AN ABSTRACT OF THE THESIS OF

_____ Janet A. Sarin _____ for the _____ Master of Science _____

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Title: The Relationship Between Participation in a Student Support Service Program, Psychological Adjustment, and Student Classification for First Generation and Low Income College Students

Abstract approved: _____

      This study examined the relationship between participation in a Student Support Service (SSS) program, psychological adjustment, and student classification for first generation and low income college students. These students are referred to as "at risk" because they are less likely to complete degree programs than other students. The SSS program Project Challenge at Emporia State University in Kansas is a federally mandated program available to students at risk. This program offers support in three areas determined to have influence in retaining these students: advising, tutoring, and counseling. Tutoring and advising contribute to increased retention rates. The level of psychological adjustment for students considered at risk has not been researched despite evidence suggesting their adjustment to college life is more difficult than other students. Consequently, no data exist to confirm that participation in support services contributes not only to academic adjustment, but also to psychological adjustment, thereby increasing the likelihood of adaptation to college and better retention rates for those at risk. It was hypothesized that at-risk students' psychological adjustment scores would reflect favorable differences in adjustment for those with the lengthiest enrollment in a SSS program as measured by student classification. The Hopkins Symptom Checklist-58

(HSCL), a self-report symptom rating scale measuring psychological adjustment, was mailed to 159 at-risk students. Student classification did not significantly predict HSCL scores. However, other research has shown participation in support services, measured by the extent of contact with services, favorably affects retention rates. Frequency of service participation in the freshman year may have nullified the expected effect of psychological adjustment scores correlating with student classification. Further research would contribute to understanding if psychological adjustment is a factor in retention rates for the student at risk population.

THE RELATIONSHIP BETWEEN PARTICIPATION IN A STUDENT SUPPORT

SERVICE PROGRAM, PSYCHOLOGICAL ADJUSTMENT, AND STUDENT

CLASSIFICATION FOR FIRST GENERATION AND LOW INCOME

COLLEGE STUDENTS

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Presented to

the Division of Psychology and Special Education

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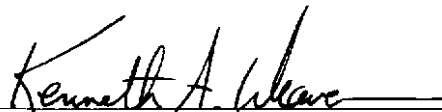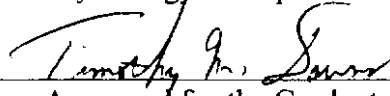
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CHAPTER 1

INTRODUCTION

Many factors contribute to the probability of a student's success in college. While these are generally similar for most students, one group of students has been considered "at risk." Risk factors are characteristics which make a student less likely to complete a four-year degree program. Being a first generation college student and/or being economically disadvantaged are two risk factors that have been shown to be particularly detrimental to degree completion (Cahalan, Muraskin, & Goodwin, 1994). This study examined the at-risk student's psychological adjustment while attending college.

First Generation College Student

A first generation college student is a student whose parents did not obtain a college degree. First generation college students are at risk for attrition because their college attendance necessitates a cultural departure and academic adjustment for which they are under prepared (London, 1992). According to London, attending college requires the first generation student to renegotiate relationships with family and friends who may feel threatened by the unfamiliar situation. The first generation student's potential degree and upward mobility may be viewed by some family and friends as a betrayal or abandonment. Feelings of disloyalty and loss must also be reconciled by first generation students who may be conflicted leaving behind their old culture while pressured to succeed in a new one. London views the first generation student's position as bordering the culture of family and friends and the culture of the college community. He views the student's greatest challenge toward degree completion as overcoming this

cultural marginality.

Padron (1992) details other detrimental characteristics associated with being a first generation college student. Because first generation college students have had no prior exposure to the college environment through parents' stories of their own college experiences, they are more easily intimidated or confused by the educational system. Time management conflicts are common. If living at home, the student is often asked to "help out" with younger siblings rather than allowed the freedom to concentrate fully on studies. Padron states that families may become obstructionists in other ways as well. Members may ridicule the student for being a "know-it-all." The family may expect the student's money saved or financial aid received to be used as an economic resource for the family. Members sometimes encourage the student to quit school in a misdirected effort to ease what they perceive as the source of the student's burdens. Families who underestimate the time, work, and money necessary for a successful academic endeavor or who belittle academic aspirations are unavailable as a source of support for a first generation college student. Both London (1992) and Padron (1992) portray the first generation college student's family as a primary source of conflict.

In a study of selected personality characteristics, McGregor, Mayleben, Buzzanga, Davis and Becker (1991) compared 211 first generation college students and 235 students whose parents had attended college. The highest levels of self-esteem occurred with students whose parents both attended college. First generation students perceived themselves significantly lower in social acceptance. However, while first generation students perceived more difficulty in adapting to stressors of their environment, they did

not view themselves as less capable of adapting than more traditional students. First generation students perceive themselves as similar to more traditional students in adaptive capability. However, this optimistic perception may be an overestimation. While first generation college students perceive some difficulties, they may underestimate the actual effort necessary for them to match more traditional students in adaptation to college life.

Low Income

Economic disadvantage is defined as low income. Low income is determined according to poverty guidelines issued yearly by the U.S. Department of Health and Human Services. Economically disadvantaged students are immediately at risk for attrition due to financial pressures. Low income students frequently are first generation college students and/or minorities (Richardson & Skinner, 1992).

Richardson and Skinner (1992) found that low income students often contend with maintaining employment while attending college full time. Low income students from families with college backgrounds were more familiar with avenues of financial aid than first generation college students and also had more realistic expectations concerning the actual cost of attending college for four years. Low income students must divide their attention between studies and acquiring financial resources. A low income and first generation student is further burdened with adjusting to the social changes noted by London (1992) and Padron (1992).

Social Isolation

Students unfamiliar with the college culture (first generation) or involved with off-campus jobs because of low income are also vulnerable to social isolation (Whitman, Spendlove, & Clark, 1984). They spend less time with others, consult professors less frequently, attend fewer college events, and directly participate in fewer college activities. Astin (1984) found students' persistence is proportionally related to their depth of involvement and their frequency of contact with academic advising. If learning is partially dependent on the quality and quantity of involvement, then isolation experienced by first generation or disadvantaged college students may be a barrier to retention rates.

Academic Preparedness

Another barrier to college success is academic under preparedness. Institutions with the highest ACT (26+) and SAT (1,100+) scores have the least attrition in the students' freshman year. One explanation is that academic preparedness can help predict student persistence (Noel, 1985). Richardson and Skinner (1992) found that low income, first generation college students were frequently academically under prepared for college. They had taken fewer or no advanced courses in high school and lacked adequate expectations about the basic skills necessary to succeed in college course work, such as time management and efficient study skills. At Laguardia Community College, a branch of City University of New York, the student population is ethnically diverse and the students are primarily first generation college students. Chaffee (1992) found 85% of

these first generation students tested were in need of remediation in writing, reading, oral skills, and/or math.

DeSilva (1984) reviewed a student support service program at Wichita State University in Kansas. The support services included tutoring, study skills and test taking workshops, cultural activities, and information referral services. Of the 101 participating students, 6.93% qualified as low income, 28.71% were first generation college students, 61.39% were low income and first generation college students, 1.98% were first generation college students and physically disabled, and .99% was low income and physically disabled. Across all classifications, demand for services was highest in the tutoring portion of the support program. DeSilva (1984) identified several reasons for low academic performance. The primary causes were deficient reading comprehension, deficient study skills, lack of study time due to employment, and lack of ability for college level work.

The results reported by Richardson and Skinner (1992), Chafee (1992), and DeSilva (1984) lead to the suggestion that students who enter degree programs with academic deficiencies generally must expend extra effort to reach even minimally acceptable levels of performance. The effort necessary to achieve satisfactory performance is probably greater for first generation and/or low income students than the effort expended by students who are neither first generation nor low income.

Student Support Services

The Student Support Services (SSS) is a federally funded grant program implemented to promote college access for disadvantaged students. The purpose of the

SSS program is to foster an institutional climate conducive to success for low income students, first generation college students, and students with disabilities. The primary function of SSS is to increase college retention for eligible students (Cahalen, Muraskin, & Goodwin, 1994). SSS program participants must be 67% students who are low income and first generation college students or students who are physically disabled. The other third must be low income or first generation college students.

SSS may differ slightly at different institutions. Support services usually consist of academic advising, tutoring, and personal counseling. Some programs also provide formally structured tutorial classes, various workshops, and cultural enrichment programs. Estimates by project directors indicate that over 75% of the participants receive academic advising, 60% receive tutoring, and roughly 50% receive some form of counseling. Individual tutoring is usually provided by peers whereas academic advising and counseling services are provided by professionals (Cahalen et al., 1994).

Evaluation of SSS

Although later studies indicate SSS do contribute to a greater probability of student retention, early evaluation of Student Support Services reported that the program had minimal impact on student success rates. A study by the Educational Testing Service (Davis, Burkheimer, & Borders-Patterson, 1975) two years after the beginning of the SSS program found no evidence that SSS systematically improved performance and satisfaction with college beyond that which might have been expected from high school grades. Outcomes were better predicted by race/ethnicity than by poverty or physical disability. In 1982, the Government Accounting Office (GAO) reviewed educational

records from 11 different SSS programs. The GAO found that approximately 50 percent of program participants were no longer at their respective institutions three years later. Measuring the normal rate of progress as one grade per year, the GAO found that students who did persist generally fell behind.

The results of the Davis, Burkheimer and Borders-Patterson (1975) and the GAO (1982) studies are tenuous considering a 1985 report by the Office of the Inspector General of the U.S. Department of Education. The report reviewed the SSS programs of five institutions that had been audited for program compliance. Four institutions were found to have had difficulty properly documenting student eligibility and participation. Moreover, the GAO study (1982), which reported negligible results from 11 programs, had also found inadequate record keeping as well as differences between local and federal project objectives.

Coulson and Bradford (1983) of Systems Development Corporation conducted a national study of SSS programs that included 6,000 students and 58 programs. Program participants were compared with eligible nonparticipating students. Results were reviewed both at one year and after two years. After one year, students who received all services (academic and non academic) were more likely to complete the freshman year than students who participated in few or no services. More service participation was associated with more attempted and completed course units. Although minority and low-income students obtained lower grades and took fewer course units, they had retention rates that were comparable to other participating students (Coulson & Bradford, 1983).

In the second year, Coulson and Bradford (1983) found that moderate participation in academically oriented services during the freshman year was associated with more extended student enrollment and with more course units attempted and completed. Participation in academic services received after the freshman year resulted in fewer positive long-term outcomes as measured by length of enrollment, course units attempted, and course units completed. Because academic services received after the freshman year had less overall impact than academic services received during the freshman year, students who persisted beyond the freshman year were possibly more capable of college level work regardless of services received. However, this explanation is discounted by Coulson and Bradford's (1983) finding that participation in nonacademic special services during the freshman year or later was also associated with more extended enrollment, more course units attempted, and higher grades.

Project Challenge, the SSS program at Emporia State University in Kansas, was evaluated over a four-year period, 1986 through 1989, and was found to impact positively on student retention rates (Goltra & Benjamin, 1991). Goltra and Benjamin compared program participants and found students who participated in all three targeted special service areas (academic advising, tutoring, and counseling) were the most likely to be retained after the freshman year. One hundred ninety-four freshmen entered Project Challenge over the four-year period. While the overall Project Challenge freshman retention rate was 68% and the overall freshman population retention rate was 73% for the same four-year period, the freshman retention rate for Project Challenge freshmen who participated in all three special service areas was 76%.

SSS and Psychological Adjustment

Psychological adjustment is defined here as level of distress reported for a given individual. The SSS program exists to aid at-risk students in their goal of academic success by reducing risk factors through academic advising, tutoring, and counseling. Although based on retention rates there is evidence to indicate the program is a success (Coulson & Bradford, 1983; Goltra & Benjamin, 1991), research has not focused on how counseling and other support services may influence the psychological adjustment of program participants. Most research focuses exclusively on program implementation.

Federal guidelines mandate that the majority of SSS program participants be first generation and/or low income students. As reviewed earlier, there is an abundance of differences between first generation or low income students and students who are neither first generation nor low income such as cultural changes, inexperience, negative family attitudes, financial pressures, isolation, and academic under preparedness. They have all been implicated in contributing to the first generation or low income student's greater likelihood to withdraw from a degree program (Chaffee, 1992; London, 1992; Padron, 1992; Richardson & Skinner, 1992; Whitman et al., 1984). The socio-cultural differences characteristic of the first generation and low income student are obstacles to success. In short, because SSS programs serve students who are at risk, its participants are particularly vulnerable to stress.

The broader gap to adjustment at college and the effort required to minimize deficits that exist for the at-risk student conceivably places additional stress on him or

her. The at-risk student's stress is most likely greater relative to the stress experienced by the student who is not at risk.

While a first generation or low income student may overcome one or another detrimental characteristic, several instances occurring simultaneously may overload the student's ability to function adequately. The increased drop out rate common to the first generation and low income student may be directly related to the level of psychological distress reported.

Remediation of excessive stress could be instrumental in obtaining increased retention rates for students at risk. Participation in SSS may lower stress and result in better psychological adjustment for its participants. Goltra and Benjamin (1991) found that students who participated in academic advising, tutoring, and counseling had better retention rates than students who participated in only one or two service areas. These results suggest that an inverse relationship may exist between SSS participation and stress.

The level of psychological distress experienced by students considered at risk has not been researched despite evidence suggesting their adjustment to college life is more difficult (London, 1992; Padron, 1992). Consequently, no data exist to confirm or disconfirm that SSS program participation contributes not only to academic adjustment, but also to psychological adjustment, thereby increasing the likelihood of adaptation to college and better retention rates for the at risk student. The purpose of this study is to measure the impact of participation in a SSS program on psychological adjustment.

<u>Hypothesis</u>

First generation and low income students enter college with a documented pattern of academic and nonacademic deficits which make the college adjustment process more difficult than for traditional students considered not at risk. The hypothesis tested in this study is: The higher the student classification of the at-risk student, the greater will be the psychological adjustment.

CHAPTER 2

METHOD

Participants

For this study, a first generation college student is a college student whose parents

do not have college degrees. A low income student is an individual at 150% of the

United States Department of Health and Human Services poverty guidelines.

The population involved in this study is rural Midwestern first generation and/or

low income students. The target population of this study is first generation and/or low

income students from rural Midwestern regions who participate in Student Support

Service (SSS) programs. What distinguishes this population as a group is its greater

probability of failure to complete college degree programs without participation in SSS

programs when compared with demographically similar students who are neither first

generation nor low income.

The accessible population for this study was the group of 159 at-risk students

enrolled at Emporia State University in Emporia, Kansas who participated in Project

Challenge during the 1997-1998 academic school year. These students included 39

freshmen, 40 sophomores, 32 juniors, and 48 seniors. Of 159 Project Challenge students,

42 were first generation, 2 were low income, 24 were disabled, 77 were low income/first

generation, and 14 were low income/disabled. Forty-six of the 159 potential respondents

returned data. The respondents were all first generation college students: 18 freshman, 11

sophomores, 6 juniors, and 11 seniors. Confidentiality policies and agreements

precluded determining the age, income, or disability status of respondents.

At the time of this study, preliminary figures for frequency of contact with

Project Challenge services were available for tutoring and counseling and unavailable for

academic advising services (T. Benjamin as reported by T. Risley, personal

communication, April 16, 1998). The figures for overall participation showed freshmen

were most frequently in contact with services followed by sophomores, then juniors.

Seniors had the least contact with services. Counseling services were frequented more

often than tutoring services following the same class pattern (see Table 1).

Confidentiality precluded sorting the 46 respondents by frequency and type of Project

Challenge service participation.

Research Design

This study design was causal-comparative. First generation and low income

students participate in Project Challenge based on pre-existing group characteristics.

Therefore, no formal treatment was randomly applied. Data were collected from the 159

Project Challenge students at Emporia State University via a mailed questionnaire. This

study examined a suspected difference in psychological adjustment while at college of

Project Challenge participants based on their student classification.

Table 1

Summary of Frequency of Contact with Project Challenge Services by Student
Classification*

Class	n	Tutoring	Counseling	Total Contact
Freshman	39	132	619	751
Sophomore	40	150	504	654
Junior	32	127	306	433
Senior	48	107	291	398
Total	159	516	1,720	2,236

*T. Benjamin as reported by T. Risley, personal communication, April 16, 1998

Instrument

Psychological distress was measured using the Hopkins Symptom Checklist-58

(HSCL) (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). The HSCL is a self-

report symptom rating scale consisting of 58 questions. It was developed to measure

psychological adjustment and has been used primarily for research in psychotherapy

(Derogatis et al., 1974). The HSCL has also commonly been used in research involving

non-clinical college student populations (Hays & Oxley, 1986; Martin & Burks, 1985;

Nowack, Gibbons, & Hanson, 1985; Roberts, 1995; G.D. Zimet, Dahlem, S.G. Zimet, &

Farley, 1988). A copy of the HSCL is shown in Appendix A.

The HSCL consists of five primary symptom dimensions: somatization,

obsessive-compulsive, interpersonal sensitivity, depression, and anxiety. Coefficients

alpha ($\underline{N}$ = 1435) are high for all five subscales ranging from .84 to .87 (Derogatis et al.,

1974). Test-retest reliability coefficients are also acceptable, ranging from .75 to .84

(Rickels, Lipman, Park, Covi, Uhlunhuth, & Mock, 1971 cited in Derogatis et al., 1974).

HSCL interrater reliability is sufficient for a self-report scale with correlation

coefficients ranging from .64 to .80 (Derogatis et al., 1974).

Rickels, Lipman, Garcia, and Fisher (1972) found criterion-related validity for the

HSCL in a study where gynecological subjects were classed as emotionally labile or non-

labile by their treatment doctor. Other neurotic patients were classified by an

independent doctor rating of global improvement as unimproved, mildly improved, or

markedly improved following drug treatment. HSCL results were consistent with doctor

classifications and the differences between all five groups of subjects were statistically significant on all five dimensions of the HSCL (Rickels et al., 1972).

Rickels et al. (1972) also demonstrated construct validity for the HSCL. Subjects were as accurately ranked by their HSCL results as they were by a clinical practitioner and by independent external criteria.

Hopkins Symptom Check List data in the present study were scored using a global index and interpreted as measuring general psychological distress (i.e., psychological adjustment). Cyr, McKenna-Foley, and Peacock (1985) concluded the HSCL global score more validly measures general distress than its dimensional scores measure categorical distress states. In a review of research on the Symptom Check List-90-R (SCL-90-R) including its precursor the HSCL, Cyr et al. (1985) demonstrated that a pattern of inconsistent findings in factor analytic study of symptom dimensions in the HSCL distress scale existed between earlier studies by Derogatis, Lipman, Covi, Rickels, 1971; Derogatis, Lipman, Covi, Rickels (1972); Lipman, Rickels, Covi, Derogatis, Uhlenhuth (1969); and Mattsson, Williams, Rickels, Lipman, Uhlenhuth (1969; as cited in Cyr et al., 1985).

Despite differences between the studies, Cyr et al. (1985) contend that this earlier research supports the psychometric use of the HSCL more as a measure of general psychological distress than of distinct psychopathological dimensions (i.e., somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety). The view is supported by the earlier research having revealed sources of intercorrelations of symptom dimensions. The Cyr et al. (1985) survey determined many items in the HSCL loaded on

both anxiety and depression and factor analyses showed disproportions in variance

accounted for existed between the first two unrotated factors.

Procedures

Identities of Project Challenge participants are confidential. This restriction

mandated this study be conducted using a mailed questionnaire. Because return rates are

notoriously low for mailed questionnaires, all 159 Project Challenge participants were

mailed the questionnaire.

One hundred fifty-nine copies of the HSCL questionnaire were numbered 1

through 159 in the upper right corner. The questionnaires, an attached consent form, and

a stamped return envelope addressed to the experimenter were placed in envelopes

numbered 1 through 159. To protect the identity of Project Challenge participants, the

director of Project Challenge labeled the envelopes in order with names from the

program's master list, as they appeared, beginning with the first name and ending with

the 159th name.

All subjects were mailed an informed consent form together with an HSCL

questionnaire. The consent form contained a brief description of the research and the

HSCL form included a definition of "first generation college student." The volunteers

were asked to mark their appropriate student classification and if they could be described

as a first generation college student. A copy of the consent form is provided (see

Appendix B).

CHAPTER 3

RESULTS

The Hopkins Symptom Checklist-58 (HSCL) was mailed to the 39 freshmen, 40 sophomores, 32 juniors, and 48 senior Project Challenge students enrolled at Emporia State University during the 1997-1998 academic year. Responses were received from 18 freshmen, 11 sophomores, 6 juniors, and 11 seniors. All respondents were first generation college students.

Psychological adjustment was quantified from individual HSCL scores using a global index. Individual scores were then grouped according to student classification (i.e., freshmen, sophomore, junior, senior) and compared using oneway analysis of variance (ANOVA). The four groups were first compared to assure assumptions for ANOVA were met. It was determined (Hartley F_{max}) the uneven individual group sizes were inconsequential before ANOVA was calculated to test the hypotheses that psychological adjustment would increase in accordance with an increase in student classification as indicated by the HSCL scale. An alpha level of .05 was set for statistical procedures.

Using a global rating, the HSCL has a possible low score of 58 (least distress) and a possible high score of 232 (most distress). For the 46 Project Challenge students responding, the sample mean was 96.41. Class means can be seen in Table 2. HSCL scores by student classification were not significantly different, $F(3,42) = .82$, $p > .05$. ANOVA data are summarized in Table 3.

Table 2

Summary of Means and Standard Deviations of HSCL-58 Score by Student Classification

Class	n	M	SD
Freshman	18	96.5	25.51
Sophomore	11	99.90	26.62
Junior	6	106.33	34.09
Senior	11	87.36	19.31
Total	46	96.41	25.52

Table 3

Summary of Analysis of Variance of HSCL score as a function of Student Classification

Source	df	SS	MS	F
Between Groups	3	1625.86	541.95	.82
Within Groups	42	27699.28	659.50	
Total	45	29325.15		

CHAPTER 4

DISCUSSION

Psychological Adjustment and Student Classification

The results of this study show no relationship between level of psychological

distress reported by students at risk and student classification. While this result was

unexpected, given Benjamin's (T. Risely, personal communication, April 16, 1998)

preliminary data for patterns of frequency and type of contact with Project Challenge

services, the lack of relationship between student classification and psychological

distress does lead to several areas for consideration.

Benjamin's preliminary data for1998 show the lower the student classification

(i.e., freshmen), the more frequently support services were used. For all classes,

counseling services were received at more than twice the rate of tutoring services. One

possible reason for finding no relationship between student classification and

psychological adjustment in the current study is that frequency of support service

participation, particularly of counseling, may quickly reduce the level of stress an at-risk

student experiences. The effect may be more immediate than hypothesized over four

years. Consistent with this interpretation is the Coulson and Bradford (1983) study

which found support services' effects were notable in the first year of a degree program.

Frequency of participation in support services may have nullified the expected

result of psychological adjustment scores improving with student classification. Students

were tested during the second semester when Project Challenge services had already

been received. Measurement for clinical symptoms at the beginning of the academic

year may have supplied substantially different data than measurement taken well after support services had been taken advantage of. Administering the HSCL at the beginning of the academic year could have provided baseline scores for comparison with HSCL scores taken after support services had been received.

Goltra and Benjamin (1991) found that students who participated in all three support service areas (academic advising, tutoring, and counseling) had higher retention rates than students who participated in two or less. Although frequency of participation (number of contacts) was not obtained in the current study, Benjamin's 1998 preliminary data allow speculation that frequency of participation in all support services may be a key factor in determining "success" for at-risk students in several areas including that of reported level of psychological adjustment. Benjamin's preliminary 1998 Project Challenge data for participation in support services suggest student classification is a factor in how often a student participates in support services. Benjamin found that freshmen had almost twice as many total contacts with services compared to seniors (751 vs. 398). Sophomores had fewer total contacts than freshman (654 vs. 751), but more contacts compared to juniors (654 vs. 433). Juniors had more total contacts compared to seniors (433 vs. 398). However, it seems reasonable to speculate the 1998 senior Project Challenge participants acquired more cumulative contact with services over the length of their degree program than did either freshmen, sophomores, or juniors.

The current study found no significant relationship between student classification and psychological adjustment for the at-risk student population. Perhaps it is accurate to view these results through a general cognitive paradigm: The first generation student's

perception of environmental difficulties (McGregor et al., 1991) allows for devising coping strategies which ameliorate the effects of any burden in adapting to environmental stressors regardless of student classification. Participating in Student Support Services (i.e., counseling, tutoring, advising, or all three) could be viewed as a general coping strategy. A specific strategy may involve how frequently (i.e., number of contacts with support services) participation occurs. Having a strategy (i.e., participation in counseling, tutoring, advising, or all three) combined with the frequency of strategy use (i.e., number of contacts) could outweigh the inexperience of first generation freshmen college students.

Another explanation for finding no relationship between psychological adjustment and student classification is that the data for this study were obtained using a mailed questionnaire to maintain the anonymity of Project Challenge students as mandated by Student Support Service directives. Unfortunately, using a mailed questionnaire conceivably contributed to a less than optimal selection of all participants from whom to generate information. The sample used in this study may not have been large or representative enough to enable generalizing about the data. This study relied upon self-report data, which could have resulted in selection bias. Students experiencing profound stress may not have responded to the request for research participants.

The results of this study may not generalize to other at risk student populations. This study was limited in scope; hence, no control group was used for comparison. The data may reflect responses which could have been obtained from any student and not those at risk in particular. A larger, more representative sample, use of a control group,

pre- and post testing, and a longitudinal study might produce less ambiguous data. Comparing frequency of participation in support services with psychological adjustment would also be advantageous.

Finally, it is necessary to consider "counseling" in an educational setting may vary from what is considered counseling in a clinical setting. A concrete description of what elements constitute a Student Support Service counseling session is needed if the explanations of the data in this study are to avoid being speculative.

Conclusion

The current study contributes to research on students at risk by clarifying areas where further research could benefit both students at risk and the programs in place to support them. As a result of this study, three important conclusions can be derived. Student classification appears to be inconsequential to psychological adjustment whereas frequency of participation in Student Support Services may have an effect. The strength of this effect may vary by type of support service accessed (i.e., tutoring, advising, or counseling). That effect may be more immediate than previously thought.

By determining if frequency of participation in Student Support Services is indeed significantly associated with psychological adjustment and improved retention rates, program objectives can be strengthened. Determining how strong the frequency of participation effect is of either tutoring, counseling, or advising could help determine where financial and employee resources are best allocated for the advantage of those at risk. The same could be said for the value of further investigating whether Student Support Services are indeed most effective in the first weeks, months, or year of a degree

program. These conclusions provide a rationale for further research of the at-risk student population.

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APPENDICES

Appendix A

Hopkins Symptom Checklist-58

Directions: Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please circle the number that best describes how much that problem has bothered or distressed you during the past seven days including today. Circle only one number of each problem and do not skip any items.

HOW MUCH WERE YOU DISTRESSED BY:	Not at All	A Little	Quite a Bit	Extremely
1. Headaches	1	2	3	4
2. Nervousness or shakiness inside	1	2	3	4
3. Unable to get rid of bad thoughts or ideas	1	2	3	4
4. Faintness or dizziness	1	2	3	4
5. Loss of sexual interest or pleasure	1	2	3	4
6. Feeling critical of others	1	2	3	4
7. Bad dreams	1	2	3	4
8. Difficulty in speaking when you are excited	1	2	3	4
9. Trouble remembering things	1	2	3	4
10. Worried about sloppiness or carelessness	1	2	3	4
11. Feeling easily annoyed or irritated	1	2	3	4
12. Pains in heart or chest	1	2	3	4
13. Itching	1	2	3	4
14. Feeling low in energy or slowed down	1	2	3	4
15. Thoughts of ending your life	1	2	3	4
16. Sweating	1	2	3	4
17. Trembling	1	2	3	4
18. Feeling confused	1	2	3	4
19. Poor appetite	1	2	3	4
20. Crying easily	1	2	3	4
21. Feeling shy or uneasy with the opposite sex	1	2	3	4
22. Feeling of being trapped or caught	1	2	3	4
23. Suddenly scared for no reason	1	2	3	4
24. Temper outbursts you could not control	1	2	3	4
25. Constipation	1	2	3	4
26. Blaming yourself for things	1	2	3	4
27. Pains in the lower part of your back	1	2	3	4
28. Feeling blocked or stymied in getting things done	1	2	3	4
29. Feeling lonely	1	2	3	4

HOW MUCH WERE YOU DISTRESSED BY:	Not at All	A Little	Quite a Bit	Extremely
30. Feeling blue	1	2	3	4
31. Worrying or stewing about things	1	2	3	4
32. Feeling no interest in things	1	2	3	4
33. Feeling fearful	1	2	3	4
34. Your feelings being easily hurt	1	2	3	4
35. Having to ask others what you should do	1	2	3	4
36. Feeling others do not understand you or are unsympathetic	1	2	3	4
37. Feeling that people are unfriendly or dislike you	1	2	3	4
38. Having to do things very slowly in order to be sure you are doing them right	1	2	3	4
39. Heart pounding or racing	1	2	3	4
40. Nausea or upset stomach	1	2	3	4
41. Feeling inferior to others	1	2	3	4
42. Soreness of your muscles	1	2	3	4
43. Loose bowel movements	1	2	3	4
44. Difficulty in falling asleep or staying asleep	1	2	3	4
45. Having to check and double check what you do	1	2	3	4
46. Difficulty making decisions	1	2	3	4
47. Wanting to be alone	1	2	3	4
48. Trouble getting your breath	1	2	3	4
49. Hot or cold spells	1	2	3	4
50. Having to avoid certain places or activities because they frighten you	1	2	3	4
51. Your mind going blank	1	2	3	4
52. Numbness or tingling in parts of your body	1	2	3	4
53. A lump in your throat	1	2	3	4
54. Feeling hopeless about the future	1	2	3	4
55. Trouble concentrating	1	2	3	4
56. Weakness in parts of your body	1	2	3	4
57. Feeling tense or keyed up	1	2	3	4
58. Heavy feelings in your arms or legs	1	2	3	4

●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●

Please check if it applies to you today.
Freshman ___ Sophomore ___ Junior ___ Senior ___
A first generation college student is a student whose parents do not have college degrees.
Are you a first generation college student? Yes ___ No ___

Appendix B

Participation Consent Letter

Participation Consent Letter

Read this consent form.

You have been selected to participate in a study investigating adjustment to college. Your contribution is helpful. Complete the questionnaire even if you have done so before. Your participation will consist of answering all the questions enclosed and returning the information along with this consent form in the stamped, addressed envelope provided. No other procedures are involved. Results of this study will be used to clarify the role of Student Support Services at Emporia State University.

Information obtained in this study will be identified only by code number. Your name would be used only to indicate that you participated in the study.

Your participation in this study is completely voluntary. Should you wish to terminate your participation, you are welcome to do so at any point in the study. Termination of participation will have no bearing on your class standing. Termination of participation will not affect availability of Project Challenge services. There is no risk or discomfort involved in completing the study.

If you have any questions or comments about this study, feel free to contact Janet Sarin Slate at 913-282-6965. If you have any additional questions, please contact Dr. Kurt Baker, Visser Hall, 316-341-5811.

Thank you for your participation.

●●

I, _____, have read the above
         (please print name)
information and have decided to participate. I understand that my participation is voluntary and that I may withdraw at any time without prejudice after signing this form should I choose to discontinue participation in this study.

_____   _____
(signature of participant,   (date)
or guardian if under age 18)

This Study Has Been Approved by the
Human Subjects Committee

Permission to Copy

I, _Janet A. Snow_ hereby submit this thesis to Emporia State University as partial fulfillment of the requirements for an advanced degree. I Agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

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_12-11-98_
Date

The Relationship Between Participation in a Student Support Service Program, Psychological Adjustment, and Student Classification for First Generation and Low Income College Students

Title of Thesis

Doug Cooper
Signature of Graduate Office Staff Member

December 14, 1998
Date Received