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Psychological and Developmental Differences Between Students Who Withdraw from College for Personal-Psychological Reasons and Continuing Students

by

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A dissertation submitted to the Graduate Faculty in Educational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2001

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This manuscript has been read and accepted for the Graduate Faculty in Educational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

3/19/01
Date

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Abstract

Psychological and Developmental Differences Between Students Who Withdraw from College for Personal-Psychological Reasons and Continuing Students

by

Karen N. Wasserman

Advisor: Professor Georgiana Shick Tryon

Higher education helps students fulfill developmental needs, direct and control different life phases, and locate the resources necessary to make changes in their lives (Marienau & Chickering, 1982). The college setting helps promote developmental changes that allow students to move their lives in chosen directions

(Chickering, 1967a). Specifically, during college, student growth occurs in the areas of developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity (Reisser, 1995). Compared to those who withdraw from college, students who persist in college show greater accomplishment on these developmental tasks (Chickering, 1974). Research indicates that college dropouts are also more personally troubled than are students who stay in school (Houston, 1970). Dropout and continuing students may also differ with regard to attributional styles used to assess life events. Specifically, students who attribute internal, global, stable causes for bad events are at-risk for depression and perhaps for college dropout (Hirsch and Keniston, 1970).

Students leave college for various reasons, and the literature often does not distinguish between students who leave college for one reason compared to students who leave for another purpose. In addition to students who leave college because of academic difficulty or failure, there are students who withdraw for personal-psychological reasons. This latter group of students has not been studied separately from other types of dropouts. This study

compared 25 students who left school for personal-psychological reasons to 25 continuing students in their accomplishment of student developmental tasks, attributional styles, and personal concerns. Results of this study suggested possible potential proactive interventions for students who are at risk for withdrawal for personal-psychological reasons. Due to the study's limitations, however, the reader should be cautious about drawing conclusions from findings.

Acknowledgments

The completion of this dissertation and the formalized portion of my graduate education has come after much time, effort, and patience on my behalf as well for those who know me well. I am privileged and honored to secure this portion of my dissertation to acknowledge those who have provided me with the opportunities and support in order to help me reach all my goals.

This acknowledgment stems back many years in the pursuit of my Ph.D. My personal statement to my undergraduate college was written in dedication to my grandmother. She symbolized for me to always strive for the top, metaphorically, as she only ate the top of her grandchildren's ice cream cones. I have many people to thank for their guidance, and to remember my grandmother, when I reflect on those who have helped me reach the top of my potential, which is what I had always been taught to do.

This dissertation began with simple thoughts of contributing a research work to my undergraduate institution, learning about college communities, and understanding the huge impact that social supports have on an individual. This was the beginning of the dissertation since I have been blessed with such personal and

professional supports. The personal dedication of this dissertation and its symbolic meaning takes more than one form. Family and friends are to be mentioned as they have added to my life in ways that professional accomplishments cannot and should not match.

In the academic realm, I have been fortunate to be educated and mentored by professionals that continuously guide me to reach my highest potential. Professor Georgiana Shick Tryon has served as my advisor, professor, and mentor for the majority of my graduate career at the Graduate Center. Professor Tryon has provided me with unwavering support and constructive criticism in ways that helped me reached a level of academia that I had only hoped for. Furthermore, Professor Tryon gave numerous hours to listen to the accounts of my dissertation experiences without judgement or disappointment. It was a pleasure to work under the mentorship of Professor Tryon and I hope my successors will be as fortunate to have such a valued and trusted relationship with their advisor. The members of my dissertation committee including Professor Marian Fish, Professor Carol Kehr Tittle, and Professor Shirley Feldmann guided my dissertation with respect and personal investment. I thank them for their time and excellence.

The Barnard College Dean of Studies Office gave tirelessly to the project of this dissertation. The numerous assistants, office staff, student participants, and Dean Marjorie Croes Silverman were instrumental in the culmination of this project. Their tireless efforts to complete the mailings and securing student participants only paralleled the ongoing support I had constantly felt as a student and now as an alumna. It is with deep gratitude and pride that I attribute much of my professional success to Barnard College.

Personally, to Lisa, Ezra, Jacob, and Nina, your interest in me and spending time together rather than what my progress in my chapters has been always helped me realize that love was not conditional. To Shira, Sharyn, Rebecca, Ronda, Sami, and Michal, your patience and support when listening to endless scheduling of revisions and dramatizations have been so valuable as was the stress release you provided me through humorous accounts and memories of our lives. To the Singers, thank you for your constant support and patience.

The dedication of this dissertation is twofold. What the completion of the dissertation and earning the highest degree currently awarded in my field of study *has* meant is dedicated to my

parents, Carole and Neil Wasserman. What the completion of the dissertation and earning the highest degree currently awarded in my field of study *will* mean is dedicated to my husband, Michael Singer.

To Mommy and Daddy, you have taught me to never give up and that what I want I can always accomplish even if it was not necessarily on my own timeline. I never hesitate in responding how blessed I have been to be raised by parents who taught me acceptance of others; ethics in all I do; and health, happiness, and lasting wealth truly come from a loving family. You never hesitate in responding that your children are the center of your universe and any sacrifice to give us the best education, support, and nurturing environment was without question. In spite of what I may define as school or personal setbacks and disappointments, I always trust that you will provide me with sound advice and unwavering support. The ability to begin and complete this graduate career along with all the experiences up to this point and future experiences are due to your example and model to work hard, love what you do, love each other, and say "I love you".

To Michael, my husband and best friend, if you only knew how I really could not have done this without you and I never would want

to. The decisions we have made as we have begun our lives together have not been the simplest, you in your career and me in mine. I do know that the wonderful thing about us is the confidence in knowing that we can independently accomplish daily academic strides but not without the partnership, respect, love, and support that we allow for one another with each breath we take. It is as if we have grown up together and now we grow together. When I look back on what has been sacrificed for me to complete this endeavor, it becomes more meaningful and I feel stronger knowing that it is for our future. I am so proud of you and I know that is how feel about me but the most pride is felt when I look at our lives together and what we are now embarking on. Goals are being met and new goals are being set together. These goals take precedence. I love you.

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CHAPTER 1

Introduction

During the past few decades, the process of college student attrition has been of interest and concern to administrators and students. Research on college student attrition has paralled the literature documenting the rise in college attendance. Kowalski (1982) reports that the attrition rate of America's college students is dramatic. Specifically, for each 100 students who enroll in college, approximately 40 will complete college requirements and earn their bachelor's degrees within four years, another 20 students will graduate in the following years, and 40 will never graduate.

Pantages and Creedon (1978) support the dramatic findings of Kowalski (1982). They found that for every 10 students in college, 4 will graduate at the end of four years. One more will graduate in the next few years. Of the remaining 5 students, 4 will transfer to a different college, but only 2 will graduate from the new college. Interestingly, Pantages and Creedon found that of the original 6 students who dropped out of college, 3 of them left during the first year, 2 left in their second year of college, and the sixth student left as a more advanced student. This translates to the 1971

national prevalence rate of 2.3 million students dropping out of higher education out of an approximate undergraduate enrollment of 7.6 million (Statistical Abstracts, 1974 as cited in Pantages and Creedon, 1978).

Tinto (1982) found that these rates of attrition have been consistent during the past 100 years despite the societal trend of recognizing the benefits of higher education for economic and job security. As reported by the American College Testing Program in 1990 and again in 1992 (cited in Tinto, 1993), attrition by freshmen from four-year colleges was 26.8 % and 53.3% respectively. Rate of attrition among first year students is reported as withdrawal during the first year represents the largest rate of withdrawal from college (Tinto, 1993).

The cause of attrition has been attributed to many factors. However, agreement in the literature centers on the fact that students entering higher education are confronted with stress as they begin and prepare for college. In addition, these students must deal with separation from friends and family and adjust to new social, academic, and personal stressors. Klein and Rennie (1985) found that many college students adjust in a satisfactory manner to

their new station in life, but there are those who need more time to adjust to the changes that college brings and still others who are never able to handle these changes.

Thus, students sometimes leave college as a result of adjustment problems that are not solely due to academic difficulties. Overall, as reported by Houston (1971), the many students who handle their problems and persist in college tend to be optimistic, view their problems as manageable, and employ previously learned behaviors to cope with present problems. Conversely, the students who do not adjust or handle their college problems tend to be pessimistic in regard to their problems, see no solutions to present difficulties, and do not actively employ strategies to alleviate their problems. Moores and Klas (1989) discussed the concern on the part of student groups, professors, and administrators to decrease student attrition rates as attrition creates loss of time, money, energy, opportunity, and student self-esteem.

Different crises occur at different stages in a college career. Hirsch and Keniston (1970) differentiated predicaments and adjustment requirements that manifest themselves at each phase of

the college experience. During the first year, students experience problems of separating from parents and the initial adjustment to the academic and social life of college. During the second year, problems concerning lifestyle, academic major, and friends predominate. During the third and fourth years of college, students look at what has to be completed for their future goals. It is important to remember that students apply previously learned coping strategies when confronted with these college crises.

Tinto (1982) found that student dropout from college is most prevalent during the first year. This is due to the fact that students realize that they had unrealistic expectations about the college academic and social milieu. Upcraft, Gardner, and Associates (1989, as cited in Tinto, 1993) further state that the first semester of college is the time when the student needs to distinguish him/herself from previous alliances and the ways in which he/she previously experienced education so that he/she can adjust to new and more challenging social and academic arenas in college. Therefore, it is not surprising that attrition rates are highest in this first year of college when students either do or do not make the adjustment to the new challenges and routine of college life.

Similarly, Pantages and Creedon (1978) presented milestones for college students to reach during each college year. Specifically, the first year determines college outlook and is essential in determining endurance and persistence for the remainder of college. The junior year has most collaboration and interaction with the academic and social milieu of college, and the senior year has limited attrition due to the fact that rates of withdrawal decrease the longer one is enrolled in college.

Chickering and Hannah (1969) and Pantages and Creedon (1978) reported that the decision to leave college consumes much thought and consideration by the student. Most of the discussion regarding whether or not to leave college is conducted with peers and parents. Pantages and Creedon (1978) reported that peers and parents were described as more warm and understanding than college faculty members, because peers and parents tried to help the student make the most appropriate decision for him or her. They specifically reported that, of the advice given to students considering leaving college, the recommendation to remain in school was the most popular given "65% of the time by the student's friends, 50% of the time by parents, 17% by faculty, 15% by deans and administrators,

and 11% by counselors" (Pantages & Creedon, 1 978, p. 87). Furthermore, the consideration to leave college was first discussed among the student and friends of the same gender. Parents were the second people to be invited into the discussion, while friends of the opposite gender from the student were third to be brought into the discussion. It is reported that any conversation with college administration occurred typically once the withdrawal process had begun (Pantages & Creedon, 1978).

To date, controversy pervades the literature as to the nature of college student attrition and the effects of college student withdrawal. Specifically, early research focused on national statistics of attrition and on demographic characteristics of students dropping out of college. However, later studies attributed dropout to personality variables (Smith, 1976). In addition to students who leave college because of academic difficulties or failure, there are those who withdraw for personal-psychological reasons. Students in this latter group have not generally been studied separately from students withdrawing for other reasons. Thus, there is no way of knowing how similar or different these students are to students who continue in college, those who leave

because they are dissatisfied with some aspect of college, and/or those who leave college because of poor academic performance. The present study attempted to begin to address this research gap by comparing developmental and personal characteristics of students in a private women's college who withdrew for personal-psychological reasons to the characteristics of continuing students.

Because of the gap in the literature relating to students who withdraw for personal-psychological reasons, the following literature review examines studies comparing students who continued in college to students who left college for a variety of reasons. First, the literature review focuses on college student development. Models of college student attrition are discussed next. Then studies comparing the characteristics of college persisters and dropouts are reviewed.

CHAPTER 2

Literature Review

This chapter presents the literature regarding college student attrition by initially reviewing models of college student development and attrition. Studies based on and expanding these models are presented next, followed by a general summary of the literature. The purpose of this dissertation and the resulting hypotheses are advanced.

Models of College Student Development and Attrition

This section presents models of college student development and attrition. The most popular theories are Chickering's (1972) Model of College Student Development and Tinto's (1982) Model of College Attrition. They have spawned numerous studies and form the theoretical bases for this dissertation.

Chickering's Model of College Student Development.

Chickering's (1972) model of college student development posits that during the course of their college years, most students deal with seven major tasks. These tasks are: developing competence (increasing intellectual and interpersonal competence), increasing awareness (expanding sensitivities), clarifying purpose, becoming

autonomous (developing interdependence with others), understanding oneself (being realistic about strengths and weaknesses), understanding others, and developing integrity. These tasks are addressed during the normal course of human development. Chickering felt, however, that development in each area is more fully realized by young adults who attend college than by those who do not. He indicated that college provides persons (other students), places (activities), and things (materials for self-learning) to enhance growth in these seven tasks.

Chickering (1967b) studied a small liberal arts college and analyzed data from three sources to investigate the relationship between autonomy and educational practices and college structure. These sources of data included student case histories from self-reports and faculty written evaluations during the four years spent in the college, questionnaires administered annually, and personality inventories including the Omnibus Personality Inventory (Heist & Young, 1968) and the Stern Activities Index (Stern, 1970). From study of these data, Chickering defined autonomy as including three major dimensions: emotional independence (being free from need for reassurance and approval and affection; disengaging from parents

with the support of peers), instrumental independence (coping with problems without seeking help from others and being mobile in solving one's own needs and achieving desires), and recognition of interdependence (understanding that loving and being loved are necessary and parallel). Furthermore, Chickering found that development of autonomy during college tends to be influenced by teaching practices (and developing intellectual ability), by flexibility in one's curriculum (to organize learning according to one's own needs and motives), and by possibilities to take on duties in the college community.

Chickering, McDowell, and Campagna (1969) investigated the relationship between student development and different colleges. They studied first- and second-year students in 13 small coeducational colleges using personality inventories (i.e., The Omnibus Personality Inventory) administered to students when they entered college, again after the first year, and then again after the second year of college. They found that during the first and second years of college, students experienced increased autonomy, heightened awareness of emotions, and elevated sensitivities and interests. Coupled with increases in some areas, there were

decreases in need for achievement and material success. This research provided evidence for the contention that development of the type that Chickering proposed occurs in college students. This development is evidenced in increases in autonomy, emotional expressiveness and sensitivities, and a decrease in goals of achieving material possessions. It was noted that these developments occur for men and women and across different college settings and for different types of students attending different colleges.

Similarly, Chickering and McCormick (1973) investigated personality development in college. Participants were studied as entering freshmen students at 13 small colleges and again when they were graduating seniors. Subjects completed the Omnibus Personality Inventory. It was found that, during the course of their college careers, students (regardless of gender or college) showed increases in autonomy, awareness, integration, aesthetic sensitivity, tolerance, and liberal religious views, and decreased materialism.

Chickering further defined other developmental subtasks observed during college. Specifically, Chickering (1967a)

categorized students' self-reports of behaviors and attitudes as well as faculty comments on graduates from small colleges. He further delineated development of independence and development of purpose into: venturesomeness (being open to experience); interdependence; resourcefulness and organization; goal directedness; full involvement, motivation, and persistence; personal stability and integration. Chickering stated that these characteristics develop through differentiation and integration of new and different experiences.

Chickering (1967a) found that students experienced stress when negotiating the various developmental tasks. Both students who persisted in college past the first year as well as those who dropped out experienced these stresses. Compared with dropouts, however, persisters had lower levels of anxiety and their comfort level and confidence were high.

Chickering and Hannah (1969) studied 13 small undergraduate liberal arts, residential, coeducational colleges with enrollments between 500 and 1500. Data were collected via interviews with students who reportedly were probably not returning to the campus the following fall, surveys collected from students who did not

return that fall, and the Attrition Study Questionnaire sent to both students who did not return as well as the students who were unlikely to return. From these data, Chickering and Hannah concluded that dropout, especially during the first year, was voluntary withdrawal due to emotional problems, individual goals not coinciding with those of the college, difficult coursework, disillusionment with the faculty, and/or a lack of clear objectives and goals. They found that before a student decides to withdraw from college, he/she experiences high levels of stress. Specifically, the decision leading up to withdrawal is painful and includes thoughts of failure, stress regarding the future, depression, and anger. Interestingly, despite feelings of isolation and stress, the potential withdrawer is not isolated because he/she talks with friends and parents about this decision. Friends and parents are reportedly helpful.

Chickering (1974) finally investigated whether or not differences in the college institution itself affected student development and attrition. He studied 3000 entering first-year students in 13 small liberal arts colleges with enrollments of 1500 students or less through the use of personality inventories (i.e.,

Omnibus Personality Inventory) during their orientation programs and at the end of their first and second years of college. The students still enrolled in 12 of the colleges were re-administered the personality inventory when they were preparing for graduation.

He reported that developmental changes throughout the four years of college were essentially the same for students in all the colleges studied and across gender. Specifically, changes included increases in autonomy, expression of feelings, personal integration and social ability, sensitivity, flexibility in thinking, religious orientation centering on skepticism of conventional religious belief, and thinking and reflection; and a decrease in practical outlook. Further findings showed that the largest and most consistent changes were in autonomy, expression of feelings, personal integration, sensitivity, complexibility, religious orientation, and thinking reflectively.

These results provided support for the validity of Chickering's model of college student development. Despite the similarities found in development across college settings it was found that institutional difference, climate of the school, and characteristics of fellow students impact student development. For example,

nonconformist students had the most increases in autonomy, impulse expression, and complexity, and the greatest decreases in practical outlook. Also, when the college emphasized a practical and proper atmosphere and admitted students who had highly practical college/vocational goals, there was less change in autonomy, impulse expression, and complexity. Overall, persisters and withdrawers differed in that dropouts were more autonomous, more impulsive, more complex, more tolerant of ambiguity, and more creative.

To summarize, Chickering presented seven developmental tasks to be accomplished by traditional aged college students with specific emphasis on autonomy. Mastering these developmental tasks is stressful. The individual student who is deciding to withdraw from college experiences additional stress. Although Chickering reported that these developmental milestones are reached by all individuals, his research shows that one's peers and environment affect this personal growth. In the section to follow, Vincent Tinto's theory of attrition as affected by developmental milestones and institutional characteristics is presented.

Tinto's Model of Student Attrition, College Persistence and Withdrawal. Vincent Tinto (1993) cited Arnold Van Gennep's, Rites of Passage, which described the orderly movement of people through their lives in tribal societies, and applied it to the college experience. Specifically, Tinto felt that college students must pass through three stages: separation, transition, and incorporation. Separation is identified as physical and social separation from past associations of family and high school. Different values, norms, and intellectual styles are found in college. Feelings during the separation phase include isolation, stress, and disorientation.

The second phase, transition, is the period of interaction with members of the new college group that one is trying to join. This phase encompasses the time before the full adoption of new norms. It is imperative that transition to college has begun before entering college to facilitate a smoother conversion to the new group. Early transition allows students to begin to adopt the goals and behaviors that they will need to be successful at their chosen institution; this is especially the case for small elite schools that are characterized as having clear goals and expectations.

The final stage, incorporation, implies that the student has

taken on new patterns of interaction with people in the group and is becoming a competent participant in the group. When there is no sense of guiding norms and beliefs, the student withdraws from the group prior to incorporation. Thus, Tinto (1988) concludes that college persistence is characterized by integrating and incorporating the intellectual and personal needs of the student into the college community. Conversely, difficulties that may give rise to dropout occur when the student is not adjusted to the social and/or academic environments.

Vincent Tinto's (1982) model of student attrition states that students withdraw from college because they are not willing to complete the heavy demands placed on them by the institution. Consequently, withdrawal rate is highest in the first year of college when students realize that their social and academic expectations were unrealistic. Furthermore, a student's decision to withdraw is considerably affected by his/her academic and social integration into the college community. Relationships between students and their professors also contribute to the social and academic integration of students into the college community. These faculty-student relationships are important as Tinto's theory of student

attrition focuses on the institution's role in the responsibility for students' dropout.

Both academic and social encounters during college are important influences on persistence. Tinto (as cited in Pascarella, 1986) based his model on the fit between the student and the college environment. Students' backgrounds, characteristics, and commitments are important considerations in determining this fit. The greater the level of integration of the student into the academic and social atmosphere of the college, the greater the student's commitment to both the institution itself and the life goal of completing college and earning the degree. These commitments are directly linked to students' persistence in college. Additional links to student persistence include: participation in extracurricular activities, friendships and peer support, student-faculty interaction, academic programs and courses, and the overall level of student involvement in the institution. Similarly, Tinto (1993) reported that personal attributes (i.e., sex, race, physical handicaps), skills (intellectual and social), finances, dispositions (motivations), and precollege experiences and achievements affect college departure through their effect on student commitment to the

goal of graduation.

Tinto's (1993) theory of student attrition presents two types of commitments: goal commitment and institutional commitment. Goal commitment includes the individual's personal educational and career goals, while institution commitment includes the individual's commitment to the institution. Tinto's theory suggests that students with high academic competency and moderate to high goal commitment tend to persist in college. Students with low institutional commitment but high academic competence transfer to another institution. Students with high institutional commitment but low academic competence tended to persist in the original college until forced to leave. Therefore, goal and institution commitments, rather than unique personality traits, predict persistence. Conversely, withdrawal from college may result when students perceive a lack of institutional fit or goal commitment.

Tinto (1975) presented past relevant research findings to investigate different variables' level of contribution to the model of college persistence. The variables studied included: family background (i.e., SES, education level, parenting style), individual characteristics (i.e., ability and personality), past educational

experience (i.e., motivation, aspiration, and expectations for college), and goal commitment (i.e., college completion). Results revealed that when a student aligns him/herself with an academically motivated peer group that is also integrated into the college environment, he/she will persist in college.

Tinto (as cited in Alexander, 1982) presented factors related to college persistence. These factors included: background characteristics (such as social status, race, sex, and ability), goal commitment, institutional commitment, academic integration, and social integration. Tinto examined archival data from several longitudinal studies. He found that it is the student's integration into the academic and social arenas of the college that best predicts college persistence. He also found that the higher the goal commitment manifested in students' future plans, the greater the likelihood of college persistence.

Getzlaf, Sedlacek, Kearney, and Blackwell (1984) reported that Tinto's model can differentiate between those who transfer and those who drop out. Participants were 237 former full-time students who voluntarily did not re-enroll at a large coeducational university for that year's summer or fall semester while control

subjects were 234 full-time students who returned to the university the following fall. Getzlaf et al. (1984) used questionnaires that centered on students' reasons for leaving college due to personal, institutional, academic, and/or social concerns. It was found that the students who withdrew from college voluntarily, tended to have a lower level of academic ability, a lower level of academic integration into the college community, a lower level of goal commitment to obtain the college degree, and a lower level of social integration than did returning students.

Others (Bean, 1982; Spady, 1970) have examined Tinto's theoretical perspective from the point of view of suicidology. Durkeim's theory of suicide (as cited in Bean, 1982) indicates that the likelihood of committing suicide decreases when individuals share values and goals with other members of a group and when those individuals experience peer support. Conversely, the tendency to commit suicide increases when there is no integration into the fabric of society and the person essentially withdraws from society completely. Bean (1982) cites Spady (1970) who compares student withdrawal from college to suicide in that "students could be expected to withdraw from a college or university for the same

reasons that people withdraw from a social milieu through suicide" (p. 291), due to lack of social integration into the college community or society at-large. As noted previously, Tinto (1988) explains that withdrawal from college is due to lack of social and academic integration between the student and the college community.

In summary, Tinto reports that college students who successfully pass through the three stages of separation, transition, and incorporation into the academic and social arenas of college will persist until graduation. Furthermore, academic and social integration into college influences persistence and increases the level of commitment to both the institution and the goal of degree completion. This phenomenon is explained by other theorists in the following section.

Other Theoretical Models of Attrition. Similar to Tinto's model, Alexander's (1982) theoretical model states that the student's early commitment to completing college and his/her academic integration into the college community are important elements in persistence. Additionally, interactions with other members of the community pave the way for social integration into the college community. Thus, the level of both social and academic

integration impacts student decisions to persist in college or to withdraw.

Another author, Rootman (as cited in Alexander, 1982) presented a goodness of fit model between the student and the university. In support of this model, Pantages and Creedon (as cited in Edwards and Waters, 1982) stated that the college fit theory revealed that the likelihood of college persistence increases as the congruence between the student's values, goals, and attitudes and those of the college increases.

In support of the theory that students' decision to withdraw or persist in college stems from their ability to adjust to the institution, Rickinson and Rutherford (1996) studied college dropouts. Specifically, they studied students who withdrew from college in their second or third term compared to students who withdrew in their first term. Results were compiled via postal questionnaires and telephone interviews that obtained demographic information (i.e., age), degree course, reason for originally selecting the university, and adjustment (academic, personal/social). Overall, Rickinson and Rutherford reported that those who withdrew had difficulty adjusting to academics (i.e., courses were demanding) and

the personal/social milieu of college. Thus, the key element affecting whether or not a student will withdraw or persist in college is the ability of the student to adjust to college's academic and social demands. Findings, although speculative since all participants withdrew, revealed that persisters would have less difficulty with adjustment in both the academic and social/personal arenas because they were able to contain their anxiety to a level that allowed for new learning.

To summarize, in addition to the Chickering and Tinto theories, there are other college attrition theories that explain persistence and withdrawal rates. Persistence is explained by Alexander's theory of goal commitment, Rootman's theory of goodness of fit between student and college, and Rickinson and Rutherford's formulations from their investigation of students' adjustment to college academic and social demands.

Research on Student Attrition

Researchers have tested and expanded these theories by studying student characteristics and environmental influences as they influence college attrition. These studies will be detailed in the following sections. Most of this research was conducted in the

1970's and 1980's. Only five studies (Bank, Biddle, & Slavings, 1992; Bray, Braxton, & Sullivan, 1999; Cornell, Callahn, & Loyd, 1991; House, 1992, 1993) have been published within the past 10 years.

Personality Dimensions. Personality variables have been examined in the search for good predictors of attrition. Bean and Covert (1973) studied 1,125 full-time freshmen students in a large coeducational university setting using SAT (Scholastic Aptitude Test) scores and results of a personality inventory (i.e., Runner Studies of Attitude Patterns-College Form; Runner, 1964). They investigated the differences between college persisters, nonacademic voluntary withdrawers, and academic dismissals using SAT Verbal and Quantitative scores and personality questionnaire measures that were obtained during freshmen orientation. Findings illustrate that although both academic and personality measures distinguished types of students, personality variables were better able to predict which students would persist in college and which students would withdraw prior to degree completion.

Smith (1976), Kowlaski (1982), and Dollar (1985) investigated personality differences among college persisters and withdrawers.

Smith (1976) studied 330 first year students at a woman's college using interviews with college personnel and students, past research, SAT scores, and the Omnibus Personality Inventory (Heist & Young, 1968). Smith defined persisters as graduates from the college, withdrawers as those who left voluntarily with no intention of returning, academic withdrawers as those who were required to leave the college for academic reasons, and returners as those who left the college but later returned and graduated.

In reporting results, Smith only differentiated between those students who completed college and those who did not. Again, as Bean and Covert (1973) found, although both academic and personality variables differentiated college persisters and dropouts, personality variables clarified which students were more likely to persist and which were not. Specifically, students who left the college were significantly more independent than college persisters. Students who left college also tended to be more impulsive than persisters. Smith speculated that this was due to the fact that college withdrawers tended to act upon their level of dissatisfaction with the institution by leaving rather than tolerating it like the persisters. The college persisters were more

socially interactive, less anxious, more conforming and tolerant, and more practical in their future orientation than the dropouts.

Kowalski (1982) reviewed findings from previous literature and found that students who persisted in college tended to be more mature, internally motivated, regimented in studies, and future oriented. They also had clearer goals, more familial support coupled with less pressure and grander goals. Those who did not persist in college were described as having an overall disinterest in school, were unaffiliated with the college community, lacked motivation, experienced undifferentiated goals, and had poor study habits.

Dollar (1985) defined persisters as students who graduated and dropouts as students who did not graduate without specifying why they decided to leave. He studied 156 college freshmen enrolled in an education division of a large university using a questionnaire (i.e., the Omnibus Personality Inventory; Heist & Young, 1968) administered in the first two weeks of their freshmen year. He reported that students who withdrew from college tended to rate higher on impulsivity and anxiety and were more socially isolated than their college persisting counterparts.

Hirsch and Keniston (1970) studied family relationships,

adaptation to conflict, and social transference to the new institution relative to withdrawal decision. They studied 40 students contemplating withdrawal from a highly selective undergraduate university. Thirty-one of these students later withdrew. They used unstructured interviews during which subjects explored their reasons for continuing or not continuing in college. Hirsch and Keniston defined a dropout as any student who voluntarily interrupts or terminates his/her studies for nonacademic reasons. They found that,

> students who left college in good academic standing were more intellectual, innovative, autonomous, and tolerant of ambiguity than those who persisted for four years in college. In general, there is some consensus that "psychological" factors play an important role, along with social and demographic factors, in leading some students to withdraw from college (Hirsch and Keniston, 1970, p. 2).

The psychological factors suggested include: lack of integration with the college community, perceived high levels of stress, and incongruence of college fit.

Therefore, Hirsch and Keniston presented a profile of college withdrawers which included: inability to complete work, feeling of wasting time, desiring time to reflect, feelings of isolation relative

to others, feelings of inadequacy, and searching for support. The stereotype of the whimsical college withdrawer was not confirmed. Rather, as previously mentioned, leaving college was the culmination of a long and painful decision for these students. Thus, the fit between the student's needs and development and the institution's ability to cater to and fulfill these needs was what influenced attrition decisions.

Pantages and Creedon (1978) presented further differentiation between college persisters and withdrawers in their descriptive analysis of previous literature. Specifically, they reported that those who persisted in college were characterized by higher levels of personal maturity and were able to live with other members of the community without being rebellious. Persisters were further defined as successful students since they conformed more to the larger community and were more self-reliant. Conversely, those who left college were identified as unable to blend into college, were more assertive, immature, nonconforming, rebellious, less future oriented, less self-reliant, and experienced an unbearable level of anxiety.

To summarize, personality dimensions have been found to be

good predictors of college attrition. Specifically, college persisters were reported to be more mature, conforming, self-sufficient, socially interactive, and less anxious. Voluntary college dropouts, who left despite a satisfactory academic record, were characterized as more intellectual, creative, and independent but were not integrated into the college community, and some reported that they experienced unbearably high levels of anxiety. The personality characteristics displayed by college persisters provide confirmation of Chickering's (1967a) college student developmental theory. Specifically, competence, awareness, purposefulness, autonomy, understanding oneself and others, and integrity are more characteristic of college persisters than of those who do not attend or withdraw from college.

This dissertation examined Chickering's developmental milestones as they relate to students who persist in college compared to students who withdraw for personal-psychological reasons. The following section indicates that attributional style is another variable that may affect college attrition rates.

Attributional Style and Depression. Attributional style has been investigated in relation to college students. Attributional

style is evident in how an individual explains and perceives different events. Specifically, as explained by Peterson and Seligman (1984) in their theoretical analysis of literature in this area, there are good and bad events. Some people describe bad events as having internal, stable, and global causes. Interpreting bad events in this way is associated with helplessness, poor coping skills, and depressive symptoms. Specifically, these dimensions (global, stable, internal) were related to depression in undergraduate students who rated low on self-esteem. Peterson and Seligman (1984) found that the explanatory style characterized by internal, stable, and global causes of bad events was observed prior to depression, whereas the converse explanatory style of external, unstable, and specific causes for bad events was observed prior to a decrease in depression.

Further evidence for a global, stable, internal attributional style and its association with depression was presented by Sweeney, Anderson, and Bailey's (1986) meta-analysis of 104 studies involving approximately 15,000 subjects (including college students, psychiatric patients, and depressed non-college students). They reported that for bad events, "attributions to internal, stable,

and global causes had a reliable and significant association with depression" (p. 974). Specifically, among depressed students, success was related to external, unstable, and specific factors (i.e., luck) while failures were related to internal, stable, and global events (i.e., lack of ability). Interestingly, in this investigation, the classroom setting created the more powerful association between depression and the attributions of stability and globality. One reason why this is the case,

> is that in classroom settings one may be assessing stable beliefs that have been produced by years of classroom feedback. Likewise subjects in these studies are likely to be students whose self-concept may be importantly determined by classroom feedback. Thus the feedback is likely to have stable and global effects on one's self-concept (Sweeney et al., 1986, p. 981).

No gender differences were found when a questionnaire regarding attributional style (i.e., the Attributional Style Questionnaire; Seligman, 1984) was administered to 130 college students (n = 80 females and 50 males) enrolled in an abnormal psychology course in a large state university (Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982). However, "[A]s predicted in the Learned Helplessness reformulation, a style in which internal, stable, and global attributions are offered for bad

events is associated with depressive symptoms in college students, adults, outpatients, and inpatients; to a lesser degree, the opposite style for attributing good events is also associated with depression" (Peterson, et al., 1982, p. 296).

A final study related depression to college dropout. Hirsch and Keniston (1970) studied 40 college students contemplating withdrawing from a private selective college. They reported that depression was a precursor to leaving college for the potential dropout. Since depression is associated with having an internal, stable, global attributional style for bad events and since depression is associated with college withdrawal, voluntarily dropping out of college may also be associated with having a global, stable, internal attributional style for bad events.

This dissertation studied students who leave college for personal-psychological reasons. Students who leave college for personal-psychological reasons or because of academic failure may feel that this bad event is their fault and that they will always be failures. These feelings are consistent with a global, stable, internal attributional style.

In summary, attributional style is evident in how an individual

explains and perceives good and bad events. The attributions describing bad events as having internal, stable, and global causes have been shown to be related to depression among undergraduate college students. Additional factors affecting attrition are presented below.

Temperament. Klein and Rennie (1985) studied 180 freshmen students entering a southern state university via questionnaires (i.e., the Dimensions of Temperament Survey; DOTS; Lerner, Palermo, Spiro, & Nesselroade, 1982) given during orientation and eight weeks later. The sample excluded those students who had not graduated from high school the preceding June, those who had lived away from their parents for three or more months, and those who had not returned the measures completed correctly or in a timely fashion. Klein and Rennie (1985) studied nine dimensions of temperament: activity, intensity, threshold, persistence, distractibility, rhythmicity, mood, adaptability, and approach-withdrawal. Temperament was defined as, "the individual's enduring behavior pattern" (p. 58). It was found that those who scored high on adaptability were less anxious and more involved in campus activities. Good predictors of adjustment and subsequent

persistence in college included high adaptability, low motoric activity, and high attention.

In general, of all dimensions of temperament, adaptability was associated with satisfaction with college life and subsequent college persistence or withdrawal. This provides support for Tinto's (1982) model of college student attrition. For students to successfully negotiate passage through the three college stages of separation, transition, and incorporation they must be adaptable.

Psychological Problems. Psychological adjustment was found to affect college satisfaction and subsequent persistence in a descriptive study of previous research conducted by Houston (1971) to identify college students prone to psychological problems. Houston found that the problems college students face may negatively influence their psychological adjustment and/or academic performance in college. Findings revealed that psychological maladjustment may prove to be a more accurate assessment of later, rather than present, academic performance and is related to college withdrawal. Houston felt that poor academic performance may sometimes be due to the stress students experience when they are unsuccessful in dealing with and handling

the problems that arise while in college. College problems include difficulties with friends and sexuality, becoming independent from one's parents, and planning for the future. Academic difficulties manifest themselves when social problems make it difficult for the student to complete academic tasks, because she/he is anxious, depressed, and/or unmotivated.

This dissertation examined prevalence of psychological problems in students who leave college for personal-psychological reasons and continuing students. Students who leave may have more psychological problems than college persisters. These problems may contribute to their leaving.

Self-Concept. House (1992) found that the academic self-concept of students who were academically underprepared was significantly related to their withdrawal from college. He studied 378 students enrolled in a large public university for four consecutive years using a questionnaire (i.e., the American Council on Education Freshmen Survey; see House, 1992). He investigated the relationship between school withdrawal, academic self-concept, and achievement expectations of full-time, residential college freshmen enrolled in a special program for academically

underprepared students. Withdrawal was defined as dropping out of college after the fourth or the eighth semester. Academic self-concept was defined as students' perceptions of their academic abilities as influenced by experiences in school. Students who had higher self-ratings of motivation to achieve and academic ability were more likely to persist in school. Interestingly, House found that the students who persisted in school perceived themselves as less likely to graduate with honors than did students who withdrew from school.

In a continuation of this study, House (1993) studied 2,544 freshmen admitted to a large university through regular admission process. A questionnaire was used that included the students' rating of their overall academic ability as well as their specific ability in mathematics and writing, their motivation to achieve, and their self-confidence in the intellectual arena. He found that students' academic self-concept was the variable most highly correlated with withdrawal from college. These findings provide further support for the assumption that personal variables are important in withdrawal decisions.

Underachievement. As indicated in previous sections, not all

college dropouts are due to poor grades. Dalton, Anastasiow, and Brigman (1977) studied nonacademic dropouts. They compared 5,059 freshmen students in a large state university and divided them into three categories: persisters who returned to college for their second semester, students who left college due to academic reasons with unsatisfactory grade-point averages, and those who left for nonacademic reasons with satisfactory grade point averages. Academic and nonacademic dropouts were compared on predicted grade point average, actual grade-point average, SAT scores, and high school rank. Relevant results revealed that nonacademic dropouts created high academic goals for themselves that they could not realistically reach. For these students underachievement was defined as something other than academic failure as indicated by grade-point average. According to Dalton et al. (1977), underachievement for nonacademic dropouts is defined as "a comparison of observed performance with the level of performance considered normal or reasonable to expect from an individual based on past achievement" (p. 501).

Similarly, in the descriptive analysis of literature regarding college attrition rates, Pantages and Creedon (1978) reported that

academic performance is not the sole predictor of dropout from college. Specifically, high school grades, school rank, and SAT were significantly related to college achievement but were less effective in predicting attrition. Pantages and Creedon reported that good grades can provide positive reinforcement to decrease the possibility of withdrawal from college but are not strong enough to guarantee graduation. Poorer grades, in isolation, are not always sufficient to cause attrition. This is because motivation and college fit need to be considered in understanding withdrawal rates since there are students who withdraw from college despite satisfactory grades.

Kòwlaski (1982) similarly found in a review of relevant literature that academic achievement is not the sole reason for college attrition. Rather, students with both academic and personal problems can be recognized as possible college non-persisters. Specifically, persisters were reported to be more mature, definitive regarding their future goals, interested in school, and supported by parents. The non-persisters were reported to be less motivated, less clear of their future goals, less entrenched in the college community, and disorganized.

Overall, these studies reveal that academic reasons, in isolation, cannot explain attrition rates. As such, academic reasons coupled with personal and social influences need to be investigated to better understand attrition and persistence rates. The present study focused on the relationship between students who withdrew from college for personal-psychological reasons despite having satisfactory grades and those who continue in college. Other variables affecting non-academic withdrawal are presented in the following sections.

Student Expectations. A study of 1,017 entering freshmen in a large state university used questionnaires that asked for participants' college expectations. These were administered in the first month of school and again five months later. Bank et al. (1992) reported that students tended to persist in college if they believed that they could achieve their desired goals by remaining there. In addition, they found that students' positive expectations increased their rate of persistence. The goals that students entered college with included five hopes (ranked in order of importance as reported by students): social hopes, academic hopes, personal hopes, positional hopes, and financial hopes. Students investigated by Bank

et al. were found to be largely optimistic, with greatest optimism in the realm of social hopes. Interestingly, the students who were optimistic in regard to one hope area tended to be optimistic in regard to all the other hope areas, while students who were pessimistic about one hope tended to be pessimistic about the other hopes as well.

Results showed that students' expectations were not as strongly related to college persistence as hypothesized. This is because hopes and goals can be achieved in both the academic and nonacademic arenas. Therefore, academic persistence relates to personal and social needs as well. Persistence was also related to identification with the university. Overall, students who thought they could achieve their goals and dreams at that university were more likely to persist. Tinto's (1993) theory of goal and institutional commitment relative to persistence in or withdrawal from college received further support from the results of Bank et al.'s (1992) study.

Social Support. There are multiple socializing agents in the college setting that students can seek out to aid in the transition to college. Chapman and Pascarella (1983) studied 2,410 full-time

freshmen students in 11 colleges using the Student Involvement Questionnaire, that was designed for this study, and found that students' supports included peers as well as administrators and faculty members. However, there is controversy in the literature regarding which socializing agent provides the most beneficial support for the student. Bean (1985) studied 517 freshmen students at a large university using a questionnaire that asked students' intentions to continue in college and reported that peers provided the essential support system over and above the administration. Similarly, in their investigation of past literature, Pantages and Creedon (1978) reported that the peer group was the most influential socializing agent for college students. Furthermore, students' experiences with friends established attitudes and beliefs about persistence and withdrawal.

Savitz and Walls (1986) found that support services are important resources for college students, but they tend to be not available and/or utilized by those students who are in most need of services. Specifically, Savitz and Walls (1986) studied the attrition rates of Black students of traditional college age (18-22) enrolled full-time at various colleges through a questionnaire that asked

participants' age, gender, class standing, and other biographical information. Students were also asked if they used college offices and department resources. Persisters were defined as students who completed college, and dropouts were defined as students who left for any reason with no intention of returning.

Savitz and Walls' findings reveal that there was a high attrition rate for Black students enrolled in campuses that served a majority of white students. Reasons for this high attrition rate included the students' feelings of powerlessness, normlessness, and anger and/or frustration. Powerlessness was defined as lacking control in the social atmosphere. Normlessness was defined as lack of a purpose or goal in life, and anger/frustration was defined as viewing the college community as catering to the majority (i.e., the white students). However, results indicated that students who sought out available services in college felt supported and consequently had higher rates of persistence.

In another study, Cornell et al. (1991) compared the college adjustment of 33 women who skipped their senior year of high school with the college adjustment of traditional high school upperclass students using an intelligence test (i.e., the Wechsler

Intelligence Scale for Children-Revised; WISC-R; Wechsler, 1974) and a personality questionnaire (i.e., California Psychological Inventory; CPI; Gough, 1987) administered at the beginning and again at the end of their freshmen year. It was debated that students' accelerated entrance into college would induce anxiety and stress that would be intensified due to the lack of familial and peer support typically gained at the conclusion of high school. However, interestingly, the converse was true. Due to the residential requirement of living together while in this acceleration program, the students developed social supports with peers who were highly similar to one another.

In general, within a supportive academic and social environment, goal-directed college students can succeed. Consequently, Tinto's (1993) theory relating commitment to the institution and degree completion is further supported. This research, coupled with research cited previously, continues to lay the foundation for the present investigation of non-academic attributes of first time students who leave college in comparison to continuing students.

Coping Strategies. College attendance is initially

characterized as a period of transition in which students change their routine in order to adapt to new academic and social demands (Tinto, 1993). Reischl and Hirsch (1989) studied 32 first-year students on academic probation at a large university in the Midwest using a questionnaire (i.e., the Inventory of Socially Supportive Behaviors; Barrera, Sandler, & Ramsay, 1981). They reported that students developed effective coping skills and adjusted well to the new demands of college when the skills were in agreement with their individual social identities. Positive social involvements had a more positive impact on students who were socially oriented while positive academic involvements had a more positive impact on students who were academically oriented.

The interaction and coping strategies employed varied depending upon the student's orientation. Specifically, seeking help from others benefitted socially-oriented students while selecting easier courses benefitted academically-oriented students. Reischl and Hirsch (1989) noted that during freshmen year there is an immediate need and intensive quest to align with a social group. Consequently, this can limit the opportunity to cultivate and search for one's best social and/or academic identity.

In a more recent study, Bray et al. (1999) hypothesized that college students' social integration would be related to the manner in which they dealt with stress. They administered three surveys to 718 first-year students at orientation, mid-way through the first semester, and at the end of the second semester. The questionnaires asked for background information, initial institutional commitment, social integration, subsequent institutional commitment, strategies used to cope with stress, and intent to reenroll for the following fall semester.

They found that viewing stress in a positive way related positively to social integration and subsequent institutional commitment. Denying the source of stress and proactively trying to eliminate sources of stress were negatively related to social integration. Both social integration and subsequent institutional commitment were positively related to intent to reenroll. These results both confirm Tinto's (1993) theory of attrition and extend it to indicate that the way students cope with stress influences both social and institutional integration.

In general, coping strategies are important elements in adjustment to college and subsequent persistence. However,

strategies are most effective when the institution's focus is similar to the individual's needs (i.e., academic orientation and/or social orientation), and, as is interpreted by Chickering's (1967a) developmental tasks, when the individual student can do what is best for him/herself.

Class Standing. College dropout rate is higher among first-year students than among students in later years, and the reasons for withdrawal differ for different students (Tinto, 1982). Bean (1985) found that as student-institution fit increases, rate of persistence increases and as the rate of alienation (i.e., lack of student-institution fit) increases, the likelihood of withdrawal increases. He studied 517 first-year students, 466 sophomores, and 423 juniors enrolled in a large university using questionnaires that asked participants' intention to return to college the following year.

Bean found that the variables related to student-institution fit were social-psychological in nature (i.e., perception of the applicability of the education, interaction with faculty members, and peer interaction and activities). Furthermore, class standing was related to rate of attrition. Rates of attrition decreased as students spent more time in college, because the fit between the

student and the institution increased with time. The level of institutional commitment also increased as time enrolled in school increased. Bean (1985) presented evidence that socialization is a strong variable affecting the decision to withdraw from college, because one's social life relates to the level of institutional fit. Consequently, peer support is an important factor in the persistence of students in college.

Gender, Race, and Age. There are differences between men and women in their college help-seeking behavior, but not in attrition rates. Johnson, Ellison, and Heikkinen (1989) studied the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1993) results of 1,589 (1,004 women and 585 men) students out of a total 1,928 students receiving counseling services during one year at a university. They found that women are not more distressed than men, but they are more willing and/or more able to talk about their feelings. Women sought counseling more often than men, and women indicated a greater realization that they were psychologically distressed. Musgrove (1968) investigated 48 randomly selected university students from the first-year, sophomore year, and junior years of a large university and compared them to students employed in

engineering firms. He interviewed the students regarding personal problems they had experienced during the previous week. Findings revealed that women worried more and worried about more things than their male counterparts.

Pascarella and Terenzini (1983) investigated social integration and academic integration of men and women students. They initially studied 1,906 entering first-year students with follow-up of 773 students focusing on their first-year experience in a large urban university. Upon follow-up, it was revealed that 673 students re-enrolled for the second year, 90 withdrew voluntarily, and 10 students were told to leave for academic and/or disciplinary reasons. (These 10 students were not investigated further since they were few in number. They were distinctly different than voluntary withdrawals because they were forced to leave against their will.)

Pascarella and Terenzini focused on persisters and voluntary withdrawers and found that overall academic integration affected goal commitment, which influenced persistence. Similarly, social integration affected institutional commitment, which influenced persistence. Findings revealed that as levels of social integration

increased, the positive influence of academic integration decreased. In addition, they reported that social integration and goal commitment had a stronger effect than academic integration on women's decision to persist or withdraw from college. Academic integration, rather than social integration, was the deciding factor for male students. Similarly, Tinto's theoretical analysis (1982) identified integration as an important variable affecting attrition for both men and women students.

Gender appears to have limited impact on rates of attrition. Pantages and Creedon's (1978) descriptive review of the literature showed that, although more men dropped out in the first semester, by the end of that first year of college there were no gender differences in attrition rates.

In terms of race affecting attrition rates, Gosman, Dandridge, Nettles, and Theony (1983) studied 84 student cohorts of persisters and dropouts (i.e., grouping together transfers, voluntary and/or involuntary withdraws) in six different colleges using the Institutional Data Questionnaire (see Gosman et al., 1983). They reported that black students had a greater tendency to drop out of college than their white counterparts. In addition, black students

experienced more interruption in their college education and enrolled on a part-time basis more often than white students. These factors contributed to the lower timely graduation rates of black students.

Pantages and Creedon's descriptive review of literature (1978) examined attrition rates of students who were normal college age plus or minus one year. They found that students' ages were not a major factor in attrition.

Summary of Characteristics of Student Persisters and Dropouts. The extensive literature reviewed provides descriptions of college persisters and dropouts. Tinto (as cited in Pascarella, 1986) reported that higher levels of academic and social integration and involvement are associated with greater commitment to the institution and the goal of completing the degree. Furthermore, Tinto (1993 and as cited in Alexander, 1982) posited that students with high academic competency and a moderate to high goal commitment to complete the college degree would show greater persistence in college. Bank et al. (1992) and House (1992) found that students who perceived that they could achieve their goals at the institution were more likely to persist. Kowlaski (1982)

reported, that relative to dropouts, college persisters are more mature, have clear future goals, and have a heightened interest in school and greater parental support. Predictors of persistence reported by Klein and Rennie (1985) included high levels of adaptability, low motoric activity, and high levels of attention.

Smith (1976) revealed that college persisters are more tolerant, more conforming, less anxious, more socially interactive, and had a more practical outlook for their future. Pantages and Creedon (1978) further characterized college persisters as having higher levels of personal maturity and being more conforming and self-reliant than drop outs. Kowalski (1982) reviewed past findings and reported that college persisters tended to be more mature, internally motivated, regimented in their academics, and future oriented. They had clearer goals and more familial supports than dropouts. Collectively, these results support Chickering's (1967a) theory by showing that college persisters achieve greater growth than dropouts relative to the developmental tasks (i.e., competence, autonomy, identity) identified as important during the college years.

Conversely, dropouts withdraw from college for many different reasons. Tinto (1982) reported that students withdraw

because they are not prepared to complete institutional demands. Rickinson and Rutherford (1996) supported Tinto's contention and found that the student's ability to adjust to academic and social demands of college influences persistence. Tinto (1993) further presented the possibility that students withdraw because of a perceived lack of student-institutional fit or goal commitment. Kowlaski (1982) revealed that academic achievement is not the sole determinant of college attrition, because both academic and personal problems affect college withdrawal. Specifically, he characterized non-persisters as less motivated, less clear of future goals, more disorganized, and less integrated into the college community.

Pantages and Creedon (1978) described college dropouts as more assertive, immature, nonconforming, rebellious, less future directed, less self-reliant, and more anxious relative to their college persisting counterparts. Kowlaski (1982) reviewed findings and reported college withdrawers to be disinterested in school, unaffiliated with the institution, unmotivated, deficient in study habits, and lacking in clear goals. Dollar (1985) further confirmed these findings and characterized dropouts as more impulsive,

anxious, and socially isolated than their college persisting counterparts.

Lack of satisfaction was also reported to influence college withdrawal. Houston (1971) found that poor academic performance may be due to the stress that students experience when they are unsuccessful in handling the problems that arise during college. As such, academic problems manifested when social difficulties made it difficult for the student to complete academic tasks, because of feelings of anxiousness, depression, and/or lack of motivation. Smith (1976) reported that college withdrawers were more independent that persisters. However, a trend was further reported by Smith that college withdrawers were more impulsive than persisters and this may be the result of them acting upon their level of dissatisfaction with the institution.

Attributional style, how an individual explains and perceives good and bad events, may be related to dropping out of college. College students who had a global, stable, and internal attributional style were likely to be depressed (Hirsch and Keniston, 1970). Depression was associated with leaving college.

College dropouts are not a unified group. There are dropouts

who are more mature and leave voluntarily because they do not want the college experience and there are others who are less mature and are forced to leave. Students who withdrew voluntarily were reported by Getzlaf et al. (1984) to have lower levels of academic ability, academic and social integration into the college community, and goal commitment to complete the college degree. Dalton et al. (1977) reported that nonacademic dropouts could not reach the high academic goals they set for themselves. Hirsch and Keniston (1970) reported that students who withdrew from college for nonacademic reasons were more intellectual, innovative, independent, and tolerant of ambiguity than their persisting counterparts.

In addition to students who leave college because of academic failure, there are those who leave for personal-psychological reasons. These students have problems such as eating disorders, substance abuse, and suicidal impulses.

While enrolled in the private women's college that was the site of this study, the author observed that students left voluntarily due to dissatisfaction with the social atmosphere, a rigorous academic courseload in which they were unable to succeed, and/or employment opportunities that could not wait. Furthermore, there

were students who were so personally troubled that they withdrew from college. These students seemed to the author to maintain sufficient grade-point averages to stay in college, but were unable to persist in college because of their psychological problems and thus were unable to achieve developmental milestones, such as those identified by Chickering, that are expected during this time. The present study focused on this group and compared the progress of students who withdrew from college for personal-psychological reasons to the progress of continuing students on college student developmental tasks as assessed by the Student Developmental Task and Lifestyle Inventory (Winston, Miller, & Prince, 1987).

College students sometimes have psychological problems, and colleges generally have at least one mental health facility on campus where students may receive counseling for these problems. Some students are able to overcome their problems and stay in college; others are not. Overall, as reported by Houston (1971), college persisters are characterized as optimistic, view their problems as manageable, and use previously learned behaviors to cope with the present problem. Conversely, college dropouts are characterized as pessimistic in regard to their problems, see no

solutions to the present difficulty, and do not actively use strategies to solve their problems. To test the assumption that students who leave college for personal-psychological reasons may be more personally troubled than college persisters, this study compared the number of problems endorsed by members of these two groups on the Symptom Checklist-90 Revised (Derogatis, 1993).

There is evidence that, relative to continuing students, some voluntary college dropouts suffer from depressive symptoms (Hirsch & Keniston, 1970). Depressive symptoms have been associated with having an internal, stable, global attributional style for bad events (Sweeney et al., 1986). It may be that students who leave college for personal-psychological reasons have a greater tendency than do continuing students to blame themselves for their misfortunes. This study, therefore, employed the Attributional Style Questionnaire (Seligman, 1984) to examine the attributional style of students who leave college for personal-psychological reasons relative to continuing students.

Problem Statement

Students who leave college for personal-psychological reasons are frequently included in larger samples of students who withdraw

from college. Because these samples group students leaving college for several different reasons, little is learned about how students who leave for one reason differ from those who leave for a different reason or from those who continue in college. This study began to address this research gap by investigating the accomplishment of college developmental tasks as well as the attributional styles and numbers of personal problems of students who left college for personal-psychological reasons compared to continuing college students.

Purpose of the Study

The purpose of this study was to investigate the differences between continuing college students and those who left college for personal-psychological reasons. Specifically, this study compared these two groups' scores on the Student Developmental Task and Lifestyle Inventory (SDTLI; Winston et al., 1987), the Attributional Style Questionnaire (ASQ; Seligman, 1984), and the Symptom Checklist-90 Revised (SCL-90-R; Derogatis, 1993). This was the first study to compare the accomplishment of college developmental tasks, the number of personal problems, and the attributional style of continuing students and students leaving college for personal-

psychological reasons.

Hypotheses

Chickering (1972) detailed developmental tasks that people undertake during the college years. Chickering posited that these tasks are more realized by young adults who attend and complete college compared to those who do not. In support of Chickering's theory, Kowalski (1982) found that college persisters are more mature and have clearer future goals, and a heightened interest in school than students who dropped out. Dropouts were more disorganized and less integrated into the college community. Pantages and Creedon (1978) described college dropouts as more immature and rebellious as well as less future directed and self-reliant than college persisters. In view of this research, the following hypotheses were advanced:

H01: College persisters would score significantly higher than students who left college for personal-psychological reasons on the Education, Career and Lifestyle scale of the Student Developmental Task and Lifestyle Inventory.

H02: College persisters would score significantly higher on the Establishing and Clarifying Purpose Dimension (PUR) of the Student

Developmental Task and Lifestyle Inventory than students who left for personal-psychological reasons.

H03: College persisters would score significantly higher on the Relationships and the Academic Environment scale of the Student Developmental Task and Lifestyle Inventory than students who left college for personal-psychological reasons.

There is evidence that, relative to students in good standing, voluntary college dropouts suffer from depressive symptoms (Hirsch & Keniston, 1970). Depressive symptoms are associated with an internal, global, and stable attributional style for bad events. It may be that dropouts for personal-psychological reasons have a tendency to internalize and blame themselves for their misfortunes. In view of this, the following hypothesis was advanced:

H04: Students who left college for personal-psychological reasons would score significantly higher than college persisters on the Bad Events Composite of the Attributional Style Questionnaire. (Note: Higher scores on this composite indicate an internal, stable, global explanation for bad events).

Houston (1971) found that psychological adjustment affected college persistence. Dropouts were more maladjusted than

continuers. Smith (1976) and Pantages and Creedon (1978) found that college dropouts were more anxious than persisters. Students who leave college for personal-psychological reasons may have more psychological problems than college persisters. In view of this, the following hypotheses were advanced:

H05: College persisters would score significantly lower than students who left college for personal-psychological reasons on the Global Severity Index of the Symptom Checklist-90 Revised.

H06: College persisters would score significantly lower than students who left college for personal-psychological reasons on the Positive Symptom Distress Index of the Symptom Checklist-90 Revised.

H07: College persisters would score significantly lower than students who left college for personal-psychological reasons on the Positive Symptom Total of the Symptom Checklist-90 Revised.

CHAPTER 3

Method

Subjects

All subjects, experimental and control, were traditional college-age students from a private liberal arts women's college affiliated with a large research university in New York City. Experimental subjects were students who had left college for personal-psychological reasons. All students (n = 64) who withdrew for personal-psychological reasons from 1990 - 1999 were invited to participate. Total enrollment for this college was approximately 2100 women (approximately 570 freshmen, 552 sophomores, 469 juniors, and 590 senior students). At this college, withdrawals for personal-psychological reasons included 2.8% of the freshmen class, 3.2% of the sophomore class, 3.1% of the junior class, and .5% of the senior class. This translated into approximately a 2% dropout rate for personal-psychological reasons in the college studied.

Control subjects were students in good standing who were selected by systematic sample (Borg & Gall, 1989). Specifically, to select the control subjects, all the students in a particular entry year were divided by the number of subjects needed for that year.

Twice as many controls as experimental subjects were solicited to ensure that an adequate number of control subjects would be obtained. The pilot study found that control group participants were harder to solicit. Appendix A gives pilot study information. Information regarding age, year in school, permanent residence, and socioeconomic status as assessed by the Hollingshead Four Factor Index of Social Adjustment (Hollingshead, 1975) was collected from each participant.

In the study proposal, all participants were to be selected from the entering class years of 1996 - 1999. Control participants were to be matched according to the year of college entry with experimental participants. Six mailings to 52 potential experimental and 104 potential control participants yielded responses from 35 potential control participants, but only 13 experimental participants. To increase the number of experimental participants, data from the 12 pilot experimental participants, who entered college between 1990 and 1995 and were dismissed from the college due to personal problems, were used.

Thus, control and experimental students were not matched in terms of their year of entry. Table 1 presents the number of

students from each year of entry who participated in each of these groups. A chi-square test, χ^2 (8, $\underline{N}$ = 50) = 26.97, $\underline{p}$ < .002, indicated that year of entry and participant group were significantly related. Table 1 shows that all of the control participants entered college in the period from 1996 - 1999, but the majority of the experimental participants (60 %) entered college from 1990 - 1995. This did not satisfy the proposal to match subjects according to year of entry. As a result, year of entry is partialed out of the analyses of the data in the testing of hypotheses. This limits conclusions that may be drawn from the study.

Table 1

Number of Experimental and Control Students in Each College Entrance Year

	Group	
Year of Entrance	Experimental (n = 25)	Control (n = 25)
1990	1	
1991	2	
1993	3	
1994	8	
1995	1	
1996	4	4
1997	4	4
1998	1	12
1999	1	5

Table 2 presents the number of students from each ethnicity group for each subject group. The interaction of Ethnicity x Group was evaluated via a chi-square test, χ^2 (3, $\underline{N}$ = 49) = 1.60, $\underline{p}$ = .66, indicating that ethnicity and group were not significantly related.

Table 2

Ethnic Composition of Experimental and Control Subjects

	Group	
	Experimental	Control
Ethnicity		
Asian	5	9
Latino	2	1
White	15	13
Other	2	2

Table 3 presents the number of students from each group either currently enrolled or not currently enrolled in college. A chi-square test, χ^2 (1, $\underline{N}$ = 49) = 11.60, $\underline{p}$ < .002, indicated that enrollment status and group membership were significantly related. Members of the experimental group were more likely than control group members to not be enrolled in the college. Of the 10 experimental subjects enrolled, 9 had returned to the college where the study was conducted and one student had transferred to another college.

Table 3

Number of Experimental and Control Students Currently Enrolled in College

	Group	
	Experimental	Control
Enrollment Status		
Yes	10	22
No	14	3

Table 4 presents the number of students from each group who had received counseling or had not received counseling. A chi-square test, χ^2 (1, $\underline{N}$ = 48) = 11.27, $\underline{p}$ < .002, indicated that receiving counseling and group membership were significantly related. Members of the experimental group were significantly more likely than the control group to have received counseling.

Table 4

Number of Students Who Received Psychological Counseling Services for Experimental and Control Subjects

	Group	
	Experimental	Control
Counseling		
Yes	20	10
No	3	15

Table 5 presents the ethnicity of participants by their SES category. There was a significant chi-square effect, χ^2 (9, $\underline{N}$ = 48) = 12.97, $\underline{p}$ < .007. Latina participants were exclusively from the lowest SES category, and the other participants were clustered in the highest two SES categories. No differences between ethnic groups were found for college enrollment status, χ^2 (3, $\underline{N}$ = 49) = 2.08, $\underline{p}$ = .48, or received counseling, χ^2 (3, $\underline{N}$ = 48) = .61, $\underline{p}$ = 89.

Table 5

Numbers and Percentages of Participants of Different Ethnicities in SES Categories

	SES Category				
Ethnicity	1	2	3	4	5
Asian	8 (51.7%)	4 (28.6%)	0	2 (14.3%)	0
Latina	0	0	0	0	3 (100%)
White	17 (63%)	5 (18.5%)	0	1 (3.7%)	4 (14.8%)
Other	3 (75%)	1 (25%)	0	0	0

Table 6 presents age, college grade point average (GPA), and SES calculated from the Hollingshead instrument for each group.

Table 6

Age, GPA, and SES Means, Standard Deviations, and Results of t-tests for Differences Between Experimental and Control Subjects

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	t	p=
Age	25	22.16	1.71	25	19.96	1.14	5.35	.001
GPA	23	3.07	.48	24	3.33	.33	-2.15	.037
SES	23	46.09	21.39	25	54.34	13.45	-1.59	.123

Members of the experimental group were significantly older than members of the control group. The GPA for members of the experimental group was significantly lower than the GPA for members of the control group. The groups did not differ with respect to SES. The Hollingshead scores show that parents of experimental and control group members were employed in the medium business, minor professional, and technical domain.

Instruments

The Student Developmental Task and Lifestyle Inventory. The Student Developmental Task and Lifestyle Inventory (SDTLI; Winston et al., 1987) is a developmental self-report questionnaire comprised of statements of developmental tasks typically undertaken by college students (i.e., "I have declared my academic major/field of academic concentration" and "While in college I have visited a career center or library to get information about possible careers or detailed information about a career I have chosen"). The current version of the SDTLI is a revision of the original Student Developmental Task Inventory (SDTI; Winston, Miller, & Prince, 1979) that was created to assess Chickering's (1967a) college student developmental tasks.

The SDTLI consists of 140 True/False statements regarding college students' behaviors, activities, feelings, attitudes, goals, and interpersonal relationships. The 140 statements are divided into three sections: Education, Career and Lifestyle (78 items; i.e., "I have declared my academic major/field of academic concentration","I can state clearly my plan for achieving the goals I have established for the next ten years", "I usually eat well-

balanced meals"); Intimate Relationships (19 items; i.e., "My partner and I regularly discuss or make plans on how we will spend our time together"); Relationships and the Academic Environment (43 items; i.e., "It sometimes bothers me if my leisure time activities are different from those of my friends", "My study time often seems rushed because I fail to estimate realistically the amount of time required").

Raw scores on the Education, Career and Lifestyle section range from 0 to 76. (there are 78 items in the section but 2 items are not scored because they are included as response bias checks) with higher scores indicating better time management, orientation towards accomplishing future goals, goal-orientation, self-motivation, self-confidence, commitment to education, independence, and feeling in control of one's life.

Raw scores on the Intimate Relationships section scores range from 0 to 19 with higher scores indicating emotional independence from parents and peers, non-academic interests, self-confidence, and acceptance of cultural differences in others. Raw scores on the Relationships and the Academic Environment range from 0 to 40 (there are 43 items in the section but 3 items are not scored

because they are included as response bias checks) with higher scores indicating acceptance of differences in others, being intellectually stimulated by college, being educationally motivated, being committed to accomplishing goals, not requiring parental and/or peer approval, being self-sufficient, being autonomous, functioning independent of peer pressure, being a productive decision maker, and managing time well.

A scale called the Establishing and Clarifying Purpose Dimension (PUR) to measure the college student task of developing purpose (Chickering, 1967a) can be calculated using selected items from the other three scales. Raw scores on the PUR range from 0 to 68 with higher scores indicating seeking meaningful educational experiences, seeking experiences related to future career and goals, being self-reliant, being self-sufficient, being self-motivated, managing time well, being able to achieve goals, and being intellectually stimulated by college. The PUR dimension of SDTLI has been found to be positively related to focusing on future life orientation, being self-motivated, searching for deep educational experiences and focusing on future career and personal goals while the PUR score related negatively to lack of risk taking and

commitment to a particular occupational arena (Winston & Miller, 1987). Four-week and two-week test-retest reliability coefficients for PUR were .85 and .87, respectively and internal consistency coefficient alpha for the entire instrument was .93 (Winston & Miller, 1987).

This study used scores from the Education, Career, and Lifestyle section, the Relationships and the Academic Environment section, and the Establishing and Clarifying Purpose (PUR) Dimension to test differences between college continuers and students who leave for personal-psychological reasons. The Intimate Relationships section was not be used. The items for this section appear most appropriate for people in long-term romantic relationships and did not seem relevant for the students sampled.

The Attributional Style Questionnaire. The Attributional Style Questionnaire (ASQ; Seligman, 1984) is a self-report instrument used to assess the propensity for people to attribute specific internal or external explanation for good and bad events. The ASQ contains 12 hypothetical situations divided into 6 good situations (i.e., "You meet a friend who compliments you on your appearance"; "You become very rich"; "You do a project which is highly praised";

"Your spouse [boyfriend/girlfriend] has been treating you more lovingly"; "You apply for a position that you want very badly and you get it"; "You get a raise") and 6 bad situations (i.e., "You have been looking for a job unsuccessfully for some time"; A friend comes to you with a problem and you don't try to help him/her"; "You give an important talk in front of a group and the audience reacts negatively"; "You meet a friend who acts hostilely towards you"; "You can't get all the work done that others expect of you"; "You go out on a date and it goes badly") with 4 questions to answer about each situation.

One question requests a cause of the situation (i.e., "Write down one major cause"), one question asks if the cause is perceived as internal or external to the subject (i.e., "Is the cause of your friend's compliment due to something about you or something about other people or circumstances?"), one question seeks to determine if the response is stable or unstable (i.e., "In the future, when you are with your friend, will this cause again be present?"), and a final question is provided to determine if the response is global or specific (i.e., "Is the cause something that just affects interacting with friends, or does it influence other areas of your life?").

Subjects rate answers on a scale from 1 to 7. Seven is the highest possible score for the good situations (i.e., 7 = Totally due to me) indicating a more external, unstable, specific attributional style and 1 is the highest possible score for the bad situations (i.e., 1 = Will never again be present) indicating a negative attributional style of internal, stable, and global explanations. In scoring, the good and bad situations need to be separated due to this reversal of scores.

Internal consistency as assessed by Cronbach's alphas for the ASQ were .56 for the stability scale, .66 for the global scale, and .21 for the locus scale; these modest reliabilities are common for scales that have few items (Tennen & Herzberger, 1985). However, when combining into overall composites for the good events and the bad events, the reliability coefficients reach more acceptable levels of .75 and .72 for good and bad events, respectively (Peterson & Seligman, 1984).

Composite scores for bad events was used in this study to test the hypothesis that attributional style for bad events differs for college persisters and students who left for personal-psychological reasons. Scores on the Bad Events Composite range from 21 to 3

with higher scores indicating a more negative explanatory style of internal, stable, and global attributions and lower scores indicating a style of external, unstable, and specific explanations for bad events. Since the literature does not address possible differences between college persisters and dropouts on the Good Events Composite, this scale was not used in this study.

ASQ scores have been shown to be positively related to depression. Specifically, it was found that depressed female psychiatric patients related their difficulties to more internal, stable, and global reasons than did the controls (Tennen & Herzberger, 1985). Furthermore, the meta-analysis investigating the relationship between attributional style and depression, reviewed by Sweeney et al. (1986), revealed associations between attribution and depression. Specifically, attributions of internal, stable, and global causes for negative events were associated with depression while attributions of external, unstable, and specific causes for positive events were also associated with depression.

The Symptom Checklist-90 Revised. The Symptom Checklist-90 Revised (SCL-90-R; Derogatis, 1993) is a self-report instrument that measures present psychological symptom patterns. The SCL-

90-R consists of 90 statements of problems that may have disturbed the subject during the previous 7 days (i.e, "Worried about sloppiness or carelessness" and "Feeling inferior to others"). Each statement is rated on a five-point scale from not at all (0) to extremely (4).

The SCL-90-R yields three global scores (Global Severity Index [GSI], Positive Symptom Distress Index [PSDI], and Positive Symptom Total [PST]) and nine primary symptoms of distress (Somatization [SOM] i.e., "headaches"; Obsessive-Compulsive [O-C] i.e., "repeated unpleasant thoughts that won't leave your mind"; Interpersonal Sensitivity [I-S] i.e., "feeling critical of others"; Depression [DEP] i.e., "thoughts of ending your life"; Anxiety [ANX] i.e., "nervousness or shakiness inside"; Hostility [HOS] i.e., "feeling easily annoyed or irritated"; Phobic Anxiety [PHOB] i.e., "feeling afraid in open spaces or on the streets"; Paranoid Ideation [PAR] i.e., feeling that most people cannot be trusted"; and Psychoticism [PSY] i.e., "hearing voices that other people do not hear"). Internal consistency alphas for the primary symptoms scales average .86 and range from a low of .79 for PAR to a high of .90 for DEP (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). One-week test-retest reliabilities for

these scales average .84 with a low of .78 for HOS and a high of .90 for PHOB (Derogatis, Rickels, & Rock, 1976).

This study used scores from the three global scales (i.e., Global Severity Index, Positive Symptom Distress Index, Positive Symptom Total), because there is no literature to support the existence of possible specific symptom differences between persisters and students who left for personal-psychological reasons. These global indices contain items from the primary symptom scales. Because of the heterogeneity of the item content of the global scales, internal consistency alphas do not appear in the manual and are not available from the test publisher (K. Bartels, personal communication, March 24, 2000). A coefficient alpha of .98 was found using study participants' answers to all 90 statements. Thus, the internal consistency reliability of the SCL-90-R in this study is quite high. Each of three global scales are computed using all 90 items.

The Global Severity Index is computed by summing the scores on the nine specific symptom dimensions, and the additional items, divided by the total response number; scores range from 30 to 81 with higher scores indicating higher levels of symptomolgy. A 10-

week test-retest reliability correlation coefficient of .84 was obtained using 103 community mental health outpatients (Horowitz et al., 1988). Criterion validity was assessed by correlating scores on the Global Severity Index with total scores on the Inventory of Interpersonal Problems. A correlation of .64 was obtained (Horowitz et al., 1988).

The Positive Symptom Total is calculated by summing the number of items scored as "nonzero". Scores range from 24 to 81 with higher scores indicating an overly dramatic and exaggerated response and explanatory style while lower scores indicate the conscious attempt of the respondent to minimize symptomatic distress and present themselves as stable, unemotional, and appropriately integrated into the community. The Positive Symptom Distress Index is calculated by dividing the sum of all item values by the Positive Symptom Total. Scores on this index range from 37 to 81 with higher scores indicating high levels of psychological distress. Neither the SCL-90-R manual nor the test publisher (K. Bartels, personal communication, March 24, 2000) could provide reliability information for the Positive Symptom Total or the Positive Symptom Distress Index. Scores were calculated according

to nonpatient female norming criteria which is most appropriate for the present study.

SCL-90-R scores have been shown to be positively related to similar symptom dimensions of the MMPI except for O-C which has no comparable dimension on the MMPI (Tryon, 1966). The SCL-90-R has been shown to be positively related to college student distress (Johnson et al., 1989). The SCL-90-R has also been used to investigate psychological problems of college outpatients, college students receiving university-based counseling to better understand themselves, and nonpatient college students (Todd et al., 1997).

Student Questionnaire. The Student Questionnaire is a self-report instrument developed for this study to obtain demographic information (i.e., age, permanent place of residence, grade point average) and information about students' college experiences (i.e., whether or not the student has had psychological counseling; how well the student's academic [and social] expectations were met at the college; how much support the student got from peers, faculty and administrators; how academically and socially integrated did the student feel into the college community). Each of these latter items were not tapped by inventories used, seem important in the

literature, and primarily come from Tinto's (1982) theory. These latter items are rated on five-point scales from not at all (0) to extremely (4). The Student Questionnaire is given in Appendix B.

Procedure

To preserve participants' confidentiality, the investigator did not know their names. Subjects were identified by members of the Dean of Studies Office. The test materials were assigned code numbers before being given to the investigator.

When students withdrew from the college used in the study, they were required to write letters to the Dean of Studies detailing their reasons for leaving. The Dean of Studies identified 52 students, who withdrew from college in 1996 - 1999, for the experimental group who indicated difficulty dealing with specific psychological problems or symptoms as their reason for college withdrawal. Students' reasons for withdrawal included depression, eating disorders, substance abuse, suicidal ideation, unhappy with current roommate and any other potential roommate, inability to adjust to the rigorous academic and social expectations of the college, and a longing for familiarity and comfort of one's hometown. Of these reasons for withdrawal, eating disorders and

depression were among the more commonly reported reasons. One subject's reason for withdrawal was unknown.

To control for possible effects of passage of time on scores on the dependent measures, control participants were matched with experimental participants according to year of college entry. Potential control participants were selected according to the following procedure. An assistant in the Dean of Studies Office selected 104 potential control subjects by a systematic sampling procedure. Systematic sampling was employed to select the control subjects since members of this sample were not selected independently. Specifically, control subjects were matched with students identified as potential experimental subjects according to year of college entry. The control sample was calculated depending on the number of experimental subjects selected from each year of college entry. Once it had been determined by the Dean of Studies Office how many students from each entry year were in the experimental group, the control sample was chosen using systematic sampling procedures by dividing all the students in a particular entry year by the number of subjects needed for that year. To ensure that an adequate number of control subjects were obtained, twice as

many control subjects as needed were solicited. The numbers of potential experimental and control participants according to year of college entry are given in Appendix C.

In April 2000, a letter of introduction and study description, two informed consent forms (one to be kept by the subject), and the testing materials were mailed to all subjects selected for the study along with a stamped return envelope (this was a viable procedure for experimental participants as evidenced by the pilot study). A postcard used to request study results was also included in the mailing. Appendix D contains copies of the Introduction, Description, and Consent Forms sent to potential student participants.

To prevent participants' identities from being known by the principal investigator, all materials were mailed by and returned to an assistant in the Dean of Studies Office. If subjects chose to participate they returned the consent form and completed tests in the envelopes to the Dean's assistant. If they did not choose to participate, they did not return these materials. When students did not respond by mid-May, they were sent a follow-up packet (see Appendix E for Follow-up Letter to be sent to potential student

participants). The Dean's assistant placed code numbers on the returned tests and gave them to the investigator. All data were kept in a locked cabinet by the investigator. Consent forms were kept in a locked cabinet in the Dean of Studies Office.

The first mailing was sent in April 2000 and was completed without financial compensation to participants for their time and effort. This first mailing yielded a total of 9 responses from the 156 potential respondents, or a 5.7% return rate. Five control and 4 experimental participants responded. Perhaps the response rate was low because participants had to spend about an hour, without compensation, completing the tests. Thus, participants were compensated $20.00 in the subsequent mailings. To continue to ensure confidentiality while compensating participants, a postal money order, paid for by the investigator, was sent to each participant who returned completed questionnaires. The assistant from the Barnard College Dean of Studies Office, who sent all the questionnaires to potential participants, also sent participants' money orders (see Appendix F for Thank-you Note sent with enclosed $20.00 money order).

The second mailing was sent in mid-May 2000 with the added

incentive of $20.00 compensation (Appendix E) to potential control and experimental subjects. This mailing yielded a total of 34 additional responses from the remaining 147 potential participants. Six experimental and 28 control participants responded. Thus, the first two mailings yielded responses from a total of 10 experimental and 33 control participants.

The third mailing was sent in June 2000 and yielded a total of 5 additional responses (2 from control and 3 from experimental participants). This brought the total number of participants from whom data were collected to 35 controls and 13 experimentals. This represented 33% and 25% of the initial pool of potential control and experimental participants, respectively.

The fourth mailing was sent in September 2000 to experimental participants only. This mailing continued to offer the financial incentive but was further sent a note with a more personal tone in the hopes of securing the sufficient number of responses needed (see Appendix G for Personal Letter to be sent to potential student participants). The fourth mailing yielded no responses as did the fifth and sixth mailings sent in October 2000 and November 2000, respectively.

The study proposal called for 26 participants in both the experimental and control groups. Six mailings yielded only half the number of experimental participants needed (see Research Design section). The pilot study included 12 experimental participants who were dismissed from the college due to personal problems that brought them to the attention of the Dean of Studies, but they had not completed the two-page Student Questionnaire. To supplement the experimental sample, a letter (see Appendix H) and the Student Questionnaire were sent to each pilot experimental participant. These women withdrew for the following reasons: eating disorders, depression, and an inability to adjust to the rigorous academic and social demands of college. These women were also given $20.00 compensation for the completion and return of the Student Questionnaire. Eleven of the 12 pilot participants (92%) returned completed questionnaires. When these 11 Student Questionnaires were added to the one remaining pilot participant who did not return the Student Questionnaire, the total number of experimental participants was brought to 25.

Ten of the 35 potential control participants could be matched with 10 experimental participants according to year of college

entry. Fifteen more control participants were needed, and they were selected from the remaining 25 potential control participants who had completed questionnaires using the following procedure. Potential control subjects' codes were written on slips of paper and placed in a box. The experimenter blindly chose 15 slips of paper whose numbers identified control participants. Because of these selection procedures, 30 of the study's 50 participants (60%) were not matched according to year of entry (see Table 1, page 65).

Research Design

The study used a two-group design to investigate possible differences between students who withdrew from college for personal-psychological reasons and continuing students in their accomplishment of college developmental tasks as well as their attributional styles and numbers of personal problems. Figure 1 presents a representation of the design. A power analysis (Cohen, 1992) shows that 26 subjects were needed in each group (Total n = 52) to achieve significance at the $p < .05$ level with a large effect size. As indicated in the procedure section, data from 50 participants (25 control and 25 experimental) were collected.

Figure 1. Representation of Research Design

Subtest (Test)	Experimental Group Students Who Withdraw for Personal-Psychological Reasons n = 25	Control Group Continuing Students n = 25
Education, Career, & Lifestyle (SDTLI)		
Establishing & Clarifying Purpose (SDTLI)		
Relationships & Academic Environment (SDTLI)		
Bad Events Composite (ASQ)		
Global Severity Index (SCL-90-R)		
Positive Symptom Distress Index (SCL-90-R)		
Positive Symptom Total (SCL-90-R)		

Data Analysis

To test the hypotheses, scores from each dependent measure were analyzed using a two-group (experimental and control) analysis of co-variance (ANCOVA). In each case, the covariate was year of

college entry. This was done because the sample did not permit matching on year of college entry; so this variable was controlled for statistically by partialing year of college entry out of each analysis. Thus, statistical control was used in lieu of experimental control. This severely limits conclusions drawn from the analyses.

In addition, the total scale and item scores from the Student Questionnaire were analyzed using two-group ANCOVAs with year of graduation as the covariate in each case. A coefficient alpha was calculated for the Student Questionnaire scale.

All variables used in this study were intercorrelated; the resulting table is presented in an appendix (see Appendix I for Pearson Product Moment Correlations for all Variables).

CHAPTER 4

Results

This chapter presents the results of tests of the hypotheses as well as means and standards deviations for each group for each inventory. Results of statistical tests presented in tables are given both with and without year of graduation partialed out so that the reader may evaluate the effects of year of entry on answers to each inventory. Tables reviewing the Student Developmental Task and Lifestyle Inventory are presented first, followed by the Attributional Style Questionnaire, the Symptom Checklist-90 Revised, and finally the Student Questionnaire.

The Student Developmental Task and Lifestyle Inventory

Table 7 presents the means, standard deviations, and statistical analyses associated with Hypothesis 1.

Table 7

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Student Developmental Task and Lifestyle Inventory Education Career and Lifestyle (SDTLIECL) Section

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p=
SDTLIECL	24	40.50	12.21	25	48.52	13.47	2.67	.081
							4.57	.039

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 1 that college persisters would score significantly higher than students who left college for personal-psychological reasons on the Education, Career and Lifestyle scale of the Student Developmental Task and Lifestyle Inventory was not confirmed. This indicates that members of the control group were not

significantly better with regard to time management, orientation towards accomplishing future goals, goal-orientation, self-motivation, self-confidence, or commitment to education than members of the experimental group. The two groups differed significantly when year of college entry was not partialed out. Therefore, year of college entry affected the results on this scale.

Table 8 presents the means, standard deviations, and ANCOVA results for the Establishing and Clarifying Purpose Dimension of the Student Developmental Task and Lifestyle Inventory for the experimental and control groups.

Table 8

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Student Developmental Task and Lifestyle Inventory Establishing and Clarifying Purpose (SDTLIPUR) Section

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SDTLIPUR	24	37.21	11.59	25	43.48	12.50	1.79	.180
							2.93	.095

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 2 that college persisters would score significantly higher on the Establishing and Clarifying Purpose Dimension of the Student Developmental Task and Lifestyle Inventory than students who left for personal-psychological reasons was not confirmed. Results indicate that members of the control group were not more

focused on life orientation, self-motivated, searching for deep educational experiences, and focused on future career and personal goals than members of the experimental group.

Table 9 presents the means, standard deviations, and ANCOVA results for the Relationships and the Academic Environment scale of the Student Developmental Task and Lifestyle Inventory for the experimental and control groups.

Table 9

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Student Developmental Task and Lifestyle Inventory Relationship and Academic Environment (SDTLIRAE) Section

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SDTLIRAE	24	24.75	7.26	24	25.29	5.97	3.28	.048
							3.69	.061

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 3 that college persisters would score significantly higher on the Relationships and the Academic Environment scale of the Student Developmental Task and Lifestyle Inventory than students who left college for personal-psychological reasons was confirmed. Results indicate that members of the control group were

significantly more accepting of the differences of others, intellectually stimulated by college, educationally motivated, committed to accomplishing goals, and self-sufficient than members of the experimental group.

The Attributional Style Questionnaire

Table 10 presents the means, standard deviations, and ANCOVA results for the Bad Events Composite of the Attributional Style Questionnaire for both the experimental and control groups.

Table 10

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Attributional Style Questionnaire for Bad Events (ASQBAD)

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
ASQBAD	25	13.31	2.67	25	12.73	1.79	.71	.50
							1.42	.24

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 4 that students who left college for personal-psychological reasons would score significantly higher than college persisters on the Bad Events Composite of the Attributional Style Questionnaire was not confirmed. Results indicate that members of the experimental group were not more likely to attribute a more

negative explanatory style to bad events indicating internal, stable, and global attributions. Therefore, there lacks support for the theory that students who withdraw from college for personal-psychological reasons have a negative attributional style that is similar to people who are depressed.

The Symptom Checklist-90 Revised

Table 11 presents means, standard deviations, and ANCOVA results for the Global Severity Index of the Symptom Checklist-90 Revised for the experimental and control groups.

Table 11

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Symptom Checklist-90-Revised Global Severity Index (SCLGSI)

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SCLGSI	24	1.07	.72	25	.63	.52	4.08	.024
							7.64	.008

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 5 that college persisters would score significantly lower than students who left college for personal-psychological reasons on the Global Severity Index of the Symptom Checklist-90 Revised was confirmed. Members of the control group presented with lower levels of psychological symptomology than experimental

group members.

Table 12 presents the means, standard deviations, and ANCOVA results of the Positive Symptom Distress Index of the Symptom Checklist-90 Revised for the experimental and control groups.

Table 12

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Symptom Checklist-90-Revised Positive Symptom Distress Index (SCLPSDI)

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SCLPSDI	24	1.91	.63	25	1.52	.42	4.08	.024
							7.49	.010

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 6 that college persisters would score significantly

lower than students who left college for personal-psychological reasons on the Positive Symptom Distress Index of the Symptom Checklist-90 Revised was confirmed. Members of the control group presented themselves as more stable, unemotional, asymptomatic, and appropriately integrated into the community than members of the experimental group.

Table 13 presents means, standard deviations, and ANCOVA results for the Positive Symptom Total of the Symptom Checklist-90 Revised for both experimental and control groups.

Table 13

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Symptom Checklist-90-Revised Positive Symptom Total (SCLPST)

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SCLPST	24	44.96	20.19	25	33.16	20.37	2.79	.073
							5.32	.027

Note. The first row indicates F and p values with year of college entry partialed out

Hypothesis 7 that college persisters would score significantly lower than students who left college for personal-psychological reasons on the Positive Symptom Total of the Symptom Checklist-90 Revised was not confirmed. Members of the experimental and control groups did not differ with regard to psychological distress.

The groups differed significantly before year of college entry was partialed out indicating that this variable affected psychological distress. This indicates that the passage of time influenced the level of positive symptoms such that students in the experimental group were more distressed than they would have been if they had been matched on year of college entry.

The Student Questionnaire

Tables 14 through 23 present means, standard deviations, and ANCOVA results for each item of the nine items of the Student Questionnaire as well as the total score on this inventory for experimental and control groups. The Student Questionnaire items were written to gather information about students' college experiences that were not tapped by other inventories. The items reflect Tinto's (1993) theory of attrition that relates to students' academic and social expectations of college. No hypotheses were advanced for these items, but these supplementary analyses were done because, consistent with Tinto's theory, students who left college for personal-psychological reasons would be expected to differ from those who continued in their beliefs about the extent to which their social and academic needs were met while in school.

Each item was rated on a 5-point scale with higher scores indicating more positive beliefs or feelings.

Table 14 presents means, standard deviations, and ANCOVA results evaluating how well the student's academic expectations were met at the college for the experimental and control groups.

Table 14

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Academic Expectations Item (ACAEXPEC) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
ACAEXPEC	24	2.54	1.25	25	3.12	.78	2.52	.091
							.536	.468

Note. The first row indicates F and p values with year of college entry partialed out

There was no difference in participants' beliefs that their academic expectations were met at college.

Table 15 presents means, standard deviations, and ANCOVA results evaluating how well the students' social expectations were met.

Table 15

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Social Expectations Item (SOCEXPEC) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SOCEXPEC	24	1.92	1.41	25	2.28	1.17	1.201	.310
							.003	.957

Note. The first row indicates F and p values with year of college entry partialed out

The groups did not differ in the belief that their social expectations were met in college.

Table 16 presents means, standard deviations, and ANCOVA results for perceived level of support from peers by the experimental and control groups.

Table 16

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Perceived Peer Support Item (PEERSUPP) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
PEERSUPP	24	2.25	1.39	25	3.28	.94	4.625	.015
							4.182	.047

Note. The first row indicates F and p values with year of college entry partialed out

Members of the experimental group believed they had less support from peers than did members of the control group.

Table 17 presents means, standard deviations, and ANCOVA results for perceived support from faculty.

Table 17

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Perceived Faculty Support Item (FACSUPP) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
FACSUPP	24	2.33	1.24	25	2.60	1.08	.370	.693
							.145	.705

Note. The first row indicates F and p values with year of college entry partialed out

There was no difference in perceived levels of faculty support felt by experimental and control subjects.

Table 18 presents means, standard deviations, and ANCOVA results for perceived levels of support from administrators.

Table 18

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Perceived Support from Administration Item (ADMSUPP) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
ADMSUPP	24	2.17	1.09	25	2.08	1.15	.056	.945
							.112	.740

Note. The first row indicates F and p values with year of college entry partialed out

There was no difference in the perceived level of support from administrators felt by members of the experimental and control groups.

Table 19 presents means, standard deviations, and ANCOVA results for perceived level of academic integration for experimental

and control groups.

Table 19

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Perceived Academic Integration Item (ACAINTEG) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
ACAINTEG	24	1.92	1.21	24	2.75	1.15	4.004	.025
							.800	.376

Note. The first row indicates F and p values with year of college entry partialed out

Significant findings were obtained when year of college entry was partialed out, but results were nonsignificant when year of college entry remain in the analysis. Students who left school for personal-psychological reasons felt less academically integrated

into the college community than continuing students.

Table 20 presents means, standard deviations, and ANCOVA results for the social integration question of the Student Questionnaire for the experimental and control groups.

Table 20

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Perceived Social Integration Item (SOCINTEG) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p=
SOCINTEG	23	1.91	1.50	25	2.44	1.29	1.088	.346
							.274	.603

Note. The first row indicates F and p values with year of college entry partialed out

No significant between groups difference was found on this

item.

Table 21 presents means, standard deviations, and ANCOVA results for goal commitment to completing college for experimental and control groups.

Table 21

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Goal Commitment to College Completion Item (GOALCOM) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
GOALCOM	24	3.50	.93	25	3.76	.60	2.022	.144
							.035	.853

Note. The first row indicates F and p values with year of college entry partialed out

No significant difference was found for this item.

Table 22 presents means, standard deviations, and ANCOVA results for students' institutional commitment to completing college for the experimental and control groups.

Table 22

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Level of Institutional Commitment to Complete College Item (INSTCOM) of the Student Questionnaire

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
INSTCOM	24	2.83	1.37	24	3.08	1.28	.686	.509
							.022	.882

Note. The first row indicates F and p values with year of college entry partialed out

There was no significant difference in group responses to this item.

To determine if the Student Questionnaire items formed an internally consistent scale that could be used to assess Tinto's formulations regarding college attrition, a coefficient alpha was calculated. This resulted in an alpha of .90 for the 9-item Student Questionnaire indicating that the Student Questionnaire is an internally consistent scale. Table 23 presents Student Questionnaire total score means and standard deviations for both groups as well as ANCOVA and ANOVA results.

Table 23

Mean, Standard Deviations, and Results of ANOVA With and Without Year of College Entry Partialed Out for Experimental and Control Subjects on the Student Questionnaire Total (SQT)

	Group							
	Experimental			Control				
Variable	n	M	SD	n	M	SD	F	p =
SQT	23	21.57	8.15	23	25.43	7.57	1.851	.169
							.391	.535

Note. The first row indicates F and p values with year of college entry partialed out

The Student Questionnaire total score did not differentiate between groups.

CHAPTER 5

Conclusions

This chapter discusses the limitations of the study, summarizes and discusses the results, and presents suggestions for educator and future researchers. The study's flaws are discussed first because they severely limit the conclusions that may be drawn from the results.

Limitations of the Study

This study was supposed to examine differences in the accomplishment of college developmental tasks, personal concerns, and attributional styles of women who left college for personal-psychological reasons and those who continued in college. These two groups of women were to be matched according to year of college entry. As indicated in the previous sections of this dissertation, 60% (n = 30) of the 50 participants were not matched according to year of college entry. This necessitated statistical control of this variable by using it as a covariate in the analyses. Statistical control is a poor substitute for the matching that was supposed to occur in this study. ANCOVA only controls for the linear effects of the covariate on the dependent measure. More

complicated relationships between the covariate and the dependent measure will be missed. Thus, year of college entry might have had an unknown, non-linear, uncontrolled effect on any of the dependent measures used. The proposed matching of the subjects in each sample according to year of college entry would have provided experimental control for some variables, such as maturation and memory, related to the passage of time. This is a far more preferable type of control than partialing year of college entry out of the analyses.

Despite six mailings and the use of a $20.00 financial incentive, only 25% of potential experimental participants responded to the study. As shown in the tables in the Results Section, some participants did not complete all questionnaires. This small sample may not be representative of women who leave college for personal-psychological reasons and women who continue in college. How these individuals may differ from others who leave college because of personal concerns and those who stay in college is not known. This sample may not even be an adequate representation of students who leave the college where the study was conducted, and generalizing findings to students at other women's colleges is not

advised. Since the sample did not include men, findings cannot be generalized to men either.

Summary and Discussion of Results

Since the majority of women in the experimental group entered college before those in the control group, it is not surprising that they were older than the women in the control group. The vast majority of women who left college for personal-psychological reasons (87%) sought counseling as compared to only 40% of control participants. But, as indicated by their significantly higher scores (both with and without year of college entry partialed out of the analyses) on the SCL-90-R Global Severity and Positive Symptom Distress Indices, they were more personally troubled than control participants. These results seem to indicate that these women were personally troubled when they left college and, even though they received counseling, continued to be psychologically distressed. These results provide support for the hypothesis that students who withdraw from college for personal-psychological reasons present with higher levels of psychological symptomology than their continuing student counterparts.

Women who withdrew from college for psychological reasons

were also less educationally motivated, self-sufficient, productive, and committed to accomplishing goals (SDTLI Relationships and Academic Environment Section) than women who continued in college. This finding lends some support for Chickering's (1972) formulation that these developmental tasks are more fully realized by young adults who continue in college than by those who drop out.

When they were in college, these personally troubled women achieved lower grades than continuing college women, and their recollection is that they were less integrated into the academic community than continuing college women. They also did not feel that they received the peer support when they were in college that continuing college women believed they had received. Thus, it appears that women who left college for personal-psychological concerns were not as personally or academically integrated into their environment as those who continued. These findings lend some support to Tinto's (1993) theory that lack of social and academic integration into the college community is associated with student withdrawal. Perhaps psychological troubles hindered their academic and personal participation in college, or their lack of integration into the college environment could have exacerbated their personal

concerns. Conclusions regarding causation may not be drawn from the results.

The results suggest that women who leave college for personal-psychological reasons have not received the counseling help they need to ameliorate their concerns. These women were not asked about how much counseling they had had, how effective they thought their counseling was, how long they were in counseling, or when (during their stay in college, before college, or after college) they went to counseling. These women were also not asked if they were disillusioned by attending a women's college. They were not questioned about their initial impression of what they hoped to find when they applied to a women's college and whether or not that impression was discrepant from the reality they found when they attended the women's college. As mentioned before, the study's limitations mean that the reader should be cautious about drawing conclusions from these findings.

Suggestions for Educators and Future Researchers

To the extent that the results present an accurate picture of dropouts for personal-psychological reasons, it seems that colleges should frequently promote the desirability and availability of

counseling services. Beginning in the first year, academic advisors and college counselors could work in conjunction with Dean of Studies' personnel to facilitate emotional and academic support of students by providing outreach to all students. Help desks and club meetings for students interested in each discipline as well as peer tutoring, which would promote peer support within the academic framework, might promote student academic and personal integration.

Relevant to the Dean's Office, the findings revealed from this study indicate that understanding students' perceived levels of social and academic integration and providing counseling services can reduce present and future rates of attrition. It is important for the Dean's Office to be aware of students' personal and academic investment in the college whereby increasing their desire to remain in the college. When information is revealed that a student is contemplating withdrawal, counseling services can begin prior to withdrawal. This has the potential to ameliorate symptoms as well as provide a sense of community for the student resulting in continuing in the college.

The Student Questionnaire, developed for this study, appears to

be a brief, internally consistent measure of student academic and social integration into college. It should be included in a replication of the present study including one additional item. An additional item could be added to investigate the level of disillusionment with attending a women's college (i.e., My expectations for personal fulfillment and knowledge are/were met while in the women's college). The Student Questionnaire may be useful in studying college withdrawal relative to Tinto's (1993) theory of attrition. It could be administered to students shortly after they begin college to see if it can differentiate between students who later drop out and those who continue.

This study should be carried out as it was designed using a sample of students matched for year of college entry. Ideally, this study should be done at several colleges to promote generalizability of results. A financial incentive for participation should be offered, but this may not ensure an adequate response rate. It may be that students who withdraw from college for personal-psychological reasons have a number of negative feelings connected to their withdrawal. They may be ashamed and angry and not desire to cooperate by completing several inventories sent to their home by

the Dean of Studies Office. Giving the questionnaires to withdrawing students as part of the withdrawal process might yield a higher response rate. Furthermore, administering the questionnaires during the withdrawal process may create a more positive tone by showing students that their reasons for departure are important and that they may help future students avoid dropping out. It is important to study women who leave college for personal-psychological reasons, because such study may yield suggestions about how to help these women achieve a better adjustment. The lack of an adequate sample prevented this study from fulfilling its promise.

Appendix A

Pilot Study

Pilot Study

The pilot study was conducted in the Spring of 1998. It differed from the present Dissertation Study because the pilot targeted people who were asked to leave the college due to personal problems as the experimental group and students in good standing as the control group. The potential experimental group included 316 students from the Fall 1994 semester through and including the Fall 1996 semester who were dismissed from the college due to personal problems. The control group consisted of a systematic sampling of 27 students enrolled in the college and in good standing at the time the pilot study was conducted. Twelve experimental subjects returned questionnaires, and one control subject returned incomplete questionnaires.

The Education, Career, & Lifestyle Section of the SDTLI yielded a mean of 42.36 and a standard deviation of 13.25 indicating that subjects scored about average on this scale.

The Establishing & Clarifying Purpose of the SDTLI yielded a mean of 37.82 and a standard deviation of 12.52 indicating that subjects scored about average on this scale.

The Relationships & Academic Environment Section of the

SDTLI yielded a mean of 27.64 and a standard deviation of 6.80 indicating that subjects scored above average on this scale.

The Bad Events Composite of the ASQ yielded a mean of 12.53 and a standard deviation of 2.90 falling squarely in the middle of a negative attributional style to explain bad events.

The Global Severity Index of the SCL-90-R yielded a mean of .80 and a standard deviation of .62. When converted to a T-score (= 63), the Global Severity Index indicated the population was at risk for psychological distress.

The Positive Symptom Distress Index of the SCL-90-R yielded a mean of 1.63 and a standard deviation of .52 which fell midway between freedom from psychological distress and some level of psychological distress.

The Positive Symptom Total of the SCL-90-R yielded a mean of 38.36 and standard deviation of 20.83 which fell midway between dramatizing psychological distress and underestimating level of distress. This provides some support for the assumption that the subjects are not free from distress.

Appendix B

The Student Questionnaire

Student Questionnaire

Please respond to the following questions by placing an "X" on the line next to the response that is most appropriate for you OR fill in the appropriate response. Be sure to mark only one response after each sentence.

1. My age is _____.
2. My ethnic background is ___ African-American __ American Indian
   ___ Asian ___ Latino origin ___ White, Non-Hispanic ___ Other
3. My permanent place of residence is _____.
4. The year I entered college was _____.
5. I am currently enrolled in college _____ yes _____ no.
6. I have received psychological counseling previously __ yes ___ no.
7. My current/departing overall grade point average is/was _____.
8. I live with _____ both parents _____ mother _____ father.
9. My mother's current job title is _____.
10. My father's current job title is _____.
11. The highest level of schooling my mother/father has completed is:

mother/father

_____/_____ less than 7th grade.

_____/_____ junior high school (9th grade).

_____/_____ some high school (10th or 11th grade).

_____/_____ high school graduate.

_____/_____ some college or specialized training.

_____/_____ college or university graduate.

_____/_____ graduate degree.

Below are questions regarding experiences had while in college. Circle the number that best describes your experiences.

0 = not at all

1 = a little bit

2 = moderately

3 = quite a bit

4 = extremely

1. My academic expectations are/were met while in college.

0 1 2 3 4

2. My social expectations are/were met while in college.

0 1 2 3 4

3. I receive/received support from my peers while in college.

0 1 2 3 4

4. I receive/received support from the faculty while in college.

0 1 2 3 4

5. I receive/received support from the administration while in college.

0 1 2 3 4

6. I feel/felt academically integrated into the college community.

0 1 2 3 4

7. I feel/felt socially integrated into the college community.

0 1 2 3 4

8. I feel/felt a strong goal commitment to completing college.

0 1 2 3 4

9. I feel/felt a strong institutional commitment to complete college.

0 1 2 3 4

Appendix C

Number of Potential Experimental and Control Participants According to Year of College Entry

Number of Potential Experimental and Control Participants According to Year of College Entry

	Group	
Year of Entry	Potential Experimental (n = 52)	Potential Control (n = 104)
1996	3	6
1997	15	30
1998	18	36
1999	16	32

Appendix D

Introduction, Description, and Consent Letters to Potential Student Participants

Ph.D. Program in Educational Psychology

The Graduate School and University Center
The City University of New York
365 Fifth Avenue
New York, NY 10016-4309
TEL 212.817.8285 FAX 212.817.1516

Letter to Potential Student Participants

Dear Barnard Student,

My name is Karen N. Wasserman and I am a Barnard alumna (BC'94). I was a psychology major while at Barnard and I am currently a full-time graduate student at the Graduate School and University Center of the City University of New York earning my Ph.D. in Educational Psychology with a specialization in School Psychology. I am conducting research for my dissertation under the auspices of the Graduate Center and in cooperation with Barnard College surveying Barnard Students. I would appreciate help from members of the Barnard community in this endeavor.

The purpose of my dissertation is to investigate withdrawal of students in college settings. Specifically, I am investigating attributes and strategies used by two groups of college students- those who are no longer in their college setting due to personal reasons and continuing students. At the close of the research, I hope to identify alternative resources and social support to assist students' adjustment to college and reasons why students withdraw from college. Students involved in this study can obtain feedback of results and overall impressions of the study by contacting me at (212) 854-2024.

If you chose to participate, please complete the four self-report questionnaires that are enclosed. **Please complete the questionnaires in their entirety**. Your responses will be kept confidential and your participation will in no way affect your status at Barnard College. You may decline to participate or withdraw from the study at any time without penalty.

Included are two identical informed consent forms. If you chose to participate, return one with your completed questionnaires to Candace at the Office of the Dean of Studies and keep the other for your records. If there are any questions regarding your participation, please call me at (212) 854-2024 or my supervisor Professor Georgiana Tryon at (212) 817-8293. If you have any questions regarding your rights as a human subjects research participant, you may call Ms. Hilry Fisher at (212) 817-7523, hfisher@gc.cuny.edu.

Thank you for your time and consideration.
Sincerely,

Karen N. Wasserman

Ph.D. Program in Educational Psychology

The Graduate School and University Center
The City University of New York
365 Fifth Avenue
New York, NY 10016-4309
TEL 212.817.8285 FAX 212.817.1516

Consent Form for College Withdrawal Study

This is my consent form to participate in the research project conducted by Karen N. Wasserman under the auspices of Barnard College and the Graduate School and University Center of the City University of New York (CUNY). The **purpose** of this research project is to investigate differences in attributional style, adjustment and personal development between students who take a leave from college and continuing students. Specifically, college students will be studied to determine possible reasons why one group of students have difficulties leading to their withdrawal from college for a specified interval of time while another group does not experience the same difficulties. It can benefit the participant to talk about the subject of college withdrawal for personal-psychological reasons as well as the fact that the research may add to the knowledge of such college withdrawal. At the close of the research, Ms. Wasserman hopes to suggest alternatives to such college withdrawal for a specified amount of time.

In choosing to participate, I understand that **I will complete four self-report questionnaires in their entirety** that will take about one hour to fill out and complete. **My confidentiality and anonymity** will be maintained. The researcher will not know my name. I will return the completed questionnaires in the self-addressed, stamped envelope provided by the researcher.

I understand that **no** physical **risk** or mental **discomfort** is associated with my participation. If I have any questions regarding this research, I will call **Karen N. Wasserman at (212) 854-2024** or Ms. Wasserman's **supervisor Professor Georgiana Tryon at (212) 817-8293.** If I have any questions concerning my rights as a participant in this study, I will call **Ms. Hilry Fisher** at Sponsored Research, Graduate School and University Center/CUNY at **(212) 817-7523, hfisher@gc.cuny.edu.**

I understand that participation is voluntary and that refusal to participate will involve **no penalty.** I understand that I can discontinue participation at any point in this project without any penalty.

I will keep one consent form for my records. The other form will be sent and kept in a locked cabinet in the Dean of Studies Office. I am fully informed concerning the study and agree to participate on a purely voluntary basis.

Participant's Signature

Date

Graduate School & University Center / CUNY
IRB
Approved
Approved: 2/25/00 Expired: To 2/2/01

Karen N. Wasserman
Principal Investigator's Signature

Appendix E

Follow-up Letter to Potential Student Participants

Ph.D. Program in Educational Psychology

The Graduate School and University Center
The City University of New York
365 Fifth Avenue
New York, NY 10016-4309
TEL 212.817.8285 FAX 212.817.1516

Dear Barnard Student,

You recently received a questionnaire packet asking you to complete inventories regarding your college experiences. Your questionnaires have not been received so copies are enclosed for you to complete. As you know from the initial mailing, I am a Barnard alumna (BC'94) and am currently a full-time graduate student at the Graduate School and University Center of the City University of New York earning my Ph.D. in Educational Psychology with a specialization in School Psychology. I am conducting research for my dissertation under the auspices of the Graduate Center and in cooperation with Barnard College surveying Barnard Students. I would appreciate help from members of the Barnard community in this endeavor.

The purpose of my dissertation is to investigate withdrawal of students in college settings. Specifically, I am investigating attributes and strategies used by two groups of college students- those who are no longer in their college setting due to personal reasons and continuing students. At the close of the research, I hope to identify alternative resources and social support to assist students' adjustment to college and reasons why students withdraw from college.

If you chose to participate, please complete the four self-report questionnaires that are enclosed. **Please complete the questionnaires in their entirety.** Your responses will be kept confidential and your participation will in no way affect your status at Barnard College. When completed questionnaires are received, you will be compensated with a $20.00 money order for your time and effort. It will be sent in an envelope addressed by the Dean of Studies Office to ensure confidentiality and anonymity. You may decline to participate or withdraw from the study at any time without penalty.

Included are two identical informed consent forms. If you chose to participate, return one with your completed questionnaires to Candace at the Office of the Dean of Studies and keep the other for your records. If there are any questions regarding your participation, please call me at (212) 854-2024 or my supervisor Professor Georgiana Tryon at (212) 817-8293. If you have any questions regarding your rights as a human subjects research participant, you may call Ms. Hilry Fisher at (212) 817-7523, hfisher@gc.cuny.edu.

Thank you for your time and consideration. Because of time constraints, please complete and return the questionnaires as soon as possible. If you have already completed the questionnaires, please disregard this set.

Sincerely,

Karen N. Wasserman

The Graduate School and University Center
The City University of New York
365 Fifth Avenue
New York, NY 10016-4309

Consent Form

This is my consent form to participate in the research project conducted by Karen N. Wasserman under the auspices of the Graduate School and University Center of the City University of New York (CUNY) and in cooperation with Barnard College surveying Barnard Students. The **purpose** of this research project is to investigate differences in attributional style, adjustment and personal development between students who take a leave from college and continuing students. Specifically, college students will be studied to determine possible reasons why one group of students have difficulties leading to their withdrawal from college for a specified interval of time while another group does not experience the same difficulties. It can benefit the participant to talk about the subject of college withdrawal for personal-psychological reasons as well as the fact that the research may add to the knowledge of such college withdrawal. At the close of the research, Ms. Wasserman hopes to identify alternative resources and social support to assist students' adjustment to college and reasons why students withdraw from college.

In choosing to participate, I understand that **I will complete four self-report questionnaires in their entirety** that will take about one hour to fill out and complete. **My confidentiality and anonymity** will be maintained. The researcher will not know my name. I will return the completed questionnaires in the self-addressed, stamped envelope provided by the researcher. When completed questionnaires are received, I will be compensated with a $20.00 money order for my time and effort. It will be sent in an envelope addressed by the Dean of Studies Office to ensure confidentiality and anonymity.

I understand that **no** physical **risk** or mental **discomfort** is associated with my participation. If I have any questions regarding this research, I will call **Karen N. Wasserman at (212) 854-2024** or Ms. Wasserman's **supervisor Professor Georgiana Tryon at (212) 817-8293.** If I have any questions concerning my rights as a participant in this study, I will call **Ms. Hilry Fisher** at Sponsored Research, Graduate School and University Center/CUNY at (212) **817-7523, hfisher@gc.cuny.edu.**

I understand that participation is voluntary and that refusal to participate will involve **no penalty.** I understand that I can discontinue participation at any point in this project without any penalty.

I will keep one consent form for my records. The other form will be sent and kept in a locked cabinet in the Dean of Studies Office. I am fully informed concerning this study and agree to participate on a purely voluntary basis.

Graduate School & University Center CUNY
IRB
Approved
Approved: 2/28/00 Expired: To 2/27/01

Karen N. Wasserman

Participant's Signature

Principal Investigator's Signature

Date

Appendix F

Thank-you Note to Student Participants

July 2000

Dear Barnard Student,

Thank you for completing the questionnaires that are part of my dissertation. Enclosed you will find the $20.00 money order.

Sincerely,

Karen N. Wasserman

Appendix G

Personal Letter to Potential Student Participants

September 2000

Dear Barnard Student,

My name is Karen N. Wasserman and as you have learned from the mailings you have received, I am completing my Ph.D. in Educational Psychology with a Specialization in School Psychology. I have hoped for Barnard students, both past and present, to assist me in my dissertation.

I have received nearly 75% of the questionnaires I need to complete my research. This letter and the enclosed questionnaires are being sent to you once again to ask you to help me reach my goal. I assure you that all your responses are confidential and your identity is anonymous. Even though these questionnaires are sent from Barnard, no one will see your responses. They are entirely confidential in this respect. The reason that Barnard is sending them is so that I will not know your identity. When your completed questionnaire comes in, I open it myself and give the Assistant to the Dean of Studies the signed consent form. I keep the anonymous questionnaires in a secure cabinet in my apartment to which only I have access. As soon as the dissertation is complete, I will destroy all questionnaires.

I hope you will join your peers and colleagues in participating in this research. I hope the results of my dissertation will benefit future students. If you have any questions, I would be happy to speak with you about this.

Sincerely,

Karen N. Wasserman

Appendix H

Pilot Study Reintroduction Letter

October 2000

Dear Barnard Student,

My name is Karen N. Wasserman. A long time ago, you completed some questionnaires that I used as part of my dissertation research. I am very grateful to you for taking the time to help me with this.

Unfortunately, my dissertation committee at CUNY Graduate Center added a two-page questionnaire to the extensive questionnaires that you already completed. I would be very grateful if you could fill this out as well. The committee also indicated that participants in my research project should be compensated financially for participating.

I'd appreciate it if you could complete the enclosed brief questionnaire and return it in the enclosed envelope. Be assured that your confidentiality and anonymity will be maintained. When I receive the questionnaire, I will send you $20 for your current and prior participation in my dissertation research.

Thank you again.

Sincerely,

Karen N. Wasserman

Karen N. Wasserman
BC '94

Appendix I

Pearson Product Moment Correlations for all Variables

Pearson Product Moment Correlations for All Variables

	entrance	age	ethnic	enrolled	counsel
entrance	1.00	-.940**	-.212	-.626**	.251
age	-.940**	1.00	.194	.634**	-.303*
ethnic	-.212	.194	1.00	.146	-.097
enrolled	-.626**	.634**	.146	1.00	-.214
counsel	.251	-.303*	-.097	-.214	1.00
gpa	.362*	-.268	.023	-.210	.060
ses	.342*	-.315*	.084	-.351*	.164
acaexpec	.297*	-.306*	.012	-.293*	.219
socexpec	.223	-.230	-.068	-.158	.360*
peersupp	.303*	-.321*	-.099	-.176	.288*
facsupp	.113	-.088	.354*	-.187	.051
admsupp	-.004	.059	.362*	.036	-.242

	entrance	age	ethnic	enrolled	counsel
acainteg	.369**	-.353*	.170	-.165	.160
socinteg	.201	-.238	.103	-.095	.287
goalcomm	.283*	-.237	.055	.014	.115
instcomm	.171	-.157	-.001	-.076	-.022
asqbad	-.004	.007	-.194	-.171	-.199
sclgsi	-.098	.100	-.276	-.034	-.366*
sclpst	-.070	.066	-.284	-.046	-.350*
sclpsdi	-.111	.124	-.238	-.008	-.338*
sdtliecl	.123	-.076	.354*	-.095	.163
sdtlirae	-.236	.219	.509**	.259	.169
sdtlipur	.114	-.057	.341*	-.065	.110

	gpa	ses	acaexpec	socexpec	peersupp
entrance	.362*	.342*	.297*	.223	.303*
age	-.268	-.315*	-.306*	-.230	-.321*
ethnic	.023	.084	.012	-.068	-.099
enrolled	-.210	-.351*	-.293*	-.158	-.176
counsel	.060	.164	.219	.360*	.288*
gpa	1.00	.560**	.471**	.268	.346*
ses	.560**	1.00	.339*	.376**	.335*
acaexpec	.471**	.339*	1.00	.645**	.491**
socexpec	.268	.376**	.645**	1.00	.731**
peersupp	.346*	.335*	.491**	.731**	1.00
facsupp	.262	.055	.451**	.482**	.326*
admsupp	.130	.074	.140	.252	.196
acainteg	.280	.300*	.550**	.619**	.618**

	gpa	ses	acaexpec	socexpec	peersupp
socinteg	.139	.231	.582**	.804**	.683**
goalcomm	.477**	.294*	.500**	.511**	.332*
instcomm	.260	-.094	.488**	.534**	.460**
asqbad	.090	.010	-.102	.002	.011
sclgsi	.047	-.194	-.172	-.105	-.112
sclpst	-.012	-.209	-.179	-.152	-.130
sclpsdi	.048	-.174	-.171	-.116	-.137
sdtliecl	.326*	.384**	.428**	.252	.246
sdtlirae	-.065	.008	.190	.106	.022
sdtlipur	.340*	.396**	.372**	.218	.196

	facsupp	admsupp	acainteg	socinteg	goalcomm
entrance	.113	-.004	.369**	.201	.283*
age	-.088	.059	-.353*	-.238	-.237
ethnic	.354*	.362*	.170	.103	.055
enrolled	-.187	.036	-.165	-.095	.014
counsel	.051	-.242	.160	.287	.115
gpa	.262	.130	.280	.139	.477**
ses	.055	.074	.300*	.231	.294*
acaexpec	.451**	.140	.550**	.582**	.500**
socexpec	.482**	.252	.619**	.804**	.511**
peersupp	.326*	.196	.618**	.683**	.332*
facsupp	1.00	.619**	.416**	.581**	.356*
admsupp	.619**	1.00	.411**	.348*	.221
acainteg	.416**	.411**	1.00	.750**	.390**

	facsupp	admsupp	acainteg	socinteg	goalcomm
socinteg	.581**	.348*	.750**	1.00	.409**
goalcomm	.356*	.221	.390**	.409**	1.00
instcomm	.483**	.393**	.424**	.584**	.495**
asqbad	.001	.086	-.185	-.022	.058
sclgsi	-.079	-.019	-.356*	-.149	-.078
sclpst	-.106	-.093	-.366*	-.184	-.107
sclpsdi	-.080	.050	-.296*	-.070	-.046
sdtliecl	.290*	.227	.387**	.298*	.195
sdtlirae	.203	.339*	.408**	.197	.010
sdtlipur	.275	.236	.339*	.267	.211

	instcomm	asqbad	sclgsi	sclpst	sclpsdi
entrance	.171	-.004	-.098	-.070	-.111
age	-.157	.007	.100	.066	.124
ethnic	-.001	-.194	-.276	-.284	-.238
enrolled	-.076	-.171	-.034	-.046	-.008
counsel	-.022	-.199	-.366*	-.350*	-.338*
gpa	.260	.090	.047	-.012	.048
ses	-.094	.010	-.194	-.209	-.174
acaexpec	.488**	-.102	-.172	-.179	-.171
socexpec	.534**	.002	-.105	-.152	-.116
peersupp	.460**	.011	-.112	-.130	-.137
facsupp	.483**	.001	-.079	-.106	-.080
admsupp	.393**	.086	-.019	-.093	.050
acainteg	.424**	-.185	-.356*	-.366*	-.296*

	instcomm	asqbad	sclgsi	sclpst	sclpsdi
socinteg	.584**	-.022	-.149	-.184	-.070
goalcomm	.495**	.058	-.078	-.107	-.046
instcomm	1.00	.255	.220	.238	.175
asqbad	.255	1.00	.585**	.507**	.594**
sclgsi	.220	.585**	1.00	.945**	.914**
sclpst	.238	.507**	.945**	1.00	.784**
sclpsdi	.175	.594**	.914**	.784**	1.00
sdtliecl	.227	-.397**	-.479**	-.449**	-.501**
sdtlirae	.069	-.409**	-.478**	-.497**	-.415**
sdtlipur	.218	-.342*	-.429**	-.402**	-.449**

	sdtliecl	sdtlirae	sdtlipur
entrance	.123	-.236	.114
age	-.076	.219	-.057
ethnic	.354*	.509**	.341*
enrolled	-.095	.259	-.065
counsel	.163	.169	.110
gpa	.326*	-.065	.340*
ses	.384**	.008	.396**
acaexpec	.428**	.190	.372**
socexpec	.252	.106	.218
peersupp	.246	.022	.196
facsupp	.290*	.203	.275
admsupp	.227	.339*	.236
acainteg	.387**	.408**	.339*

	sdtliecl	sdtlirae	sdtlipur
socinteg	.298*	.197	.267
goalcomm	.195	.010	.211
instcomm	.227	.069	.218
asqbad	-.397**	-.409**	-.342*
sclgsi	-.479**	-.478**	-.429**
sclpst	-.449**	-.497**	-.402**
sclpsdi	-.501**	-.415**	-.449**
sdtliecl	1.00	.506**	.987**
sdtlirae	.506**	1.00	.463**
sdtlipur	.987**	.463**	1.00

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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