ASSESSING COLLEGE STUDENTS' MENTAL HEALTH NEEDS: A PROCESS EXAMPLE USING NOMINAL GROUPS AND A SURVEY QUESTIONNAIRE

A Thesis

by

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SURVEY QUESTIONNAIRE. (September 1983)

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An assessment of college students' mental health needs was conducted. The study was designed to provide a process example of a needs assessment whose results could be translated into counseling and psychological service programs. Development of the needs assessment process required consideration of several theoretical issues: (a) how to conceptualize counseling need, (b) how to measure specific counseling needs, and (c) how to use the resultant data for counseling service program decision making. Procedures were designed to require a minimum of administrative time and money, provide a random and representative sample, and yield an acceptable survey response rate.

Three stages were employed in developing the needs assessment. The process was begun with a series of nominal group meetings to explore student perceptions of campus mental health needs. From the information generated by 137 subjects, two separate trial survey questionnaires were constructed. Next, the trial questionnaires

were pretested and revised during pilot surveys using 158 subjects, and eventually condensed into one final needs assessment questionnaire. Finally, from 258 students systematically selected in a stratified random sample, 194 college students (68%) completed the final needs assessment questionnaire.

The final questionnaire asked students to rate 40 college student goals on two scales regarding each goal's level of importance and the university's success in aiding students' goal attainment. Of the 40 goals, 24 were clearly identified as student needs, and 16 were too ambiguously rated for need identification purposes. More than half the items were referred for further study before developing direct counseling programs and services.

Although this example of a mental health needs assessment process has several limitations, its benefits were considered paramount. By examining theoretical issues pertinent to the assessment process, future studies of college students' needs for counseling and psychological services may be more rigorous than past attempts. Additionally, the results do offer evidence of student needs for which counseling programs and services may be planned. More importantly perhaps, student needs were identified that require further investigation and/or program reevaluation.

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DEDICATION

To Allyson Marie Anne Besch-Caison

My wife, partner, and companion in life.

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INTRODUCTION

Needs assessment has been a topic of continuing interest in the counseling and education literature during the past two decades. Program evaluation proponents emphasize the ability of needs assessment to provide university administrators information to assist in planning appropriate services and obtaining necessary funding resources (Harpel, 1976; Lenning & McAleenan, 1979). A number of relatively sophisticated needs assessment strategies and models have been developed, utilized and reported in the literature (Hays, 1977; Kaufman, 1972, 1977; Kimpston & Stockton, 1979; Trimby, 1979; Witkin, 1977). Staff members at college counseling and psychological services centers have adapted many of these needs assessment techniques to college communities. Attempts to assess students' needs for counseling and psychological services have ranged from studies designed to gather data on existing conditions (Indrisano & Auerbach, 1979; Zwibelman, 1977) to studies which measure discrepancies between current and required states (Gill & Fruehling, 1979; Hageseth, McCarthy, & Strohm, 1981). The time and expense required to assess students' needs for mental health services, however, often decreases project feasibility. Most college and university centers have a small staff who work full-time in direct service and prevention activities, and neither manpower nor funds are made available for needs assessment or evaluation (Burck & Peterson, 1975).

In addition to logistical constraints, college populations tend to be relatively transitory and quite resonant to changes which occur in the larger society. Needs may change dramatically in the space of just a few years, and subtle shifts may occur in just a single year (Corazzini, 1979). Therefore, college and university needs assessment projects, to be optimally useful, should involve a minimal time lag between assessment and implementation of the changes suggested by the assessment (King, Newton, Osterlund, & Baber, 1973). A needs assessment program which could be optimally adaptable to the unique nature of the college community (Kaufman, 1972; Lenning & McAleenan, 1979) and which could be carried out rather quickly, with minimal expenditure of time and money, could prove quite useful (Kimpston & Stockton, 1979; Witkin, 1977).

Chapter I

CONTEXT OF NEEDS ASSESSMENT

Student affairs divisions of postsecondary academic institutions have attempted, for years, to improve the quality of college students' lives. Programs rendering health, counseling and financial aid services, to name a few, are common on today's college and university campuses. During the last 10 to 15 years, however, financial resources available for student affairs functions have greatly diminished. Consequently, student affairs professionals have been asked to account for their programs' worth in greater depth and detail (Corazzini, 1979; Lenning & McAleenan, 1979). Harpel (1976) provides an overview of accountability practices for administrators in student affairs. Suggestions for program planning, budgeting and program evaluation are included. According to this accountability model, needs assessment constitutes the first step in the program planning phase.

However, it has been suggested that the development of needs assessment technology has not kept pace with increasing administrative demands for program evaluation and accountability practices within student affairs.

> The evaluation literature generally acknowledges the importance of assessing needs as a prelude to or a part of a systematic evaluation process. The procedures for

> such assessment, however, are rarely explicated.... It is almost as if needs assessment is a self-explanatory and perhaps elementary process. Yet, needs assessment is a complexa and difficult set of procedures that are largely unresearched (Lenning & McAleenan, 1979, p. 185).

Lenning and McAleenan (1979) examine some of the theoretical issues relevant to conducting a needs assessment. Before engaging in needs assessment, consideration of the following questions is recommended: (a) what groups are to be targeted for assessment; (b) how will their presumed needs be conceptualized; (c) how can theoretical needs be operationally defined, to insure their objective measurement; and (d) how will assessment results be implemented (Lenning & McAleenan, 1979). Comments concerning each of these issues are included here.

Target Groups

Some writers suggest that an assessment of college students' needs not stop with a study of students in general. Focusing only on "students in general" may overlook needs particular to student subgroups. Additionally, nonstudent groups may have needs which indirectly influence the status of students' needs (Lenning & McAleenan, 1979). Kaufman (1972) suggests that attempts to aid students in achieving "educational success" at least include input from: (a) learners, (b) parents and community members, and (c) educators. Lenning and McAleenan caution, however, that needs assessments of subgroups identified too specifically can make needs

studies "unduly cumbersome and may decrease the usefulness of the assessment data for planning purposes" (p. 187). Kuh (1979) provides a taxonomy of target groups that may be overlooked in a college student needs assessment. These include: prospective students, dropouts, alumni, families of students, and high school counselors.

Theoretical Definitions of Need

College students have many needs. Presumably, this feature is reflected in the variety of student services offered by student affairs. Moreoever, needs theorists' attempts to define and conceptualize "need" have been numerous. Lenning and McAleenan (1979) review several need schemes, all of which merit consideration by student affairs staff. Among the list of need concepts identified are: (a) developmental needs, (b) environmental needs, (c) problem based needs, and (d) goal based needs.

The question, then, of which need concept to employ in an assessment deserves some consideration. For example, in an assessment of students' needs for counseling services, will needs for problem resolution, goal attainment, or environmental changes, such as increased service advertisements, be assessed?

Operational Definitions of Need

Having decided upon the need scheme to be employed, the assessor is faced with the task of objectively identifying real needs. This is a two-fold problem. It involves: (a) describing specific needs which comprise the domain of needs subsumed by the overall need concept, and (b) deciding how to operationalize the need concept to insure objective measurement of the specific needs.

Describing Needs

Whether assessing students' developmental needs, problem based needs, or other types of needs, as they relate to students' overall need for a particular student affairs service, the needs assessor must first create a list of service-related specific need items. For example, in the area of counseling services, students may need weight loss programs, study help services, or crisis intervention services. To determine students' most prevalent needs, a researcher may: (a) review related needs studies and relevant theory, and/or (b) obtain a prepackaged need inventory. The first method can be rather time consuming, and the second can be costly. Therefore, a needs assessor may opt to generate his or her own list of specific needs relevant to his/her target population. Use of the Nominal Groups Technique (Delbecq, Van de Ven, & Gustafson, 1975) offers the assessor one such "do-it-yourself" approach.

The nominal groups technique is a highly structured, small group process designed for the purpose of generating ideas concerning a specific subject. It is intended to maximize group task orientation and freedom for individual thought and expression, while concurrently minimizing the probability of interpersonal conflict or group deviation from the stated task. The object of group participants using this technique is to arrive at some form of group concensus concerning individual group members' ideas about a specific topic.

Use of the nominal groups technique provides a means of eliciting input from students and nonstudents alike regarding what the

prevalent and specific needs of a target group are for a particular student affairs service. Additionally, the assessor can avoid the time consuming practice of reviewing related literature and the often costly purchase of a prepackaged needs inventory.

Measuring Needs

Developing a list of target needs is only the first of two steps required for objectively identifying needs. In order for identified needs to be useful, an explicit operational definition of the need concept should be included in the assessment (Babbie, 1975). For the most part, educators have chosen to operationalize their research concepts in terms of goals (Harpel, 1976).

Kaufman (1972) defined the concept of need as being the measurable distance (or gap) between the present situation (where we are now) and a stated goal (where we want to be). For several years his discrepancy analysis model was described as the classical method for assessing learner needs in educational planning (Witkin, 1977). Some program evaluation proponents, however, have questioned whether a discrepancy or deficiency analysis sufficiently measures the need concept.

Kimpston and Stockton (1979), although supportive of the discrepancy model's capacity to determine problems for planning, point out that the Kaufman method identifies more problems than can realistically be addressed by planners. The problem becomes one of setting priorities. These writers suggest that in addition to measuring the gap between a current situation and a set of stated goals, two other variable measures be included in an operational definition

of the need concept: (a) the relative attainability of a goal, and (b) the institution's responsibility to its constituents for aiding in goal attainment.

Lenning and McAleenan (1979) agree that an assessment of discrepancies alone may generate insufficient data on which to base program decisions. They suggest that need, as operationalized by the discrepancy definition, has led many program planners to equate "wants" or demands with authentic needs. For example, merely benefitting from a service does not satisfy the criterion of its need. "A gift of one million dollars would benefit most people; but having less than a million dollars would not put most people in an unsatisfactory condition" (p. 188). Additionally, they argue that "met needs," i.e., where there are no measurable gaps, will be overlooked in a discrepancy or deficiency based needs assessment. Measuring only the extent to which programming should be increased or reduced ("incremental needs") neglects the question of whether existing programs are necessary to continue satisfying needs ("maintenance needs"). For these reasons, Lenning and McAleenan suggest that need is actually "a combination of discrepancy and level of necessity" (p. 188).

In summary, the identification of useful needs for a particular student affairs service, involves a two-step process: (a) specific needs must be listed and described, and (b) the need concept must be operationalized to make measurement of the specific needs objective. Use of the nominal groups technique is an alternative approach to reviewing needs literature and theory for the purpose of describing

students' most salient needs. Including measures of need necessity, when analyzing discrepancies between current and required conditions, provides a meaningful definition of the need concept.

Implementation of Results

The purpose of identifying college students' needs for student affairs services is to provide useful information on which programmatic decision making can be based. The ability of student affairs staff members to translate information about students' development, environment, problems and goals into services and programs is important if college students' needs are to be realistically met. Knowledge of whether to maintain or change existing programs can be systematically gained from the results of a properly conceived needs assessment (Gill & Fruehling, 1979; Harpel, 1976).

Summary

College students have needs which student affairs offices attempt to meet by providing student services. Due to increasing administrative demands for greater accountability of those services, student affairs staff members are using the needs assessment to provide a base for systematic program planning. However, the procedures for conducting a needs assessment are not very well researched. In this regard, some theoretical considerations for developing a needs assessment were offered. They are: (a) what groups are to be targeted for assessment; (b) how will their presumed needs be conceptualized; (c) how can theoretical needs be operationalized to insure their objective measurement; and (d)

how will assessment results be implemented. Suggestions for answering these questions were offered.

Chapter II

REVIEW OF RELATED LITERATURE

Thus far, researchers have approached the task of determining college students' needs for counseling services from three major perspectives: student development theory, facility usage studies and survey studies (Gill & Fruehling, 1979). Gill (1976) reviewed studies which used at least one of these three research methods to identify counseling service needs of students. He concluded that although each method has a role in need assessment, the survey study, when conducted properly, was the most useful for assessing student needs.

However, counselors often possess little knowledge of how to properly use survey research methods. The lack of emphasis on professional training in this regard may account for inattention to the use of rigorous survey research practices when studying college students' needs (Kuh, 1979; Wheeler & Loesch, 1981). Hackett (1981) suggests that the frequent misuse of survey methods as a means of assessing students' counseling needs most often involves methodological problems related to sample selection, questionnaire development and data collection. Others (Gill & Fruehling, 1979; Harpel, 1976) point out that most measures used in past needs assessment strategies are methodologically impractical. Specifically, Gill & Fruehling emphasize the necessity for needs researchers to design

their studies to generate data that translate "into concrete, and usable realities for the practicing college counselor" (p. 323). Needs researchers' inattention to sound methodological practices of survey research may lead to results which are questionable on the basis of validity and representativeness, as well as usefulness. Several methodological concerns have been described in the literature.

Need Measures

Typically, published survey research studies of college students' counseling and psychological service needs have measured self-reports from students concerning incidence of their problems and concerns, appropriateness of topics for discussion, and preferences for assistance and type of help desired (Tryon, 1980). Examples of research into each of these areas are included here.

Regarding preference measures: Graff and Horne (1973) asked married college students if they wanted counseling in nine areas of student concerns. Benjamin and Romano (1980) asked students whether four counseling center services should be offered, while Simono (1978) asked students to provide ratings of importance of seven counseling center services. Lenning and McAleenan (1979) suggest that this approach may confuse student wants with needs. For example, students may indicate that they desire a particular service but fail to utilize the service once provided. Moreover, Friedlander's (1978) research suggests that there is a difference between asking students to rate importance of a service in meeting specific needs and students' intentions to use the service. Carney,

Savitz, and Weiskott (1979) attempted to bypass the problem by asking students to indicate how likely they would be to participate in counseling center sponsored workshops. However, few studies seem to have seriously addressed the question of whether wants equal needs.

As noted, researchers also frequently measure incidence reports of problems and concerns as well as students' perceptions of what topics are appropriate to discuss with a counselor. Henggeler, Sallis, and Cooper (1980) found that students rated alcohol abuse, smoking, and drug abuse as most serious of 24 mental health problems. Of 14 pressures reported to Fullerton and Potkay (1973), most students cited "grades," "money," and "social" as their three major pressures. Indrisano and Auerback (1979) found that students rated study habits and grades, disturbing thoughts, and sleep as the most prevalent of 26 areas of concern. Shueman and Medvene (1981) studied student perceptions of appropriateness of presenting problems. They concluded that after 20 years of research in this area, students continued to view concerns of an educational, vocational, and academic nature as being more appropriate for presentation to a counselor than concerns of a personal adjustment nature.

Limitations

In her discussion of survey limitations, Hackett (1981) warns of potential misuse of information collected during surveys due to inadequacy or superficiality. The survey studies cited above, for example, yield results either too general or misleading to be useful in the empirical evaluation of students' needs for counseling center

services and programs (Gill & Fruehling, 1979; Harpel, 1976). Babbie (1975) addresses the need for useful survey results in this respect. He recommends that studies include explicit operational definitions of research concepts. The ability to translate data concerning student problems, concerns and help preferences into counseling center services and programs is important if college students' counseling needs are to be realistically met (Gill & Fruehling, 1979; Hageseth et al., 1981).

An Alternative Strategy for Measuring Need

Gill (1976) developed a survey instrument to assess college student counseling needs. His attempt to operationally measure counseling needs surpassed previous efforts to produce usable assessment results. After first reviewing the literature on expressed student concerns and problems he developed goal statements reflective of those concerns from which, he assumed, needs might develop. Through a mail questionnaire survey he asked students to rate each goal statement on two five-point Likert scales: (a) "How important to you is achievement of this goal at this time?" and (b) "How successful is this institution in helping you achieve this goal?" Also, students were offered the option of indicating that the institution is not responsible for helping them attain the goals.

Gill's attempt to develop a needs assessment strategy to study college students' counseling needs is noteworthy in several respects. The assessment was not limited to asking students about present concerns or desired services. Instead, Gill conceptualized "counseling need" as problem based and converted common student

problems into goal statements reflecting problem resolutions. By obtaining ratings on institutional "success" and "unsuccess" in aiding goal achievement he produced a measureable gap between "what is" and "what should be." Furthermore, asking students about "importance" and "unimportance" of goal achievement and institutional responsibility for aiding in achievement, yielded a measure of each goal's level of necessity for program planning. Results of this type of survey provide the student affairs professional concrete evidence concerning which counseling programs should be developed, maintained, or considered for further study.

Sample Selection Methods

A second methodological problem of survey studies involves sample selection. Haphazardly choosing student samples for a survey subtracts from results' validity and representativeness (Hackett, 1981). Fullerton and Potkay (1973), for instance, approached students "at random" during "various" (p. 356) hourly and daily times, while Ancheta (1980) offered no description of the sample selection procedure employed: "A sample of...students completed a...questionnaire" (p. 156). Carney and Savitz (1980) initially selected a random sample of students for a telephone survey. When the caller was unable to reach a student after three calls "another one was randomly selected until the desired sample size was achieved" (p. 598). Scheaffer, Mendenhall, and Ott (1979) warn against changing sampling elements arbitrarily, i.e., after the initial sample is drawn. Results may be biased due to "haphazard" substitutions.

Arbitrarily sampling introductory psychology (Gelso, Birk, Utz, & Silver, 1977; Gelso, Karl, & O'Connell, 1972) or sociology (Shueman & Medvene, 1981) classes is another frequently used sampling procedure. As in King et al. (1973), who sampled students from a list of classes whose enrollment equalled 100 or more, there is always the possibility that those students not given the chance of being selected might have responded to the survey differently from those who were selected (Goldman, 1976).

Strict adherence to probability sampling theory is the key to obtaining a representative sample. Failure to do so may result in biased data, unrepresentative of the population under consideration (Matross, 1981). Hackett (1981) discusses the most reliable and accepted probability sampling schemes, e.g., simple random, systematic, stratified and cluster sampling in her review of survey research methods.

Questionnaire Development Practices

Development of an appropriate and relevant survey instrument is another area which has received attention (Babbie, 1975; Berdie & Anderson, 1974). The question of whether an instrument has content validity is especially important in survey research. An instrument's items should cover a representative sample of the domain of behavior being investigated (Anastasi, 1976). In practice, however, counseling needs researchers frequently have neither the time nor skills to adequately insure content validity of their survey instruments. Consequently, they often either generate a list of questions based upon their own expectations regarding student concerns (e.g.,

Henggeler et al., 1980; Snyder, Hill, & Derksen, 1972), or derive such questions from lists of student concerns previously identified in similar studies (e.g., Hummers & DeVolder, 1979; Shueman & Medvene, 1981; Webster, Sedlacek, & Miyares, 1979). These methods of question-item development may ignore the potential for sudden changes in students' concerns, as well as other idiosyncracies of the population in question (Corazzini, 1979; King et al., 1973).

Ideally, questions should be timely. Moreover, they should be relevant to the intended respondents, addressing those problems and needs most applicable to the particular college community under study (Babbie, 1975). Berdie and Anderson (1974) suggest "knowing your people" (p. 27) prior to developing the questionnaire. Kaufman (1972), likewise stresses the importance of investigating the target population's "context of values" (p. 32) as a starting point in needs assessment. King et al. (1973) interviewed education and psychology students concerning students' problems and knowledge of the counseling center. From the students' responses to open-ended questions, the authors constructed a multiple choice questionnaire, part of which was designed to determine what types of problems students were experiencing.

The nominal groups technique for program planning (Delbecq et al., 1975) provides a needs researcher with a method to easily determine concerns students have which are common to a particular college community. Use of the nominal groups technique to systematically analyze the domain of behavior to be measured during the

survey enables the needs researcher who is short on time and research skills to feel confident of the instrument's content validity.

Data Collection Techniques

In addition to using accepted probability sampling schemes and asking clear questions, Matross (1981) includes obtaining high response rates as a major criterion for a methodologically sound survey. Consideration of this factor, as well as money and time constraints, and extent of need for question clarification, usually figure heavily in one's decision of how best to collect the survey data (Hackett, 1981; Miller, 1970; Scheaffer et al., 1979; Weisberg & Bowen, 1977). Scheaffer et al. (1979) review four major types of survey data collection approaches: (a) personal interviews; (b) telephone interviews; (c) self-administered questionnaires, which usually are mailed; and (d) direct observations. The latter method will not be considered here as a serious survey alternative. More often than not, counselors' direct observations are unsystematic and subjective (Lenning & McAleenan, 1979). Such simplistic observations can lead to program emphasis shifts grounded more on humanitarian and idealistic sympathies than tangible evidence for such changes (Bingham & Tucker, 1981; Harpel, 1976).

Personal Interviews

Although time consuming and frequently expensive to conduct, personal interviews usually yield high response rates. People tend to respond when confronted in person (Scheaffer et al., 1979). Fullerton and Potkay (1973) interviewed undergraduate students to assess their perceptions of personal pressures and help sources.

They obtained a better than 98% response rate. Personal interviews also offer the opportunity for "on the spot" clarification of questions. However, deviations from the required interview format and differences in interviewers' personal styles of interacting with respondents may introduce bias into the sample data (Miller, 1970).

Telephone Interviews

Telephone interviews, compared to personal interviews, tend to cost less time and money. They do, however, entail more problems related to insuring response accuracy, via question clarification, and obtaining adequate response rates (Hackett, 1981). Of 450 students Carney and Barak (1976) selected at random for a telephone survey, data from 238 was not obtained, resulting in a response rate of 47%. Carney and Savitz (1980) surveyed students by telephone and achieved their intended sample size. They did so, however, by substituting new subjects for those initially selected, a tact which disregards problems associated with inattention to probability sampling procedures. After three attempts to reach a sampled student by telephone proved unsuccessful, another student was selected for survey. Although the desired sample size was achieved in this case, a discussion of response rate, e.g., 100%, is meaningless in light of the haphazard sampling procedure employed. Matross (1981) suggests that as many as 10 call-backs may be required at some colleges before a 90% response rate is realized. Scheaffer et al. (1979) provide statistical procedures for selecting the number of call-backs necessary to overcome a less than desirable response rate.

Questionnaires

Self-administered questionnaires require little time and money (Miller, 1970). When mailed, however, their results are frequently open to question (Hackett, 1981). Mail questionnaires generally yield lower response rates than do telephone interviews, thereby casting doubt on the results' representativeness (Weisberg & Bowen, 1977). To correct this problem many studies frequently make follow-up contacts. Matross (1981) reports that as many as four to five follow-ups may be necessary to obtain a 75% response rate to mailed surveys. Graff and Horne (1973) made three follow-up contacts while assessing counseling needs of married students and obtained an average return rate of 75%. Benjamin and Romano (1980), however, mailed a prequestionnaire letter and additionally employed three follow-up contacts while surveying students and faculty regarding counseling needs. They only received 42% completed questionnaires. Rust and Davie (1961) questioned college students by mail about their personal problems. After two follow-up contacts a 56% response rate was obtained. In contrast, Webster et al. (1979) compared white and minority college students' perceptions of the seriousness of certain problems. They used only one follow-up contact and obtained a return rate of 74%.

The following response rates were obtained in mail surveys with no follow-up contacts: King and Matteson (1959), 49% response rate to a questionnaire concerning what kinds of problems students felt were most appropriate to bring to a counseling center; Kramer, Berger, and Miller (1974), 39%; Penney and Buckles (1966), 24% return

rates on questionnaires designed to assess students' problems and preferred sources of assistance; and Simono (1978), average 58.5% response rate to a questionnaire mailed to students and faculty to determine differential importance placed on counseling and psychological services. The use of follow-up contacts to mailed questionnaires is imperative if an adequate response rate is desired. However, even sustained efforts to obtain a substantial number of completed mailed questionnaires will not always prove fruitful.

When poorly designed and not pretested, self-administered mailed questionnaires, may also provide questionable results. Faced with such a questionnaire, respondents may require but be unable to receive further clarification of survey purpose and questions (Hackett, 1981). Clearly, while mailed survey questionnaires may initially cost little time and money, in the long run their disadvantages may more than outweigh their benefits.

In general, personal interviews rate highest, when compared to either mailed questionnaires or telephone interviews, in obtaining high response rates and insuring valid responses. Mail questionnaires are better means for collecting survey data when only cost factors are considered (Miller, 1970; Weisberg & Bowen, 1977). Hackett (1981) suggests that telephone surveys may be a compromise between mail questionnaires and personal interviews.

In addition, personally distributing self-administered questionnaires to groups, such as university classes when available, may be another compromise between mailed questionnaires and personal interviews. As noted, surveys employing a self-administered

questionnaire to collect data are inexpensive and require little time to conduct. When personally distributed to groups of students, in contrast to mailing, the personal contact with respondents may also increase the results' validity. For example, the presence of a survey administrator in the classroom offers respondents the opportunity to obtain clarification about question, questionnaire format and survey purpose. Additionally, return rates may be positively effected. Henggeler et al. (1980) administered a mental health needs assessment survey questionnaire to 25 randomly selected university classes. Of the 457 students present at the time the survey was conducted, all returned completed questionnaires. In an attempt to determine student perceptions of appropriate problems for presentation at a counseling center, Shueman and Medvene (1981) surveyed a total of 532 freshmen students in introductory sociology classes at a large university and a small community college. They also reported a return rate of 100% of those who were there. Johnson (1977) selected a stratified random sample of university classes containing 427 students. Survey questionnaires to assess students' attitudes towards counseling were administered in the classrooms. Of the 407 questionnaires returned, 377 (or 92.6%) were determined usable. As suggested earlier, people tend to respond when confronted in person (Scheaffer et al., 1979).

Problem Statement

The needs assessment can be a useful tool for student affairs professionals in the college and university setting. Needs assessment results can provide usable information for making programmatic

decisions. However, a review of survey research studies of college students' problems, concerns, preferences for help, and related needs reveals several basic methodological problems. Inattention to appropriate survey research methodology may lead to the use of inadequate operational definitions of need (Gill & Fruehling, 1979; Harpel, 1976), haphazard methods of sample selection (Hackett, 1981; Matross, 1981), psychometrically questionable practices of questionnaire development, (Berdie & Anderson, 1974; Matross, 1981), and deficient techniques for collecting data (Hackett, 1981; Matross, 1981). Consequently, one's confidence in such survey studies' results, required for effective decision making when programming for college student counseling needs, may be less than desirable.

The present project was designed to provide a process example of a college student needs assessment whose results could be translated into counseling and psychological service programs. Development of the needs assessment process required consideration of several theoretical issues: (a) how to conceptualize counseling need, (b) how to measure specific counseling needs, and (c) how to use the resultant data for counseling service program decision making. The study design was of the survey type, and employed a self-administered questionnaire for the assessment instrument. Procedures were designed to require a minimum of administrative time and money, provide a random and representative sample, and yield an acceptable survey response rate.

Chapter III

METHOD

Setting

The study was conducted at Appalachian State University, a southeastern university located in the Appalachian Mountains of western North Carolina. The total enrollment at the school is approximately 10,000. The Counseling and Psychological Services Center at Appalachian State is considered to be fairly traditional in orientation. The center offers free counseling facilities to students upon request. Services rendered include individual and group counseling for educational and vocational questions as well as concerns of a more personal nature. The center also provides individual and group testing services for the university community.

Stages of Study

Three stages were employed in developing the student mental health needs assessment: (a) The process was begun with a series of nominal group meetings to explore student perceptions of campus mental health needs. From the information generated, two separate trial survey questionnaires were constructed; (b) The trial questionnaires were pretested and revised during pilot surveys, and eventually condensed into one final needs assessment questionnaire; (c) College students were surveyed using the final needs assessment

questionnaire. Following is an account of the activities comprising each stage of the study.

Stage I: Development of Trial Survey Questionnaires

Subjects. Initial attempts to generate need items for inclusion in two trial survey questionnaires involved sampling 137 Ss in small groups. No systematic efforts were made to randomize Ss. The sample primarily consisted of freshmen and sophomore students. However, input from some upperclassmen, including graduate students, and university personnel was obtained. The sample groups included several intact groups such as a sorority, a Vietnam veterans group, a church group, a junior transfer students group, a local students group, a women's dormitory group, two counseling center professionals groups, and a group comprised of university student development professionals. Several of the groups consisted of student volunteers from undergraduate psychology courses. The undergraduate psychology students were offered partial credit for fulfillment of class research requirements for their participation. All group members participated on a voluntary basis.

Materials. Group leaders were required to conduct the nominal groups. Ten masters level graduate students from the psychology department were selected for this purpose. A total of five hours staff time was devoted to instructing the graduate students in the procedures for conducting nominal groups. In order to standardize, as much as possible, procedures for conducting the nominal groups, group leaders were provided with typed instructions to read to the groups' participants. Complete instructions as delivered to students

are included in Appendix A. Group leaders additionally employed a standard group handout, summarizing for participants the leaders' expectations of them during the group meetings' initial stage. A complete copy of the handout is contained in Appendix B.

Procedures. Within a one week period, the 10 graduate students collected data from students via a series of 18 nominal groups meetings. Group meetings ranged in duration from 30 to 40 minutes, depending upon group size. Number of participants in each meeting ranged from 4 to 10, with an average of 7 student participants per meeting. At the outset of the meetings group leaders provided participants with verbal and written instructions concerning the groups' intended activities and purpose.

Three lists of need/problem statements were developed within each group: (a) Each student individually generated his or her own list of problem statements, (b) from which students consensually generated a group list in round robin fashion. (c) Based upon items contained in the group list students individually listed and ranked five problem statements they perceived as being the most serious for ASU students.

The author calculated rankings for each group's list of consensually generated problem statements by adding individuals' rankings within groups. The process yielded a list of ranked problem statements for each of the 18 groups. The lists were then distributed equally among the author, the assistant director of the counseling center, and a psychology faculty member. These three individuals separately converted the problem statements into three

separate lists of specific, behaviorally oriented goal statements. The author compiled and pared the three lists to produce a preliminary pool of 97 goal statements. Sixty-eight of the items were chosen for inclusion in the trial questionnaires. The remaining 29 items were discarded due to their ambiguity or similarity to accepted items.

Using Gill and Fruehling's (1979) taxonomy of eight college student goal areas, and the type of goals subsumed by each area, the 68 goal statements were subjectively classified according to the following categories: (a) personal security (27 items), (b) sexual adjustment (2 items), (c) marital and close relationships (5 items), (d) family relationships (5 items), (e) social relationships (20 items), (f) educational-vocational planning (2 items), (g) work-study development (4 items), and (h) community involvement (3 items). The complete list of 68 goal statements, as categorized using Gill and Fruehling's (1979) college student goal taxonomy, is included in Appendix C.

Once categorized, every other one of the 68 goal statements falling into five goal areas (personal security, marital and close relationships, family relationships, social relationships, and community involvement) was selected for inclusion on the first trial questionnaire. The remaining items in the above five areas were included on the second trial questionnaire. All items subsumed by sexual adjustment, educational-vocational planning, and work-study development, were included on both trial questionnaires. The decision for doing so was due, in part, to the fact that there were

so few goal statements of these kinds, and, in the author's judgment, they all appeared to reflect valid needs of ASU students.

Stage II: Pretest and Revision of Trial Questionnaires

Subjects. A total of 158 Ss from one developmental psychology class and five introductory psychology classes, participated in the study's second phase, during which two separate trial survey questionnaires were given a pilot administration. Again, no systematic efforts to randomize either students or classes were made. The number of Ss participating in each of the pilot tests were: 103 and 55. The 66 males and 92 females were mostly single (145), between the ages of 17 and 21 years (143), and enrolled for 12 or more credit hours (140). They identified their class standings to be: Freshmen (90), Sophomores (38), Juniors (18), Seniors (7), and Others (5). All Ss voluntarily completed the survey questionnaires, and the introductory psychology students were offered partial credit for fulfillment of class research requirements for their participation.

Materials. The two trial questionnaires were developed using the data generated in the nominal groups, for the purpose of (a) conducting a pilot survey of students' counseling needs, and (b) testing the efficacy of the questionnaires' design. Copies of Form I and II of the trial questionnaires are included in Appendix D.

The questionnaires were divided into two main sections. The first section consisted of six multiple choice items designed to gather demographic data, such as sex, age, marital status,

enrollment status (number of credit hours), class (freshman, sophomore, etc.) and academic area. The second section consisted of two questions about each of 40 needs-goal statements. Two open-ended questions were included at the end of this section for additional comments concerning: (a) personal goals not included in the inventory, and (b) the content and structure of the inventory as a whole. Concerning each of the 40 goal statement items, for example, "Decrease my use of alcohol," Ss were asked: (a) "How important to you is achievement of this goal at this time?", with Likert ratings consisting of "very unimportant," "unimportant," "important," and "very important," and (b) "How successful is ASU in helping you achieve this goal?", with ratings consisting of "very unsuccessful," "unsuccessful," "successful," and "very successful." A "not applicable" rating was allowed on the "importance" scale and a "not ASU's responsibility" rating on the "success" scale, giving each Likert scale a five-point rating potential. All item response options were constructed for computer processing of data.

Lenning and McAleenan (1979) defined counseling need as "a combination of discrepancy and level of necessity" (p. 188). Their two-dimensional definition of counseling need provided the theoretical basis for the manner in which survey questions and goal statements were related. Need items, about which the two survey questions queried, were stated in specific, behaviorally (goal) oriented terminology. The author assumed, as did Gill (1976), that college student goals could indicate student concerns from which needs might develop. Therefore, the survey questionnaires offered students

the opportunity to rate goal achievement importance (level of necessity), as well as the institution's success in assisting students in goal achievement (discrepancy).

Procedures. The two trial questionnaires were given a pilot run over a period of two days in one developmental and five introductory psychology classes. No efforts were made to randomly select student or class samples. Instead, the author approached class instructors arbitrarily to ask permission to use class time to administer the questionnaires. Total class time requested was 15 to 20 minutes. All six course instructors approached allowed their students to be surveyed.

During the pilot run, students were encouraged to provide written and verbal feedback about the questionnaires' instructional format, its graphic layout, clarity of survey questions'/items' wording, and to add any personal goals not already listed on the inventories. Their input in this regard provided the basis for the progressive reshaping of the trial questionnaires' design. A standard verbal introduction to the questionnaires, delivered to students, is contained in Appendix E. Other instructions delivered to students during the pilot runs, with accounts of changes in survey format (verbal and written) and administrative procedures, are included in Appendix F.

Student feedback and computed frequencies for the item ratings were used in constructing a final 40 item version of the questionnaire, requiring a 15 minute classroom administration time. Several criteria were used in determining which of the 68 items, from the

trial questionnaires' administrations to the six test groups, should be omitted from or included on the final survey instrument: (a) if a high percentage of cases did not answer a question about a goal statement, or responded with "not applicable" regarding "importance of achieving," the item was suspected of being too ambiguous for inclusion on the final survey questionnaire; (b) if a high percentage of cases responded to the "importance of achievement" question concerning a goal statement in the form of "very unimportant" or "unimportant," then the item received a low priority rating for inclusion on the final survey questionnaire; and finally, (c) the reliability of test subjects' responses to the two questions about goal statements was considered as a means of determining whether or not to include an item in the final survey instrument. If the symmetry of computed response frequencies (graphically portrayed in histograms) for questions about a goal item, across the six test groups, was fairly similar, then the item was considered probably to be a good one.

Stage III: Final Assessment of Students' Mental Health Needs

Subjects. A stratified systematic sample of classes from various schools and departments throughout the university produce a sample of 11 classes with a total enrollment of 285 students. The method for selecting the final student sample involved systematic sampling of clusters from within four strata, with sample elements defined as students, and clusters (classes in which students were enrolled) as sampling units. A master computer file listing all classes taught in the Spring of 1982, with respective numbers of

students enrolled, was selected as a sampling frame. The following classes were excluded from the survey to simplify the study's design: (a) thesis courses, (b) labs, (c) independent-individual studies, (d) classes with five or fewer students enrolled, and (e) classes taught during the first half of the Spring semester, since such classes would not have been available during the last half of the semester when the actual survey was conducted. The four strata were designated according to assessed course difficulty level using ASU course numbers:

Stratum 1. 1000 - 1999

Stratum 2. 2000 - 2999

Stratum 3. 3000 - 4499

Stratum 4. 4500 and above

Such a procedure was deemed the most appropriate in terms of the type of student taking a particular level course. Students with less knowledge of what kinds of services are offered at ASU were expected to be enrolled in lower level courses, and more experienced and knowledgeable students should be in more advanced courses. In all, 11 classes were selected for the final sample based upon an intended sample size of 250 students. The procedure used to select the final student sample, with figures for the proportional allocation of students to strata is included in Appendix G.

Only 194 students (68%) served as Ss, voluntarily completing the final needs assessment survey questionnaire, with no promise of reward or renumeration. (See Table 1 for breakdown of strata by: (a) department from which classes were sampled, (b) course number,

(c) title of classes sampled, (d) number of students enrolled in each class, (e) number of students present on day of survey who participated in Ss, (f) survey day, and (g) survey time.) The 102 males, 91 females, and 1 unidentified person, were mostly single (171), between the ages of 17 and 21 years (142), and enrolled for 12 or more credit hours (168). They indicated their class standings to be: Freshmen (46), Sophomores (39), Juniors (57), Seniors (36), and Others (16).

Materials. Development and construction of the third and final needs assessment survey questionnaire was based upon the analysis of hard data and student feedback produced during the pilot tests of the two trial questionnaires. A copy of the final survey questionnaire is included in Appendix H. The final needs assessment questionnaire, with minor exceptions, was designed using basically the same format as the two trial questionnaires. It was divided into two main sections. The first section consisted of five multiple choice items designed to gather demographic data, such as sex, age, marital status, enrollment status (number of credit hours), and class (freshman, sophomore, etc.). The second section consisted of two questions about each of 40 needs-goal statements. Two open-ended questions were included at the end of this section for additional comments concerning: (a) personal goals not included in the inventory, and (b) the content and structure of the inventory as a whole. Concerning each of the 40 goal statement items, Ss were asked: (a) "How important to you is achievement of this goal at this time?", with Likert ratings consisting of "very unimportant,"

Table 1

Strata Breakdown

Stratum	Department	Course #	Course Title	Survey Day	Time	# Students[a] Enrolled	# Subjects[b]
S_1	English	1100	Introduction to Literature	Wednesday	3:00	26	13
	Math	1010	Introduction to Math	Thursday	12:00	35	22
	Physical Education	1019	Racquetball	Thursday	3:00	20	14
	Sociology	1110	Marriage and Family	Thursday	2:00	50	16
						(131)	(65)

(table continues)

Table 1 (continued)

Stratum	Department	Course #	Course Title	Survey Day	Time	# Students[a] Enrolled	# Subjects[b]
S_2	Business Education	2660	Introduction to Business Data	Thursday	3:00	30	9
	Philosophy and Religion	2010	Old Testament Literature	Wednesday	2:00	21	26
						(51)	(35)
S_3	Business Education	3910	Business Law I	Thursday	8:00	12	11
	Marketing and Management	3050	Principles of Marketing	Friday	9:00	54	43

(table continues)

Table 1 (continued)

Stratum	Department	Course #	Course Title	Survey Day	Time	# Students[a] Enrolled	# Subjects[b]
	Psychology	3302	Educational Psychology	Thursday	8:30	13	18
						(79)	(72)
S_4	Marketing and Management	4550	International Marketing	Wednesday	12:00	14	11
	Biology	5514	Plant Anatomy	Wednesday	2:30	10	11
						(24)	(22)
					Totals	(285)	(194)

[a]Numbers in parentheses indicate strata subtotal numbers and total number of students enrolled in selected class samples.

(table continues)

Table 1 (continued)

[b]Numbers in parentheses indicate strata subtotal numbers and total number of students participating in the survey.

"unimportant," "important," and "very important," and (b) "How successful is ASU in helping you achieve this goal?", with ratings consisting of "very unsuccessful," "unsuccessful," "successful," and "very successful." A "not applicable" rating was allowed on the "importance" scale, and a "not ASU's responsibility" rating on the "success" scale, giving each Likert scale a five point rating potential. Item response options were constructed for computer processing of data.

Procedures. The final assessment of student needs involved obtaining permission to sample selected classes, and administering the final needs survey questionnaire. After selecting the class samples, the author approached the respective class instructors to ask permission for use of class time to administer the questionnaire. Total class time requested was 15 minutes. All but one course instructor approached was willing to cooperate. To avoid loss of the nonparticipating class, the author went back to the Master File of classes, and in accordance with suggested probability sampling procedures, again systematically sampled the appropriate stratum for a replacement cluster sample. The instructor of the replacement class did agree to allow his class to be surveyed. Portions of three days were used to survey the classes. Complete instructions as delivered to students are in Appendix E. Class time requirement for questionnaire administration averaged 15 minutes.

Computer Processing of Data

The concept of a need, defined as a combination of the amount of discrepancy and the level of necessity (Lenning & McAleenan, 1979)

provided the theoretical basis for the initial analysis of data. In this regard, students' responses to the two survey questions were analyzed on two dimensions. For each of the 40 goal statement items, students rated the importance of achieving a goal (Survey question 1) on a five position Likert scale, and then rated ASU's success in aiding achievement of the same goal (Survey question 2) on a different five position Likert scale.

Cross tabulations of student ratings on the two five position Likert scales concerning each of the 40 goal statement items produced response frequencies for each pair of crosstabs. These pairs of responses became the units of analysis for the identification of students' needs. The frequencies were plotted on a 5 x 5 two dimensional data matrix, one dimension being goal achievement and the other, institutional success in assisting goal achievement (Gill & Fruehling, 1979; Hageseth et al., 1981). A crosstabulation matrix of the two scales looks like this: (See Table 2).

The top number in each cell of the matrix is the frequency, and the bottom number is the percentage that frequency is of the total. Missing responses were excluded. The matrix is the computer output of "Subprogram Crosstabs" in SPSS.

To further simplify the analysis of data, the 5 x 5 matrix was collapsed into a 3 x 3 data matrix. This was accomplished by combining rating categories: On Scale 1, ratings of "very important" and "unimportant" became "unimportant," and "very important" and "important" became "important." On Scale 2, ratings of "very unsuccessful" and "unsuccessful" became "unsuccessful," and "very

Table 2

Crosstabulation Matrix (5 x 5) for Item Number One

Question 1		Question 2				
		Very Unsuccessful 0	Unsuccessful 1	Successful 2	Very Successful 3	Not Responsible 4
Very Unimportant	0	0 0.0	2 1.0	8 4.2	2 1.0	0 0.0
Unimportant	1	1 0.5	0 0.0	2 1.0	0 0.0	1 0.5
Important	2	1 0.5	4 2.1	49 25.7	0 0.0	1 0.5
Very Important	3	3 1.6	10 5.2	85 44.5	8 4.2	12 6.3
Not Applicable	4	1 0.5	0 0.0	0 0.0	0 0.0	1 0.5

successful" and "successful" became "successful." The 3 x 3 crosstabulation matrix looks like this: (See Table 3). Collapsing the data matrix in this manner produced categories that seemed to describe the data in a practical fashion.

Table 3

Crosstabulation Matrix (3 x 3) for Item Number One

			Question 2		
			Unsuccessful	Successful	Not Responsible
			1	2	3
Question 1	Unimportant	1	3	12	1
			1.6	6.3	0.5
	Important	2	18	14.2	13
			9.4	74.3	6.8
	Not Applicable	3	1	0	1
			0.5	0.0	0.5

Chapter IV

RESULTS

Table 4 presents in tabular form the results of the 3 x 3 cross tabulation matrices for each of the 40 goal statement items. Only seven rating categories are shown: "important" x "unsuccessful" (category A), "important" x "successful" (B), "important" x "not responsible" (C), "unimportant" x "not responsible" (D), "unimportant" x "unsuccessful" (E), "unimportant" x "successful" (F), and "not applicable" (G). Category G ("not applicable") subsumes the following three categories of the 3 x 3 matrix: "not applicable" x "unsuccessful," "not applicable" x "successful," and "not applicable" x "not responsible." The table shows the counts and percentages (response frequencies) of students rating each of the 40 goal-items in each of the seven categories, and the total number of students rating each goal-item.

Knowledge of how most students rated an item is necessary for the identification of students' needs. Analysis of the data should include a method to determine which response frequencies for the rating categories are reflective of substantial agreement about the importance and success dimensions for each item. For example, the need or justification for program or service development aimed at helping students achieve a goal would be indicated if a substantial number of students rated achievement of that goal as "important,"

Table 4

Student Response Frequencies for Item Ratings, Counts and Percentages, and Total Responses to Items

Item	Rating Categories[a] A "Important" x "Unsuccessful" CNT	PCT	B "Important" x "Successful" CNT	PCT	C "Important" x "Not Responsible" CNT	PCT	D "Unimportant" x "Not Responsible" CNT	PCT	E "Unimportant" x "Unsuccessful" CNT	PCT	F "Unimportant" x "Successful" CNT	PCT	G "Not Applicable" CNT	PCT	n
1. Improve my ability to make decisions.	18	9.4	142	74.3	13	6.8	1	.5	3	1.6	12	6.3	2	1.0	191
2. Maintain my sense of individuality amidst peer pressure to conform.	28	14.7	64	33.5	63	33.0	14	7.3	7	3.7	9	4.7	6	3.1	191
3. Become more responsible in handling the freedom of college.	26	13.9	91	48.7	27	14.4	10	5.3	4	2.1	14	7.5	15	8.0	187

(table continues)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
4. Decrease my use of alcohol.	9	5.0	6	3.3	22	12.2	56	31.1	23	12.8	14	7.8	50	27.8	180
5. Decrease my use of marijuana.	8	4.7	4	2.4	9	5.3	31	18.2	10	5.9	8	4.7	100	58.8	170
6. Control my weight within desired limits.	36	20.0	31	17.2	59	32.8	19	10.6	4	2.2	5	2.8	26	14.4	180
7. Eat more nutritiously.	69	36.5	55	29.1	38	20.1	5	2.6	10	5.3	6	3.2	6	3.2	189
8. Develop an effective exercise plan.	29	15.5	88	47.1	40	21.4	14	7.5	4	2.1	6	3.2	6	3.2	187

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
9. Spend less time being down and depressed.	44	23.8	60	32.4	37	20.0	9	4.9	8	4.3	5	2.7	22	11.9	185
10. Learn how to be a happier person.	34	18.0	74	39.2	48	25.4	7	3.7	4	2.1	8	4.2	14	7.4	189
11. Learn to better control my anger.	24	12.8	42	22.5	59	31.6	23	12.3	8	4.3	3	1.6	28	15.0	187
12. Learn ways to reduce and control anxiety.	56	29.5	58	30.5	42	22.1	11	5.8	5	2.6	5	2.6	13	6.8	190
13. Examine and evaluate my value system.	27	14.1	76	39.6	62	32.3	12	6.3	5	2.6	4	2.1	6	3.1	192

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
14. Be more familiar with campus resources for help with educational and personal problems.	56	29.3	90	47.1	6	3.1	2	1.0	9	4.7	23	12.00	5	2.6	191
15. Budget my time more effectively.	43	22.6	72	37.9	61	32.1	2	1.1	5	2.6	5	2.6	2	1.1	190
16. Acquire financial resources necessary to allow me to continue school.	55	30.9	69	38.8	13	7.3	8	4.5	6	3.4	13	7.3	14	7.9	178

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	NCT	PCT	NCT	PCT	CNT	PCT	CNT	PCT	
17. Have better control of my money.	47	25.0	30	16.0	91	48.4	11	5.9	2	1.1	2	1.1	5	2.7	188
18. Become better informed about birth control and pregnancy.	21	11.8	43	24.2	18	10.1	27	15.2	13	7.3	23	12.9	33	18.5	178
19. Obtain more information about sex and sexuality.	23	12.4	47	25.3	16	8.6	37	19.9	17	9.1	25	13.4	21	11.3	186
20. Communicate more openly and honestly with my															

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
partner (boy/girlfriend, fiance, spouse).	29	15.4	40	21.3	82	43.6	8	4.3	1	.5	8	4.3	20	10.6	188
21. Deal more effectively with death and separation from significant others in my life.	44	23.8	29	15.7	65	35.1	15	8.1	6	3.2	7	13.8	19	10.3	185
22. Be better able to cope with and deal with problems in my family.	31	16.4	41	21.7	79	41.8	15	7.9	5	2.6	3	1.6	15	7.9	189

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"[b]		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
23. Make a firm career decision.	51	26.7	108	56.5	10	5.2	2	1.0	5	2.6	10	5.2	5	2.6	191
24. Make a final decision about a major.	45	24.9	81	44.8	8	4.4	0	0	8	4.4	12	6.6	27	14.9	181
25. Be better able to communicate with faculty members.	44	22.7	120	61.9	4	2.1	2	1.0	9	4.6	12	6.2	3	1.5	194
26. Improve my communication/ speaking skills.	30	15.5	129	66.8	6	3.1	3	1.6	7	3.6	15	7.8	3	1.6	193

(table continued)

Table 4 (continued)

	Rating Categories[a]													
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
27. Be more assertive in social situations.	31	16.3	73	38.4	51	26.8	14	7.4	8	4.2	6	3.2	7	3.7	190
28. Develop leadership skills.	38	19.9	111	58.1	14	7.3	9	4.7	5	2.6	12	6.3	2	1.0	191
29. Learn to meet new people and make new friends.	27	14.2	118	62.1	32	16.8	3	1.6	3	1.6	5	2.6	2	1.1	190
30. Adjust to living in a dorm.	14	8.8	57	35.6	5	3.1	8	5.0	9	5.6	21	13.1	46	28.8	160
31. Express myself with the opposite sex more effectively.	33	17.9	50	27.2	72	39.1	9	4.9	3	1.6	11	6.0	6	3.3	184

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	NCT	PCT	
32. Find and participate in social activities which do not involve drugs or drinking.	49	26.2	58	31.0	16	8.6	18	9.6	18	9.6	12	6.4	16	8.6	187
33. Find things to do other than bar-hopping in Blowing Rock.	60	32.4	40	21.6	15	8.1	20	10.8	16	8.6	9	4.9	25	13.5	185
34. Find satisfying leisure activities here, so I do not go home so frequently.	54	30.0	32	17.8	9	5.0	14	7.8	18	10.0	14	7.8	39	21.7	180

(table continued)

Table 4 (continued)

	Rating Categories[a]														
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
35. Remain involved in campus activities and friendships while living off campus.	41	25.2	47	28.8	20	12.3	4	2.5	14	8.6	2	1.2	35	21.5	163
36. Decrease feelings of tension that come from concerns about school work.	104	54.7	50	26.3	20	10.5	2	1.1	6	3.2	3	1.6	5	2.6	190
37. Develop better study habits.	63	33.2	80	42.1	32	16.8	1	.5	7	3.7	6	3.2	1	.5	190

(table continued)

Table 4 (continued)

	Rating Categories[a]													
	A "Important" x "Unsuccessful"		B "Important" x "Successful"		C "Important" x "Not Responsible"		D "Unimportant" x "Not Responsible"		E "Unimportant" x "Unsuccessful"		F "Unimportant" x "Successful"		G "Not Applicable"		n
	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	CNT	PCT	
38. Increase my interest in studying and learning.	55	29.3	101	53.7	15	8.0	1	.5	4	2.1	9	4.8	3	1.6	188
39. Feel more a part of Boone and the local area.	48	25.4	53	28.0	18	9.5	27	14.3	12	6.3	18	9.5	13	6.9	189
40. Participate more in student/campus activities.	38	20.2	83	44.1	11	5.9	12	6.4	13	6.9	24	12.8	7	3.7	188

and the university as "unsuccessful" in promoting goal achievement. On the other hand, decisions to maintain existing programs and services would be justified if a substantial number of students rated achievement of a related goal as "important," and the university as "successful" for helping them achieve that goal. However, no statistical techniques were apparent for analyzing the data so as to clarify what percentage of respondents constituted a "substantial portion" of all respondents. Therefore, the following method was created in an attempt to determine which response frequencies for the rating categories were indicative of substantial agreement among respondents.

First, reported response frequencies for each of the 40 items across all categories were compared. The highest response frequency (percentage) among the seven frequencies was then identified and designated as the upper limit of a range of response frequencies assumed to indicate how a substantial number of students responded to each item. Ten percentage points were then subtracted from the upper limit and the lesser frequency was designated as the lower limit of the range of substantial response frequencies. Response frequencies falling in the range of substantial frequencies were then determined. These response frequencies were assumed to indicate how most students rated an item, and as such, became the units of analysis for the identification of students' needs.

For each item, when the largest response frequency minus ten percentage points is selected for the range of frequencies within students' needs may be identified, 14 of the 40 items presented in

Table 4 reflect two categorical needs (bi-modal distributions), and two items reflect three categorical needs (tri-modal distributions). Table 5 includes those items rated by a substantial number of students in two or more categories, the respective categories, and associated response frequencies.

Table 6 shows the remaining 24 items for which no more than one identifiable need is evident and the associated percentages of students rating the items as such. Additionally, the items are prioritized with respect to rating category.

Over half of the sample felt that their need to (a) reduce schoolwork related tension was important, but not being met by the university's services and programs. Approximately one-third of the sample felt that their need to (b) find things to do other than bar-hopping in a nearby "wet town" also was important, but not being met by the university's services and programs.

The university was seen as successful in helping students meet the following "important" needs: (a) improve their decision making abilities, (b) improve their communication/speaking skills, (c) learn to meet new people and make new friends, (d) be better able to communicate with faculty members, and (e) develop leadership skills.

The majority of this sample also expressed that managing their money, communicating with their partners, coping with family problems, expressing themselves to the opposite sex, and dealing with death and separation issues were important needs. At the same time,

Table 5

Identified Needs Rated in Two or More Categories (Ambiguous Needs), with Associated Response Frequencies

Item	Rating Categories (Response Frequencies)		
2. Maintain my sense of individuality amidst peer pressure to conform.	B (33.5%)	C (33.0%)	
4. Decrease my use of alcohol.	D (31.1%)	G (27.8%)	
7. Eat more nutritiously.	A (36.5%)	B (29.1%)	
9. Spend less time being down and depressed.	A (23.8%)	B (32.4%)	
11. Learn to better control my anger.	B (22.5%)	C (31.6%)	
12. Learn ways to reduce and control anxiety.	A (29.5%)	B (30.5%)	C (22.1%)
13. Examine and evaluate my value system.	B (39.6%)	C (32.3%)	
15. Budget my time more effectively.	B (37.9%)	C (32.1%)	
16. Acquire financial resources necessary to allow me to continue school.	A (30.9%)	B (38.8%)	
19. Obtain more information about sex and sexuality.	B (25.3%)	D (19.9%)	
30. Adjust to living in a dorm.	B (35.6%)	G (28.8%)	
32. Find and participate in social activities which do not involve drugs or drinking.	A (26.2%)	B (31.0%)	

(table continued)

Table 5 (continued)

Item	Rating Categories (Response Frequencies)		
34. Find satisfying leisure activities here, so I do not go home so frequently.	A (30.0%)	G (21.7%)	
35. Remain involved in campus activities and friendships while living off campus.	A (25.2%)	B (28.8%)	G (21.5%)
37. Develop better study habits.	A (33.2%)	B (42.1%)	
39. Feel more a part of Boone and the local area.	A (25.4%)	B (28.0%)	

Table 6

Identified Needs, Prioritized with Respect to Category, with Associated Response Frequencies

Category	Item	Response Frequency	Rank
"Important" x "Unsuccessful"			
	36	54.7%	1
	33	32.4%	2
"Important" x "Successful"			
	1	74.3%	1
	26	66.8%	2
	29	62.1%	3
	25	61.9%	4
	28	58.1%	5
	23	56.5%	6
	38	53.7%	7
	3	48.7%	8
	8	47.1%	9
	14	47.1%	10
	24	44.8%	11

(table continues)

Table 6 (continued)

Category	Item	Response Frequency	Rank
	40	44.1%	12
	10	39.2%	13
	27	38.4%	14
	18	24.2%	15
"Important" x "Not Responsible"			
	17	48.4%	1
	20	43.6%	2
	22	41.8%	3
	31	39.1%	4
	21	35.1%	5
	6	32.8%	6
"Not Applicable"			
	5	58.8%	1

they felt that the university is not responsible for helping them meet these needs.

Finally, over half of the sample indicated that decreasing their use of marijuana was an important, but not applicable goal. Discussion of those items rated by a substantial number of students in two or more categories (Table 5), is reserved for the next section.

During the Nominal Groups and pilot survey phases of the study, efforts were made to identify and include on the final questionnaire only items reflecting important problems and concerns for students. Knowledge of the percentage of students rating items as important should provide an indication of the efficacy of the Nominal Groups and pilot survey phases. By averaging the response frequencies in each rating category, across items, estimates of how most students rated all the items can be compared across categories. Present in Table 7 are the response frequency means from each category. As expected, a higher percentage of students (74%) are found to have rated items in categories A, B, and C ("important") than in the remaining categories (26%).

Table 7

Category Response Frequency Means

Category	Response Frequency Mean
A. "Important" x "Unsuccessful"	21.2%
B. "Important" x "Successful"	35.3%
C. "Important" x "Not Responsible"	17.5%
D. "Unimportant" x "Not Responsible"	6.6%
E. "Unimportant" x "Unsuccessful"	4.4%
F. "Unimportant" x "Successful"	5.8%
G. "Not Applicable"	9.4%

Chapter V

DISCUSSION

An assessment of students' needs using importance and success ratings produces a vast amount of data (Table 4), whose analysis can be quite complex. Following is a discussion of the results and how they do or do not lend themselves to the clear identification of students' needs. Included is a discussion of the translation of data into programs and services. Finally, a summary of the study's assets and limitations is provided.

Identification of Student Needs

The identification of students' needs depends upon knowing how most students rated an item. However, no statistical techniques were apparent for analyzing the data so as to clarify what percentage constituted a "substantial portion" of all respondents. Therefore, a methodology was created. Following is a discussion of the practical implications for using the method for discerning majority opinion.

The process employed to identify students' needs, as described in the Results section, revealed that 16 of the 40 items (40%) were rated by most students relatively equally in two or more need categories (Table 5). Of the 16 ambiguously rated items, approximately one-third were rated "important" x "unsuccessful" and "important" x "successful." Item number seven exemplifies those items rated in

this manner. When comparing the data in Table 4 across rating categories for item number seven ("eat more nutritiously"), 36.5% of the respondents indicated the goal to be "important," and the university, "unsuccessful" in aiding its attainment, while 29.1% also indicated that the goal is "important," but the university, "successful" in helping them attain it. Is one to assume that for item number seven, programs and services designed to help students eat more nutritiously should be developed ("important" x "unsuccessful") or simply maintained ("important" x "successful")? Similarly, for item number nine ("spend less time being down and depressed"), 23.8% of the respondents indicated this goal to be "important," and the university, "unsuccessful" in aiding its attainment, while 32.4% also indicated that the goal is "important," but the university, "successful" in helping them attain it.

Although respondents did agree upon the importance dimensions for these goals, their apparent disagreement concerning the university's success in aiding goal attainment raises the question of whether student subgroup biases influenced overall item ratings. For example, the disagreement among respondents regarding the university's success in aiding students in attaining goal number nine ("spend less time being down and depressed"), could possibly be explained by the following various student subgroup characteristics at ASU: differences in the quantity and quality of dormitory sponsored "fun" activities, dormitory vs. off-campus living experiences, or freshmen vs. senior schoolwork expectations. Additionally, social or political influences particular to the year or season

in which this survey was conducted could have impacted on some students more so than on others. For instance, if a rise in unemployment among newly graduated college students had recently been reported in the media, seniors more so than freshmen or sophomore students might have viewed the university as unsuccessful in helping students spend less time being down and depressed.

Table 5 also shows that one-fourth of the ambiguously rated items were rated "important" x "successful" and "important" x "not responsible." For example, for item number two ("maintain my sense of individuality amidst peer pressure to conform"), 33.5% of the respondents indicated the goal to be "important," and the university, "successful" in aiding its attainment, while 33.0% also indicated that the goal is "important," but the university, "not responsible" for helping them attain it. Is one to assume that for item number two, programs and services designed to help students maintain their sense of individuality...be maintained ("important" x "successful") or phased out ("important" x "not responsible")? If the university is being successful in assisting students in attaining goal number two as indicated by one-third of the sample, would maintaining facilitative programs and services be justified when another third of the students feel the university should not be responsible for helping them attain the goal?

Before phasing out on-going programs and services designed to assist students in attaining goals they feel are important, but not the university's responsibility, consideration should be made of what students mean by "not responsible." Some students may not be

aware of the appropriateness of university programming for such goals, or of the university's capability for providing the services. It may be possible that students would expect more from the university if they were better informed of what the university can provide. Additionally, for some student goals, it may be unfeasible to allow students to dictate for what the university should or should not be responsible. For example, Table 5 shows that 22.5% of the respondents indicated that they view the university as successful in helping them to control their anger better, but 31.6% view the university as "not responsible" for helping them attain this goal (item number 11). However, in situations involving students who have obviously lost control of their anger, to the point of jeopardizing others' safety, the university may not only help students control their anger, but may control it for them, e.g., by imposing medical or physical restraints if necessary.

Clearly, for those items rated by a substantial number of respondents in more than one category, further study of this ambiguity is indicated. Future research may examine fewer goals more specifically among student subgroups rather than "students in general." Although the present study did not attempt to relate students' goal ratings with reported demographic data, knowledge of whether such relationships are meaningful may aid in teasing out specific subgroup bias effects. Additionally, the question of what students mean by "not responsible" deserves further investigation.

Although the capacity for interpreting importance and success data is limited when using the methodology created here to determine

which response frequencies are indicative of how most students rated an item, the method still shows promise for clearly identifying students' needs. Table 6 contains 24 of the 40 items (60%) found to possess only one substantially rated categorical need. For example, 74.3% of the respondents rated item number one ("improve my ability to make good, effective decisions") as important, but the university as successful in aiding attainment of the goal. For item number 36 ("decrease feelings of tension that come from concerns about schoolwork"), 54.7% of the sample rated attainment of the goal as important, but the university as unsuccessful in assisting in its attainment. And for item number 17 ("have better control of my money"), 48.4% of the respondents indicated that the goal is important, but the university should not be responsible for aiding students in its attainment.

Approximately, 40% of the items' ratings reflect sufficient ambiguity, i.e., more than one substantially rated categorical need, to rule out conclusive interpretation of their results. However, the remainder of the items, with the possible exception of those for which the university is viewed as "not responsible" for providing assistance, appear to be rated clearly enough to provide counseling professionals empirical data on which programmatic decision making may be based.

Translation of Data

The translation of data into services and programs is important if college students' counseling needs are to be realistically met. Three interventions for the type of data collected in the present

study seem feasible. These interventions are: (a) development of direct programs or services, (b) maintenance of existing programs or services, and (c) further study of ambiguous data. Following is a discussion of several items with respect to each of these types of interventions.

Intervention "a," development of direct programs or services, will be directed by those items rated by a substantial number of students as "important" x "unsuccessful." For example, 54.7% of the respondents indicated they had a need for programs or services to help them decrease feelings of tension that come from concerns about schoolwork. In response to this identified need, the Counseling and Psychological Services Center may decide to increase publicity surrounding its biofeedback/stress management program, and/or develop campus outreach programs designed to teach students how to relax. For item number 33 ("find things to do other than bar-hopping in Blowing Rock"), 32.4% of the respondents indicated this goal to be "important," and the university as "unsuccessful" in helping them attain it. Program or service development aimed at helping students attain this goal may include the publishing of a special brochure entitled "Alternatives to Hopping at the Rock--A Study of ASU Student Social Activities."

Table 6 shows that 15 items were rated "important" x "successful," meaning that most students feel the university's present services are sufficiently assisting them in attaining the related goals. Interventions with respect to these identified "maintenance" needs might involve a study of programs and services presently

provided by the university which aid students in attaining these goals. For example, with respect to item number 26 ("improve my communication/speaking skills"), further study of university services designed to assist students in improving communication/speaking skills might be conducted. After identifying the relevant services, counseling center professionals might initiate communication with those involved in the provision of these services to inform them of their assessed success (Hageseth et al., 1981).

For intervention "c", further study of ambiguous data, Table 5 lists those 16 items rated by a substantial number of students in two or more rating areas. Further study of these items' ratings might involve a follow-up assessment of students' needs, designed to consider subgroup characteristics and the impact such characteristics have on the ways in which students rate certain items.

It may also be appropriate to consider for further study those items for which a substantial number of respondents felt the university was "not responsible" for aiding goal attainment (categories C and D). As noted previously, before phasing out on-going programs and services students view the university as "not responsible" for providing, consideration should be made of what students mean by "not responsible."

Although the relative magnitude of response frequencies found in categories E and F ("unimportant"), and G ("not applicable") are exceptionally low (Table 7), further study of this data is additionally recommended. For example, what do students mean when they indicate that attainment of a goal is unimportant? Do they

place no conscious value on it or are they unaware of its importance to them? Do some students rate a goal as "unimportant" when others, meaning the same, respond with "not applicable?" By raising students' awareness of the needs commonly associated with the college years, e.g., through educating students or increasing counseling program visibility, will students perceive attainment of more goals as important (Gill, 1976)?

No clear-cut answers to these questions are apparent, based upon the results of this study. Nevertheless, the results do offer evidence of student needs for which counseling programs and services may be planned. More importantly perhaps, student needs were identified that require further investigation and/or program reevaluation.

Assets and Limitations of Study

The present project provides a process example of a college student needs assessment whose results, in part, can be translated into counseling and psychological service programs. Prior to developing the needs assessment questionnaire, efforts were made to insure its content validity. A preliminary investigation of students' problems, concerns and needs was conducted in an attempt to generate items for inclusion on the questionnaire. Input was obtained from students as well as student development professionals. Use of the Nominal Groups technique to elicit ideas regarding students' needs proved to be an invaluable aid.

The Nominal Groups technique was selected as a preferred method for eliciting students' problems and concerns for several reasons. Use of the technique was intended to relieve the author from

compiling college students' problems and concerns from related needs studies, enable the author to dispense with the cost of purchasing a needs inventory, and aid him in developing a survey instrument tailored to the specific needs of ASU students for the time period during which students were surveyed. However, it is possible that the time required for a literature review, or the money necessitated for the purchase of a needs inventory may have been as easily spent on these activities as the time required to conduct the Nominal Groups and finally make use of the data generated therein. Furthermore, no valid statements can be made at this point regarding the initial hope that the items generated in the Nominal Groups would reflect any more particularly ASU students' goals than would goal-items taken from the literature of another college students' needs inventory.

As in any survey process involving the development and use of an inventory and the subsequent selection of a population sample, the question of bias in sample selection is ever present. For example, a heavy concentration of freshmen and sophomore students were used in the Nominal Groups process at a cost of minimal input for item generation from upperclassmen. Therefore, it is reasonable to assume that the concerns generated by students in the Nominal Groups were representative of freshmen and sophomore college students at ASU. However, had there been more upperclassmen participants in the groups, the final survey inventory may have looked somewhat different in item content. To rectify this potential sample bias, further

use of the Nominal Groups process should include a wider cross-section of college students than was employed in this study.

Development of the survey questionnaire included procedures to insure its practical use and aesthetic appearance. Two pilot tests of the questionnaire aided in clarifying instructions, eliminating poor items, shortening administration time and improving its overall appearance.

The importance of selecting a random and representative sample of the student body for the final survey was also considered. In this regard, accepted probability sampling procedures were adhered to in an attempt to obtain such a sample.

The manner in which data were collected in the present study was designed to require little time and money, yet provide an optimal response rate. In this respect, personally administering questionnaires to classes of students proved to be a relatively simple and efficient method. Nevertheless, the number of students completing the final needs assessment survey questionnaire (194) yielded a response rate of only 68%. Two factors account for the low return rate:

1. The instructor of a class with 50 students enrolled consented to allow survey time during the class hour. However, the instructor became ill on the day the class was scheduled to be surveyed. When the author arrived at the class at the appointed time, he discovered that 34 of the 50 students had already been dismissed by a departmental secretary. Consequently, a high percentage of potential subjects was lost.

2. Several classes were sampled on Thursday afternoon and Friday morning. Appreciable numbers of students were found not to be in attendance at their classes during these time periods (38 students, excluding the number of dismissed students described above). In contrast, most classes sampled on Wednesday and early Thursday morning did not show any substantial drops in attendance (only 19 students during these class times were unavailable for survey). It may be possible that many students at ASU begin missing classes by Thursday afternoon and particularly on Fridays "to begin their weekends early."

A solution to the first case might involve contacting instructors on the day or evening before the scheduled survey times to remind them of their class commitments to the assessment process. In the second case, with prior knowledge concerning students' class absenteeism patterns, survey contact days should probably be scheduled early in the week at ASU to overcome a less than desirable response rate. At institutions other than ASU, researchers employing the method used in this study to collect survey data may want to investigate class attendance numbers on particular days of the week at the college in question. Additionally, rather than conducting a survey of this type during the spring semester, there are several reasons for conducting one during the early part of the fall semester. For example, the response rate may be higher if more students do in fact attend classes at the start of a school year rather than in its middle or toward its end. Moreover, if students are surveyed early in the school year, potential dropouts' needs may be assessed.

Also, by identifying needs early in the school year, ample time is available for implementing the results during the school year for which needs were assessed.

In contrast to many college student counseling needs studies, the present assessment was not limited to asking students about present concerns (e.g., Indrisano & Auerback, 1979; Henggeler et al., 1980) or desired services (e.g., Benjamin & Romano, 1980; Graff & Horne, 1973). Instead, "counseling need" was conceptualized as goal-based to reflect student problem resolution. Additionally, "counseling need" was defined to be a combination of the measured distance between the present and future state of perceived goal attainment, and the level of necessity students attributed to goal attainment. The survey instrument reflected this two-dimensional approach for measuring goal attainment need by asking students to rate 40 goal-items by importance level and institutional success in aiding goal attainment. The two response options to the questionnaire's 40 items were designed to ease computer processing of the large amount of data provided by students. The computer output of "Subprogram Crosstabs" in SPSS seemed to describe the data in a practical fashion. Moreover, this stategy for processing the data incorporated both response dimensions for each of the 40 goal statement items.

Analysis of importance and success data is complex. The identification of students' needs depends upon knowing how most students rated an item. However, no statistical techniques were apparent for analyzing the data so as to clarify what percentage of respondents

constituted a "substantial portion" of all respondents. Therefore, a method was created. This "makeshift" method possesses no known theoretical proof of its statistical validity, robustness, or viability for use on importance and success data. Nevertheless, use of the method helped to describe the complexities associated with analyzing the two dimensional data obtained here.

Although the mental health needs assessment process presented here has its limitations, the benefits to be derived from the endeavor are numerous. By examining theoretical issues pertinent to the assessment process, future studies of college students' needs for counseling and psychological services may be more rigorous. Additionally, the results do offer evidence of student needs for which counseling programs and services may be planned. More importantly perhaps, student needs were identified that require further investigation and/or program reevaluation.

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APPENDIX A

Nominal Groups Procedure and Verbal Instructions Delivered to Students

Nominal Groups Procedure and Verbal Instructions
Delivered to Students

I want to thank you for being willing to help us today. We are in the process of reviewing the functioning of the Counseling Center and we are starting by studying the problems which exist within our community.

We are going to begin today by asking each of you to generate ideas in a silent-group process. Our primary interest today is in identifying problems, not in thinking about solutions...that will come later.

The questions we are going to focus on today is the following: WRITE ON BOARD - What are the mental health and personal development needs or problems of ASU students? We are interested in your perspective--what you believe are significant needs/problems in the ASU Community.

We intend for you to look at mental health and personal development in their broadest sense, including the ability to feel comfortable about oneself, have satisfying relationships with others, meet the demands and stress of life successfully, and to maximize one's growth and potential.

On the paper we are handing out, we would like each of you to take five minutes to list your ideas in response to this question, each idea stated in a brief phrase of a few words. Try and be as specific as possible. Please work independently of other members in identifying problems which you perceive. During this period of independent thinking we ask that you do not talk to other members,

interrupt their thinking, or look at their worksheets. We would appreciate intense thought and effort during the next five minutes. At the end of five minutes, we will call time and proceed to the next phase of this process. Are there any questions?

IF THERE ARE ANY QUESTIONS AT THIS POINT, REGARDING MORE SPECIFICITY OF THE QUESTION, EXPLAIN THAT YOU WOULD LIKE EACH PERSON TO REPLY FROM THE BASIS OF HIS OWN INTERPRETATION OF THE QUESTION AND THAT BY STATING THE QUESTION MORE SPECIFICALLY, YOU MIGHT LOSE SOME CREATIVE IDEAS BASED ON INDIVIDUAL INTERPRETATION AND VIEWPOINT.

Let's proceed then with our individual efforts for the next five minutes.

THERE ARE FOUR KEY GUIDELINES FOR SERVING AS LEADER IN STEP 1.

A. RESIST NON PROCESS CLARIFICATIONS
B. HAVE THE QUESTIONS IN WRITING ON THE BOARD
C. MODEL GOOD GROUP BEHAVIOR BY WRITING YOURSELF DURING THE FIVE MINUTE PERIOD
D. SANCTION INDIVIDUALS WHO DISRUPT THE SILENT INDEPENDENT ACTIVITY
("Please don't interrupt those who are still at work by talking or moving about. There are still two minutes remaining in our work period, and I ask that you all continue to think and write ideas down in silence for the remainder of this short period.")

STEP 2

During the last five minutes, each of us has used our time to list mental health and personal development needs of ASU students. Now we would like to have each of you share your ideas with the other members of the group.

This is an important step because our list of ideas will constitute a guide for further discussion.

In order to accomplish this goal as quickly and efficiently as possible, I am going to go around the table and ask individuals, one at a time, to give me one idea from their worksheet, summarized in a brief phrase or a few words. After the entire list is on the board, we will have the opportunity to discuss, clarify, and dispute the ideas.

If someone else in the group lists an idea which you also had on your worksheet, you need not repeat the idea. If, however, in <u>your judgment</u> the idea on your worksheet contains a different

emphasis or variation, we would welcome the idea. Variations on a theme are important and will help us be creative.

Also, if ideas from others bring a new idea to your mind, please write it down on your card and present it to the group.

STEP 2 GUIDELINES: LEADER REQUIREMENTS FOR THIS STEP INCLUDE--

1. CLEAR VERBAL STATEMENT OF THE STEP
   A. THE OBJECTIVE IS TO MAP THE GROUP'S THINKING.
   B. IDEAS SHOULD BE PRESENTED IN BRIEF WORDS OR PHRASES.
   C. IDEAS WILL BE TAKEN SERIALLY.
   D. DUPLICATE ITEMS SHOULD BE OMITTED.
   E. VARIATIONS ON THEMES ARE DESIRABLE.
2. EFFECTIVE MECHANICAL RECORDING
3. DIRECT SANCTION ON INAPPROPRIATE GROUP BEHAVIOR

STEP 3

Now that we have listed our ideas on the flip chart, I want to take time to go back and briefly discuss each idea. The purpose of this discussion is to clarify the meaning of the items on our chart. We hope you will feel free to express your ideas. Rather than reviewing each item individually let's discuss the items which interest us most. Let me point out that the originator of the item need not feel obliged to clarify or explain an item. Any member of the group can play that role.

Does anyone have any questions or comments about specific items?

STEP 3 GUIDELINES: THE MAIN RESPONSIBILITIES OF THE LEADER, THEREFORE, RELATIVE TO THE DISCUSSION ARE:

1. TO VERBALLY DEFINE THE ROLE OF THE STEP AS CLARIFICATION
2. TO AVOID SPENDING THE FULL 10 MINUTES ON A SINGLE ITEM

STEP 4

We have now completed our discussion of the list of ideas, and have clarified the meaning of some of the ideas. At this time, I would like to have the judgment of each group member concerning the most important ideas on the list.

To accomplish this step, I wonder if each of you would take five index cards.

(THE LEADER HANDS A SET OF INDEX CARDS TO PARTICIPANTS AT THE TABLE)

I would like you to select the five most important items from our list of items. As you look at the board and find an item which you feel is very important, please record the item on an index card.

(THE LEADER GOES TO THE BOARD AND DRAWS AN INDEX CARD)

Write the identifying words or phrase on the card.

(THE LEADER WRITES THE PHRASE FOR A SAMPLE ITEM ON THE CARD)

Do this for each of the five most important items from our list of items. When you have completed this task, you should have five cards, each with a separate phrase written on the card.

Spend the next few minutes carefully selecting the five items.

Now we would like you to spread the five cards out in front of you. Pick the card with the most important problem/need on it and place a 1 in the upper right hand corner. Using the four remaining cards, select the card with the most important problem from the set which is left. Place a 2 in the upper right hand corner. Continue selecting the next most important problem until you have only one card left. Place a 5 on that card.

APPENDIX B

Nominal Groups Handout
(Written Instructions to Students)

Nominal Groups Handout
(Written Instructions to Students)

During the five minute quiet period, you will be asked to respond to the following question.

WHAT ARE THE MENTAL HEALTH AND PERSONAL DEVELOPMENT NEEDS

OR PROBLEMS OF ASU STUDENTS?

We intend for you to look at mental health and personal development in their broadest sense, including the ability to feel comfortable about oneself, to meet the requirements of the academic environment, have satisfying relationships with others, meet the demands and stress of life successfully, and to maximize one's growth and potential.

Below is an example of one worker's response to a similar question asked at a needs assessment at an auto factory. These specific items are not relevant for ASU, but they can give you an idea of the type of items and how they might be stated.

1. Shift changes mess up family life.

2. No encouragement or expectation for advancement.

3. A lot of drinking on the job.

4. Alcoholism among workers.

5. Stress from high quotas.

6. Racial problems on the line.

7. New men ignored--no help offered.

APPENDIX C

Goal Statements

Goal Statements

Personal Security (27 items)

1. Be more accepting of my faults and limitations.
2. Be more accepting of others' faults and limitations.
3. Be more accepting of others' differences.
4. Improve my ability to make good, effective decisions.
5. Make more decisions independent of parental pressure.
6. Maintain my sense of individuality amidst peer pressure to conform.
7. Maintain self-confidence in the midst of change.
8. Become more responsible in handling the freedom of college.
9. Stop smoking cigarettes.
10. Decrease my use of alcohol.
11. Decrease my use of marijuana.
12. Decrease my use of psychedelics, downers, and/or speed.
13. Control my weight within desired limits
14. Eat more nutritiously.
15. Develop an effective exercise plan.
16. Spend less time being down and depressed.
17. Spend less time being lonely.
18. Feel more like a worthwhile and good person.
19. Learn how to be a happier person.
20. Learn to better control my anger.
21. Learn ways to reduce and control anxiety.
22. Examine and evaluate my value system

23. Become more familiar with campus resources for help with educational and personal problems.

24. Feel more secure when walking alone or near campus.

25. Learn to budget my time more effectively.

26. Acquire financial resources necessary to allow me to continue school.

27. Have better control of my money.

Sexual Adjustment (2 items)

28. Become better informed about birth control and pregnancy.

29. Obtain more information about sex and sexuality.

Marital and Close Relationships (5 items)

30. Communicate more openly and honestly with my partner (boy/girl friend, fiance, spouse).

31. Learn to cope with a long distance relationship.

32. Deal more effectively with death and separation from significant others in my life.

33. Get over a "heartbreaking" relationship.

34. Come to terms with the issue of marriage vs. career.

Family Relationships (5 items)

35. Improve my relationship with parents.

36. Better cope with pressure from home to do better in school.

37. Be better able to cope with and deal with problems in my family.

38. Become secure in life at college; less dependent upon family and friends from home.

39. Develop ability to stand up to parental attempts to control my life.

Educational/Vocational Planning (2 items)

40. Make a firm career decision.

41. Make a final decision about a major.

Social Relationships (20 items)

42. Learn to seek and use support from others besides my family.

43. Increase frequency of nonclassroom contacts with my professors.

44. Be better able to communicate with faculty members.

45. Adjust to the lack of individual attention received from college administrators and faculty.

46. Be more able to assert myself to faculty and university staff.

47. Improve my communication/speaking skills.

48. Become more assertive in social situations.

49. Learn to feel more comfortable in groups.

50. Develop leadership skills.

51. Be less likely to go along with peer pressure to use and consume alcohol.

52. Become able to develop intimate, sharing relationships.

53. Learn to meet new people and make new friends.

54. Get along better with my roommate.

55. Establish better relationship with resident advisor.

56. Adjust to living in a dorm.

57. Express myself with the opposite sex more effectively.

58. Find and participate in social activities which do not involve drugs or drinking.

59. Find satisfying leisure activities here, so I do not go home so frequently.

60. Remain involved in campus activities and friendships while living off-campus.

61. Find things to do other than bar-hopping in Blowing Rock.

Work-Study Skill Development (4 items)

62. Decrease feelings of tension that come from concerns about school work.

63. Develop better study habits.

64. Become more regular in class attendance.

65. Increase my interest in studying and learning.

Community Involvement (3 items)

66. Feel more a part of Boone and the local area.

67. Feel more like I belong at ASU.

68. Participate more in student/campus activities.

APPENDIX D

Pilot Survey Forms I and II

Pilot Survey Form I

The purpose of this inventory is to help the Counseling Center to determine the needs of ASU students. Completed inventories will provide information for planning services and programs to assist student in achieving their educational and personal goals. There are 40 items which most people take about 15 minutes to complete.

Before you begin the inventory indicate your sex, age, marital status, enrollment status, class and academic area in the space on your answer sheet intended for identification number. (Do not write your social security identification number in this space.) In this space there are 10 blocks in which to mark; you will use only the first six.

1. Sex: Male (1) Female (2)
2. Age: 17-21 (1) 26-30 (3)
   22-25 (2) 31-Over (4)
3. Marital Status: single (1), married (2), other (3)
4. Enrollment Status: 12 or more credits (1), less than 12 credits (2)
5. Class: Freshman (1)
   Sophomore (2)
   Junior (3)
   Senior (4)
   Graduate (5)
   Other (6)
6. Academic Area:
   College of Arts and Sciences (1)
   College of Business (2)
   College of Fine & Applied Arts (3)
   College of Learning & Human Development (4)
   College of Continuing Education (5)
   General College (6)
   Graduate School (7)

The inventory consists of a list of goal statements and two questions about each goal. Read each statement. Then mark on the answer sheet the letter that most nearly corresponds to your answer to each question.

Example: How important to you is achievement of this goal at this time?

	Very unimportant	Unimportant	Important	Very important
	a	b	c	d
Answer Sheet (1)	A	B	(C)	D

How successful is the Counseling Center in helping you achieve this goal?

	Very unsuccessful	Unsuccessful	Successful	Very successful	Not the Counseling Center's responsibility
	a	b	c	d	e
Answer Sheet (1)	(A)	B	C	D	E

This response is from a student who wants to achieve this goal but believes that the Counseling Center is not being helpful toward the end.

There is a space at the end for you to add goal statements that you believe should be included in this inventory. Write in such goal statements and/or any other remarks you may have concerning the nature or the items listed. Also, when you come upon a goal statement that is vague, ambiguous, or hard to understand, please draw a line through the item on the inventory page.

Goal	How important to you is achievement of this goal at this time?					How successful is ASU in helping you achieve this goal?					
		A = Very unimportant	B = Unimportant	C = Important	D = Very important		A = Very unsuccessful	B = Unsuccessful	C = Successful	D = Very successful	E = Not the Counseling Center's responsibility
Be more accepting of my faults and limitations.	(1)	A	B	C	D	(2)	A	B	C	D	E
Be more accepting of others' differences.	(3)	A	B	C	D	(4)	A	B	C	D	E
Make more decisions independent of parental pressure.	(5)	A	B	C	D	(6)	A	B	C	D	E
Maintain self-confidence in the midst of change.	(7)	A	B	C	D	(8)	A	B	C	D	E
Stop smoking cigarettes.	(9)	A	B	C	D	(10)	A	B	C	D	E
Decrease my use of marijuana.	(11)	A	B	C	D	(12)	A	B	C	D	E
Control my weight within desired limit.	(13)	A	B	C	D	(14)	A	B	C	D	E
Develop an effective exercise plan.	(15)	A	B	C	D	(16)	A	B	C	D	E
Spend less time being lonely.	(17)	A	B	C	D	(18)	A	B	C	D	E
Feel more like a worthwhile and good person.	(19)	A	B	C	D	(20)	A	B	C	D	E
Learn ways to reduce and control anxiety.	(21)	A	B	C	D	(22)	A	B	C	D	E
Be more familiar with campus resources for help with educational and personal problems.	(23)	A	B	C	D	(24)	A	B	C	D	E

Goal	How important to you is achievement of this goal at this time?					How successful is ASU in helping you achieve this goal?					
		Very unimportant	Unimportant	Important	Very important		Very unsuccessful	Unsuccessful	Successful	Very successful	Not the Counseling Center's responsibility
Budget my time more effectively.	(25)	A	B	C	D	(26)	A	B	C	D	E
Have better control of my money.	(27)	A	B	C	D	(28)	A	B	C	D	E
Be better informed about birth control and pregnancy.	(29)	A	B	C	D	(30)	A	B	C	D	E
Obtain more information about sex and sexuality.	(31)	A	B	C	D	(32)	A	B	C	D	E
Communicate more openly and honestly with my partner (boy/girlfriend, fiance, spouse).	(33)	A	B	C	D	(34)	A	B	C	D	E
Deal more effectively with death and separation from significant others in my life.	(35)	A	B	C	D	(36)	A	B	C	D	E
Come to terms with the issue of marriage vs. career.	(37)	A	B	C	D	(38)	A	B	C	D	E
Improve my relationship with parents.	(39)	A	B	C	D	(40)	A	B	C	D	E
Be secure in life at college: less dependent upon family and friends from home.	(41)	A	B	C	D	(42)	A	B	C	D	E
Develop ability to stand up to parental attempts to control my life.	(43)	A	B	C	D	(44)	A	B	C	D	E

Goal	How important to you is achievement of this goal at this time?					How successful is ASU in helping you achieve this goal?					
		Very unimportant	Unimportant	Important	Very important		Very unsuccessful	Unsuccessful	Successful	Very successful	Not the Counseling Center's responsibility
Make a firm career decision.	(45)	A	B	C	D	(46)	A	B	C	D	E
Make a final decision about a major.	(47)	A	B	C	D	(48)	A	B	C	D	E
Learn to seek and use support from others besides my family.	(49)	A	B	C	D	(50)	A	B	C	D	E
Be better able to communicate with faculty members.	(51)	A	B	C	D	(52)	A	B	C	D	E
Be more able to assert myself to faculty and university staff.	(53)	A	B	C	D	(54)	A	B	C	D	E
Be more assertive in social situations.	(55)	A	B	C	D	(56)	A	B	C	D	E
Develop leadership skills.	(57)	A	B	C	D	(58)	A	B	C	D	E
Develop intimate, sharing relationships.	(59)	A	B	C	D	(60)	A	B	C	D	E
Get along better with my roommate.	(61)	A	B	C	D	(62)	A	B	C	D	E
Adjust to living in a dorm.	(63)	A	B	C	D	(64)	A	B	C	D	E
Find and participate in social activities which do not involve drugs or drinking.	(65)	A	B	C	D	(66)	A	B	C	D	E

Goal		How important to you is achievement of this goal at this time?					How successful is ASU in helping you achieve this goal?					
		Very unimportant	Unimportant	Important	Very important		Very unsuccessful	Unsuccessful	Successful	Very successful	Not the Counseling Center's responsibility	
Remain involved in campus activities and friendships while living off-campus.	(67)	A	B	C	D	(68)	A	B	C	D	E	
Decrease feelings of tension that come from concerns about school work.	(69)	A	B	C	D	(70)	A	B	C	D	E	
Develop better study habits.	(71)	A	B	C	D	(72)	A	B	C	D	E	
Be more regular in class attendance.	(73)	A	B	C	D	(74)	A	B	C	D	E	
Increase my interest in studying and learning.	(75)	A	B	C	D	(76)	A	B	C	D	E	
Feel more a part of Boone and the local area.	(77)	A	B	C	D	(78)	A	B	C	D	E	
Participate more in student/ campus activities.	(79)	A	B	C	D	(80)	A	B	C	D	E	

Please list any personal goals you may have that are not already included in this inventory.

Please make comments about individual items and the inventory as a whole.

Pilot Survey Form II

The purpose of this inventory is to help the Counseling Center determine the needs of ASU students. Completed inventories will provide information for planning services and programs to assist students in achieving their educational and personal goals. There are 40 items which most people take about 15 minutes to complete.

Before you begin the inventory, please circle one number for each of the six categories listed below:

1. Sex: Male (1) Female (2)
2. Age: 17-21 (1) 26-30 (3)
   22-25 (2) 31-Over (4)
3. Marital Status: single (1), married (2), other (3)
4. Enrollment Status: 12 or more credits (1), less than 12 credits (2)
5. Class: Freshman (1)
   Sophomore (2)
   Junior (3)
   Senior (4)
   Graduate (5)
   Other (6)
6. Academic Area:
   - College of Arts & Sciences (1)
   - College of Business (2)
   - College of Fine & Applied Arts (3)
   - College of Learning & Human Development (4)
   - College of Continuing Education (5)
   - General College (6)
   - Graduate School (7)

The inventory consists of a list of goal statements and two questions about each goal. Please read each goal carefully and then answer Question 1 and Question 2 for each goal. See example following.

Example:

Goal Be better informed about birth control and pregnancy.

Question 1	Question 2
How important to you is achievement of this goal at this time?	How successful is ASU in helping you achieve this goal?
A Very unimportant	A Very unsuccessful
B Unimportant	B Unsuccessful
(C) Important	C Successful
D Very important	D Very successful
E Not applicable	(E) Not ASU's responsibility

This response is from a student who wants to achieve this goal but believes ASU is not being helpful toward the end.

There is a space at the end for you to add goal statements that you believe should be included in this inventory. Write in such goal statements and/or any other remarks you may have concerning the nature of the items listed. Also, when you come upon a goal statement that is vague, ambiguous, or hard to understand, please draw a line through the item on the inventory page.

We realize that some of the goal statements are personal. Because of this, our procedures are designed to insure the confidentiality of your responses. Please do not write your name or ID number anywhere on the inventory.

Circle the answer which most nearly corresponds to your response to the two questions about each goal.

Goal	How important to you is achievement of this goal at this time?					How successful is ASU in helping you achieve this goal?				
	Very unimportant	Unimportant	Important	Very important	Not applicable	Very unsuccessful	Unsuccessful	Successful	Very successful	Not ASU's responsibility
1. Be more accepting of others' faults and limitations.	A	B	C	D	E	A	B	C	D	E
2. Improve my ability to make good, effective decisions.	A	B	C	D	E	A	B	C	D	E
3. Make more decisions independent of parental pressure.	A	B	C	D	E	A	B	C	D	E
4. Maintain my sense of individuality amidst peer pressure to conform.	A	B	C	D	E	A	B	C	D	E
5. Become more responsible handling the freedom of college.	A	B	C	D	E	A	B	C	D	E
6. Stop smoking cigarettes.	A	B	C	D	E	A	B	C	D	E
7. Decrease my use of alcohol.	A	B	C	D	E	A	B	C	D	E
8. Decrease my use of marijuana.	A	B	C	D	E	A	B	C	D	E
9. Decrease my use of psychedelics, downers, and/or speed.	A	B	C	D	E	A	B	C	D	E
10. Control my weight within desired limits.	A	B	C	D	E	A	B	C	D	E
11. Eat more nutritiously.	A	B	C	D	E	A	B	C	D	E
12. Spend less time being down and depressed.	A	B	C	D	E	A	B	C	D	E
13. Learn to be a happier person.	A	B	C	D	E	A	B	C	D	E
14. Learn to better control my anger.	A	B	C	D	E	A	B	C	D	E

15.	Examine and evaluat my value system.	A B C D E	A B C D E
16.	Feel more secure when walking alone or near campus.	A B C D E	A B C D E
17.	Acquire financial resources necessary to allow me to continue school.	A B C D E	A B C D E
18.	Be better informed about birth control and pregnancy.	A B C D E	A B C D E
19.	Obtain more information about sex and sexuality.	A B C D E	A B C D E
20.	Learn to cope with a long distance relationship.	A B C D E	A B C D E
21.	Get over a "heartbreaking" relationship.	A B C D E	A B C D E
22.	Better cope with pressure from home to do better in school.	A B C D E	A B C D E
23.	Be better able to cope with and deal with problems in my family.	A B C D E	A B C D E
24.	Make a firm career decision.	A B C D E	A B C D E
25.	Make a final decision about a major.	A B C D E	A B C D E
26.	Increase frequency of nonclass-room contacts with my professors.	A B C D E	A B C D E
27.	Adjust to the lack of individual attention received from college administrators and faculty.	A B C D E	A B C D E
28.	Improve my communication/speaking skills.	A B C D E	A B C D E
29.	Feel more comfortable in groups.	A B C D E	A B C D E
30.	Be less likely to go along with peer pressure to use and consume alcohol.	A B C D E	A B C D E
31.	Learn to meet new people and make new friends.	A B C D E	A B C D E

32.	Establish better relationships with resident advisor.	A B C D E	A B C D E
33.	Express myself with the opposite sex more effectively.	A B C D E	A B C D E
34.	Find satisfying leisure activities here, so I do not go home so frequently.	A B C D E	A B C D E
35.	Find things to do other than bar-hopping in Blowing Rock.	A B C D E	A B C D E
36.	Decrease feelings of tension that come from concerns about school work.	A B C D E	A B C D E
37.	Develop better study habits.	A B C D E	A B C D E
38.	Be more regular in class attendance.	A B C D E	A B C D E
39.	Increase my interest in studying and learning.	A B C D E	A B C D E
40.	Feel more like I belong at ASU.	A B C D E	A B C D E

41. Please list any personal goals you may have that are not already included in this inventory.

42. Please make comments about individual items and the inventory as a whole.

APPENDIX E

Standard Verbal Introduction to Survey Questionnaires (Forms I, II, and Final)

Standard Verbal Introduction to Survey Questionnaires
Forms I, II, and Final

The author employed a standard verbal introduction of himself and the needs assessment questionnaires (two trial and one final) prior to administering survey forms to students. Although verbal instructions to students were added to the introduction in the cases of trial questionnaire administrations, the following remarks were read to all students who were given a survey form:

> My name is Walt Caison and I'm a graduate student in psychology. The questionnaire being passed out is part of a survey I'm conducting to fulfill thesis requirements. The survey is designed to assess college student needs. Its results will be used by the Counseling Center to provide programs and services to students in the future. The questionnaire is self-explanatory, though feel free to ask questions. No one is required to participate.

APPENDIX F

Pilot Survey Format Changes (Verbal and Written)

Pilot Survey Format Changes (Verbal and Written)

Form I of the two trial questionnaires was administered four times during the course of one day to one developmental and three introductory psychology classes. Form II was administered twice on the following day to two more introductory psychology classes. Between the four administrations of Form I, decisions were progressively made to alter written and verbal instructions delivered to students as well as the wording of one survey question. These changes were reflected in the typed format of Form II by the second survey contact day. Additionally, between the two administrations of Form II, verbal clarification of a survey question was formally added to the standard introductory remarks delivered to students. All changes were made to ease response recording and to clarify question comprehension. In both cases, the amount of time required for students to complete the forms apparently decreased due to the changes.

Following is a progressive account of specific changes made during the pilot surveys. Also included are comments concerning reasons for the changes and relevant observations of the pilot survey process.

Form	Group	n	Changes	Comments
I	1	34		-Administered Form I as is, with computer answer sheet. -Administration time: 25 minutes
	2	32	-Requested all papers be passed in when 15 minutes had elapsed.	-Administered Form I as is, with computer answer sheet. -Many students were unable to complete Form I in only 15 minutes. -Several students indicated they were not familiar enough with the services offered by the Counseling Center to answer the second survey question: "How successful is the Counseling Center in helping you achieve this goal?"
	3	20	-Verbally instructed students to change "Counseling Center" in the second survey question to "ASU" and respond accordingly on answer sheet.	-Continued having students mark responses on computer answer sheet. -Administration time: 20 minutes
	4	20	-Continued verbal instructions to make wording change in second survey question. -Omitted use of answer sheet. -Verbally instructed students to ignore written instructions on Form I concerning making responses on answer sheet.	-Administration time: 15 minutes without use of answer sheet.

Form	Group	n	Changes	Comments
			-Verbally instructed students to mark answers directly on Form I.	
II	1	18	-Note typographical changes on Form II compared to Form I: (a) on Form II, written instructions required response recording directly on questionnaire instead of computer answer sheet. (b) on Form II, the example provided for answering the two survey questions included an example of a goal statement. (c) On Form II, re-typed the second survey question to read "ASU" instead of "Counseling Center." (d) Altered typed numbering format:	-Administered Form II as is. -Omission of answer sheet decreased time required to complete questionnaire to 15 minutes. -On Form I, the example provided for answering the two survey questions did not include an example goal statement about which the survey questions queried. -Rewording the survey question clarified its meaning.
			1. Numbered and titled first and second survey questions: "Question 1" and "Question 2".	-On Form I, the first and second survey questions were unnumbered.
			2. Numbered goal statements, e.g., 1, 2, 3...40.	-On Form I, goal statements were unnumbered.
			3. Deleted numbers for goal statement ratings (Likert scales) to first and second survey questions.	-On Form I, Likert scale ratings of each goal statement were numbered, e.g., rating responses to the first and second survey questions for the first goal statement, were numbered "(1)" and "(2)", for the second goal statement, "(3)" and "(4)", third, "(5)" and "(6)"...fortieth goal statement, "(79)" and "(80)". Numbering Likert scale ratings on Form I in this manner eased the transferring of responses from the questionnaire to the computer answer sheet.

Form	Group	n	Changes	Comments
			(e) Survey questions about goal statements began on page two immediately after written instructions ended. (f) Survey questions were typed only on page two, with goal statements continuing through the last page, four.	-On Form I, page two contained continued written instructions only. Survey questions, together with goal statements began on page three and continued through the last page, five. -On Form I, survey questions about goal statements were typed at the top of each page, with goal statements extending down the length of the page. -Typing survey questions on page two of Form II, immediately after written instructions ended, without retyping the same survey questions above goal statements at the top of each following page, decreased the number of pages required for the questionnaire from five to four pages. -Students indicated that deletion of typed survey questions at the top of each page of goal statements was confusing. Students had to repeatedly "flip" from pages three, four and five containing goal statements back to page two to refer to typed survey questions. -Students indicated they did not understand "achievement" in Question 1: "How important to you is achievement of this goal at this time?"
	2	37	-Note typographical changes on Form II compared to Form I (discussed above).	

Form	Group	N	Changes	Comments
			-Formally added verbal instructions to standard introductory remarks concerning Question 1: "Note: Achievement of a goal may be 'unimportant' or 'very unimportant' if: (a) you have already attained the goal, or (b) the goal is not valued by you."	-After administration, students indicated such verbal instructions were not necessary for clarification of survey "Question 1". -Administration time: 15 minutes

APPENDIX G

Sample Selection Procedure
Figures for Proportional Allocation of Students to Strata

Sample Selection Procedure

1. Count the number of usable classes per stratum.
2. Systematically sample 10% of the usable classes per stratum to estimate 10% of the number of students in each stratum.
3. Divide the 10% estimate of the number of students per stratum by 10% of the number of classes per stratum to estimate the mean number of students in each class per stratum (estimated M class size).
4. Multiply the number of classes per stratum by the estimated mean class size to estimate the number of students per stratum.
5. Add the estimates of the number of students per stratum to estimate the total number of students available for sampling from the sample frame.
6. Divide the estimated number of students per stratum by the estimated total number of students to find the weighted average (w_i) of the number of students per stratum.
7. Multiply the weighted average for each stratum by the theoretical (intended) sample size (250 students) to find the theoretical number of students within each stratum sample.
8. Divide the theoretical number of students within each stratum sample by the estimated mean class size to find the theoretical number of class samples.
9. Divide the number of classes per stratum by the theoretical number of class samples to find k.
10. Systematically sample 1-in-k classes from each stratum to find the final student sample.

Figures for Proportional Allocation of Students to Strata

Stratum	# Classes Per Stratum	Estimated $\underline{M}$[a] Class Size	Estimated # Students Per stratum	W_i[b]	Theoretical #[c] Students Per Stratum Sample	Theoretical[d,e] # Class Samples	k[f]
S_1	504	31	15624	.46	115	3.71 (4)	126
S_2	317	22	6974	.20	50	2.27 (2)	158
S_3	432	19	8208	.24	60	3.16 (3)	144
S_4	209	15	3135	.10	25	1.67 (2)	104
		Total =	33941				

[a]Average number of students per class per stratum.

[b]Weighted average of the number of students per stratum (estimated number of students per stratum/estimated total number of students).

[c]Intended overall sample size (250 students) x w_i.

[d]Theoretical number of students per stratum sample/estimated $\underline{M}$ class size.

[e]Numbers in parentheses indicate the approximate theoretical number of class samples to be drawn.

[f]Number of classes per stratum/theoretical number of class samples.

Note: Systematically sample 1-in-k classes from each stratum.

APPENDIX H

Final Needs Assessment Survey Form

Final Needs Assessment Survey Form

The purpose of this inventory is to help the Counseling Center determine the needs of ASU students. Completed inventories will provide information for planning services and programs to assist students in achieving their educational and personal goals. There are 40 items which most people take about 15 minutes to complete.

Before you begin the inventory, please circle one number for each of five categories listed below:

1. Sex: Male (1) Female (2)
2. Age: 17-21 (1) 26-30 (3)
   22-25 (2) 31-over (4)
3. Marital Status: single (1), married (2), other (3)
4. Enrollment Status: 12 or more credits (hours) 1
   Less than 12 credits (hours) 2
5. Class: Freshman (1)
   Sophomore (2)
   Junior (3)
   Senior (4)
   Graduate (5)
   Other (6)

The inventory consists of a list of goal statements and two questions about each goal. Read each statement. Then circle the letter that most nearly corresponds to your answer to each question. Indicate "not applicable" for Question 1 when a goal statement refers to a behavior that is not typical of you. For example: Decrease my use of alcohol - if you do not drink alcohol, circle E for "not applicable." Indicate "not ASU's responsibility," letter E, for Question 2 when you feel that ASU should not be concerned with your achievement of that particular goal.

There is space at the end for you to add goal statements that are not included in this inventory. Also, please write down any comments you have about this inventory in the space provided.

Your answers are confidential. Do not sign your name if you want confidentiality maintained.

Circle the letters that most nearly correspond to your answers to the two questions about each goal.	Question 1 How important to you is achievement of this goal at this time?					Question 2 How successful is ASU in helping you achieve this goal?				
	Very unimportant	Unimportant	Important	Very important	Not applicable	Very unsuccessful	Unsuccessful	Successful	Very successful	Not ASU's responsibility
1. Improve my ability to make good, effective decisions.	A	B	C	D	E	A	B	C	D	E
2. Maintain my sense of individuality amidst peer pressure to conform.	A	B	C	D	E	A	B	C	D	E
3. Become more responsible in handling the freedom of college.	A	B	C	D	E	A	B	C	D	E
4. Decrease my use of alcohol.	A	B	C	D	E	A	B	C	D	E
5. Decrease my use of marijuana.	A	B	C	D	E	A	B	C	D	E
6. Control my weight within desired limits.	A	B	C	D	E	A	B	C	D	E
7. Eat more nutritiously.	A	B	C	D	E	A	B	C	D	E
8. Develop an effective exercise plan.	A	B	C	D	E	A	B	C	D	E
9. Spend less time being down and depressed.	A	B	C	D	E	A	B	C	D	E
10. Learn how to be a happier person.	A	B	C	D	E	A	B	C	D	E
11. Learn to better control my anger.	A	B	C	D	E	A	B	C	D	E
12. Learn ways to reduce and control anxiety.	A	B	C	D	E	A	B	C	D	E
13. Examine and evaluate my value system.	A	B	C	D	E	A	B	C	D	E

Circle the letters that most nearly correspond to your answers to the two questions about each goal.	Question 1 How important to you is achievement of this goal at this time?					Question 2 How successful is ASU in helping you achieve this goal?				
	Very Unimportant	Unimportant	Important	Very important	Not applicable	Very unsuccessful	Unsuccessful	Successful	Very successful	Not ASU's responsibility
14. Be more familiar with campus resources for help with educational and personal problems.	A	B	C	D	E	A	B	C	D	E
15. Budget my time more effectively.	A	B	C	D	E	A	B	C	D	E
16. Acquire financial resources necessary to allow me to continue school.	A	B	C	D	E	A	B	C	D	E
17. Have better control of my money.	A	B	C	D	E	A	B	C	D	E
18. Become better informed about birth control and pregnancy.	A	B	C	D	E	A	B	C	D	E
19. Obtain more information about sex and sexuality.	A	B	C	D	E	A	B	C	D	E
20. Communicate more openly and honestly with my partner (boy/girlfriend, fiance, spouse).	A	B	C	D	E	A	B	C	D	E
21. Deal more effectively with death and separation from significant others in my life.	A	B	C	D	E	A	B	C	D	E
22. Be better able to cope with and deal with problems in my family.	A	B	C	D	E	A	B	C	D	E
23. Make a firm career decision.	A	B	C	D	E	A	B	C	D	E

Circle the letters that most nearly correspond to your answers to the two questions about each goal.	Question 1 How important to you is achievement of this goal at this time?					Question 2 How successful is ASU in helping you achieve this goal?				
	Very unimportant	Unimportant	Important	Very important	Not applicable	Very unsuccessful	Unsuccessful	Successful	Very successful	Not ASU's responsibility
24. Make a final decision about a major.	A	B	C	D	E	A	B	C	D	E
25. Be better able to communicate with faculty members.	A	B	C	D	E	A	B	C	D	E
26. Improve my communication/ speaking skills.	A	B	C	D	E	A	B	C	D	E
27. Be more assertive in social situations.	A	B	C	D	E	A	B	C	D	E
28. Develop leadership skills.	A	B	C	D	E	A	B	C	D	E
29. Learn to meet new people and make new friends.	A	B	C	D	E	A	B	C	D	E
30. Adjust to living in a dorm.	A	B	C	D	E	A	B	C	D	E
31. Express myself with the opposite sex more effectively.	A	B	C	D	E	A	B	C	D	E
32. Find and participate in social activities which do not involve drugs or drinking.	A	B	C	D	E	A	B	C	D	E
33. Find things to do other than bar-hopping in Blowing Rock.	A	B	C	D	E	A	B	C	D	E
34. Find satisfying leisure activities here, so I do not go home so frequently.	A	B	C	D	E	A	B	C	D	E
35. Remain involved in campus activities and friendships while living off-campus.	A	B	C	D	E	A	B	C	D	E

Circle the letters that most nearly correspond to your answers to the two questions about each goal.	Question 1 How important to you is achievement of this goal at this time?					Question 2 How successful is ASU in helping you achieve this goal?				
	Very unimportant	Unimportant	Important	Very important	Not applicable	Very unsuccessful	Unsuccessful	Successful	Very successful	Not ASU's responsibility
36. Decrease feelings of tension that come from concerns about school work.	A	B	C	D	E	A	B	C	D	E
37. Develop better study habits.	A	B	C	D	E	A	B	C	D	E
38. Increase my interest in studying and learning.	A	B	C	D	E	A	B	C	D	E
39. Feel more a part of Boone and the local area.	A	B	C	D	E	A	B	C	D	E
40. Participate more in student/campus activities.	A	B	C	D	E	A	B	C	D	E

41. Please list any personal goals you may have that are not already included in this inventory.

42. Please make comments about individual items and inventory as a whole.

VITA

Walter B. Caison was born in Clinton, North Carolina on October 30, 1954. He attended elementary and junior high schools there, graduating from Clinton High School in June 1973. The following September he entered The University of North Carolina at Chapel Hill, from which he graduated in May 1977 with a Bachelor of Arts degree in Psychology. In October 1977 he returned to Clinton to begin work as a Psychological Assistant in Children's Services at the Duplin-Sampson Area Mental Health and Mental Retardation Services Center. He remained there for two years before entering The Graduate School at Appalachian State University (September 1979) to study toward a Masters degree. This degree was awarded in December 1983 in the field of Clinical Psychology.

From October 1981 to April 1982, Mr. Caison served as a Psychology Intern in the Bristol Regional Mental Health Center's Children and Youth Services located in Bristol, Tennessee. Upon completion of the internship, he accepted employment with the agency as a Psychological Examiner and continues in this capacity to date. He is a member of The Southeastern Psychological Association, and presented a paper based upon the present study at a meeting of the Association in March 1982.

Mr. Caison's parents are Earl and Lynette Caison of Clinton, North Carolina. In September 1982, he married the former

Ms. Allyson Besch of Westfield, New York. The couple's present address is 1036 Elizabeth Street, Bristol, Tennessee 37620.