

AN ABSTRACT OF THE THESIS OF

Hunter Todd Feaster for the Master of Science

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Students on the Beck Depression Inventory

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Research concerning depression has been conducted for many years. The college population has been a popular target for assessing depressive symptomatology. However, much of the depression research with the college population does not delineate between nontraditional and traditional college students. With a steady increase in the enrollment of nontraditional students, this section of the target population is also important to examine in depression research. The purpose of the present research project was to provide data concerning levels of depression among traditional and nontraditional undergraduate college students. In addition, levels of depression were also examined among men and women students. The revised Beck Depression Inventory (BDI) and the Student-life Stress Inventory (SLSI) were the instruments used in this study. The data were analyzed with a two-way analysis of covariance (ANCOVA) and revealed that men were more depressed than women as assessed by the BDI. The amount of stress that men in our society are placed under can justify these higher depression scores.

A COMPARISON OF TRADITIONAL AND NONTRADITIONAL COLLEGE
STUDENTS ON THE BECK DEPRESSION INVENTORY

A Thesis

Presented to

the Division of Psychology and Special Education

EMPORIA STATE UNIVERSITY

In Partial Fulfillment

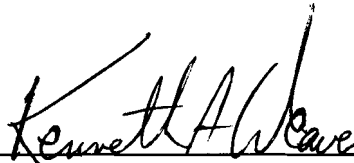
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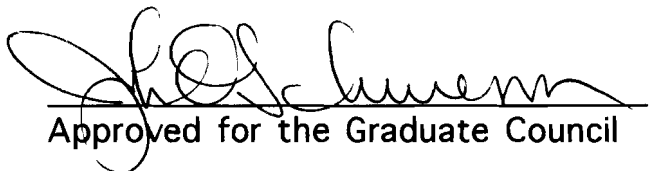
by

Hunter Todd Feaster

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and Special Education



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CHAPTER 1

INTRODUCTION

According to the National Comorbidity Survey, nearly one in five Americans experiences major clinical depression during his or her lifetime (Survey, 1994). During any one month period in the United States, at least 5% of the adult population is suffering from depressive illness (Cohen, 1994). In addition, the rate of depression has increased 10 times in the United States over the last two generations (Franken, 1994). If this trend continues, it may have detrimental effects on the population. According to the American Psychiatric Association's (1994) Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV), people suffering from Major Depressive Disorder often display some of the following characteristics nearly every day: depressed mood most of the day, diminished interest or pleasure in activities, significant weight loss or weight gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or inappropriate guilt, inability to think or concentrate, and recurrent thoughts of death or suicidal ideation.

Biological explanations for depression have been extensively studied. Many theorists believe low levels of the neurotransmitters norepinephrine and serotonin as well as high levels of the chemical acetylcholine can bring about depression (as cited in Comer, 1992). Furthermore, when studying depression, it is important to examine certain biological and demographic variables that have been known to affect this mood disorder such as gender and age.

Gender is one demographic variable that has been extensively researched in relation to depression. Much of the research suggests women suffer from depression at a rate twice that of men. There are many hypotheses as to why this occurs. These hypotheses range from personality differences between the two genders to the societal pressures which women experience that men do not.

A second variable that should be examined when studying depression is age. Research suggests depression rates for both boys and girls remain relatively constant throughout childhood until adolescence (Nolen-Hoeksema, 1990). At the time of early to middle adolescence, the depression rate for girls appears to escalate at a rate of two to one in comparison to boys (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; Weissman & Klerman, 1977). Following adolescence, this two to one ratio remains relatively constant throughout the lifespan. Depression is believed to be one explanation for the high rates of suicide among the elderly. In Western society, the elderly are more likely to commit suicide than people in any other age group (as cited in Comer, 1992).

A major life change, such as entering college, is another variable that impacts depression. The rate of depression among college students is quite alarming. Wong and Whitaker found that 30% of their college population sample reported at least a mild level of depression. Of the clinical symptoms, depression is one of the most frequently observed in the college population.

When studying college students, it is important to note there are traditional students and nontraditional students. Although the definition for nontraditional students varies, traditional students are typically defined as students aged 18 to 24 years old. Nontraditional students are typically defined as students aged 25 years old and older. According to the National Center for Educational Statistics (NCES), the number of adults returning to college has been on the rise and is expected to continue at least until the end of the decade. The NCES projects a 17% increase in the enrollment of adults 25 years and older between 1989 and 1999, compared with only a 10% growth rate for traditional students. With an increase in the number of nontraditional students attending college, recognizing this population in research is important.

The purpose of the present research is to examine the levels of depression among traditional and nontraditional undergraduate college students using the Beck Depression Inventory (BDI) and the Student-life Stress Inventory (SLSI). More specifically, it will attempt to answer the following questions: (1) are there differences in the levels of depression between traditional and nontraditional undergraduate college students, and (2) do men and women undergraduates obtain different scores on the BDI?

The practical significance of this study is apparent. Significant findings can provide a basis for preventive and therapeutic measures for depression. Furthermore, a knowledge of student and gender differences in relation to depression among a

college population can be beneficial to anyone who works with this group. It is important that all university personnel, including counselors, residence hall staff, and faculty members, be aware of the scope and prevalence of depression on college campuses.

Literature Review

Gender

A great deal of research has been compiled examining gender in relation to depression. Women experience depression at twice the rate of men (Bower, 1995; Weissman & Klerman, 1977). Similarly, Weissman (1971) reported that women relative to men with depression attempt suicide at a rate of approximately two to one, although they succeed less often.

Boggiano and Barrett (1991) examined gender differences relating to depression in college students using the BDI and the Expanded Attributional Styles Questionnaire (EASQ). The results of 133 participants indicated women college students are indeed more depressed, as indexed by their scores on the EASQ and the BDI, in comparison to their male counterparts.

In a 1990 study by McDaniel and Richards, gender differences among college students were examined in relation to depression. This study interviewed 35 men and women college students who reported experiencing serious depression within the past year, and asked about the coping techniques they used. The results indicated women reported more depression than did men, both retrospectively and currently. This supports the research indicating women tend to report depression at higher rates (McDaniel & Richards, 1990;

McDermott, 1987; Vredenburg, Krames, & Flett, 1986; Wong & Whitaker, 1993). Although some investigators suspect that women may actually have higher rates of depression, others believe women are simply more likely to admit such feelings and seek help (Astor-Dubin & Hammen, 1984; Roehl & Okun, 1984; Vredenburg et al., 1986; Zuckerman, 1989).

Warren (1983) believes women report higher rates of depression because of their personalities. According to Warren, men are intolerant of the experience of depression. The depressive experience is incompatible with the male gender role, which stresses competence, confidence, self-reliance, control and a restriction of affect. Because of the incompatibility of the male gender role and depression, Warren (1983) hypothesized that men may be less likely than women to seek help when depressed and may be more likely to perceive depression as a sign of failure, weakness, or as an attempt to hide such feelings from others. High masculinity has been found to be consistently associated with low depression and high self-esteem. In contrast, high femininity has had either no, or weak, relationships to favorable adjustment (Waelde, Silvern, & Hodges, 1994).

There is evidence that depressed women attribute their depression to internal causes (Burns as cited in Endlich, 1989). Stehouwer, Bultsma, and Blackford (1985) observed differential patterns among adult female depressives and found an internal focus on depressive symptomatology. Pessimism, sense of guilt, and insomnia combined with somatic preoccupation suggest an

internalized, ruminative character to depression experienced by female depressives. Depressive women tend to view themselves as failures.

Boggiano and Barrett (1993) reported one important source of depression for female college students is concern over interpersonal relations. College is often the first time adolescents have free reign of their own lives without having to answer to an immediate authority figure. In addition, Boggiano and Barrett stated women are heavily socialized to be concerned about others and to develop intimate relationships. This source of identity likely becomes predominant during the college years. Perhaps many women do not achieve the goals of positive and intimate relationships they wanted; thus, depression results (Katz et al. as cited in Boggiano & Barrett, 1993).

Another theory for higher rates of depression among women in this age group focuses on attractiveness and body image. Women rigidly define what is an acceptable body image and quickly internalize the current standard of female beauty. Currently, society's standard for female beauty is to be increasingly thin. In turn, body dissatisfaction, coupled with the importance women attach to their weight and appearance, leads to depression among many women (McCarthy, 1990).

In spite of these previous studies, there is disagreement in the literature concerning the relationship of college students' gender and the experience of depression. Nolen-Hoeksema (1987, 1990)

found a striking absence of sex differences in relation to depression among college students. Gladstone and Koenig (1994) conducted a study where 200 college students completed a packet of questionnaires that assessed demographic characteristics, depressed mood and symptoms, and a variety of cognitive and psychosocial variables. The results indicated an equal rate of depression among men and women. Nolan and Willson (1994) also found similar findings with men and women undergraduates reporting similar scores on the BDI.

Age

Age is another variable that is related to depression. Symptoms of depression are commonly experienced by adolescents and young adults and may be present even in relatively young children (Epstein as cited in McDermott, Hawkins, Littlefield, & Murray, 1989). Craig and Van Natta (1979) suggest that the reporting of symptoms of depression declines with age after adolescence, but reporting symptoms is frequent among high school and college age populations. Depression rates for individuals 25 to 64 years of age are higher (5 to 6.5 %) than for young adults (4.4 %) and for the elderly (2.5 %) (Cohen, 1994).

During the 6 to 12-year-old period depression rates for boys and girls are relatively equal (Nolen-Hoeksema, 1990). However, during the period of early to middle adolescence, depression rates for girls sharply increase so that girls are twice as likely than boys to experience depression. Epidemiological findings indicate that this 2:1 (female to male) disparity continues from adolescence

throughout adulthood, including the 18 to 24-year-old period characterized as early adulthood (Lewinsohn et al., 1993; Weissman & Klerman, 1977).

For men, the risk of becoming depressed peaks in the early twenties (Robbins, 1993). The years of higher education, starting a career, developing relationships, marriage, starting a family, and increasing responsibilities are the years when depression is most likely to begin occurring in men. For women, the risk of becoming depressed does not peak until the age of 50 (Robbins, 1993). At this age, a woman's children have usually grown, and she is approaching menopause and a potential mid-life crisis.

Wong and Whitaker (1993) examined college students and found that age has a similar relationship as grade classification. They found that levels of depression decrease as one gets older. Wong and Whitaker had 171 college students complete a brief demographic information sheet and six standardized questionnaires: the BDI, the Center for Epidemiological Studies-Depressed Mood Scale (CESD), the Dysfunctional Attitudes Scale (DAS), the Problem-Solving Inventory (PSI), the Index of Self-Esteem (ISE), and the Bem Sex Role Inventory (BSRI). The results from this study indicated that freshman reported the highest levels of depression, problem-solving difficulties, and dysfunctional attitudes. Moreover, there appeared to be consistent and gradual improvements such that by the senior year, upperclass students reported significantly less depression.

Student Status

Attending a college or university is another variable linked to depression. The events experienced while one is in college may be a crisis for many students. College is often the first time individuals are away from their parents for extended periods of time. On campus, students are exposed to new freedoms and choices in their personal lives which they may have never experienced before. This new environment complete with new stressors such as financial obligations, academic obligations, and peer pressure may culminate in a proneness towards depression.

Depression is the most commonly identified mental health problem among university students at a rate which is 50% higher than the rate of the general population between the ages of 18 and 74 (Bumberry, Oliver, & McClure, 1978). A 4-year longitudinal study of incoming freshman by Rimmer, Halikas, and Schuckit (1982) found that 39% of the students experienced psychiatric illness during their collegiate careers, 90% of whom were suffering from depression.

McLennan (1992) tested 148 first-year undergraduate students by administering the Zung Depression Scale (ZDS) and the Irrational Beliefs Test (IBT) at the beginning and the end of the academic school year. McClennan's findings indicated 27% of the sample was depressed on at least one of the two survey occasions. This suggests the number of students who will experience depression at some time during an academic year is somewhat greater than a simple frequency might suggest.

Gladstone and Koenig (1994) also found similar results concerning depression rates among college students. Gladstone and Koenig examined 200 students using the BDI, the Depression Symptom Checklist (DSCL), the Response Styles Questionnaire (RSQ), the Attributional Styles Questionnaire (ASQ), the Bem Sex-Role Inventory (BSRI), the Attitudes Toward Women Scale for Adolescents (AWSA), the Revised UCLA Loneliness Scale, the Perceived Emotional/Personal Support Scale (PEPSS), and the Life Events Questionnaire (LEQ). Gladstone and Koenig also found a high rate of depression among college students. Nearly one-fourth (24.4%) of the sample were found to be at least mildly depressed.

Nontraditional College Students

From 1980 to 1985, enrollments of undergraduate students under 25 years of age (traditional students) decreased by 5%, whereas there was a 12% increment in the enrollment of older adult (nontraditional) college students (Snyder, 1987). Reports show a decline in the enrollment of traditional students with a steady increase in the enrollment of nontraditional students (Hruby, 1985). By the year 2000, approximately 50% of the male college students and 23% of the female college students will be 25 years of age or older (U. S. Department of Education Office of Educational Research and Improvement, 1989).

Because the number of nontraditional students is growing, many universities and colleges must develop programs and services designed to attract and retain older learners (Chartrand as cited in Query, Parry, & Flint, 1992). Many studies have been conducted

utilizing the traditional college student population, but there has been little research conducted on the nontraditional student population (Johnson as cited in Woodard & Suddick, 1992). The increasing number of nontraditional students returning to college should justify the need for more research with this population.

When studying the nontraditional student, Kasworm (1982) has suggested that nontraditional students differ from traditional students in their psychological, psychosocial, and behavioral needs. Traditional students share needs similar to nontraditional students, but nontraditional students often have to balance roles such as parent, spouse, and employee. Upon reentering the educational system, nontraditional students often face especially stressful situations due to high levels of uncertainty and commitment to a variety of life roles. Unmitigated, these types of situations may trigger debilitating emotions such as guilt, anger, frustration, burnout and cognitive depression among nontraditional students and their families (Query, Parry, & Flint, 1992).

Student-life Stress Inventory

The Student-life Stress Inventory (SLSI; Gadzella, 1991) is a measure of student stress developed by Gadzella in 1991. Gadzella developed this instrument based on a model consisting of different kinds of stressors and reactions to stressors (referred to by stress theorists and researchers) (Gadzella, 1994). The SLSI consists of 51 items where participants respond by rating each item using a 5-point Likert scale. The items on the inventory are listed under nine categories and two sections (types of stressors and reactions

to stressors). Five of the nine categories are types of stressors (frustrations, conflicts, pressures, changes, and self-imposed). Four of the categories are reactions to stressors (physiological, emotional, behavioral, and cognitive). Data show that the SLSI gives a moderately reliable and valid measure of students' stress on the nine categories studied (Gadzella, 1994).

Beck Depression Inventory

The revised Beck Depression Inventory (BDI; Beck et al., 1979) is a 21-item instrument designed to assess the severity of depression in adolescents and adults. Introduced at the Center for Cognitive Therapy at the University of Pennsylvania Medical School in 1971, the revised BDI replaces the original developed by Beck, Ward, Mendelson, Mock and Erbaugh (1961). During the last 25 years, the BDI has become one of the most widely accepted instruments in clinical psychology and psychiatry for assessing the intensity of depression in psychiatric patients (Piotrowski, Sherry, & Keller, 1985), for detecting possible depression in normal populations (Steer, Beck, & Garrison, 1985), and in depression research (Hatzenbuehler, Parpal, & Matthews, 1983).

The BDI was originally constructed to assess the current depth of depression with items covering affective, cognitive, motivational, and physiological areas of depressive symptomatology along a four-point continuum (Bumberry et al., 1978). Each item consists of four statements rated from 0 to 3, representing increasing severity of depressive symptomatology from which the participant picks one. An individual's score is determined

by calculating the sum with the range of possible scores extending from 0 to 63. The BDI is used to classify four levels of depression: (a) none to minimal (0-9), (b) mild to moderate (10-18), (c) moderate to severe (19-29), and (d) severe (30-63) (Beck, Steer, & Garbin, 1988).

Because the BDI was designed for use with psychiatric populations, skepticism has been raised as to whether or not it is a valid instrument for measuring depression among college students. Bumberry et al. (1978) researched the validity of the BDI with a university population and concluded it was a valid instrument for measuring depression among the university population. In addition, Tashakkori, Barefoot and Mehryar (1989) gave 405 Iranian college students a battery of tests which included the BDI and also found validity in the BDI as a measure of depression among college students.

Statement of Purpose

The purpose of the present research project was to examine traditional and nontraditional undergraduate college students' levels of depression. Although both traditional and nontraditional students experience depressive symptomatology as a result of college, the comparative level of depression that these students are experiencing is the interest. In addition, possible gender differences were also examined.

Levels of depression were assessed using the BDI. The SLSI, although not a measure of depression, was a covariate for the data

analysis. In addition, a demographic questionnaire was used to classify the participants.

The information gained from this project may be useful not only to practitioners, but also to students, professors, colleagues, and anyone else who comes in contact with students suffering from depression. By differentiating between traditional and nontraditional students, programs and therapeutic interventions can be evaluated to determine their effectiveness in meeting the needs of both types of students. Although both types of students are having similar collegiate experiences, their personal lives outside of the academic realm may not be very similar.

CHAPTER 2

METHOD

Participants

The participants in this study were 113 college students divided into four groups based on gender (men or women) and student status (traditional or nontraditional). There were 26 participants in the traditional men group, 25 in the nontraditional men group, 37 in the traditional women group, and 25 in the nontraditional women group. The participants were volunteers from a midwestern, regional state university. Participants signed up to participate in order to fulfill class requirements. Participants were informed both from the sign up sheet and by phone that participation would require attendance at one group session lasting approximately 15 to 20 minutes.

Nontraditional students were defined by the university as meeting one or more of the following criteria: (a) aged 24 years and older (b) a parent, (c) have been out of college two consecutive years or longer, (d) a veteran, and/or (e) married. According to the 1995 fall enrollment statistics, this definition of a nontraditional student represented 26% of the university's population. For the purpose of this study, students were classified as traditional by meeting one of the following characteristics: (a) aged 24 years and older, (b) a parent, (c) a veteran, or (d) married.

Instruments

The instruments employed in this study consisted of an informed consent form (Appendix A), a short demographic

questionnaire (Appendix B), the Student-life Stress Inventory (SLSI; Gadzella, 1991, Appendix C), and the Beck Depression Inventory (BDI; Beck et al., 1979; Appendix D). The demographic questionnaire requested personal information from the students regarding gender, age, grade classification, marital status, veteran classification, and number of children. The students were asked not to put their names on any of the other materials used to ensure confidentiality. The materials were numbered in order to identify the data.

To estimate the reliability of the SLSI, several analyses have been done. Cronbach alpha was computed for the total inventory with values of .76 for all subjects, .78 for men, and .76 for women. In addition, Cronbach alphas for each of the nine categories have been computed and range from .52 (frustration) to .85 (change). Finally, Pearson product-moment correlations have also been computed for the nine categories and range from .57 (cognitive) to .76 (emotional) with the total score (Gadzella, 1994).

Beck et al. (1961) reported the split-half reliability for the BDI at .86 with a mean coefficient alpha of .86 in a meta-analysis with nine psychiatric samples and .81 for 15 nonpsychiatric samples (Beck et al., 1988). Several studies have also demonstrated the construct and concurrent validity of the instrument leading the National Institute of Mental Health to adopt the BDI as a standard assessment tool (Rabkin & Klein as cited in Query et al. 1992). College students' BDI scores have good test-retest reliability after 2 weeks ($r = .90$; Lightfoot & Oliver, 1985) and at 3-month intervals ($r = .74$; Miller & Seligman, 1973). Internal consistency of

the BDI among undergraduates is also acceptable (Bryson & Pilon, 1984; Peterson, Schwartz & Seligman, 1981).

Procedure

The researcher began the project by submitting an application form for approval to the Human Subjects Committee explaining what procedures would be used. Following the approval of the committee, the researcher posted a sign up sheet by the Psychology and Special Education Office requesting participants. An additional sign up sheet was posted outside of the Nontraditional Student Center because additional nontraditional students were needed. Test administration took place in a group setting in a classroom. When the students arrived at the designated classroom, they were given an informed consent form and asked to carefully read and sign the form if they were interested in participating in the project. Those students who were not interested in participating were thanked and then dismissed.

After the consent forms were signed and returned, the researcher passed out a numbered questionnaire booklet that consisted of a demographic form, the SLSI, and the BDI to each participant. Next, the researcher instructed the participants to read the directions on the demographic form, complete the form, and then wait for further instructions. Upon the completion of the demographic form, the researcher asked the participants to read the instructions at the top of the SLSI and complete it. Following the completion of the SLSI, the researcher read the following instructions for the completion of the BDI while asking the

participants to silently read along from the instructions on the test:

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2, or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

Upon completion of the BDI, the participants returned all of the materials and were asked not to discuss the questionnaire with other students as to avoid contamination of the research. Finally, the participants were thanked for their time and dismissed.

Although no time limit was imposed on the participants, the testing procedure required approximately 15 to 20 minutes for total administration.

CHAPTER 3

RESULTS

Following the administration of the questionnaires, the demographic questionnaire was utilized to classify each participant into one of the four experimental groups based on gender and student status. Following the classification of each participant, the scores from the Student-life Stress Inventory (SLSI) and the Beck Depression Inventory (BDI) were produced by summing the numerical responses of each test. The total scores were entered into an SPSS analysis of covariance program and analyzed at the .05 alpha level.

A two-way analysis of covariance (ANCOVA) was employed with gender (men or women) and student status (traditional or nontraditional) as independent variables, and the total score on the BDI as the dependent variable. The total score from the SLSI was used as the covariate to help control for extraneous variables relating to stress. The average age of the participants was as follows: traditional men were 19.62 years ($SD = 1.45$), nontraditional men were 28.47 years ($SD = 7.68$), traditional women were 19.75 years ($SD = 1.48$), and nontraditional women were 29.29 years ($SD = 6.41$).

The results of the two-way ANCOVA revealed that the SLSI served as a good covariate correlating highly with the dependent variable (BDI scores; $r = .54$, $p < .01$). Results of this analysis also revealed nonsignificance for student status, $F(1, 107) = 3.29$, $p > .05$, and gender x student status, $F(1, 107) = 3.22$, $p > .05$. The results of the analysis did, however, reveal significant findings for

gender $F(1, 107) = 4.86, p < .05$. The men were more depressed than the women. Table 1 shows the Analysis of Covariance for the BDI with the SLSI as the covariate. A comparison of the adjusted means and standard deviations of BDI scores for the student participants is shown in Table 2.

Table 1

Analysis of Covariance for the Beck Depression Inventory With the Student-life Stress Inventory as Covariate

Source	df	SS	MS	F
Sex (A)	1	231.47	231.47	4.86*
Status (B)	1	156.71	156.71	3.29
A x B	1	153.19	153.19	3.22
Covariate	1	2270.80	2270.80	47.72**
Error	107	5091.62	47.59	

* $p < .05$

** $p < .01$

Table 2
Table of Adjusted Means and Standard Deviations for Beck
Depression Inventory Scores

Student Status	Men	SD	Women	SD	Total
Traditional	8.55	7.33	7.96	6.45	16.51
Nontraditional	13.33	11.82	7.99	7.01	21.32
Total	21.88		15.95		

CHAPTER 4

DISCUSSION

The purpose of this research was to examine traditional and nontraditional undergraduate college students' level of depression using the Beck Depression Inventory (BDI). In addition, the levels of depression among men and women undergraduate students were also analyzed.

Gender

Results of the gender analysis revealed that men and women significantly differ in their levels of depression as assessed by the BDI. On average, men scored about 3 points higher than women on the BDI.

According to Good and Mintz (1990), one explanation for the higher levels of depression can be explained by college men's orientation toward success, power, and competition. This orientation may interfere with other domains of life such as home, health, and leisure. Men's socialized drive to achieve may lead them to ignore other aspects of life, a tendency that is predicted to result in depression.

According to Jourard (as cited in Good & Mintz, 1990), although men have basic needs such as to love and be loved, to know and be known, to care and to be cared for, the socially prescribed male gender role requires men to be noncommunicative, inexpressive, and competitive and to evaluate life success in terms of external achievements rather than interpersonal fulfillment. Thus, according to Jourard, if a man fulfills the prescribed male gender role, his

basic needs may go unmet. The adherence to traditional male roles may have detrimental consequences for men, including an increased risk of depression. The suppression of these needs may have resulted in the higher levels of depressive symptomatology as measured through the BDI.

Student Status

Results of the study indicated student status does not effect levels of depression and the scores on the BDI. Traditional and nontraditional college students do not differ from each other in the levels of depression they are experiencing.

Future Use of the BDI

The BDI is one of the most widely accepted instruments for detecting possible depression in normal populations (Steer, Beck, & Garrison, 1985) and in depression research (Hatzenbuehler, Parpal, & Matthews, 1983). Although differences were found in the levels of depression among traditional and nontraditional students as well as among men and women, the sources and manifestations of depression are only understood to a limited degree. Regardless of what type of student is experiencing depression, university programs providing health services need to be aware of the prevalence of depression and be able to promote preventive and counseling services.

Future research concerning depression should concentrate on nontraditional men and potential negative consequences of the traditional male gender role in relation to depression. Furthermore, future research should also address the issue of why men express

feelings of depression and seek help for depression less often than women, as well as what steps can be taken to remedy this situation.

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APPENDIX A
Informed Consent Form

PARTICIPATION CONSENT LETTER

Please read this consent form carefully. If you have any questions, ask the experimenter and he will answer the questions.

The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and you will not be subjected to reprimand or any other form of reproach. There is no risk of harm involved in completing the study.

You will be asked to fill out two short questionnaires investigating the use of the Beck Depression Inventory with Emporia State University students. The time to complete the questionnaires will be approximately 15-20 minutes.

Information obtained from the study will be identified only by code number. Your answers as well as any identifying data will remain confidential. Your name will be used only to indicate that you participated in the study and received extra credit for participating.

If you have any questions or comments about this study, please feel free to contact Todd Feaster, 343-9272.

Thank you for your participation.

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

(Signature of participant)

(Date)

THIS PROJECT HAS BEEN REVIEWED BY THE EMPORIA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR TREATMENT OF HUMAN SUBJECTS FOR THE PROTECTION OF HUMAN SUBJECTS.

APPENDIX B
Demographic Questionnaire

DEMOGRAPHIC QUESTIONNAIRE

INSTRUCTIONS: Please respond to the following questions with honest answers. Fill in the blank or circle your selection on this form.

1. What is your gender? Male Female

2. What is your age? _____

3. What is your classification? FR SO JR SR

4. What is your marital status?
 Single Divorced Separated Married Widowed

5. Do you have any children? Yes No

6. Are you a veteran? Yes No

APPENDIX C
Student-life Stress Inventory

STUDENT-LIFE STRESS INVENTORY

Please indicate how you feel about the following statements listed below.

1=Most of the Time 2=Often 3=Occasionally 4=Seldom 5=Never

I. STRESSORS

A. As a student:

1. I have experienced frustrations due to delays in reaching my goals. 1 2 3 4 5
2. I have experienced daily hassles which affected me in reaching my goals. 1 2 3 4
3. I have experienced lack of sources (money for auto, books, etc.). 1 2 3 4 5
4. I have experienced failures in accomplishing the goals that I set. 1 2 3 4 5
5. I have not been accepted socially (became a social outcast). 1 2 3 4 5
6. I have experienced dating frustrations. 1 2 3 4 5
7. I feel I was denied opportunities in spite of my qualifications. 1 2 3 4 5

B. I have experienced conflicts which were:

8. Produced by two or more desirable alternatives. 1 2 3 4 5
9. Produced by two or more undesirable alternatives. 1 2 3 4 5
10. Produced when a goal had both positive and negative alternatives. 1 2 3 4 5

C. I experience pressures:

11. As a result of competition (on grades, work, relationships with spouse and/or friends). 1 2 3 4 5
12. Due to deadlines (papers due, payments to be made, etc.). 1 2 3 4 5
13. Due to an overload (attempting too many things at one time). 1 2 3 4 5
14. Due to interpersonal relationships (family and/or friends, expectations, work responsibilities). 1 2 3 4 5

D. I have experienced:

15. Rapid unpleasant changes. 1 2 3 4 5
16. Too many changes occurring at the same time. 1 2 3 4 5
17. Change which disrupted my life and/or goals. 1 2 3 4 5

E. As a person:

- 18. I like to compete and win. 1 2 3 4 5
- 19. I like to be noticed and be loved by all. 1 2 3 4 5
- 20. I worry a lot about everything and everybody. 1 2 3 4 5
- 21. I have a tendency to procrastinate (put off things that have to be done). 1 2 3 4 5
- 22. I feel I must find a perfect solution to the problems I undertake. 1 2 3 4 5
- 23. I worry and get anxious about taking tests. 1 2 3 4 5

II. REACTIONS TO STRESSORS

F. During stressful situations, I have experienced the following:

- 24. Sweating (sweaty palms, etc.). 1 2 3 4 5
- 25. Stuttering (not being able to speak clearly). 1 2 3 4 5
- 26. Trembling (being nervous, biting fingernails, etc.). 1 2 3 4 5
- 27. Rapid movements (moving quickly, from place to place). 1 2 3 4 5
- 28. Exhaustion (worn out, burned out). 1 2 3 4 5
- 29. Irritable bowels, peptic ulcers, etc. 1 2 3 4 5
- 30. Asthma, bronchial spasm, hyperventilation. 1 2 3 4 5
- 31. Backaches, muscle tightness (cramps), teeth-grinding. 1 2 3 4 5
- 32. Hives, skin itching, allergies. 1 2 3 4 5
- 33. Migraine headaches, hypertension, rapid heartbeat. 1 2 3 4 5
- 34. Arthritis, over-all pains. 1 2 3 4 5
- 35. Viruses, colds, flu. 1 2 3 4 5
- 36. Weight loss (can't eat). 1 2 3 4 5
- 37. Weight gain (eat a lot). 1 2 3 4 5

G. When under stressful situations, I have experienced:

- 38. Fear, anxiety, worry. 1 2 3 4 5
- 39. Anger. 1 2 3 4 5
- 40. Guilt. 1 2 3 4 5
- 41. Grief, depression. 1 2 3 4 5

H. When under stressful situations, I have:

42. Cried. 1 2 3 4 5

43. Abused others (verbally and/or physically). 1 2 3 4 5

44. Abused self (used drugs, etc.). 1 2 3 4 5

45. Smoked excessively. 1 2 3 4 5

46. Was irritable towards others. 1 2 3 4 5

47. Attempted suicide. 1 2 3 4 5

48. Used defense mechanisms. 1 2 3 4 5

49. Separated myself from others. 1 2 3 4 5

I. With reference to stressful situations, I have:

50. Thought about and analyzed how stressful the situations were. 1 2 3 4 5

51. Thought and analyzed whether the strategies I used were most effective. 1 2 3 4 5

APPENDIX D
Beck Depression Inventory

BECK DEPRESSION INVENTORY

Directions: This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2, or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

- A. 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.
- B. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
- C. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.
- D. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.
- E. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
- F. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
- G. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

- H. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.
- I. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
- J. 0 I don't cry any more than usual.
1 I cry now more than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
- K. 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
- L. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost of my interest in other people.
3 I have lost all of my interest in other people.
- M. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.
- N. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.
- O. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
- P. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

- Q. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

- R. 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

- S. 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less. Yes_____No__

- T. 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think about anything else.

- U. 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

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

Hunter Todd Feaster
Signature of Author

12-11-96
Date

A Comparison of Traditional and
Nontraditional College Students
on the Beck Depression Inventory
Title of Thesis/Research Project

Doug Cooper
Signature of Graduate Office Staff Member

12-16-96
Date Received