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PERCEPTION OF THE CLASSROOM ENVIRONMENT
BY TRADITIONAL AND NON-TRADITIONAL COLLEGE STUDENTS

CHERYL D. GULLEY

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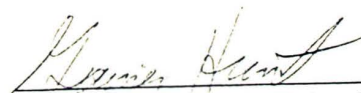

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Perception of the Classroom Environment
by Traditional and Non-Traditional College Students

A Thesis
Presented to the
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In Partial Fulfillment
of the Requirements for the Degree
Master of Science

Cheryl D. Gulley
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Abstract

The current study examined the college classroom environment in terms of the psychosocial climate preferred by traditional and non-traditional students. With the college population becoming more and more non-traditional in composition (National University Continuing Education Association, 1992), restructuring the classroom to more closely match the preferences of the non-traditional student may be needed since classroom environment preference has been shown to be closely linked to classroom success (Burden & Fraser, 1980; Fraser & Fisher, 1983; Rentoul & Fraser, 1980; Waxman, 1991; Winston, Vahala, Nichols, Wintrow, & Rome, 1994). The current study used an adapted form of the College Classroom Environment Scales (Winston, Vahala, Nichols, & Gillis, 1989) to measure such factors as the teaching style of the professor, clarity in assignment information, and competitiveness in the classroom to better understand the preferences of the traditional versus the non-traditional student.

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CHAPTER I

INTRODUCTION

The college experience is challenging for most students and the factors which determine whether the experience will be favorable or unfavorable are varied. The current study focused on the classroom environment as one factor in the college experience which has been shown to be related to an enhanced learning experience (Menges & Kulieke, 1984; Rentoul & Fraser, 1980) and has also been shown to be related to a reduction in the rate of attrition (Ashar & Skenes, 1993). As early as 1983, information from studies of the American population pointed to the likelihood of an increasing student body that was not from the traditional mold (Hodgkinson, 1983).

The typical college student of past years is referred to as the traditional student. The traditional student is from 18 to 24 years, unmarried and a relatively recent high school graduate. Recent demographic information of the college student population has shown that this profile of the typical college student is changing (King, 1994; Luzzo, 1993). The term non-traditional will be used to categorize a second group of college students. The National Non-traditional Student Association defines a non-traditional student as a student who fits into any of the following categories: 25 years of age or older, married, a single parent, or returning to higher education after an absence of 5 years or more. A growing number of students fit the category of non-traditional student.

In fact the University Continuing Education Association (1992) reports that by the year 2000 the majority of college students will be over 25 years of age and will take courses only on a part-time basis while continuing to work to support families and pay tuition.

Since a change in the profile of the typical college student is now becoming a reality, change in the college classroom environment may also need to take place. Recent studies have reported differences in the profile of a typical non-traditional student which deviate from the characteristics of a traditional college student (Krager, Wrenn & Hirt, 1990). Because of life experiences, the non-traditional student may have already acquired the skills necessary to succeed in the college environment through positive experiences in job or career-related areas (Yarbrough & Schaffer, 1990) and may not be as distracted by the pressures of having to adjust to being on their own for the first time. However, if many years have elapsed since the last experiences in the arena of higher education, the non-traditional student may experience different types of doubts and insecurities, or feelings of isolation if they do not perceive themselves to be like the other students (Krager et al., 1990). Also plaguing the non-traditional student may be pressures, responsibilities and demands on their time, whether career or family, that a traditional student does not have. According to Chickering (1969) older learners have a broader range of individual differences than younger learners plus a greater sense of self-responsibility which also impacts their college experience. Schlossberg

(1984) mentions that the variety of the non-traditional students' life experiences impact their educability. The frequency of major transitions, such as the decision to pursue a new career or work toward a career following a divorce, have also been shown to be part of the influence to return to higher education (Yarbrough & Schaffer, 1990). Students who have a positive reaction to their experiences at school have been shown to be more likely to stay with their studies (Krager, Wrenn & Hirt, 1990), to be higher achievers (Waxman, 1991; Rentoul & Fraser, 1980; Fraser & Fisher, 1983) and to use the resources of the school more fully (Epstein & McPartland, 1976; King, 1994).

Individual preferences in the classroom environment also play a role in keeping the non-traditional student in college according to recent studies of student attrition and retention in higher education. According to the data compiled by Ashar and Skenes (1993) non-traditional students are greatly impacted by the social environment in the college setting. Tinto (1987) defined two social factors which appear to contribute to unfavorable experiences for non-traditional learners. One was a state of incongruence, defined as a conflict between the student and those with whom they must interact at the college or in the classroom. The second social factor which may impact an older students' learning experience was a feeling of isolation. Tinto suggested isolation could be a problem if there is little or no interaction with the teacher or other students. In the same context, Schlossberg and Warren (1985) reported consistent findings of greater instances of success when the non-traditional student felt

that their presence at the college mattered to their advisor or the institution and that these feelings also contributed to the success rate in keeping the student in their chosen program of study (King, 1994). Increasingly there is an awareness of the impact of the psychosocial environment and the need to know more about its impact on the non-traditional student.

The current study examined classroom environment preferences reported by traditional and non-traditional students in order to determine whether differences in preferences exist. Understanding the similarities and differences in the preferences of traditional and non-traditional students will aid in the possible restructuring of the college classroom environment in order to better support the growing non-traditional student population and in turn may provide better educational experiences for all students.

Definition of Terms

Traditional Student: For the purposes of the current study, the term traditional student is used to describe a college student aged 18 to 24 years, unmarried and a relatively recent high school graduate.

Non-traditional Student: The term non-traditional student refers to a student who falls into one or more of the following categories: 25 years of age or older, married, a single parent, or returning to college after an absence from formal education of 5 years or more.

Classroom Environment: For the purpose of this study, classroom environment

is used to refer to aspects of the college classroom, like feelings generated by and about the instructor, other students, the subject matter, or the style of instruction, that contribute in positive or negative ways to the learning atmosphere. The classroom environment was measured by an adapted form of the College Classroom Environment Scales (Winston, Vahala, Nichols, & Gillis, 1989).

Psychosocial Environment: As used in this study, psychosocial environment refers to the social interactions that take place in the college setting and how those interactions are perceived.

Purpose of the Study

The purpose of the current study was to explore the possible differences between the traditional student and the non-traditional student in regard to preferences in college classroom environment. An understanding of these differences may aid in better preparation for the growing population of non-traditional students.

CHAPTER II

REVIEW OF THE LITERATURE

Research Involving Traditional and Non-traditional Subjects

Little data has been compiled which compares the learning styles of the traditional and non-traditional college student (Sheehan, McMenamin, McDevitt, 1992). Data that has been gathered deals primarily with school-related anxiety and listening attitudes of the two groups.

Yarbrough and Schaffer (1990) examined the anxiety related to higher education as experienced by traditional and non-traditional students at the University of Montana. Research involved the comparison of results of three instruments measuring anxiety. The traditional students scored higher, reporting higher levels of anxiety than did the non-traditional group. Yarbrough and Schaffer equated life experiences, especially positive life experiences, with the lessening of anxiety for non-traditional students as the possible result of increased confidence levels gained through life experiences.

A second study involved the use of self-report instruments to compare the listening attitude used by traditional and non-traditional students in the classroom setting (McDevitt, Sheehan, McMenamin, 1991). From the self-reports it was determined that non-traditional students used more assertive listening behaviors than traditional students. The non-traditional student tended to ask questions of the instructor in order to better understand, while the

traditional students would attempt to listen more closely, thereby taking a more passive approach. McDevitt et al. stressed the importance of understanding the listening skills of students as this particular area of learning style has been linked to achievement and the retention of college students.

While the fore mentioned comparisons of traditional versus non-traditional students have varied in scope, they have one point in common. All the studies have pointed to differences in the two groups of college students. Differences in listening attitudes and school-related anxiety may only be a small portion of the differences to be documented when comparing traditional and non-traditional students. Further study of the classroom environment, as one of the most fundamental learning environments, is needed.

Psychosocial Aspects of Classroom Environment

With increased awareness of the importance of facilitating a positive learning experience for students, one variable focused on by researchers has been the classroom environment. Previous research has explored the relationship between learning and actual versus preferred classroom environment (Burden & Fraser, 1993; Fraser & Fisher, 1983; Waxman, 1991; Winston, Vahala, Nichols, Wintrow, & Rome, 1994), the student's perception of the classroom (Yuen-Yee & Watkins, 1994), the rate of absences based on classroom climate preference (DeYoung, 1977), the classroom as one of the environmental factors influencing learning (Christenson & Ysseldyke, 1989;

Rentoul & Fraser, 1980), and the preferred classroom linked to the student's intellectual development (Cheong, 1994; Hadley & Graham, 1987).

Psychosocial aspects of the classroom environment have been the emphasis of many studies in the past three decades. Psychosocial environment as used here refers to the social interactions that take place in the classroom and how they are perceived by those in the classroom environment.

For the last 25 years, studies of classroom environment have primarily involved elementary and secondary school settings with little research focused on higher education as a learning environment (Clarke, 1990; Funderburk, 1994; Vahala & Winston, 1994). The research generated by Fraser and various colleagues has contributed greatly to the known data in the area of classroom environment (Fisher & Fraser, 1991; Fraser, 1991; Fraser & Fisher, 1982; Fraser & Fisher, 1983; Fraser, Giddings & McRobbie, 1991; Fraser & Tobin, 1991; Fraser, Treagust & Dennis, 1986; Fraser & Griffiths, 1992). An early examination of person-environment fit was researched by Rentoul and Fraser (1980). The Individualized Classroom Environment Questionnaire was administered to 285 junior high school students. The ICEQ included measures of the students' perceptions of their actual as well as preferred environment and the teachers' perception of the actual environment and preferred environment. Scales within the ICEQ included relationship with the teacher, classroom participation, and degree of independence in learning. The Rentoul and Fraser (1980) study showed a significant positive correlation

between learning outcomes and perception of the actual classroom when the classroom was of the preferred variety. The Rentoul and Fraser research laid the groundwork for later studies on the influence of the classroom on learning.

Later research by Fraser and Fisher (1983) proposed a person-environment fit hypothesis which stated that not only does the classroom environment influence the students' learning outcome but that for the influence to be positive the environment closely fit the classroom environment preferred by the students. Higher learning levels were found in cases where the students' classroom preferences were closely matched with the classroom environment, especially in instances where students preferred individualization and were allowed to follow individualized paths of study.

A 1993 study by Burden and Fraser using the Individual Classroom Environment Questionnaire (ICEQ) evaluated the actual classroom experience of students in secondary school classrooms in Great Britain. By means of the study, Burden and Fraser concluded that the students desired a higher level of personalization of the classroom environment to encourage individualized learning. Burden and Fraser make the point that, through the use of environment scales, feedback is coming from an active participant in the learning process--the student--rather than from someone outside the student / teacher / classroom context. The information gathered from the student participant is especially valuable.

In a 1994 study of primary schools in Hong Kong (Cheong, 1994), both physical and psychological environmental factors were determined to be important components of the learning experience. The total subject size for Cheong's study was an impressive 21,622 sixth-grade students. Using an adaptation of the Classroom Environment Scale, the students were asked to respond to a total of 36 items which rated preferences for various classroom environments. Some of the items were reworded to more closely reflect a Hong Kong classroom situation as the researcher stated awareness of the differences in typically Western versus Eastern classroom styles. Student academic achievement was found to highly correlate with both the physical and psychological aspects of preferred classroom environment. Cheong's findings showed that two measures, students' attitude toward the teacher and the effectiveness of what was taught, were more likely to be influenced by the students' perception of the classroom environment than were other measures. Cheong concluded that the perception of the teaching skills of the instructor as well as the perception of the physical environment of the classroom were the strongest predictors when linked to a students' performance.

Other researchers have also used the paradigm of person-environment fit as a basis for their theories. Christenson and Ysseldyke (1989) postulated a concept of student-environment fit as part of the "Student Learning in Context" (SLIC) model. The SLIC model takes into account a variety of factors that influence learning, including environmental factors, when designing

intervention strategies for increased learning capacity rather than relying on the students' individual characteristics as the only indicator of learning abilities.

The Christenson and Ysseldyke model views the learning process as a holistic relationship between the student, the family, the school or institution, and the classroom environment, further stressing the importance of the classroom environment as a contributing factor to learning.

DeYoung's (1977) study of an undergraduate social science class was based on restructuring the class in an attempt to provide an improved psychosocial environment within the classroom. Changes to the course were based on the data gathered from the actual and preferred forms of the questionnaire. Results, including better class attendance and an improved satisfaction rating for the course, were attributed to the classroom becoming closer to what the students had reported as ideal. The class environment has also been shown to be a possible predictor of course achievement (Fraser & Fisher, 1982). The Fraser and Fisher study was primarily a replication of earlier studies but served to strengthen the argument for a strong relationship between student outcomes and the classroom environment when the environment was close to the students' perceived ideal. For this sample of students in science classrooms, the perceived ideal included high degrees of order and organization which was found to promote increased academic outcomes.

Waxman (1991) advanced the theory of person-environment fit further by formulating the student cognition paradigm. The student cognition paradigm

suggests that the students' success is more closely linked to the students' perception and reaction to the classroom environment than the instructor's teaching style or even the students' individual background characteristics. Waxman suggests that it is the students' perception of the classroom instruction and learning climate that ultimately influences the degree of learning achieved. Student perception of the classroom environment may also influence the amount of effort exerted for the class and may thereby impact the overall learning derived from the class experience (Winston et al., 1994). Winston et al. refers to earlier studies by Fraser and Fisher (1982) that found students to be influenced toward higher achievement when the nature of the classroom was one more closely matched to the student's preference. The perception of the classroom as preferred was even more important than what the actual classroom might be (Babad, 1996). In other words, as long as the student perceived the classroom to be what they preferred, the desired climate was in place even if the teacher and outside observers did not perceive the classroom to be a close match to the student's preference. Winston et al. further advanced the proposition that evaluating and fine tuning the classroom learning environment to increase the favorable perception of the classroom for the students may be quite valuable for increased learning.

Classroom Environment Scales

One method used to examine the perception of students is the administration of self-report classroom environment scales. Classroom environment scales are instruments consisting of statements concerning the classroom teaching environment and social climate which can be matched with a range of responses along a continuum from Strongly Agree to Strongly Disagree. These instruments are divided into multiple portions (or scales) which address specific areas of interest pertinent to the classroom environment.

Prior to the development of classroom environment scales, interaction-type data was used to evaluate classroom social climate. Interaction-type studies as explained by Dunkin and Haertel (1974) involved intense observation and coding of behavior and events, followed by the communication of these events within the context of a categorical system. Self-report scales have been found to be a valuable alternative to observation techniques because self-report is more economical than observation (Babad, 1996; Fraser, Treagust, & Dennis, 1986). No extensive training of outside observers is required and less time is required to collect data. In addition, information comes directly from the student, bypassing the observer, and eliminating observer bias which could be present (Burden & Fraser, 1993) as well as eliminating the possibility of deviation from typical behavior due to the observers' presence.

The intent of classroom scales has been to determine individual or group impressions of an actual classroom environment or of the preferred classroom

environment. The actual form measures what the subject perceives to exist in the actual classroom. While, the preferred or ideal form measures what the subject perceives as the ideal characteristics of the classroom environment.

Measuring the actual classroom perception as well as the measure of the preferred classroom has been valuable in determining the differences which exist between the two (Fraser & Griffiths, 1992; Fraser, Tregust & Dennis, 1986; Winston, Vahala, Nichols, Gillis, Wintrow & Rome, 1994; Yarrow & Millwater, 1995; Yuen-Yee & Watkins, 1994). A comparison of the responses to the two questionnaires, actual and preferred, may reveal information which may be used as an improvement to the classroom social climate (Winston et al., 1994). Results of a 1994 study conducted by Winston et al. showed a distinct difference in the responses of undergraduate students when a comparison was made of real versus ideal conditions in an undergraduate statistics class. This difference in response points to the ability of students to distinguish between and report the characteristics of an existing classroom environment and their preferences in an ideal classroom environment. This ability is important when considering the validity of actual and preferred versions of instruments measuring classroom environments.

It has also been insightful to measure the instructor's perception in comparison to the student's perception (Fraser, Treagust, & Dennis, 1986). Interestingly, when students' perceptions and preferences were compared to the instructors' perception and preferences, both groups expressed a desire for

a more positive classroom environment than the one they perceived to exist. But the teachers' rating of the actual classroom environment was typically found to be more positive than what the students perceived as the actual classroom climate (Fraser et al., 1986). The disparity in the perceptions of the instructor and the students restates the value of having an instrument to measure perceptions because of the differences which may exist and may be misinterpreted by an observer.

In a recent study concerning classroom environment (Yuen-Yee & Watkins, 1994), 180 secondary school students in Hong Kong responded to two questionnaires in order to determine their perception of the actual classroom environment and their preferred classroom environment. The Learning Process Questionnaire was used for determining perception of the actual learning environment and the Classroom Environment Scales was used to determine the students' preferred learning style. Multiple regression and factor analyses were performed based on the actual and preferred measures of the LPQ and CES. Overall the information gathered reflected a student population who preferred a more friendly and democratic style in which the students and teachers worked together rather than the more typically found autocratic style of classroom. This information could be used as a valuable tool for the teacher, as originally suggested by Fraser and Fisher (1983), in order to better understand the perceived environment and, perhaps, constructively change the environment to provide better rapport and morale which would benefit the

student and teacher alike

The development of new classroom environmental intervention strategies (Yarrow & Millwater, 1995) may also be a possible outcome of the use of classroom environment scales. In a study conducted by Yarrow and Millwater, actual and preferred forms of classroom environment scales were used in a pretest-posttest format. Students were asked to report the perception of the classroom with changes in the class format attempted following the pretest. Class discussion of the results of the pretest aided in defining the changes to be made to the class. Yarrow and Millwater suggest that student participation in the shaping of the classroom social climate can be a positive factor improving student satisfaction in the classroom and also be of benefit to the instructor.

In some cases, scales have been developed to address a unique environment such as science laboratories used by specific students (Science Laboratory Environment Inventory (SLEI), Fraser, Giddings, & McRobbie, 1991; Fraser and Griffiths, 1992). Classroom environment scales have been adapted, translated and used multi-culturally with a long list of countries cited as participants in learning environment studies (Waxman, 1991). But, until recently, few studies have addressed the needs of the college student based on classroom environment scales. One explanation given is that until relatively recent times, a suitable instrument had not been developed (Fraser, 1991; Waxman, 1991; Fraser, Treagust, & Dennis, 1986). One such instrument is the College Classroom Environment Scales (Winston, Vahala, Nichols, Gillis, 1989)

developed to aid in gathering information concerning students' perceptions of the social climate of the college classroom.

Using the College Classroom Environment Scales, Vahala and Winston (1994) investigated the differences in the characteristics of three post-secondary institutions (a two year college, a private liberal arts college, and a large research university) regarding classroom climate. The study also investigated the differences in classroom climate based on the discipline being taught and the effect of the perceived classroom climate on the students' learning outcome. According to Vahala and Winston, data was gathered from 35 introductory level courses at three institutions with a total subject population of 706. The subjects completed the CCES based on their perceptions of the actual classroom environment.

The results of the Vahala and Winston study showed that differences in academic demands and standards in classroom settings were perceived based on the type of college institution setting studied supporting the earlier findings by Moos (1979) comparing high schools. Differences were found in the perceived professorial concern (PC) in the university setting versus the private, liberal arts college. Also, students at the two-year college perceived greater academic rigor (AR) than did students responding at the liberal arts colleges.

Differences in students' perception also reflected the subject being taught with laboratory classrooms being perceived as more hostile and competitive and English composition classes perceived as academically

challenging at all three types of colleges. Lastly, the authors of this study reported that the classroom environment made a small, but significant, contribution toward achieving a higher course grade when the environment was perceived as challenging but non-hostile.

Comparisons of other areas of discipline also showed differences in perception of academic rigor, professorial concern and cathetic learning climate further emphasizing the need to examine the differences in perception regarding classroom environment and the effect on classroom learning.

Now that we have instruments such as the College Classroom Environment Scales, CCES, (Winston, Vahala, Nichols, & Gillis, 1989) there are many possible applications. Among these applications are: cross-cultural comparison of perceptions of classroom environments to address the growing diversity of the college student population (Waxman, 1991) as called for by Ross-Gordon (1991) in a study which pointed to the lack of multi-cultural classroom research, and the use of environment scales for self-inspection of teaching techniques (Waxman, 1991). Waxman (1991) proposes the use of actual and preferred questionnaires by teachers in order to gain feedback from students in their classrooms.

The current study uses an adapted form of the CCES (Winston, Vahala, Nichols & Gillis, 1989) to assess preferences of college classroom environment and to compare the responses of traditional and non-traditional

students grouped into the two categories according to age, marital status, employment status, and number of children.

Participants

The current study had a sample of 134 students. The sample was composed of 30 students enrolled at Watkins Institute College of Art and Design, a small, liberal arts college in Nashville, Tennessee and 104 students from Austin Peay State University in Clarksville, Tennessee. Male and female students 18 years of age and older were included in the study. The data collected from the subjects was divided into two groups: responses from traditional students and responses from non-traditional students, as defined in Chapter 1. Traditional students numbered 34 with a mean age of 20.2 years. Of the 34, eight were from Watkins Institute and 26 were from Austin Peay. The participants in the non-traditional group numbered 100 with a mean age of 30.8 years. The non-traditional students were composed of 22 from Watkins Institute and 78 from Austin Peay. Demographic information obtained along with the data from the CCES-I (Appendix A) was the means of making the distinction between the two groups.

Procedure

Data was collected at the two colleges from student volunteers. At the beginning of each session, the researcher explained that the questionnaire was being used to study the characteristics of a student's ideal classroom

environment. It was stated that participation in the study was entirely voluntary, without penalty for non-participation and that the return of a completed questionnaire implied consent to use the data. The questionnaire was then administered with a duration of approximately 15 to 20 minutes typically needed in order to complete the questionnaire.

Materials

The College Classroom Environment Scales (CCES) (Winston, Vahala, Nichols, & Gillis, 1989) is an instrument composed of 62 statements. Prior to beginning the study, permission was obtained from the author for use and reproduction of the instrument for the purpose of conducting the current study (Appendix B). The ideal form of the classroom environment scale was chosen for use in the current study. The possible responses are limited to five possibilities based on a Likert-type scale ranging from 1=never or almost never true, 2=seldom true, 3=occasionally true, 4=often true, to 5=always or almost always true.

The CCES is subdivided into six scales with separate functions.

(1) Cathetic Learning Climate (CLC) was used to evaluate the type of academic atmosphere found in the classroom. ("This class seems to go fast." "Students are enthusiastic about participating in class activities.") (2) Professorial Concern (PC) evaluated the instructor's perceived concern about the individual student. ("The professor is willing to assist students outside of class." "The

professor spends time talking informally with students before and/or after class.”) (3) Inimical Ambiance (IA) was used to evaluate whether the classroom environment is perceived as a friendly place to learn or a hostile, highly competitive environment. (“Students do not feel comfortable volunteering ideas or opinions in this class.” “In order to get good grades in this class it’s important to appear to agree with the professor.”) (4) Academic Rigor (AR) was used to describe the students’ perception of the classroom as intellectually demanding or loosely structured. (“The professor has set high standards that students must meet in order to get good grades.” “Students in this class are challenged to think for themselves.”) (5) Affiliation (AF) evaluated the interaction that takes place in the classroom environment in terms of whether the interaction is student-driven or controlled by the instructor. (“Relationships established among students in this class carry over outside the classroom.” “Students often help each other with assignments or in understanding difficult material.”) (6) Structure (ST) evaluated how clearly the instructor and the course materials communicate with the student. (“There are firm deadlines when things are due.” “The professor follows the syllabus very closely.”)

Experimental Hypothesis

It was hypothesized that the responses of the traditional and non-traditional students to the College Classroom Environment Scales (Ideal

Format) would differ. More specifically, there will be significant differences in the scores on the College Classroom Environment Scales between traditional and non-traditional students ($\alpha < .05$) across one or more of the six scales.

CHAPTER IV

RESULTS

Using SYSTAT Version 7.0, a statistical software package, a multiple regression analysis was performed on the data collected from the CCES (College Classroom Environment Scales-Ideal Format) questionnaire (N=134). An alpha level of .05 was used for all statistical tests. The multiple regression, $R(6, 128) = .97$; $p < .05$, was significant. Therefore, F -tests were conducted in order to determine which of the scales differed significantly based on the responses of the traditional and non-traditional students. A summary of the results is reported in Table 1. Scales of Professorial Concern [PC], Inimical Ambiance [IA], and Affiliation [AF] were shown to differ significantly in the responses of the two groups of students.

No significant correlations were reported in the scale area of Cathetic Learning [CLC], Academic Rigor [AR], and Structure [ST].

Table 1

Student Status and Classroom Environment Factors

<u>Scale</u>	<u>Traditional, n= (34)</u>		<u>Non-Traditional, n= (100)</u>		<u>F</u>
	Mean	SD	Mean	SD	
CLC	70.22	12.07	70.92	12.30	1.297*
PC	49.33	8.92	49.69	9.21	2.077*
IA	16.75	6.72	15.77	6.55	3.814*
AR	28.83	3.65	29.12	4.42	0.730*
ST	32.47	4.90	32.86	7.47	0.884*
AF	23.97	4.83	22.56	4.81	-2.483*

note: * = $p < .05$

CHAPTER V

DISCUSSION

The results from the multiple regression analysis permit rejection of the null hypothesis and support the hypothesis that some differences exist in the classroom preferences of traditional students and non-traditional students. In the area of Professorial Concern [PC], non-traditional students preferred a more friendly, caring professor who is more apt to show respect for the students' opinions and ideas. Significantly lower scores by traditional students indicated that they are less concerned with the attributes of empathy and friendliness in their classroom interactions with the professor. This score further supported the findings by Schlossberg and Warren (1985) and King (1994) which suggested that greater instances of success are possible for non-traditional students who feel that their presence at the college matters.

Scoring in the scales of Inimical Ambiance [IA] indicated a preference for a classroom environment that is more competitive and rigidly structured for the traditional student. The non-traditional student scored significantly lower on this scale. Because the non-traditional student is often motivated to attend college for more personalized career-building objectives (Chickering, 1969; Sheehan, McMenamin & McDevitt, 1992; Yarbrough & Schaffer, 1990), the non-traditional student may be on their own track in search of specific knowledge to be applied in a very specific way. They may have a plan for use of the information where a

traditional student may be in college for external reasons, family and societal pressure and expectations, and may not have had time to determine the path that they will eventually take using the knowledge presented in the classroom setting. The traditional student may also be more willing to be led and more apt to get reinforcement from their grades rather than the knowledge they acquire (Sheehan et al., 1992).

Through comparison of scores in the scale of Affiliation [AF], traditional students reported a greater tendency to favor informal class interactions and a relationship-building atmosphere with their fellow classmates than did non-traditional students. This indication further supported the theory that non-traditional students aren't as socially motivated in their attendance in the college arena, but are more internally motivated to attend college (Krager, Wrenn & Hirt, 1990; Yarbrough & Schaffer, 1990). This may also be explained by primary relationships for the non-traditional student typically being outside the college setting in the form of spouse and children, whereas the traditional student has more of a social base within the college setting.

Similarities between the traditional and non-traditional students also appeared to exist. Data from traditional and non-traditional students suggested an agreement on the ideal classroom environment in the areas of Structure [ST], Academic Rigor [AR], and Cathetic Learning Climate [CLC]. Scores in the scale of Cathetic Learning Climate were moderately high for both groups indicating a preference for an environment with an energy level which

stimulates the class to participate in activities without being excessively high energy.

The Structure scale also indicated a similar mean response for traditional and non-traditional students. Both groups are experiencing a significant change in lifestyle which creates some tension (Krager, Wrenn & Hirt, 1990). Clarity in the instructor's expectations for the course, instructions and course assignments contribute to the self-confidence and emotional well-being of both the traditional and non-traditional student.

The last area of similarity occurred in the scale of Academic Rigor which measures the degree of challenge and how demanding the environment should be to be considered ideal. Both the traditional and non-traditional student favored a moderate level of challenge with the classroom norm being somewhat demanding.

Similarities in subgroups such as non-traditional and traditional college students are as important as the differences (King, 1974). It is important to continue to monitor the needs of all groups of college students for similarities and differences because students mirror the changes that occur in society in general and higher education must continue to evaluate the learning environment for all students.

Limitations of the current study

Some limitations are inherent in the scope of the current study. Data has been collected from two college, both in the southeastern region of the United

States. This may introduce an unknown geographic bias to the study. Also, because a portion of the participants were from a college of visual arts where the students were more homogeneous in interests and life experiences, conclusions may not be generalizable to a larger, more diverse population due to the specificity of this participant population. The current study should be considered exploratory in nature for these reasons.

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Appendix A

**RETURNING THIS FORM IMPLIES CONSENT TO USE
THE DATA FOUND WITHIN.**

IDEAL COLLEGE CLASSROOM ENVIRONMENT SCALES

Adapted from the College Classroom Environment Scales
(Winston, R.B., Jr., Vahala, M.E., Nichols, E.C., & Gillis, M.E. (1989))

Please indicate how frequently each of the following statements would be true in terms of your idea of an ideal classroom environment. Consider your responses carefully: respond as you honestly feel an ideal classroom should be. Do not spend a great deal of time pondering any particular statement. Please complete the following questions in their entirety including the background information at the end of the questions.

Use the scale below to record your answers. Please do not omit any items.

A=Never or almost never true in an ideal classroom environment
B=Seldom true in an ideal classroom environment
C=Occasionally true in an ideal classroom environment
D=Often true in an ideal classroom environment
E=Always or almost always true in an ideal classroom environment

Circle the response which seems most appropriate for:

	Never or almost never true	Seldom true	Occasion- ally true	Often true	Always or almost true
	A	B	C	D	E
1. Other students bring up good points in class that had never occurred to me.	A	B	C	D	E
2. The professor is willing to assist students outside of class.	A	B	C	D	E
3. The professor is not specific about deadlines.	A	B	C	D	E
4. The professor sets high standards that students must meet in order to get good grades.	A	B	C	D	E
5. The professor tries to let the class know her or him as a person.	A	B	C	D	E
6. The class seems to go fast.	A	B	C	D	E
7. Students seem to want to show each other up in class.	A	B	C	D	E
8. The assignments for class require a substantial amount of time outside of class.	A	B	C	D	E
9. There are people in class with whom I would like to be friend	A	B	C	D	E

10. On examinations students are called on to take what they read and heard in class and produce original answers or creative solutions.	A	B	C	D	E
11. Students make contributions in class which make it a better learning experience for everyone.	A	B	C	D	E
12. There are firm deadlines when things are due.	A	B	C	D	E
13. The professor recognizes students by name outside of class.	A	B	C	D	E
14. The professor follows the syllabus very closely.	A	B	C	D	E
15. Students often continue to talk about some of the ideas brought out in the class even after it is over.	A	B	C	D	E
16. It is very clear what students need to do in order to make good grades in class.	A	B	C	D	E
17. Students often help each other with assignments or in understanding difficult material.	A	B	C	D	E
18. Class lectures hold the students' interest.	A	B	C	D	E
19. The professor expects students to be creative in solving problems or satisfying requirements.	A	B	C	D	E
20. The content of a course must be well arranged and logically presented.	A	B	C	D	E
21. Students feel uncomfortable talking with the professor in class.	A	B	C	D	E
22. Students take pride in their work in class.	A	B	C	D	E
23. Relationships established among students in class carry over outside of the classroom.	A	B	C	D	E
24. Students are enthusiastic about participating in class activities.	A	B	C	D	E
25. Class expectations are clearly spelled out.	A	B	C	D	E

26. My presence in class makes no difference.	A	B	C	D	E
27. Students work together on assignments and projects for class.	A	B	C	D	E
28. Students express opinions or beliefs (related to the course content) that contradict each other.	A	B	C	D	E
29. Students do not feel comfortable volunteering ideas or opinions in class.	A	B	C	D	E
30. To do well in class a student must be able to think critically.	A	B	C	D	E
31. Students in class have gotten to know each other well.	A	B	C	D	E
32. Students seem eager to leave as soon as the class ends.	A	B	C	D	E
33. Students take a lot of notes in class.	A	B	C	D	E
34. Students get excited about some of the things they learn in class.	A	B	C	D	E
35. The professor shows a genuine interest in students' performance in the class.	A	B	C	D	E
36. Students in class treat each other as mature adults.	A	B	C	D	E
37. Students are quick to volunteer ideas or information in class.	A	B	C	D	E
38. The professor spends time talking informally with students before and/or after class.	A	B	C	D	E
39. The professor is impatient when someone says something "stupid" or asks "dumb questions."	A	B	C	D	E
40. Students feel comfortable approaching the professor with problems they are having with class.	A	B	C	D	E
41. If students were to miss several classes in a row, they would have a hard time getting caught up.	A	B	C	D	E
42. Students' ideas and opinions are appreciated in class.	A	B	C	D	E

43. Students daydream, write letters, or read the newspaper during class.	A	B	C	D	E
44. Differing opinions and points of view are encouraged in class.	A	B	C	D	E
45. The guidelines for evaluation in class are clearly outlined.	A	B	C	D	E
46. The professor embarrasses students who don't know the answers to her or his questions.	A	B	C	D	E
47. If students don't stay up with the readings and/or homework, they will be in trouble in class.	A	B	C	D	E
48. Contributions of classmates add significantly to the course content.	A	B	C	D	E
49. The professor is authoritative in his or her presentations.	A	B	C	D	E
50. The class requires students to understand and make judgments on issues about which the "experts" disagree.	A	B	C	D	E
51. The professor goes out of her or his way to help students who request it.	A	B	C	D	E
52. Students show enthusiasm about learning the subject matter of the course.	A	B	C	D	E
53. The professor seems to be understanding about students' personal problems and concerns.	A	B	C	D	E
54. In order to get good grades in the class it is important to appear to agree with the professor.	A	B	C	D	E
55. Students spend time outside of class discussing relevant course topics with classmates.	A	B	C	D	E
56. The professor shows respect for students' opinions and points of view.	A	B	C	D	E
57. Students participate in lively debates or discussions in the class.	A	B	C	D	E

- | | | | | | |
|--|---|---|---|---|---|
| 58. Students are encouraged to visit the professor in his or her office. | A | B | C | D | E |
| 59. Students are challenged to think for themselves. | A | B | C | D | E |
| 60. Assignments in the class leave room to pursue students' personal interests. | A | B | C | D | E |
| 61. Students use class discussions or presentations to test some of their own ideas. | A | B | C | D | E |
| 62. There are opportunities to contribute during the class. | A | B | C | D | E |

BACKGROUND INFORMATION Please answer the following questions

- A. Male _____ Female _____
- B. Age _____
- C. What is your current class standing?
- Freshman _____ Sophomore _____ Junior _____ Senior _____
- D. What is your major area of study? _____
- E. Marital Status? Married _____ Single _____ Divorced _____ Widowed _____
- F. Number of children at home? _____
- G. Employment Status? Full-time _____ Part-time _____ Unemployed _____
- Other _____

Appendix B



The University of Georgia

Doctoral Degree Programs/Specialties
Counseling Psychology
Student Affairs Administration

College of Education
Department of Counseling and
Human Development Services

Masters Degree Programs
Community Counseling
Rehabilitation Counseling
School Counseling
Student Personnel in Higher Education

November 12, 1996

Cheryl Gulley
Department of Interior Design
Watkins Institute
College of Art & Design
601 Church Street
Nashville, TN 37219

Dear Ms. Gulley,

Enclosed you will find a copy of the College Classroom Environment Scales (CCES) and the appropriate scoring key. You may copy the enclosed instrument as needed for your research. I do ask that you send me the results of your study using the CCES.

If you have any further questions please let me know.

Sincerely,

Roger E. Winston, Jr.
Professor

Site of Olympic Soccer, Volleyball, and Rhythmic Gymnastics 1996

VITA

VITA

Cheryl Gulley was born in Nashville, Tennessee on November 15, 1954. She attended schools in the public system of Davidson County, graduating from high school in June, 1972. She entered the University of Tennessee in September of 1973 receiving a Bachelor of Science in Psychology in August 1977 graduating with High Honors.

An additional undergraduate degree, a Bachelor of Design, was acquired from O'More College of Design in Franklin, Tennessee in 1983. From 1983 through 1992, she was employed in the field of commercial design and interior architecture. She began teaching classes at Watkins Institute College of Art and Design in 1990. She became the Department Chair for the interior design division in May, 1997.

In January 1996, she entered Austin Peay State University to pursue the Master of Science degree with a major in Psychology and a concentration in Psychological Science. The Master of Science was conferred in May, 1998.