academic selectivity of the student body and training and reputation of faculty, are inappropriate for the public two-year college. A secondary purpose then is to suggest student satisfaction as one alternative means of evaluating the public two-year college.

## CHAPTER II

### Related Literature

#### Student Satisfaction

Student satisfaction as a concept or as a significant variable has received relatively little emphasis in the literature. The more general topic of environmental or institutional assessment has been researched considerably; however, the main emphasis has been on identifying those institutional characteristics that are believed to affect the students' development. For example, there are a number of well developed measurements on college environments, considering the characteristics of the students, staff, administration, and physical aspects of the institutions (Inventory of College Activities, Astin, 1968; College and University Environmental Scales, Pace, 1960). These types of studies have emphasized the students' perception of the environment by asking them to rate their environment on the existence of certain stimuli which have been defined as desirable or undesirable. The interest has not been on the degree to which these stimuli, e.g., quality of education, social activities, study facilities, satisfy the students' needs but has instead been on the degree to which students believe these stimuli actually exist in the environment.

A considerable portion of the literature related to student satisfaction draws on personality theory, emphasizing the need for congruence between the students' personality and the dominant environment of the college in order to reduce strain. For example,

Pace and Stern (1958), utilizing the concept of environmental press, consider the relationship between personality needs and the psychological press of the college environment in order to predict success in specific curricula. Several studies, utilizing the above approach, show a positive relationship between congruence with the environment and satisfaction (Flacks, 1963; Glick, 1963; Holland, 1968; Trow, 1963). These studies, however, have defined dissatisfaction in terms of expressed tendency to withdraw from college, therefore, viewing satisfaction in terms of success in college. Pervin (1967), using the semantic differential with 365 four-year college students, found that perceived self-college similarity was related to ratings of satisfaction. Satisfaction with the environment was measured by five general questions involving the academic aspects, non-academic aspects, and overall satisfaction with the college.

Betz, et al (1970, 1971), provide a different approach to student satisfaction. Unlike the above researchers, they define satisfaction as the students' appraisal of the various aspects of his educational experiences in terms of his own needs and desires. Drawing on the principles and methods of job satisfaction (e.g., Herzberg, Mausner, Peterson, and Capwell, 1957; Hoppock, 1935; Broom, 1964), Starr, Betz, and Menne (1971) developed, revised, and tested the College Student Satisfaction Questionnaire (CSSQ) designed to measure student satisfaction on five dimensions: Social Life, Compensation, Working Conditions, Recognition, and Quality of Education. Satisfaction was defined as the degree to which students believe they are getting what they desire from their educational

experiences. This approach differed from the others in that in addition to measuring satisfaction with the various academic and non-academic aspects of the environment, it provided for the expression of satisfaction concerning the degree to which students feel they are recognized as individuals by faculty and peers; the degree to which students feel compensated for their efforts; the degree to which students feel they have some control over their environment; the perceived relevancy of the education for personal goals and needs; the degree to which the environment provides students with the opportunity for associations and interactions which would enhance development.

Student satisfaction has been studied in relation to several variables in an effort to determine the validity of the CSSQ. Starr, Betz, and Menne (1972), with a sample of 1,968 Iowa State University students, compared satisfaction scores of academic dropouts, non-academic dropouts, and non dropouts. Their findings suggested a positive relationship between student satisfaction and academic performance. In another study of 500 Iowa students, Betz, et al (1970), found that type of residence and year of school were related to satisfaction, while sex differences seemed to have little effect on satisfaction. Sturtz (1971), in a study of 233 Iowa State College women, found that adult women students were more satisfied than younger students. In a further study of 3,121 students, attending ten public and private colleges and universities, satisfaction scores were higher for private college students on Quality of Education, Recognition, and Compensation Scales, while public college students

were more satisfied with Social Life and Working Conditions (Betz, Starr, Menne, 1972).

Student satisfaction has also been studied in relation to uncertainty regarding vocational plans. Hecklinger (1970), with a sample of 356 juniors at a small liberal arts college found that undecided students were less satisfied with the college environment. Satisfaction was inferred from the degree to which students perceived certain stimuli as existing within the environment.

In summary, student satisfaction has been defined in two ways:

(1) in terms of educational persistence or expressed tendency to withdraw from college and (2) in terms of the degree to which students feel they are getting what they desire from their educational experiences. The first approach basically focuses on the fit between the individual and the environment. The latter approach, drawing on the literature on job satisfaction, is more concerned with the measurement of satisfaction. Utilizing the second approach, student satisfaction has been investigated in relation to several variables: age, academic performance, sex, year of school, type of residence, and uncertainty concerning vocational plans.

Of the two basic approaches, the research of Betz, Starr, and Menne appears to provide a more extensive and systematic treatment of the concept of student satisfaction. Satisfaction or dissatisfaction is not simply inferred from student feelings concerning dropping out or not dropping out of college, but is defined in terms of the students' appraisal of various aspects of the environment. This appraisal is not merely concerned with the perceived existence of certain stimuli,

but instead with the students' satisfaction with these stimuli in terms of his own needs and desires.

### The Community College and the Student

For purposes of this thesis, the terms public two-year college, public junior college, and community college are used synonymously. The community college as an institution of higher education can best be defined by considering its history and development and its basic objectives and philosophy.

According to Monroe (1972), the first public two-year college opened in 1901. Until the mid 30's most community colleges were primarily concerned with the preparation of students for transfer to four-year colleges. This role changed somewhat during the depression and World War II, as the community college responded to the demands of business and industry for technically trained personnel. Although considerable growth was experienced during this period, the real expansion of the public two-year college occurred during the 1960's as both the number of colleges and the number of students doubled (Monroe, 1972). It was during this period that the community college responded to the pressure to provide equal educational opportunity to the culturally disadvantaged.

Today, the community college is probably one of the most comprehensive institutions in education and is viewed by many educators as the key to universal higher education. Briefly stated, its general objectives are to maximize educational opportunity for all and to meet local community needs. More specifically, the following objec-

tives and purposes are often publicized for two-year colleges in various states: to offer two years of work transferrable to four-year colleges; to provide occupational skills and knowledge for entrance into the labor market or for job advancement; to provide means for extending cultural interests; to offer courses designed to meet local community needs; to enable students to maintain home residence while attending college during a period of immaturity; to provide opportunity for re-education in fields where change is rapid; to provide education for students with scholastic deficiencies; to provide a second chance for late starters; to provide opportunity to innovate in teaching; to provide an open door policy; to provide a comprehensive curriculum; and to provide opportunity and motivation for students for whom post-secondary education would have been otherwise unobtainable.

On a national level, community college students as a group are reported to differ significantly from four-year college students. The students tend to come from less affluent families, particularly from the homes of lower white collar and blue collar workers who have aspirations that their children shall become the first college graduates in the family and, thus, have better occupations than their fathers (Monroe, 1972; Medsker, 1960).

Reports on ability levels generally indicate that the community college students are inferior to four-year students on abilities as measured by standard aptitude tests (American College Testing Program, 1969). The following statement by Richards and Braskamp (1969, p.80) illustrate the commonly accepted view of the abilities and interests

of the community college student:

Two-year colleges attract pragmatic students seeking vocational training; they are less attractive to talented students who are intellectually and academically oriented, who plan a degree in one of the traditional subject areas, and who expect to take part in a wide variety of activities in college.

Monroe (1972), comparing two-year and four-year college students, describes community college students as being less likely to be critical or accept criticism of the existing establishment, as placing greater emphasis on receiving immediate rewards, as being less motivated, as having lower aspirations, as being more concerned with a relevant education or one that is occupationally oriented, and, overall, as being more insecure, therefore, having greater need for reward and recognition.

The literature suggests that the community college has suffered from an image as inferior, or as providing second-rate education when compared to other institutions of higher education (Monroe, 1972). While many educators view the community college as a mere extension of high school, others argue that it is a poor imitation of the four-year college. Clark (1960) attributes this problem of identity and status to the fact that the public junior college has been judged according to the traditional standards and images of higher education. For example, a community college, in general, would not compare favorably with most four-year colleges on such criteria as academic selectivity of the student body or the training and reputation of the faculty. Furthermore, community college education and four-year college education are differentially related to an outside

hierarchy of social status of occupation.

The literature presents sufficient evidence that the community college is serving a unique function in higher education; therefore, it should not be evaluated according to those standards used for four-year colleges. As the community college is defined as an institution which reaches out and adapts to the needs of the individual and the community, it would appear that student satisfaction would be an appropriate alternative means of evaluation.

## CHAPTER III

### Theoretical Perspective and Model

#### Introduction

The primary purpose of this thesis is to develop, test, and revise a causal model explaining student satisfaction among community college students. Although the work of Betz, Starr, and Menne has contributed substantially to the topic of student satisfaction, the main concern of those using the CSSQ has been the development of a measure of student satisfaction. The emphasis, then, has been on bivariate relationships in order to test for reliability and validity rather than on explaining why some students may be more or less satisfied with a particular environment. Furthermore, in those studies of student satisfaction which were previously cited herein, the subject of investigation was four-year college students. As it was indicated in Chapter II, the community college and its student body differ significantly from the four-year college and its students. Some of the variables considered, such as place of residence, year of school, certainty regarding vocational plans, would not be as meaningful in studying two-year college students.

For purposes of developing a causal theory of student satisfaction, a multivariate approach will be utilized. This enables the researcher to study the multiple effects of more than one independent variable on one or more dependent variables. The specific method of multiple analysis to be applied is referred to as "path analysis." Although this technique will be discussed in more detail in Chapter IV,

it would be worthwhile to provide a brief description at this point. Briefly, path analysis involves specifying the network of causal paths that exist between variables and defining a set of equations which permit prediction of how change in one variable affects the values of the other variables. These networks, when diagrammed, are referred to as causal models. The relationships and the order of causality postulated by a causal model must be derived from theoretical and logical considerations. Before proceeding to the presentation of the causal model, it is necessary to discuss sociological theory and its relevance to student satisfaction.

#### Broad Theoretical Assumptions

The model to be presented in this thesis is based on two broad theoretical assumptions:

(1) Some system of stratification based on social inequality does exist in all societies (Davis and Moore, 1945). Members of society are differentiated into subgroups which bear to one another a relation of social inequality. As a result of social structural factors, strata within society differ in chances for survival, in value orientations, in type of socialization, in the quality of education, and in patterns of social behavior (Heller, 1969).

(2) The way in which individuals define their situation is socially determined. According to the symbolic interactionist, the individual assigns meaning to his situation through the process of interaction. For example, Mead (1934) discusses the importance of the "significant other," certain people who are more influential in

the formation of individuals' attitudes and the "generalized other," the social group to which the individual belongs and whose attitude he takes on. Attitudes, or ones appraisal of a situation, are not acquired in a social vacuum, but are a function of relating to or interacting with others.

Accepting the first assumption that stratification exists and the second assumption that the definition of the situation is socially determined, it follows that different status groups within society have different experiences, attitudes, frames of reference, and will, therefore, construct their social reality accordingly.

Although these assumptions have provided a framework within which to consider the variables to be included in explaining satisfaction, a more specific theory, relative deprivation, has provided insight into the relationships posited among the variables.

#### Relative Deprivation Theory

The theory of relative deprivation has been used to explain violence and discontent among various groups of people. The same principles and concepts may provide insight into satisfaction or dissatisfaction with educational experiences.

According to Gurr (1970, p. 24), discontent arises not out of deprivation but instead arises when "actors perceive discrepancy between their value expectations and their value capability." Value expectations are defined as "the goods and conditions of life to which people believe they are rightfully entitled ." Value capabilities are defined as "the goods and conditions of life that men see them-

selves as having potential to achieve." Relative deprivation then involves a gap between actors' expectations and capabilities. Gurr (1970, p. 27) points out that value expectations and value capabilities may be viewed collectively as the average expectation and capabilities of group members. Three types of relative deprivation are suggested by Gurr (1970):

(1) decremental - exists when the value expectations remain the same yet the value capabilities decrease.

(2) aspirational - exists when value capabilities are stable, yet value expectations increase.

(3) progressive - exists when both expectations and capabilities rise through time yet capabilities begin to drop without corresponding drop in expectations.

Although Gurr stresses the necessity of comparison, he does not utilize specially the concept of reference group. Pettigrew (1971) points out that for relative deprivation to exist there must be a group or collectivity to which the individual compares himself. His classification of relative deprivation is based on this point. For Pettigrew, the individual may feel deprived in comparison to the average member of his own group or in comparison to some other reference group.

The theory of relative deprivation has been applied to the educational setting, although not extensively. Davis (1966) suggests that it may be better to send students to colleges where they will do well rather than to highly prestigious colleges where they may be

in the bottom ranks in regards to academic performance. This would enable the student to bring his capabilities (in comparison to other students within the same environment) more in line with his expectations.

### The Theoretical Model

Due to the lack of research directed at explaining student satisfaction, the model to be presented is primarily exploratory. Before presenting the initial model, the following points should be emphasized:

(1) Student satisfaction is defined as whether or not the students believe they are getting what they desire from their educational experiences within the public two-year college, or the students' appraisal of the situation in terms of their needs and desires.

(2) The community college, the situation or environment being assessed, is a unique institution within higher education and, as a group, the students differ from four-year college students.

Having considered the broad theoretical assumptions, the theory of relative deprivation, and the relevant literature, the following variables are included in the forthcoming model: socioeconomic status, sex, age, employment status, felt control concerning entry into community college, program of study, college performance, and perceived reputation of the community college. The rationale for including these variables and the posited relationships follows.

### Rationale for Variables

Socioeconomic status, sex, and age are postulated as exogenous variables due to their priority in time and theoretical assumptions. Socioeconomic status and sex have been shown to correlate highly with educational aspirations, educational opportunities, and educational and occupational attainments (Iffert, 1957; Haller and Butterworth, 1960; Astin, 1964; Sewell, 1971; Haller and Portes, 1973). Age would appear to be an important variable due to the broad age range in the community colleges. Reissman (1953) found that age may affect aspirations.

Relative deprivation theory leads us to believe that higher socioeconomic status students, males, and younger students may experience less satisfaction with the community college. Although this study is not designed to provide a direct measure of relative deprivation, there is sufficient evidence that higher socioeconomic status students, as a group attend more prestigious colleges, and that educational opportunity and attainment is greater for both higher socioeconomic status groups and males (Sewell, 1971). It is reasonable to speculate that individuals in either of these groups, being more likely to compare their situation with those with higher value expectations, would feel relatively deprived attending a public two-year college; therefore, they would be more likely to be dissatisfied than their lower socioeconomic status and female counterparts. Reissman (1953) found that older individuals who had experienced a lack of success had lower aspirations. The older students within the community college have in many instances experienced some lack of

success in formal education. The expectations, then, of older students would be more congruent with their capabilities. Furthermore, older students would possibly have had greater exposure to successful college graduates and at the same time experienced a relative lack of education. Spurtz (1971) in a study of four-year college students found older students to be more satisfied.

Additional support for the posited relationship between socioeconomic status and satisfaction is suggested by the literature pertaining to "fit" between the student and environment. For example, researchers, using tendency to withdraw as a measure of satisfaction, have found that lower socioeconomic status students are incongruent with four-year college environments, therefore, more dissatisfied than higher socioeconomic status students (Freedman, 1956; Davie, 1958; Ellis, 1964). As lower socioeconomic college students are seen as being less culturally sophisticated (Peterson, 1965; Harnett and Peterson, 1967; McLaughlin, 1965) than higher socioeconomic counterparts, have generally had a more restricted range of experiences (Baird, 1967b), and are more likely to be oriented to college in terms of occupational or professional training rather than in terms of intellectual growth (Baird, 1967b), it would appear that lower socioeconomic status groups would be more congruent with the community college.

In addition to directly affecting student satisfaction, the above variables would indirectly affect satisfaction through one or more of the following: program of study, student employment status, college performance, felt control concerning entry into the community college, and perceived reputation of the community college.

The students' program of study would appear to be a significant variable in determining student satisfaction. In addition to affecting the environmental stimuli to which students are exposed, program of study has been shown to reflect interests, personality traits, and life goals (Astin, 1964). Furthermore, several researchers have suggested that prestige rankings have been assigned to the various programs of study within the community college. For example, Knoell (1970a,b) found that blacks and other minorities avoided entering the occupational/technical programs due to the low prestige of these type of programs. It is posited then that those students in the more prestigious programs will be more satisfied with the community college than those in less prestigious programs. Program of study will be treated as a function of socioeconomic status. Brue, Enger, and Maxey (1971), in a study of 924 Iowa community college students, found that occupational students generally came from lower socioeconomic backgrounds.

A positive relationship is posited between college performance (as measured by cumulative grade point average) and student satisfaction. Although most research tends to focus on performance as a dependent variable, or as an indication of the impact of the environment, it would appear that academic performance, by influencing the students' feelings of success, could possibly affect satisfaction. Betz, Starr, and Menne (1972), in a study of satisfaction among four-year college students, found that academic dropouts were more dissatisfied than non-academic dropouts and non-dropouts.

Student performance shall be treated as a function of program of study, sex, employment status, age, and socioeconomic status. Brue, Engen, and Maxey (1971) suggested that occupational/technical students in a community college performed at a higher level than students in the transfer programs; therefore, it is postulated that the higher the prestige of the program, the lower the performance of the students. Females are expected to perform at a higher level than males, based on studies which show that females are more likely to receive better grades in elementary and high schools (Yorburgh, 1974). A positive relationship is posited between age and performance, as it would appear that older or more mature students would have a more serious attitude toward education. A negative relationship is suggested between employment status (number of hours worked per week) and college performance. One would speculate that working students would have less time to devote to their studies and would, therefore, be less likely to perform at a high level. A negative relationship is suggested between employment status and socioeconomic status.

Caution should be taken in predicting the relationship between socioeconomic status and performance, due primarily to the nature of the community college. Although a positive relationship has been shown to exist between performance and socioeconomic status among students at all levels within the educational system, a negative relationship will be suggested for the two-year public college student. While the lower socioeconomic status students would be more likely to attend the community college for financial and convenience reasons, it would appear that higher socioeconomic status students would be

more likely to attend for reasons pertaining to academic deficiencies.

The students' initial attitude toward attending the community college would appear to affect satisfaction. While some students may have really wanted to attend the community college, others may have felt forced into the environment. Since literature on job satisfaction has shown that control over one's own situation is an important determinant of job satisfaction (Blauner, 1960), one would speculate that those students who felt they had little control over their entry into the community college would evaluate their experiences within the college more negatively. Relative deprivation theory suggests that higher status groups would be expected to achieve higher educational levels; therefore, enrollment in a community college would be perceived as a less desirable alternative than it would be for females and lower socioeconomic status students whose expectations, as a group, are lower.

The final variable to be considered is the students' perceived reputation of the community college. The perceived reputation of the community college shall consist of what students believe their off-campus and on-campus friends think concerning the quality of the community college. Considering the general theoretical assumption that one's definition of the situation is derived from others (Mead, 1934), it would appear that the perceived reputation would affect the students' appraisal of the community college. Numerous studies have demonstrated the importance of peer group influence (Newcomb, 1962; Kandel and Lesser, 1969). A negative relationship is expected between

socioeconomic status and perceived reputation, as higher socioeconomic status students would tend to use higher standards of comparison when evaluating the community college.

#### Presentation of the Model

In order to specify the above causal relationships for analysis, the following set of equations has been constructed:

$$X_9 = P_{91}X_1 + P_{92}X_2 + P_{93}X_3 + P_{95}X_5 + P_{96}X_6 + P_{97}X_7 + P_{98}X_8 + P_{9a}R_a$$

$$X_8 = P_{81}X_1 + P_{8b}R_b$$

$$X_7 = P_{71}X_1 + P_{72}X_2 + P_{73}X_3 + P_{76}X_6 + P_{7c}R_c$$

$$X_6 = P_{61}X_1 + P_{62}X_2 + P_{63}X_3 + P_{6d}R_d$$

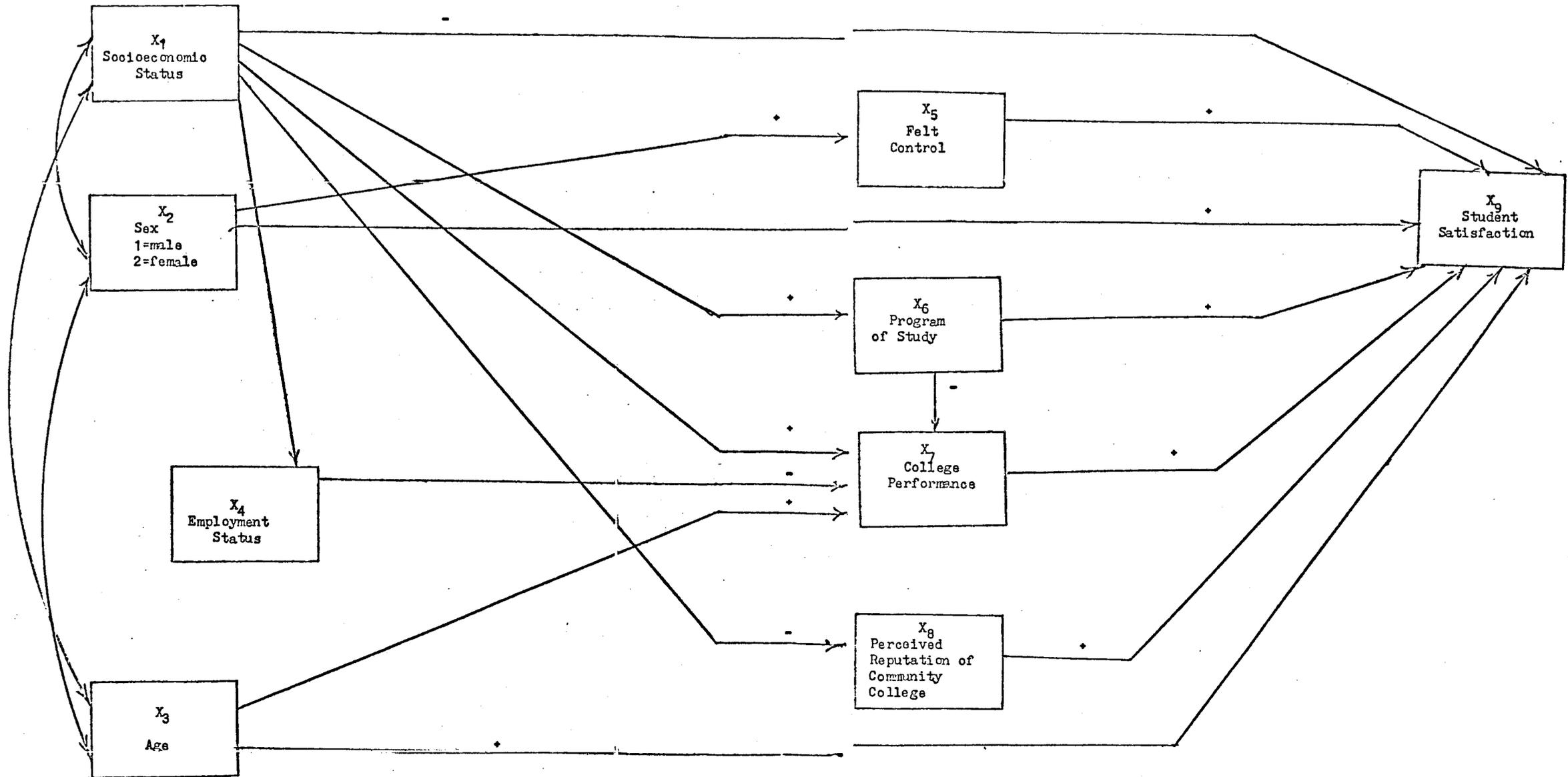
$$X_5 = P_{51}X_1 + P_{52}X_2 + P_{5e}R_e$$

$$X_4 = P_{41}X_1 + P_{4f}R_f$$

The X's are the measured variables in standardized form; the p's are path coefficients or partial regression coefficients of standardized variables; the R's are residual or error terms. The subscripts for the p's are as follows: the first subscript identifies the dependent variable; the second subscript the variable whose direct effect on the dependent variable is measured by the path coefficient.

A path diagram for the initial model is postulated in Figure 1.

FIGURE 1. CAUSAL MODEL ONE



## CHAPTER IV

### Research Methods

#### Population, Sample, and Method of Data Collection

The population for the study consists of all full-time students enrolled in the Virginia Community College system during the winter quarter, 1974. The sample consists of 1,008 full-time students randomly and proportionately selected from six Virginia community college campuses (Table 1). For purposes of selecting the campuses, Virginia's thirty-one community college campuses were stratified according to size and geographical location and one campus was randomly selected from each strata. Of the campuses selected, all had been in operation for more than one year.

Table 1. Participating Community Colleges

<u>Name of College</u>	<u>Questionnaires</u>		
	<u>Mailed</u>	<u>Returned</u>	<u>Used in Analysis</u>
Southside Com. Col. Christanna Campus	36	23	17
Mountain Empire Com. Col.	48	32	25
Lord Fairfax Com. Col.	56	40	34
Danville Com. Col.	130	90	71
Tidewater Com. Col. Va. Beach Campus	192	152	97
Northern Va. Com. Col. Annandale Campus	546	385	312
<b>Total</b>	<u>1008</u>	<u>722</u>	<u>556</u>

The data were collected during May and June with a mail questionnaire sent to each students' permanent home address. Mailing addresses were provided by the Research and Planning Division of the

Virginia Department of Community Colleges. Utilizing a three-phase mailing procedure, a 72% return rate was obtained (for specific information on mailing procedure and return rates, see Appendix A). Of the 722 questionnaires returned, 556 contained all necessary data and were, therefore, used in the analysis. The procedure for handling missing data is discussed with the operationalization of the variables section.

In consideration of the sampling procedure employed, the sample may be considered representative of full-time students in Virginia Community Colleges.

#### Operationalization of Variables

College Student Satisfaction. Satisfaction has been defined as "the degree to which students believe they are getting what they desire from their educational experiences" (Betz, et al). Satisfaction with the community college was measured by 35 items from the College Student Satisfaction Questionnaire (CSSQ) (Betz, Klingensmith, and Menne, 1970). The CSSQ consists of 70 items designed to measure five dimensions of college student satisfaction:

- (1) Working Conditions: the physical conditions of the students' college life, such as adequacy of study and lounging facilities.
- (2) Compensation: the amount of input (e.g., study) required relative to academic outcomes (e.g., grades), and the effect of input demands on the students' fulfillment of other needs and goals.
- (3) Social Life: opportunities to meet socially relevant goals such as dating, meeting compatible or interesting people, making friends, participating in campus events and informal social activities.

- (4) Quality of Education: the various academic conditions related to the individuals' intellectual and vocational development, such as the competence and helpfulness of faculty and staff, including advisors and counselors, and the adequacy of curriculum requirements, teaching methods, and assignments.
- (5) Recognition: attitudes and behaviors of faculty and students indicating acceptance of the student as a worthwhile individual.

For this research, seven items were chosen from each dimension. For purposes of selecting the 35 items to be used in this study, the 70-item CSSQ was pretested among 180 students from two Virginia Community colleges. Inter-item correlations with each dimension and item to total correlations were utilized in choosing the seven items for each dimension, in addition to content of the question and Spearman-Brown (Bohrnstedt, 1970) and Kuder-Richardson (Kuder and Richardson, 1937) reliability coefficients.

Administration of the instrument required the student to choose, on a five-choice Likert scale, the degree of satisfaction he felt regarding various aspects of his college experience. Response alternatives ranged from "very dissatisfied" through "satisfied" to "very satisfied." (For items used, see Appendix B.)

Only those respondents who answered at least 32 of the 35 satisfaction items were used in the analysis. Twenty-four failed to meet this criteria. Mean satisfaction scores were used for the analysis in order to take into consideration the number of items answered by each participant. Utilizing the Spearman-Brown formula (Bohrnstedt, 1970), a .95 reliability coefficient was obtained for the 556 cases used in the analysis.

Socioeconomic status. This variable was operationalized in terms of fathers' education and occupation, using Hollingshead's two-factor index of social status (Hollingshead and Redlich, 1958). A total of 103 respondents failed to give their fathers' occupation and one failed to give father's education; therefore, 104 cases were deleted from the analysis due to missing values on socioeconomic status.

Sex. This variable was operationalized in terms of male (1) and female (2), as reported by the respondent.

Age. Each respondent was asked their age at the nearest birthday. For two respondents who failed to answer this question, the mean age of 22 was used.

Employment status. Students' employment status was operationalized in terms of the number of hours worked per week at the time of the study.

Felt control concerning entry into community college. This variable was operationalized in terms of whether or not the respondent felt he had control over his situation when first enrolling in the community college. The instrument of measurement consisted of two statements regarding occupational and educational alternatives and two statements regarding preferences about going to college versus not going or going to another college versus the community college (see Appendix C). Although this scale was pretested for content and clarity of the items, the reliability coefficient, using the Spearman-Brown formula, was only .47. Additional development of the scale is therefore recommended. Due to missing data, 11 cases were deleted from the analysis.

Program of Study. This variable was operationalized in terms of whether the respondent was (1) in a developmental program or unclassified at the time of the questionnaire, (2) in an occupational/technical program, or (3) in a transfer or university parallel program.

College Academic Performance. Each respondent was asked to indicate his cumulative grade point average to the nearest tenth, using 4.0 to represent an A, 3.0 for a B, and 2.0 for a C. For the 10 respondents who failed to answer this question, a mean of 2.9 was assigned.

Perceived Reputation of the Community College. This variable was defined in terms of how students felt their friends and associates, both on and off campus, viewed the community college. Each student was asked to indicate to what extent they thought each of these groups would agree with a series of seven statements concerning the reputation of the community college (Appendix D). A reliability coefficient of .75 was calculated, using the Spearman-Brown formula. Fifty-one cases were deleted from the analysis due to missing values on this variables. Only those respondents who had no more than four missing values were retained. Mean scale scores were calculated in order to take into account the number of items answered by each respondent.

#### Method of Analysis

Multivariate analysis and path analysis have been briefly introduced in Chapter II. As it was pointed out, the use of path

analysis involves specifying a network of causal paths that exist between variables and defining a set of regression equations which permit the prediction of how change in any one variable affects the values of other variables.

Certain theoretical and methodological assumptions are involved in the use of path analysis. Briefly, these assumptions are as follows: (Duncan, 1966; Land, 1969; Heise, 1969)

(1) All relationships within a specified system are assumed to be linear (defined in terms of the sum of values of other variables).

(2) The causal relationships are assumed to be asymmetrical or recursive.

(3) The causal model is posited as a closed system. Certain variables, referred to as exogenous, are assumed to be predetermined and the cause of the remaining subset of variables, referred to as endogenous.

(4) When the variation of an endogenous variable is not completely explained by other variables within the system, a residual variable is introduced to account for the unexplained variance.

(5) Variables within the system must be ordered in terms of causality.

In addition to the above, the usual methodological assumptions involved in multivariate regression analysis are applicable and, in this thesis, considered to have been met.

The influence of socioeconomic status, sex, age, employment status, felt control at entry, program of study, college performance,

and perceived reputation of the community college on student satisfaction will be examined through the use of three path analyses. The first set of equations (presented graphically in Figure 2) will consider those relationships suggested by the relevant theory and literature. Model II will be fully recursive, considering all possible relationships in an effort to discover relationships not previously considered. For Model III, those variables which were not found to be related to satisfaction, either directly or indirectly, will be deleted from the analysis.

## CHAPTER V

### Findings and Interpretation

#### Introduction to Path Diagrams

In the figures to be presented, the relationships between the exogenous variables (socioeconomic status, sex, age) are not analyzed; therefore, the quantities on the curved lines with two-headed arrows represent the zero-order correlation coefficients. The relationships being analyzed are represented by straight lines with one-way arrows to indicate that the analysis assumes a recursive and closed system composed of all standardized variables.

The quantities in the figure are the numerical values of path coefficients, or beta weights. The squared path coefficient measures the proportion of the variance of the dependent variable for which the determining variable is directly responsible (Wright, 1934: 164). The residuals paths (R's) are shown above each dependent variable. These represent the unexplained variance in the particular variable.

The zero-order intercorrelation coefficients on which all computations are based are given in Table 2 on the following page .

In the diagrams of the models, only those relationships which are statistically significant, as estimated by the F-test, and related to satisfaction either directly or indirectly will be discussed. Statistically significant relationships are indicated with an asterick (\*).

TABLE 2. ZERO-ORDER CORRELATION COEFFICIENTS

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>
X <sub>1</sub> SES								
X <sub>2</sub> Sex	125*							
X <sub>3</sub> Age	-238*	-282*						
X <sub>4</sub> Employ	-062	-064	004					
X <sub>5</sub> Control	-018	140*	003	-001				
X <sub>6</sub> Pro.Study	064	-040	058	-069	066			
X <sub>7</sub> Perform.	-031	089*	237*	-091*	148*	143*		
X <sub>8</sub> Perceived Reputation	-163*	058	155*	-070*	288*	063	112*	
X <sub>9</sub> Satisfaction	-100	102*	130*	-009	348*	032*	167*	434*

\* Significant at .01 level  
 Decimals Omitted.  
 N = 556 in all Cases.

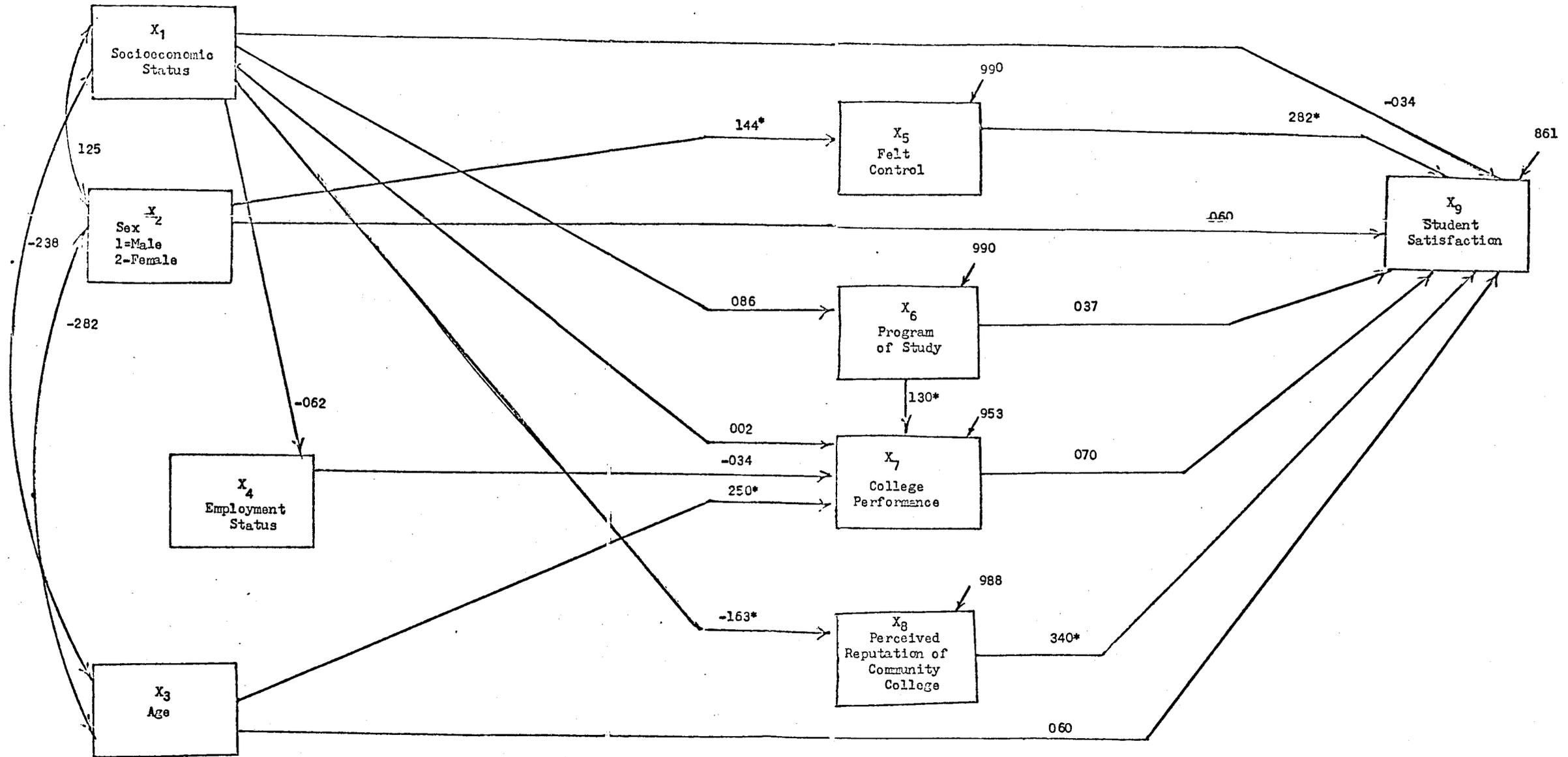
### Model I - Findings

The path diagram in Figure 2 examines those relationships which have been suggested by relevant theory and literature. Two variables of the eight considered, directly affected student satisfaction. To illustrate, those students who felt greater control over their entrance into the community college were more likely to be satisfied with their educational experiences there. Also, those students who perceived their friends as viewing the community college more positively scored higher on satisfaction. The influence of perceived reputation was .34 while the influence of felt control at entry was .23. Thus, perceived reputation was found to be a more important determinant of satisfaction.

Socioeconomic status, sex, and age had no direct effects on satisfaction. Socioeconomic status indirectly affected satisfaction through its direct negative effect on perceived reputation. To illustrate, as socioeconomic status increased, perceived reputation decreased. Sex directly affected felt control, therefore, indirectly affecting satisfaction. Females scored higher on felt control at entry and were, therefore, more likely to be satisfied.

Age was not found to affect satisfaction either directly or indirectly. All statistically significant relationships were in the direction postulated. Before discussing those variables which were not significantly related to satisfaction, a fully recursive model will be tested in order to discover any relationships which were not suggested in Model I.

FIGURE 2. CAUSAL MODEL ONE



\*Significant at .05 level  
 Decimals Omitted.  
 N=556 for all cases.

Model II - Presentation and Findings

For purposes of testing a fully recursive model, the following set of equations was established:

$$X_9 = P_{91}X_1 + P_{92}X_2 + P_{93}X_3 + P_{94}X_4 + P_{95}X_5 + P_{96}X_6 + P_{97}X_7 + P_{98}X_8 + P_{9a}R_a$$

$$X_8 = P_{81}X_1 + P_{82}X_2 + P_{83}X_3 + P_{84}X_4 + P_{85}X_5 + P_{86}X_6 + P_{87}X_7 + P_{8b}R_b$$

$$X_7 = P_{71}X_1 + P_{72}X_2 + P_{73}X_3 + P_{74}X_4 + P_{75}X_5 + P_{76}X_6 + P_{7c}R_c$$

$$X_6 = P_{61}X_1 + P_{62}X_2 + P_{63}X_3 + P_{64}X_4 + P_{65}X_5 + P_{6d}R_d$$

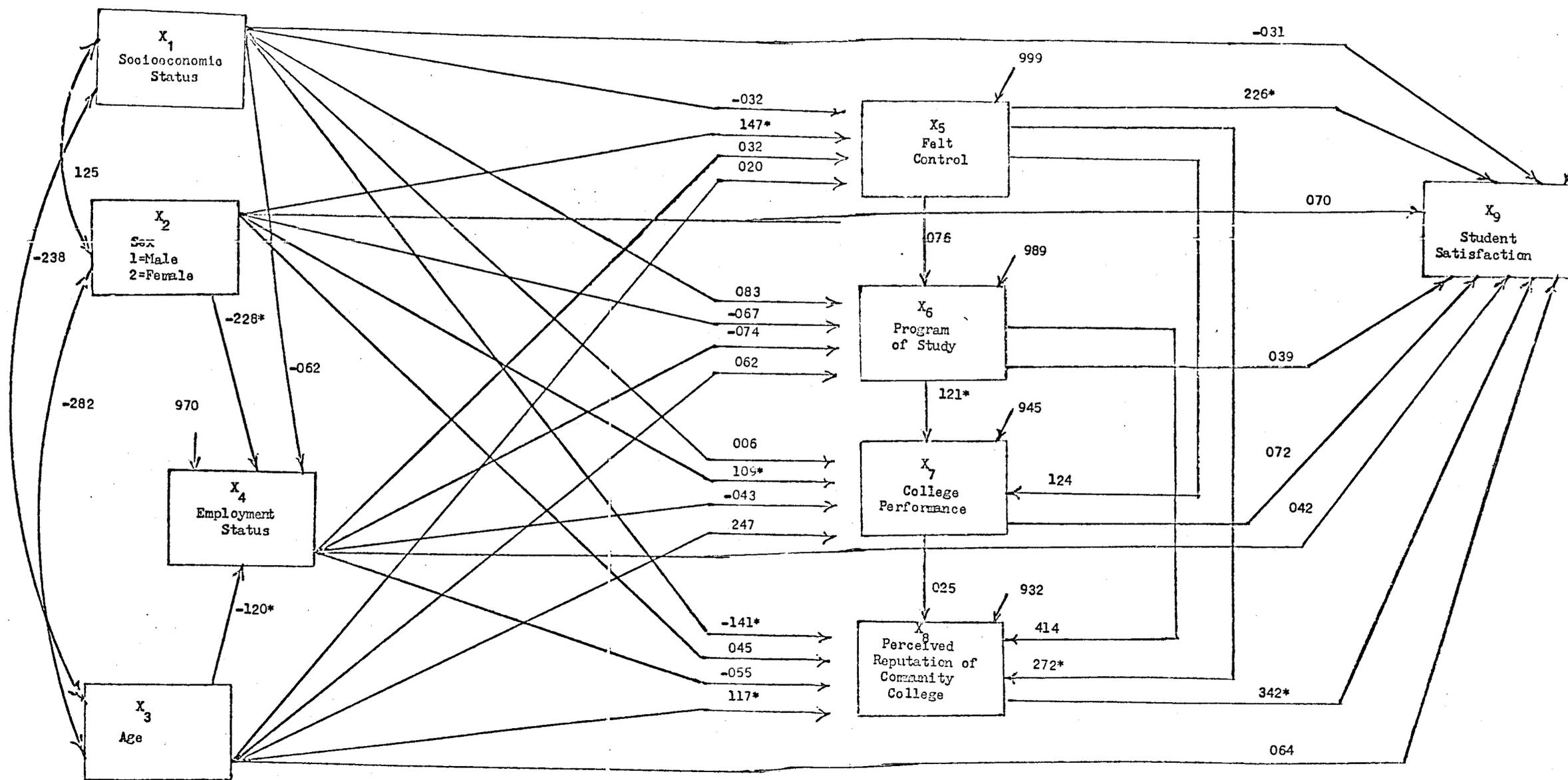
$$X_5 = P_{51}X_1 + P_{52}X_2 + P_{53}X_3 + P_{54}X_4 + P_{5e}R_e$$

$$X_4 = P_{41}X_1 + P_{42}X_2 + P_{43}X_3 + P_{4f}R_f$$

The path diagrams in Figure 3 give a comprehensive picture of the direct and indirect effects of all considered variables on student satisfaction. Of 30 possible direct and indirect relationships within the system, 13 were found to be statistically significant, with six of the 13 involving direct and indirect relationships with satisfaction. As it was previously noted, only those statistically significant relationships involving satisfaction will be discussed.

As in Model I, felt control at entry and perceived reputation of the community college were the only direct determinants of satisfaction. The magnitude of these relationships remained about the same, increasing slightly. The indirect effects of socioeconomic and sex were almost identical to those shown in Model I.

FIGURE 3. CAUSAL MODEL II



\*Significant at .05 level.  
 Decimals Omitted.  
 N=556 for all cases.

Two indirect influences which had not been predicted previously were found. For example, a positive relationship was noted between age and perceived reputation, indicating that older students perceive the reputation of the community college more favorably than younger students and are, therefore, more satisfied. The second relationship not considered in Model I was between felt control at entry and perceived reputation. Those students who felt they had greater control over their entry into the community college also perceived others as viewing the community college more favorably. The theory of relative deprivation offers a possible explanation. Those students who felt greater control would have expected less in terms of education and would have been more likely to relate to groups with lower value expectations, or groups that would view the community college more favorably.

Before proceeding to Model III, the deleted variables will be briefly discussed. These variables will be deleted for the analysis of Model III, as they were not statistically related to satisfaction in the preceding models.

College Performance: college performance did not affect satisfaction, directly or indirectly. This lack of relationship may be due to the nature of the community college. Unlike the four-year college, the community college does not use high school performance as a criteria for entrance. Furthermore, the community college has programs which enable the student to enter at his academic level and overcome academic deficiencies. Thus, the pressure to perform is

not as great within the community college as it is within four-year colleges and universities.

Employment status: the postulated negative relationship between employment status and performance was not statistically significant. This may be due to the flexibility of the community college in meeting the needs of its working students. As employment status did not statistically relate to satisfaction, it will be deleted from the analysis.

Program of Study: there was no significant relationship between the program of study and satisfaction. It was suggested that those students in the more prestigious programs would be more satisfied, as their position within the community college was more favorably defined. The findings revealed that students were equally satisfied in all programs of study. This may be explained by the fact that within specific colleges certain occupational/technical programs are very prestigious and there is a demand in the labor market for graduates from these programs. Furthermore, the occupational/technical and developmental programs are often seen as a means of gaining transfer status to a four-year college. In view of this, the students' reason for entering one type of program over another and educational plans may be variables for future consideration.

Model III - Presentation and Findings

For Model III, those variables were not found to be statistically related to satisfaction were deleted. Thus, the following set of equations was established:

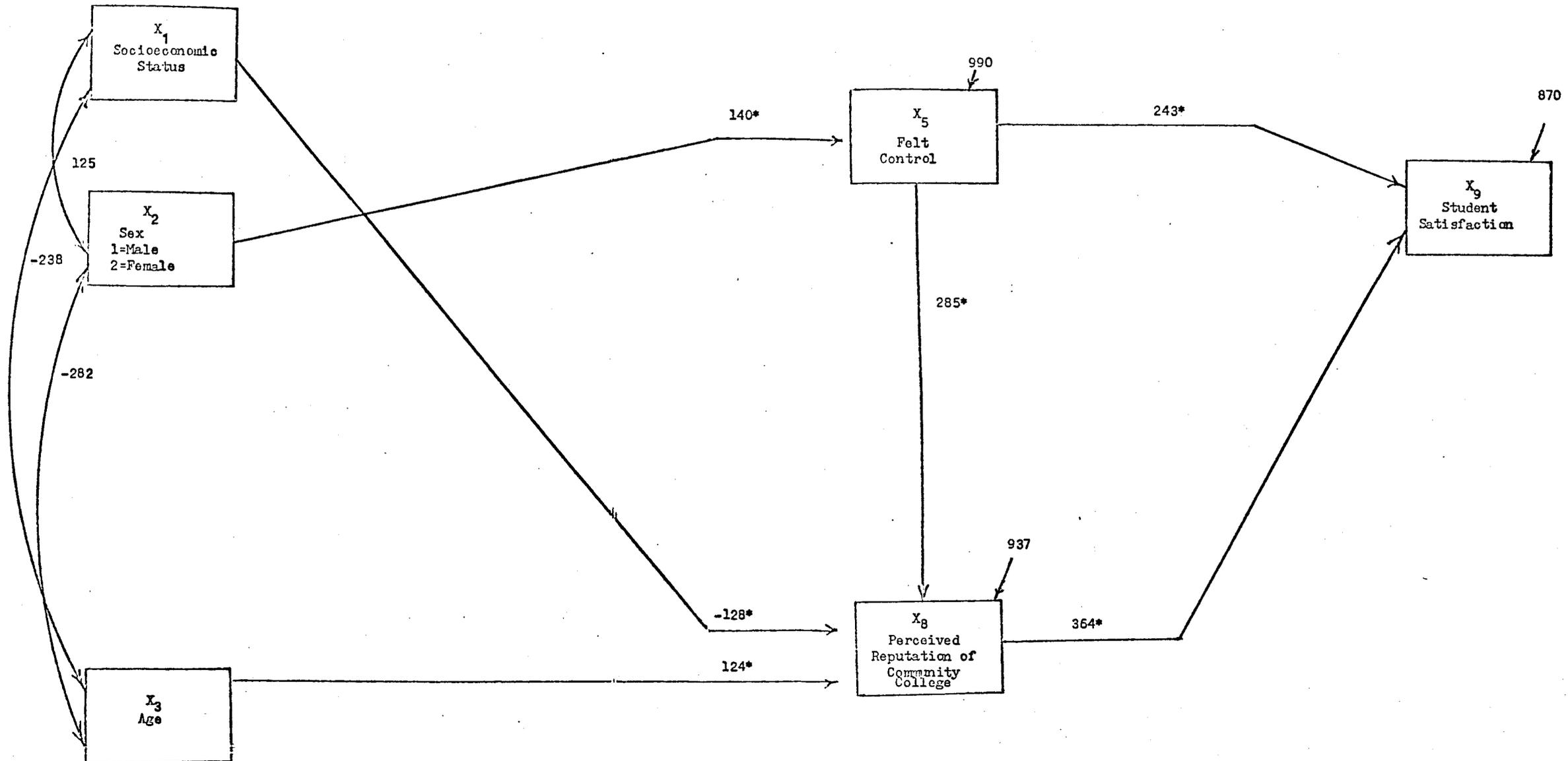
$$X_9 = P_{98}X_8 + P_{95}X_5 + P_{9a}R_a$$

$$X_8 = P_{81}X_1 + P_{83}X_3 + P_{85}X_5 + P_{8b}R_b$$

$$X_5 = P_{52}X_2 + P_{5c}R_c$$

The path diagrams in Figure 4 illustrate only a slight change in the path coefficients in Model II and III. As all values were found to be statistically significant, further analysis will not be necessary.

FIGURE 4. CAUSAL MODEL III



\*Significant at .05 level  
 Decimals Omitted.  
 N=556 for all cases.

## CHAPTER VI

### Summary and Conclusions

The purpose of this study was to develop, test, and revise a causal theory of student satisfaction among public two-year college students. Through the use of path analysis, student satisfaction was investigated as a function of eight variables: socioeconomic status, sex, age, employment status, felt control concerning entry into the community college, college performance, and perceived reputation of the community college.

Utilizing the broad theoretical assumptions that stratification exists and that one's definition of the situation is socially determined, it was suggested that background variables, e.g., socioeconomic status, sex, and age, would affect student satisfaction both directly and indirectly. In addition, felt control, program of study, college performance, and perceived reputation of the community college were introduced as intervening variables. The specific relationships were posited in terms of relative deprivation theory and knowledge of previous research.

Perceived reputation and felt control at entry were found to have a direct positive effect on satisfaction. Socioeconomic status and age affected satisfaction through perceived reputation, while sex exerted influence through felt control at entry. In accordance, lower socioeconomic status students, females, and older students were more likely to be satisfied with their community college experiences.

The findings which have been presented suggest the utility of the symbolic interactionist perspective and, more specifically, relative deprivation theory in explaining ones appraisal of a situation. For example, the effect of perceived reputation on satisfaction illustrates the role of the significant other in the students' definition of the community college environment. The direct and indirect effects of felt control and the indirect effect of socioeconomic status, sex, and age provide support for relative deprivation theory. It was suggested that higher socioeconomic status students, males, and younger students would experience greater dissatisfaction with the community college, as they would perceive a discrepancy in their value expectations and value capabilities (defined in terms of being enrolled in a low-prestigious college). Although socioeconomic status, sex, and age did not directly affect satisfaction, their influence through the intervening variables, felt control and perceived reputation, may be seen as indicative of the perceived expectations of the students. Those students who felt they had control over their entry into the community college, or who perceived their friends as viewing the community college favorably, possibly did so because their attendance in the community college was not evaluated in comparison to attending a four-year college, but instead in reference to not attending any college. For future, however, it would be meaningful to provide a more accurate measure of relative deprivation.

Within the causal models presented, perceived reputation and felt control at entry were the key causative factors in explaining student

satisfaction. However, together these two variables accounted for only 25% of the variance in student satisfaction. This indicates the need for additional variables. The following set of variables are suggested as they would better enable one to determine the discrepancy between expectations and capabilities of the students: high school performance, reference groups in high school, and encouragement to attend college. To illustrate, it would appear that higher ability students in high school would expect more in terms of post secondary education. However, the effects of ability on expectations would possibly be mediated by the expectations of the students' significant others or the degree to which the student was actually encouraged to attend college. In addition to including these variables, it would be instructive to find out what motivates students to attend the community college rather than a four-year college and to enter one specific program of study over another. To do this, both subjective measures or more objective measures, such as academic aptitude, would be necessary.

One of the more interesting findings involved the lack of relationship between college performance and satisfaction. It was speculated that the pressure to perform was not as great in the two-year college as in the four-year college. As this, too, is relative to the situation and individual involved, it would be interesting to further explore this relationship among two-year and four-year college students and compare the findings.

This research has been concerned primarily with the development of an attitude rather than the relationship between attitude and

behavior. It would be interesting, however, to conduct a follow-up study to determine possible relationships between educational and occupational attainments and satisfaction. Furthermore, it would be instructive to determine to what extent ones evaluation of the community college changes after leaving the environment and what factors influence this.

Although the theoretical relevance of this research has been noted, the practical or applied aspects are more difficult to illustrate. This is primarily due to the non-descriptive nature of the analysis. For example, a more descriptive analysis of the data would provide community college administrators with information on student satisfaction with specific aspects of the environment, thus enabling them to take steps to alleviate possible trouble areas. Knowledge of the importance of perceived reputation of the community college and felt control concerning entry into the community college in explaining student satisfaction should nevertheless also be useful to community college administrators. Most important, they demonstrate the significance of the image of the community college. To some extent then perceived reputation and felt control can be manipulated by community college personnel. Public relations programs could be designed to educate high school teachers, counselors, and others involved in the students' decision-making process on the many advantages of attending a community college. In many cases, the community college may be a more desirable alternative than students realize.

In addition to pointing out the importance of the image of the community college, the role played by perceived reputation of the community college and felt control concerning entry demonstrate the importance of social psychological variables in determining how students perceive or appraise their environment. It would appear then that the attitudes of community college personnel toward the students would affect students' satisfaction.

In conclusion, this research was an initial attempt in explaining student satisfaction among public two-year college students. It is believed that its primary value lies in the directions it suggests rather than in the specific relationships found to exist.

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## APPENDIX A-1. QUESTIONNAIRE MAILING PROCEDURE

Mailing addresses for those students to be included in the study were obtained with the assistance of the Research and Planning Division of the Virginia Department of Community Colleges. Three mailing contacts were utilized, consisting of an initial mailing and two follow-up mailings. Approximately 14 days lapsed between mailings.

Each mailing consisted of a questionnaire (A-2), a cover letter, and a business reply envelope (A-4). The cover letter for the first mailing (A-3) explained the purpose and nature of the study and the relevance to the student. A statement concerning the cooperation of the Virginia Department of Community Colleges and the use of Virginia Polytechnic Institute stationery added to the legitimacy of the study. Having considered the nature of the population being appealed to, the first letter was of a personal nature. The second letter (A-5) was as brief as possible, simply requesting the student to return the questionnaire if he had not already done so. The third appeal (A-6) was more lengthy than the second letter, in addition to being the most personal of the three. This letter pointed out that the questionnaire had not been return and requested the student to do so in order to avoid further expenses to the researcher.

Each reply envelop was coded with a number in the upper left hand corner in order to avoid redundant mailings. This number was not explained in any of the letters. Only four of 722 respondents removed the identification number from the envelope.

Letters were mailed to 1,052 students. Forty-four were returned by the post office as address unknown. Of those 1,008 students who were assumed to have received the questionnaire, 72% completed and returned the questionnaire. The mailing sequence and return rates are shown below. Those which were classified as undeliverable by the post office are not included.

	# <u>Mailed</u>	# <u>Returned</u>	% <u>Returned</u>	% of <u>Total</u>
First Mailing	1008	467	46%	46%
Second Mailing	541	174	32%	17%
Third Mailing	<u>367</u>	<u>81</u>	<u>22%</u>	8%
TOTAL	1008	722	72%	

APPENDIX A-2. MAIL QUESTIONNAIRE

The following questionnaire gives you an opportunity to express your feelings about your educational experiences in the community college. Please read each question carefully and, unless otherwise indicated, record the answer in the blanks provided at the righthand side of each page by writing the number of the statement which represents your response. Your responses will be treated confidentially. (If you are no longer enrolled in the community college, please base your answers on last quarter's attendance.)

First, we would like to know something about you, your academic experiences, and your family.

1. What is your current student status? (1) full-time student (at least 12 hrs.) 1. \_\_\_\_\_  
 (2) part-time student  
 (3) no longer enrolled in the community college

---

2. How many quarters have you completed at the community college you are now attending? (1) less than one (5) four quarters 2. \_\_\_\_\_  
 (2) one quarter (6) five quarters  
 (3) two quarters (7) six quarters  
 (4) three quarters (8) over six quarters

---

3. What is your class? (1) Freshman (2) Sophomore 3. \_\_\_\_\_

---

4. What type of program are you enrolled in? (1) occupational/technical (3) developmental 4. \_\_\_\_\_  
 (2) university parallel (4) unclassified

---

5. Write the name of your specific curriculum or area of study: \_\_\_\_\_

---

6. Was this curriculum your (1) first choice (2) second choice (3) third choice or other 6. \_\_\_\_\_

---

- 7-8. Using 4.0 to represent an A average, 3.0 for a B average, and 2.0 for a C average, what is your cumulative grade point average to the nearest tenth? 7-8. \_\_\_\_\_

---

9. What are your educational plans? 9. \_\_\_\_\_  
 (1) transfer to four-year college after completing community college program  
 (2) transfer to four-year college before completing community college program  
 (3) end formal education with 1-year certificate or diploma  
 (4) end formal education with 2-year degree  
 (5) end formal education before completion of any community college program  
 (6) other (specify) \_\_\_\_\_

---

- 10-11. How far do you commute to school? Specify number of miles one way. 10-11. \_\_\_\_\_

---

12. Have you ever been enrolled as a full-time student in a 4-year college or university? If so, indicate the number of different schools. If not, put zero. 12. \_\_\_\_\_

---

13. If you have been enrolled full-time in a 4-year college, what was the last date of your enrollment there? Specify the month and year: \_\_\_\_\_

---

14. How often do you think about dropping out of college for non-academic reasons? (1) very often (4) never 14. \_\_\_\_\_  
 (2) quite often (5) I have dropped out  
 (3) seldom

---

15. Which do you feel closer to? (1) friends attending your college 15. \_\_\_\_\_  
 (2) friends who are not attending your college  
 (3) no difference

---

- 16-25. What per cent of your college expenses do you receive from each of these sources? parents \_\_\_\_\_ %  
 self or spouse \_\_\_\_\_ %  
 financial aid, scholarship \_\_\_\_\_ %  
 GI benefits \_\_\_\_\_ %  
 specify other \_\_\_\_\_ %

---

- 26-28. If you are employed, indicate the number of hours you work per week. Put zero if you are unemployed. 26-28. \_\_\_\_\_

---

29. If you are employed, what is your specific job? \_\_\_\_\_

GO ON TO BACK OF PAGE

## Page 2

30. What is your marital status? (1) single (2) married (3) specify other \_\_\_\_\_ 30. \_\_\_\_\_
- 
31. What sex are you? (1) male (2) female 31. \_\_\_\_\_
- 
- 32-33. How old were you on your last birthday? 32-33. \_\_\_\_\_
- 
34. What was your class standing in high school? (1) top 10% (2) top 25% (3) upper half (4) lower half (5) did not graduate 34. \_\_\_\_\_
- 
35. What is the highest level of school that your father (or male guardian) completed? (1) less than 7 years (2) 7-9 years (3) 10-11 years (4) high school graduate (5) some college (at least one year) (6) college graduate (4-year degree) (7) graduate degree beyond Bachelors 35. \_\_\_\_\_
- 
36. What is the highest level of school that your mother completed? (use the same categories as above) 36. \_\_\_\_\_
- 
- 37-38. If your father (or male guardian) is presently working, what is his occupation? If retired, what was his occupation? BE SPECIFIC; for example, write railroad brakeman rather than railroad employee. \_\_\_\_\_
- 
- 39-40. If your mother is currently working or has worked, what is (or was) her most recent job? BE SPECIFIC. \_\_\_\_\_
- 

The following statements are concerned with the various aspects of your college experience. Considering your own needs and desires, decide how satisfied you are with each aspect of your college described in the statements and mark the number which represents your response in the provided space.

- Responses 1 means: I am VERY DISSATISFIED.  
 2 means: I am SOMEWHAT DISSATISFIED.  
 3 means: I am SATISFIED, no more, no less.  
 4 means: I am QUITE SATISFIED.  
 5 means: I am VERY SATISFIED.

INDICATE HOW SATISFIED YOU ARE WITH:

41. The opportunity to make close friends here. 41. \_\_\_\_\_
42. The way teachers talk to you when you ask for help. 42. \_\_\_\_\_
43. The competence of most of the teachers in their own fields. 43. \_\_\_\_\_
44. The amount of study it takes to get a passing grade. 44. \_\_\_\_\_
45. The amount of personal attention students get from teachers. 45. \_\_\_\_\_
46. The chance to be heard when you have a complaint about a grade. 46. \_\_\_\_\_
47. The availability of good places to live near the campus. 47. \_\_\_\_\_
48. The chance to take courses that fulfill your goals for personal growth. 48. \_\_\_\_\_
49. The chance to have privacy when you want it. 49. \_\_\_\_\_
50. Teachers' expectations as to the amount that students should study. 50. \_\_\_\_\_
51. The availability of good places to study. 51. \_\_\_\_\_
52. The fairness of most teachers in assigning grades. 52. \_\_\_\_\_
53. The social events that are provided for students here. 53. \_\_\_\_\_
54. Teachers' concern for students' needs and interests. 54. \_\_\_\_\_

GO ON TO NEXT PAGE

Responses    1 means: I am VERY DISSATISFIED.  
                   2 means: I am SOMEWHAT DISSATISFIED.  
                   3 means: I am SATISFIED, no more, no less.  
                   4 means: I am QUITE SATISFIED.  
                   5 means: I am VERY SATISFIED.

INDICATE HOW SATISFIED YOU ARE WITH:

- 55. The activities and clubs you can join. 55. \_\_\_\_\_
- 56. The chance to get acquainted with other students outside of class. 56. \_\_\_\_\_
- 57. The availability of your advisor when you need him. 57. \_\_\_\_\_
- 58. The chance of getting a grade which reflects the effort you put into studying. 58. \_\_\_\_\_
- 59. The quality of the education students get here. 59. \_\_\_\_\_
- 60. The concern here for the comfort of students outside of classes. 60. \_\_\_\_\_
- 61. The chances of getting acquainted with the teachers in your areas of interest. 61. \_\_\_\_\_
- 62. The chance of getting into the courses you want to take. 62. \_\_\_\_\_
- 63. The availability of comfortable places to lounge. 63. \_\_\_\_\_
- 64. The chances for men and women to get acquainted. 64. \_\_\_\_\_
- 65. The counseling that is provided for students here. 65. \_\_\_\_\_
- 66. The chance to prepare well for your vocation. 66. \_\_\_\_\_
- 67. The chance you have for a "fair break" here if you work hard. 67. \_\_\_\_\_
- 68. The chance to meet people with the same interests as you have. 68. \_\_\_\_\_
- 69. What you learn in relation to the amount of time you spend in school. 69. \_\_\_\_\_
- 70. The amount of study you have to do in order to qualify someday for a job you want. 70. \_\_\_\_\_
- 71. The kinds of things you can do for fun without a lot of planning ahead. 71. \_\_\_\_\_
- 72. The chance to participate in class discussions about the course material. 72. \_\_\_\_\_
- 73. The practice you get in thinking and reasoning. 73. \_\_\_\_\_
- 74. The activities that are provided to help you meet someone you might like to date. ANSWER ONLY IF YOU ARE SINGLE. 74. \_\_\_\_\_
- 75. The appropriateness of the requirements for your major. 75. \_\_\_\_\_

We are interested in how you felt about your initial decision to attend the community college. When responding to the following questions, think back to the time when you enrolled at the community college and indicate the degree to which you can agree or disagree with the following statements. Write the number which represents your response in the provided space.

Responses    1 Strongly Agree  
                   2 Agree  
                   3 Disagree  
                   4 Strongly Disagree

- 76. At the time I entered the community college, I felt that I had few, if any, attractive educational or occupational alternatives. 76. \_\_\_\_\_
- 77. I would have preferred not to have gone to any college. 77. \_\_\_\_\_
- 78. I would have preferred to have gone to another college. 78. \_\_\_\_\_
- 79. If I wanted an education, I had little choice other than to attend the community college. 79. \_\_\_\_\_

80-89. Below are listed some reasons why students may have decided to attend the community college rather than a four-year college or university.

- |  |   |
|--|---|
| (1) Convenience                            | (7) Not prepared emotionally for a four-year college                  |
| (2) Finances                               | (8) Community college offered desired program                         |
| (3) Friends attended community college     | (9) Did not want to devote four years to education beyond high school |
| (4) Parental expectations                  | (10) Couldn't get accepted elsewhere                                  |
| (5) Lack of academic preparation           | (11) Did not apply to other colleges early enough                     |
| (6) Preferred community college atmosphere |   |

Choose five reasons which best apply to you. Of these five, which were more important? Record your answer in the provided space by writing the number which represents the:

- Most important reason \_\_\_\_\_  
 Second most important reason \_\_\_\_\_  
 Third most important reason \_\_\_\_\_  
 Fourth most important reason \_\_\_\_\_  
 Fifth most important reason \_\_\_\_\_

We are interested in how your friends who are not attending the community college view your college, in how your friends who are attending your college view your college, and in how you view your college. In the first column, respond to each of the following statements for your off-campus friends; in the second column, respond for your on-campus friends; in the third column, indicate your own response. Using the following key, write, in the appropriate space, the number which represents the desired response.

- Response Key**
- 1 Strongly Agree
  - 2 Agree
  - 3 Disagree
  - 4 Strongly Disagree

	Off-campus Friends	On-campus Friends	Self
The community college is more like high school than like college.	90	91	92
The community college provides education for many who would not otherwise have the opportunity.	93	94	95
The community college provides first-quality education for occupational/technical students.	96	97	98
The community college consists mostly of students who cannot go elsewhere for an education.	99	100	101
The community college is more student-oriented than the majority of the four-year colleges.	102	103	104
The community college does a good job of preparing students to transfer to four-year colleges.	105	106	107
In most respects, the community college is as good a place to get an education as most four-year colleges and universities.	108	109	110

THANK YOU FOR YOUR COOPERATION IN COMPLETING AND RETURNING THIS QUESTIONNAIRE.



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

*Blacksburg, Virginia 24061*

DEPARTMENT OF SOCIOLOGY (703) 951-6878

May 3, 1974

Dear College Student:

I am interested in finding out what community college students feel about their educational experiences. As a former community college student myself, I believe that the success of the community college cannot be accurately evaluated without considering the needs and desires of its students.

Since you were enrolled in a Virginia community college during the Winter Quarter, 1974, you are among the 1,000 students who have been randomly selected to participate in a study on student satisfaction. This study is being done in cooperation with the Research and Planning Division of the Virginia Department of Community Colleges.

You can help in this project by filling out and returning the enclosed questionnaire. This should take approximately 15 minutes of your time. If you are no longer enrolled in the community college, base your responses on your last quarter's attendance.

Your responses will be treated confidentially and will not be associated with you personally. They will be used only for research on community college students as a group.

Please complete and return the enclosed questionnaire in the stamped, pre-addressed envelope. Your involvement is greatly appreciated.

Yours truly,

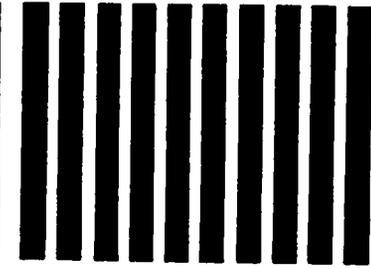
Joan H. Biggs, Director  
VCC Student Survey

Enclosures

APPENDIX A-4. BUSINESS REPLY ENVELOPE FOR RETURN MAILINGS

VCC STUDENT SURVEY  
VPI&SU  
660 MCBRYDE HALL  
BLACKSBURG, VIRGINIA 24061 1149

FIRST CLASS  
Permit No. 96  
Blacksburg, Va.



**BUSINESS REPLY MAIL**  
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

Postage will be paid by:

VCC STUDENT SURVEY  
Virginia Tech  
660 McBryde Hall  
Blacksburg, Virginia 24061



APPENDIX A-5. COVER LETTER FOR SECOND MAILING

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

*Blacksburg, Virginia 24061*

DEPARTMENT OF SOCIOLOGY (703) 951-6878

May 17, 1974

Dear College Student:

We recently sent you a questionnaire concerning your satisfaction with the community college. Student involvement is essential for the success of this study.

If you have not already done so, would you please complete and return the enclosed questionnaire today? Thank you for your participation.

Yours truly,

Joan H. Biggs, Director  
VCC Student Survey

Enclosures



## VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

*Blacksburg, Virginia 24061*

DEPARTMENT OF SOCIOLOGY (703) 951-6878

June 3, 1974

Dear College Student,

We recently sent you a questionnaire concerning your satisfaction with the community college. We have not yet received your response. It is important that we hear from as many students as possible so that the study will provide an accurate evaluation of the community college.

Although this study is being done in cooperation with the Research and Planning Division of the Virginia Department of Community Colleges, I am relying on my own finances to fund this project. In order to make this project more successful and to eliminate the expenses of any additional mailings, I would appreciate your cooperation.

Again, let me assure you that your responses will be treated confidentially and will be used for research purposes only. If you have not already done so, please complete and return the enclosed questionnaire in the pre-addressed, postage-paid return envelope. Thank you for your help.

Yours truly,

Joan H. Biggs, Director  
VCC Student Survey

Enclosures

## APPENDIX B. ITEMS USED TO MEASURE STUDENT SATISFACTION

Instructions: The following statements are concerned with the various aspects of your college experience. Considering your own needs and desires, decide how satisfied you are with each aspect of your college described in the statements and mark the number which represents your response in the provided space.

Responses 1 means: I am very dissatisfied.  
2 means: I am somewhat dissatisfied.  
3 means: I am satisfied, no more, no less  
4 means: I am quite satisfied.  
5 means: I am very satisfied.

INDICATE HOW SATISFIED YOU ARE WITH:

1. The opportunity to make close friends here.
2. The way teachers talk to you when you ask for help.
3. The competence of most of the teachers in their own fields.
4. The amount of study it takes to get a passing grade.
5. The amount of personal attention students get from teachers.
6. The chance to be heard when you have a complaint about a grade.
7. The availability of good places to live near the campus.
8. The chance to take courses that fulfill your goals for personal growth.
9. The chance to have privacy when you want it.
10. Teachers' expectations as to the amount that students should study.
11. The availability of good places to study.
12. The fairness of most teachers in assigning grades.
13. The social events that are provided for students here.
14. Teachers' concern for students' needs and interests.
15. The activities and clubs you can join.
16. The chance to get acquainted with other students outside of class.
17. The availability of your advisor when you need him.
18. The chance of getting a grade which reflects the effort you put into studying.
19. The quality of the education students get here.
20. The concern here for the comfort of students outside of classes.
21. The chances of getting acquainted with the teachers in your areas of interest.
22. The chance of getting into the courses you want to take.
23. The availability of comfortable places to lounge.
24. The chances for men and women to get acquainted.
25. The counseling that is provided for students here.
26. The chance to prepare well for your vocation.
27. The chance you have for a "fair break" here if you work hard.
28. The chance to meet people with the same interests as you have.
29. What you learn in relation to the amount of time you spend in school.
30. The amount of study you have to do in order to qualify someday for a job you want.

31. The kinds of things you can do for fun without a lot of planning ahead.
32. The chance to participate in class discussions about the course material.
33. The practice you get in thinking and reasoning.
34. The activities that are provided to help you meet someone you might like to date. ANSWER ONLY IF YOU ARE SINGLE.
35. The appropriateness of the requirements for your major.

APPENDIX C. ITEMS USED TO MEASURE FELT CONTROL CONCERNING ENTRY INTO COMMUNITY COLLEGE

Instructions: we are interested in how you felt about your initial decision to attend the community college. When responding to the following questions, think back to the time when you enrolled at the community college and indicate the degree to which you can agree or disagree with the following statements. Write the number which represents your response in the provided space.

Responses            1 Strongly Agree  
                          2 Agree  
                          3 Disagree  
                          4 Strongly Disagree

1. At the time I entered the community college, I felt that I had few, if any, attractive educational or occupational alternatives.
2. I would have preferred not to have gone to any college.
3. I would have preferred to have gone to another college.
4. If I wanted an education, I had little choice other than to attend the community college.

APPENDIX D. ITEMS USED TO MEASURE PERCEIVED REPUTATION OF THE  
COMMUNITY COLLEGE

Instructions: we are interested in how your friends who are attending and who are not attending your college view the community college. Respond to each of the following statements for your on-campus and off-campus friends.

Response Key    1 Strongly Agree  
                      2 Agree  
                      3 Disagree  
                      4 Strongly Disagree

1. The community college is more like high school than like college.
2. The community college provides education for many who would not otherwise have the opportunity.
3. The community college provides first-quality education for occupational/technical students.
4. The community college consists mostly of students who cannot go elsewhere for an education.
5. The community college is more student-oriented than the majority of the four-year colleges.
6. The community college does a good job of preparing students to transfer to four-year colleges.
7. In most respects, the community college is as good a place to get an education as most four-year colleges and universities.

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the scanned document**

A MULTIVARIATE ANALYSIS OF STUDENT SATISFACTION  
AMONG VIRGINIA COMMUNITY COLLEGE STUDENTS

by

Joan Hogg Biggs

(ABSTRACT)

Student satisfaction, defined as the degree to which students believe they are getting what they desire from their educational experiences, has received relatively little emphasis in educational and sociological literature. Thus, the purpose of this study is to develop a causal model explaining satisfaction among Virginia Community College students.

Path analysis was used to investigate the relationship between student satisfaction and eight variables: socioeconomic status, sex, age, employment status, felt control concerning entry into the community college, program of study, college performance, and perceived reputation of the community college. Posited relationships were derived generally within a symbolic interactionist perspective and, more specifically, from relative deprivation theory. Past research was considered when applicable.

The findings indicated that felt control concerning entry into the community college and perceived reputation of the community were positively related to student satisfaction. Socioeconomic status, sex, and age were indirectly related to satisfaction through felt control and perceived reputation. Employment status, program of study, and

performance had no effect on satisfaction. This research was primarily exploratory. The findings provided considerable support for relative deprivation theory. The primary value of the study, however, lies in the directions it suggests for further research.