Past studies examined a variety of factors involved in attitudes toward people with mental illness. Such factors included age, gender, education, and professional training. Usually these factors were investigated either alone or with many others in general studies about perception of mental illness. Past research has not focused on interaction effects between education and gender. This study investigated the interaction and effects of gender and educational level on attitudes toward people with mental illness. For the purpose of this study, attitudes of freshmen and graduate students in a variety of helping professions were examined. Eighty-eight students were given a short demographic profile and the attitudinal measure Community Attitudes Toward the Mentally Ill. This instrument measured global attitudes toward mental illness and attitudes on four different dimensions: authoritarianism, benevolence, community mental health
ideology, and social restrictiveness. One factorial analysis of variance (ANOVA) for the entire scale and four additional factorial ANOVAs for each of the dimensions were performed. No significant interaction was found between gender and educational level. Results also showed no significant effect for gender on any of the four dimensions or the entire scale of community attitudes. No significant effect was found for benevolence or community mental health ideology. A significant effect for educational level on global attitudes toward people with mental illness was found. Two dimensions that varied significantly across educational levels were authoritarianism and social restrictiveness. Graduate students scored significantly higher than freshmen on both dimensions and on global attitudes indicating more favorable attitudes toward people with mental illness. Individuals on a higher educational level were less authoritarian and socially restrictive than individuals on a lower educational level.
AN EXAMINATION OF THE EFFECTS OF GENDER AND EDUCATION ON
ATTITUDES TOWARD PEOPLE WITH MENTAL ILLNESS AMONG COLLEGE
STUDENTS

A Thesis
Presented to
the Division of Psychology and Special Education
EMPORIA STATE UNIVERSITY

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Annette Pomberg
August 1998
ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS..................................................................................................................... iii

TABLE OF CONTENTS....................................................................................................................... iv

LIST OF TABLES............................................................................................................................... v

CHAPTER

1 INTRODUCTION..................................................................................................................... 1

2 METHOD............................................................................................................................... 19

Participants.............................................................................................................................. 19

Design..................................................................................................................................... 20

Instrument............................................................................................................................. 20

Procedure............................................................................................................................... 22

3 RESULTS.............................................................................................................................. 24

4 DISCUSSION......................................................................................................................... 37

REFERENCES.......................................................................................................................... 41

APPENDICES............................................................................................................................ 48

Appendix A:.......................................................................................................................... 48

Appendix B:............................................................................................................................ 55

Appendix C:............................................................................................................................ 57
LIST OF TABLES

TABLE 1: Means and Standard Deviations for Authoritarianism Measured by CAMI................................................................. 25

TABLE 2: Summary of Analysis of Variance of Authoritarianism as a Function of Educational Level and Gender................................................................. 26

TABLE 3: Means and Standard Deviations for Benevolence Measured By CAMI................................................................. 27

TABLE 4: Summary of Analysis of Variance of Benevolence as a Function of Educational Level and Gender................................................................. 28

TABLE 5: Means and Standard Deviations for Community Mental Health Ideology Measured By CAMI................................. 30

TABLE 6: Summary of Analysis of Variance of Community Mental Health Ideology as a Function of Educational Level and Gender................................. 31

TABLE 7: Means and Standard Deviations for Social Restrictiveness Measured by CAMI......................................................... 32

TABLE 8: Summary of Analysis of Variance of Social Restrictiveness as a Function of Educational Level and Gender................................. 33

TABLE 9: Means and Standard Deviations for Global Community Attitudes Measured by the Entire CAMI................................. 34
TABLE 10: Summary of Analysis of Variance of Global Community Attitudes as a Function of Educational Level and Gender

<table>
<thead>
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<th>35</th>
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CHAPTER 1

INTRODUCTION

Human perception of things, persons, and events is subjective. Human beings perceive their surroundings selectively, depending on their education, knowledge, background, and interests. Some perceptions, true or false, are passed on through generations. Such perceptions form the basis for prejudices, myths, and stereotypes toward things or people. Prejudices toward human beings remain, and, after a certain time, nobody can explain their origin. Prejudices can be positive or negative in nature, but negative prejudices are much more often studied than the positive ones. Prejudices in general vary from preference to aversion to a certain group of people. These groups are often people from a certain cultural or religious background, people with disabilities, or people with a disease. Many people in society have prejudices toward people with mental illness, although a high percentage of the population have experienced a mental illness or know somebody with mental illness.

Myths and prejudices about people with mental illness have been present throughout history. At times, people thought mental illness was caused by supernatural forces. During the Middle Ages, many people believed the mentally ill were possessed by evil demons. Commonly people with
mental illness were harassed, chased, or abused in public. During the witch hunts in the 15th, 16th, and 17th century, people who behaved strangely in any way were persecuted, tortured, and killed. Many people with mental illness were among the victims. From the early ages, people with mental illness were gathered in madhouses, hospitals, and asylums. There they often lived under bad conditions. Put in chains and held in isolation, people in these institutions usually got worse rather than better. Not medicated, left by themselves, or only with other mentally ill people around them, the patients in these madhouses had no chance of recovery.

Today, many things have changed in the treatment and perception of mental illness. Although medication and better education of the public improved the perception and integration of the mentally ill into society, there are still many false beliefs, prejudices, and myths about mental illness. These prejudices or beliefs may be positive or negative in nature. People often view individuals with mental illness as stupid, dirty, or dangerous. Others think that the mentally ill are good in nature, but that they should be left alone in their world of fantasies. Neither of these ideas is helpful when trying to integrate mentally ill people into society. Not only people in the public but also professionals have certain prejudices and beliefs about
individuals with mental illness.

The purpose of this research is to investigate what constitutes common prejudices and attitudes of professionals as well as of the public. How might they be changed through awareness, education, or exposure to clients with mental illness? Can knowledge about mental illness or experience with the mentally ill influence a person's attitude toward people with mental illness? Do certain attitudes influence the daily work of mental health professionals, and, if the answer to this question is yes, to what degree? Can a professional's attitude help or hinder the integration of people with mental illness into society?

The idea of educating the public and professionals about mental illness and integrating people with mental illness into society is very important to the academic field. Professionals have to understand which prejudices they may have. The knowledge of common prejudices and attitudes of the general population can be an important factor for the professional's success at work. This knowledge can also help professionals to improve the integration of people with mental illness into the communities by developing strategies to change personal attitudes and educating the public. In addition, the recognition of personal attitudes by students can prepare them better for their internships. In general, the new
awareness can be used to help professionals be aware of their own prejudices as well as prejudices held by the public. This will help professionals in their attempts to successfully integrate people with mental illness into society.

**Literature Review**

Studies investigate several issues related to prejudices, attitudes, and myths about mental illness. Factors involved in the perception of mental illness are opinions held by the general public (Bissland & Munger, 1984), the representation of mental illness in the mass media (Wahl, 1995), historical causes of the stigmatization of people with mental illness (Bootzin, Acocella, & Alloy, 1993; Grob, 1991), and attitudes toward the mentally ill by mental health professionals (Hatfield & Lefley, 1993). All of these factors are somehow related to each other. Therefore, the perception of mental illness needs to be investigated through an analysis of different factors.

**Stigma and misperception.** Marshak & Seligman (1993) point out that the initial perception of a person might not be accurate or objective. Professionals, as well as nonprofessionals, may misperceive others. The authors believe that human perception is often distorted and erroneous. Research investigates the sources of misperception. Human information processing tends to be
fast and, therefore, not in depth. This leads to errors in
the process (Fiske & Taylor, 1984). Gaps in the information
processed are filled with prior personal experience. These
experiences are often very subjective, which makes them
prone to biases. For example, a visible impairment or a
psychiatric label given to a person can mislead a
professional and can contribute to forming a negative bias.
Marshak & Seligman (1993) explain the phenomenon of “spread”
as characterized by inferences about a person evoked through
a single characteristic. A single impairment may evoke the
assumption that there are more impairments. For example, a
clinically depressed person may also be seen as suicidal,
even if this is not the case, or a person with schizophrenia
may be viewed as having lower intelligence because of a
speech impairment. The stigma often remains even if the
source is gone (Goffman, 1963). For example, a formerly
hospitalized psychiatric patient is still viewed as mentally
ill.

Stigma is another factor involved in the perception of
mental illness (Ainlay, Coleman & Becker, 1986). Hatfield
and Lefley (1993) describe stigma as “the most critical
burden suffered by persons with major mental illnesses” (p.
100). Research shows that people with mental illness are
the most stigmatized group. They are socially rejected and
are at the highest risk of exclusion (Rabkin, 1974; US
Department of Health and Human Services, 1980). A stigma is often attached to a person with mental illness and will remain with the person for a long time after the recovery (Wodarski & Naugher, 1983). The stigma also affects the clients' opinions about their mental illness and family members' opinions of the client (Low, 1991). A client who develops a self-stigma will have enormous difficulties recovering.

Mass media. The mass media contributes to the stigma of mental illness (Carling, 1995; Hatfield & Lefley, 1993). Hyler, Gabbard, and Schneider (1991) state that "the portrayal of mentally ill people in movies and television programs has an important and underestimated influence on public perceptions of their condition and care" (p. 1044). People with mental illness are discriminated against in movies and TV shows. Headings in newspapers and sensational reports in the news also contribute to the stigma attached to mental illness. The media often describe people with mental illness as animals with no human feelings or as inhumane serial killers acting out with bestiality (Wahl, 1995). Mass media also influence professionals, although they tend to have more education in mental health than people in the public (Wahl, Borostovik, & Rieppi, 1995).

Violence and mental illness. Some people in society think that people with mental illness are prone to violence
attitudes may stem from this perception. Research has shown that people with mental illness are somewhat more likely to act violently than other people in society (Levey & Howells, 1994; Torrey, 1994). Some researchers deny this tendency in order to decrease the stigmatization of people with mental illness. For example, assault rates in psychiatric hospitals are under reported. Assaults are viewed as an embarrassment to the institution (Lion, Snyder, & Merrill, 1981). The stigma of mental illness will not disappear with a more favorable presentation of mentally ill offenders in research studies. However, the subgroup of mentally ill offenders is a minority (Torrey, 1994).

Torrey (1994) cites particular factors such as a history of violence, substance abuse, or noncompliance with medication as increasing the likelihood of violence of a mentally ill person. Simply belonging to the group of mentally ill individuals does not increase one’s tendency to act violently. However, many people in the public, as well as mental health professionals, are afraid of people with mental illness (Levey & Howells, 1994). This again refers back to the way people with mental illness are presented in the media (Hyler, Gabbard & Schneider, 1991). Levey and Howells (1994) mention a tendency in human nature to
overestimate the presence of certain relationships and especially so if these relationships are rare. For example, the presentation of one serial killer with mental illness in the mass media may lead to an overestimation of the relationship between homicide and mental illness. As a consequence, many mentally ill individuals are viewed as potential killers. Research has shown that individuals diagnosed with mental illness, especially the ones diagnosed with paranoid schizophrenia, are more avoided than individuals with other psychiatric labels, including simple schizophrenia (Wahl, 1987).

Attitudes. The term attitude is defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1). An attitude has an impact on the perception of mental illness. The evaluating individual can respond to this “entity” on an unconscious, conscious, cognitive, or behavioral level. Individuals form an attitude when they respond to the situation at hand the same way they responded to a similar situation in the past. An individual who has formed an attitude toward a person with mental illness will usually respond in similar ways when encountering the next person with mental illness. Through this process, a prejudice may be developed which is going to be applied in every subsequent situation with a similar
person (Young-Bruehl, 1996). Levey & Howells (1994) argue that there will be no attitude change without also a change in beliefs. In addition, the authors believe the attitudes toward people with mental illness will not change spontaneously as a function of increased integration of former mentally ill patients into the communities.

Francell (1994) suggested completely changing the name of mental illness in order to improve the image of people with mental illness in the public. He suggests the name "neurobiological disorder," which he believes is less stigmatizing than mental illness. Francell believes that the new label alone will not lead to a spontaneous attitudinal change. In addition to this, he states that public awareness and education have to be increased to make a major change in attitudes of people in society.

Common myths. There are many myths surrounding mental illness. Some of these myths "have been so persistent that they have acquired an aura of truth - and many are widely though wrongly accepted as facts" (U.S. Department of Health and Human Services, 1985, p. 7). Such a myth is that a person who has been mentally ill can never be normal again. In fact, examples in recent history show that people with a mental illness recovered and were capable of outstanding performances. A primary example is Abraham Lincoln who suffered from clinical depression before the attainment of
the presidency. Another resistant myth is that mentally ill people are unpredictable. In reality, the decompensation of a mentally ill patient seen on an outpatient basis can usually be predicted ahead of time by staff members. An additional widespread myth is that people with schizophrenia have so-called "split personalities." People with schizophrenia often have distorted thought processes but not multiple personality disorder (About Schizophrenia, 1993). Multiple personality disorders are very rare—and often misdiagnosed—so that people in the public, as well as mental health professionals, will rarely encounter an individual who actually has this disorder (U.S. Department of Health and Human Services, 1985). Another myth is that it is impossible to carry on a normal conversation with a mentally ill person. In reality, people with mental illness are often intelligent and highly educated. Many have college degrees and have conducted jobs with high responsibilities when their illness is not acute.

**Prejudices of mental health professionals.** The attitudes of professionals and students are affected by public attitudes, by the mass media, and by previously formed prejudices. The word prejudice comes from the Latin word praepudicium and is defined as a "judgement formed in advance of a trial" (Young-Bruehl, 1996, p. 43). Young-Bruehl describes the term prejudice as usually "[a] negative
attitude toward a socially defined group and toward any person perceived to be a member of that group" (p. 43).

Professionals working with mentally ill may have prejudices and may be as biased as anyone in the society (Corey, 1996; Six, 1993). However, professionals have to be aware of their prejudices. They may underestimate client’s capacities, neglect their needs, and assume that they do not have the same rights as any other person (Marshak & Seligman, 1993). Overprotection, paternalistic attitudes, restriction, and control of clients with mental illness violate clients’ rights (Menolascino & McCann, 1983; Newton, 1989; Haeseler, 1992). Overly controlling and protecting the clients with mental illness increases their dependency and disables them to make decisions in life.

Hatfield and Lefley (1993) describe experiences of hospitalized patients with mental illness. Whenever these patients disagreed with the opinions of mental health workers, they were called “resistant, rebellious, or mentally ill” (p. 93). The authors cite a client who felt he developed a “self-stigma” and he felt “less capable, less worthwhile than a so-called normal person” (p. 101). The consumer stated “I feel less competent because people expect me to be less competent” (Hatfield & Lesley, 1993, p. 101). Professionals can cause clients to feel less competent by assuming they are. A professional who does not expect much
from a client or has a negative attitude toward a client will not contribute much to the client’s progress in treatment. Marshak and Seligman (1993) call this a fatalistic approach to treatment.

Research also shows that mental health professionals have a very pessimistic view of what the public thinks about people with mental illness (Bissland & Munger, 1984). Marrin (1991) cites a professional who stated that the public does not care about the mentally ill. Bissland and Munger (1984) state in their study that “all mental health professionals said that they regarded most people as highly fearful, biased, and ignorant on the subject [other people’s view of mental illness]” (p. 517). The authors examine how such a pessimistic view could interfere with the work of professionals, and especially, with their ability to educate the public about mental illness. Contrary to this study, more community residents than professionals had an optimistic view about public perception of the mentally ill.

Other research with mentally ill offenders indicated that mental health professionals still had more optimistic views of placing mentally ill offenders in the community than subjects from the criminal justice system or respondents from other social services (Nuehring & Raybin, 1986). Shore and Dickey (1991) mention the “NIMBY (Not In My Back Yard)” (p. 25) phenomenon when people are discussing
the placement of mentally ill patients into the community. Also, mental health professionals are affected by this phenomena because "we share, to a greater or lesser extent, the stigma attached to our patients" (p. 25).

The training of mental health professionals may also affect their perception of mental illness (Ridenour, 1969). Cook, Jonikas, and Razzano (1995) found that professionals who were trained by a consumer of mental health services had significantly more positive views of, and voiced less stigmatized terms about, people with mental illness than professionals trained by a nonconsumer. Another study (Group for the Advancement of Psychiatry, 1986) indicates that some professionals avoid working with the mentally ill because of the stigma attached to them. The study also criticizes the lack of exposure toward the mentally ill population in training sites of mental health professionals. Because of this lack, many professionals may not develop a positive orientation or attitude toward mentally ill clients (Group for the Advancement of Psychiatry, 1986).

Dain (1994) states that one of the reasons why mentally ill patients are still stigmatized is a "number of professions competing for authority over the mentally ill" (p. 1010). Throughout history, psychiatrists especially have been competing with clinical psychologists. For decades, psychiatry had the domain of treating the mentally
ill. Then psychologists took over many of the responsibilities psychiatrists used to carry out. From this point on, psychologists conducted therapy and psychiatrists mainly prescribed medication. Dain states that stigma has been a tool used by both psychiatrists and clinical psychologists in these instances. One of the reasons the stigma of mental illness has remained for so long may be the early arguments among professionals. If professionals do not have clear views of mental illness, how can they treat people with mental illness and how can they assume that the stigma and particular prejudices will disappear in the public?

The prevalence of people with mental illness in society is high (Jablensky, 1989). Although many former mentally ill patients are released from the hospitals into society and medication has enabled them to live in their communities, old myths and prejudices remain. The stigmatization of people with mental illness in the media contributes to these prejudices. More successful public education about mental illness is needed as well as more detailed research on this topic.

Professionals with an awareness of their own prejudices are more capable of fighting false beliefs and educating the public. Some research states that mental health professionals have failed to adequately educate the public
about mental illness (Wahl, 1987). This failure may be caused by professionals’ struggle in dealing with their own perception of mental illness and their own prejudices. Wahl (1987) suggests that education of professionals and the public, in order to be successful, should explicitly focus on misperceptions.

In addition, professionals’ awareness of having certain attitudes and opinions may prevent professionals from engaging in a paternalistic or authoritarian treatment approach. Professionals may be more able to support clients in obtaining housing or finding a job. With an improved awareness, negative or rejecting attitudes that can lead to a self-fulfilling prophecy can be avoided (Brown, 1989). The new knowledge can be used to help professionals be aware of prejudices and to support their attempts to successfully integrate a person with mental illness into society.

Education, age, and gender. Several studies found that the more advanced professional training or education a person received the better was his or her attitude toward people with mental illness (Mangum & Mitchell, 1973; Rabkin, 1974). Mound and Butterill (1993) designed an educational program for high school students and showed that education about mental health reduced stigma. Nunnally (1961) found a lack of information about mental illness caused negative attitudes. He also reported younger and better-educated
subjects had better attitudes toward mental illness. However, these attitudes were still negative.

Rabkin (1974) indicates that the older the subjects, the more rejecting were their attitudes toward people with mental illness. The author believes that older people received on average less education. Rabkin also states that the more advanced professional training individuals received, the better was their attitude toward people with mental illness. In addition, Rabkin found that professionals with lower employment status and less professional training had less favorable attitudes and were more authoritarian and socially restrictive. Individuals with more advanced professional training were more conscious of client's strengths than individuals with less training (Rabkin, 1974). Mangum and Mitchell (1973) did not find significant differences between age and attitudes toward mental illness in their study.

While "education may improve knowledge and awareness of mental health issues, direct experiences of people with mental illness is required for attitudinal change" (Levey & Howells, 1994, p. 123). Research has shown contradictory results about how contact to people with mental illness may affect attitudes. Desforges et al. (1991) detected that contact with a former mental patient improved attitudes toward this individual. However, these were not generalized
to the larger group of people with mental illness. Rabkin (1974) argues that contact alone will not improve attitudes but that educational exposure and motivation is needed to improve attitudes. Taylor and Dear (1981) state that familiarity with mental health services or contact with a person who receives these services has a positive effect on attitudes toward mental illness.

Gender appears to be another important factor in investigating attitudes toward mental illness. Studies showed that women were more sensitive and less distant toward people with mental illness (Taylor & Dear, 1981; Tringo, 1970).

The purpose of this study was to answer several research questions.

RQ 1. Does the educational level (freshmen and graduate students) affect students' attitudes toward people with mental illness?

RQ 2. Do male and female college students differ in their attitudes?

RQ 3. If attitudes among the examined groups differ, what dimensions of attitudes will differ and to what degree will they differ?

The researcher investigated how college students' attitudes toward people with mental illness vary across gender and educational level. The researcher examined these
attitudes among college students majoring in helping professions. The following were hypothesized:

H 1. Students at a higher educational level (graduate students) have more favorable attitudes than students at a lower educational level (freshmen).

H 2. Women have more favorable attitudes than men.
CHAPTER 2

METHODS

The purpose of this study was to assess how educational level and gender affect attitudes toward mental illness held by college students majoring in helping professions. Educational level was defined as the amount of formal training received. Educational level was expressed by the academic classification in freshmen and graduate students. Students majoring in helping professions were those who want to work in the following areas: Art Therapy, Counseling, Education, Health Care, Psychology, Rehabilitation, and Social Work.

Participants

The sample consisted of 88 students of whom 44 were freshmen and 44 were graduate students. There were equal numbers of female (n = 22) and male participants (n = 22) in each group. The average age was 18-19 for freshmen and 29-30 years for graduate students. Freshmen were majoring in Art Therapy (1), Education (21), Health Care (14), Psychology (4), Rehabilitation (1), and Social Work (3). In contrast, graduate students majored in Art therapy (12), Counseling (5), Education (11), Psychology (15), and Rehabilitation (1). Freshmen were enrolled in Introductory Psychology courses and graduate students were enrolled in psychology courses at Emporia State University, Emporia,
The students were invited to participate voluntarily. Students in introductory courses received a point credit toward their course requirement.

**Design**

This research had a 2 (Educational Level: freshmen or graduate) x 2 (Gender: men or women) between subjects design. The dependent variables were the four dimensions and the entire scale of community attitudes toward people with mental illness. Gender and educational level served as independent variables.

**Instrument**

For the purpose of this study, the Community Attitudes Toward the Mentally Ill (CAMI) was administered (Taylor & Dear, 1981). Taylor and Dear modified the Opinions about Mental Illness (OMI) scale, which was designed for mental health professionals (Cohen & Struening, 1962). Taylor and Dear found that there was a lack of measurements to assess public attitudes. The CAMI was developed to "construct an instrument able to discriminate between those individuals who accept and those who reject the mentally ill in the community" (Taylor & Dear, 1981, p. 227).

The CAMI is a 40-item scale with four different dimensions and includes positive and negative statements about mental illness (Appendix A). The responses to each statement are rated on a 5-point Likert scale (strongly
agree to strongly disagree). Ten items in the scale are summed for each of the four dimensions. A participant can score between 10 and 50 on each dimension. The score on the entire CAM1 scale is determined by the sum of scores on all four dimensions with a range of scores between 40 and 200.

The four dimensions of CAM1 are authoritarianism, benevolence, community mental health ideology, and social restrictiveness. Authoritarianism is the view of people with mental illness as "an inferior class requiring coercive handling" (Taylor & Dear, 1981, p. 226). A sample item is "The best way to handle the mentally ill is to keep them behind locked doors." Benevolence is a sympathetic and paternalistic approach to people with mental illness. An example for this dimension is "We have a responsibility to provide the best possible care for the mentally ill." Community mental health ideology refers to integrating people with mental illness into the community using all possible resources. A sample item is "The best therapy for many mental patients is to be part of a normal community." Social restrictiveness is defined as viewing people with mental illness as a threat to the public. An example of this dimension is "I would not like to live next door to someone who has been mentally ill" (Taylor & Dear, 1981).

Taylor and Dear reported that the external and internal validity of the CAM1 scale was extensively analyzed in
pretest studies and a final study using a large sample size (N = 1090). The authors defined the construct validity for the four dimensions of the CAMI scale using factor analysis. They determined correlation coefficients between .63 and .77. Taylor and Dear explained that these coefficients are comparable with earlier studies using the OMI scale.

Investigating the reliability of the CAMI scale, the authors determined that three of the four scales had high reliability between a .76 to a .88. One dimension of the scale (authoritarianism) was found to have a lower but still satisfactory reliability of a .68.

**Procedure**

Data were collected over a period of several sessions during the spring semester 1998. Sessions were held in a specific classroom. Some sessions with graduate students were held during class. In the beginning of each session, the researcher explained briefly the procedure. The researcher instructed the participants to complete the informed consent form (Appendix B). The participants were also asked to fill out a short demographic profile (Appendix C). This profile contained relevant information for the interpretation of the data. Age, gender, educational level, and major were included in this information. Then the participants completed the CAMI scale. The researcher insured the confidentiality of the participants by keeping
the informed consent forms separate from the data. The participants were dismissed as soon as they had completed the demographic profile and the questionnaire.
CHAPTER 3

RESULTS

For each of the four dimensions of the Community Attitudes Toward the Mentally Ill (CAMI) scale as well as for the entire scale, a 2 x 2 analysis of variance was performed with Educational Level and Gender as independent variables. The first hypothesis stated that students at a higher educational level (graduate students) had more favorable attitudes compared to students at a lower educational level (freshmen). The second hypothesis tested whether women had more favorable attitudes than men.

The results for these analyses revealed a significant effect for Educational Level on the dimension authoritarianism, $F(1,84) = 8.66, p < .05$. Graduate students scored significantly higher than freshmen on authoritarianism indicating a more favorable attitude. No significant interaction effect was found between educational level and gender for authoritarianism. In addition, no significant effect was revealed for gender on this dimension. Tables 1 and 2 provide the results of the analysis for authoritarianism.

The benevolence dimension did not vary significantly for educational level. In addition, no significant difference was found for gender or the interaction between gender and educational level (Tables 3 and 4).
Table 1

Means and Standard Deviations for Authoritarianism Measured by CAMI

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<th>Group</th>
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</tr>
<tr>
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</tr>
<tr>
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<td>Freshmen</td>
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<td>37.32</td>
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</tr>
<tr>
<td>Graduate</td>
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<td><strong>Total</strong></td>
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Table 2

Summary of Analysis of Variance of Authoritarianism as a Function of Educational Level and Gender

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*P < .05
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<th>Group</th>
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<td><strong>Women</strong></td>
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<td>38.00</td>
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<tr>
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<td>39.30</td>
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Table 4
Summary of Analysis of Variance of Benevolence as a Function of Educational Level and Gender

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<td>Gender</td>
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<td>.92</td>
<td>.04</td>
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</table>
Tables 5 and 6 provide the results of the analysis for the dimension community mental health ideology. Community mental health ideology revealed no significance for the effects of educational level or gender. No significant difference was found for the interaction.

A significant effect was found for Educational Level on the dimension social restrictiveness, $F(1,84) = 7.36, p < .05$. Graduate students scored significantly higher than freshmen on this dimension. A higher score on social restrictiveness indicated a more favorable attitude on this dimension. Therefore, graduate students were less socially restrictive than freshmen. No significant effect for gender and no significant interaction were revealed for social restrictiveness. The results of this analysis are provided in Tables 7 and 8.

For the entire CAMI scale, a significant effect was found for Educational Level, $F(1,84) = 7.31, p < .05$. This result supported the first hypothesis that graduate students have in general more favorable attitudes than freshmen. No significant interaction was revealed between educational level and gender. In addition, no significance was found for the effect of gender. The results of these analyses are provided in Tables 9 and 10.

The second hypothesis tested whether women had more favorable attitudes than men. No significant effects for
Table 5

Means and Standard Deviations for Community Mental Health Ideology Measured by CAMI

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
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</thead>
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Table 6

Summary of Analysis of Variance of Community Mental Health Ideology as a Function of Educational Level and Gender

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<td>49.50</td>
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Table 7

Means and Standard Deviations for Social Restrictiveness

Measured by CAMI

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<th>SD</th>
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</thead>
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<td>Graduate</td>
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<td></td>
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<tr>
<td>Freshmen</td>
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<td>Graduate</td>
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Table 8

Summary of Analysis of Variance of Social Restrictiveness as a Function of Educational Level and Gender

<table>
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<td>31.92</td>
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</table>

*p < .05
### Table 9

Means and Standard Deviations for Global Community Attitudes Measured by the Entire CAMI

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
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<th>SD</th>
</tr>
</thead>
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<td>Women</td>
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<td>Freshmen</td>
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<td>Graduate</td>
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<tr>
<td>Total</td>
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<td>Freshmen</td>
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<tr>
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<td>18.29</td>
</tr>
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</table>
Table 10

Summary of Analysis of Variance of Global Community Attitudes as a Function of Educational Level and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
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<td>352.00</td>
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<tr>
<td>Educational Level x Gender</td>
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<td>142.55</td>
<td>.53</td>
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*p < .05
gender were found on any of the four dimensions or the entire CAMI scale. There was a nonsignificant pattern that females on a specific educational level scored higher on the CAMI scale than males on the same educational level. However, educational level was found to have stronger effects for more favorable attitudes toward people with mental illness than gender in this sample.
The purpose of this study was to assess the effects of educational level and gender on attitudes toward mental illness held by college students majoring in helping professions. Do students' attitudes toward people with mental illness differ with a higher educational level in college compared to a lower educational level? Do attitudes differ among women and men?

The first hypothesis stated that students at a higher educational level (graduate students) had more favorable attitudes compared to students at a lower educational level (freshmen). Results showed that global attitudes toward the mentally ill differed significantly among students majoring in helping professions on the two educational levels. This was measured by the Community Attitudes Toward the Mentally Ill (CAMI) scale, a scale that differentiates between individuals with accepting versus rejecting attitudes toward people with mental illness. Graduate students of both genders had more favorable attitudes toward the mentally ill than freshmen of both genders. Rabkin (1974) stated that individuals with more advanced professional training had more favorable attitudes toward the mentally ill than individuals on a lower employment status with less professional training. Rabkin (1974) also showed that
individuals with more advanced professional training were less authoritarian and socially restrictive in their attitudes toward people with mental illness than individuals who had less professional training. The results in this sample also supported this finding. Graduate students had significantly more favorable attitudes on two dimensions of the CAMI scale: authoritarianism and social restrictiveness. Authoritarianism is the view of people with mental illness as "an inferior class requiring coercive handling" (Taylor & Dear, 1981, p. 226). Social restrictiveness is the view of people with mental illness as a threat to the public.

The second hypothesis that women would have more favorable attitudes than men was not supported. Educational level appeared to be the significant determinant for more favorable attitudes toward people with mental illness in this sample.

There were several limitations to this research. The first limitation was the relatively small sample size. There were only 22 students per group. A second limitation was the unequal distribution of majors in the four groups. For example, a significant number of freshmen were majoring in the health care field, but there were no graduate students representing this field in the sample. The major in college could have affected the results. Future studies should consider major in college as a variable in attitudes.
toward mental illness and should implement an equal
distribution of majors in the studied sample.

A third limitation might have been the age difference
between freshmen and graduate students. The age difference
might have contributed to the results, because the age was a
factor involved in educational level. The average age of
freshmen was 18-19 years whereas the average age of graduate
students was 29-30 years. Previous research indicated that
age was a factor involved in attitudes toward mental
illness. Although Mangum and Mitchell (1973) did not find
significant differences between age and attitudes toward
mental illness, Nunnally (1961) reported that younger
subjects had more favorable attitudes. Rabkin (1974) found
that older subjects showed more rejecting attitudes toward
people with mental illness. Future research should include
age as a variable to examine its effects on attitudes toward
mental illness.

Other limitations might have been the misinterpretation
of questions and responses to questions in socially
acceptable ways. In addition, the term mental illness was
not defined precisely.

All of these limitations could have affected the
results. Furthermore, contact or experience with people
with mental illness could be included as a variable in
future studies. Further research on the topic is
recommended because of the mentioned limitations of this study.

In summary, no significant interaction was found between educational level and gender for any of the five anovas. Gender did not have an effect on attitudes toward mental illness in this sample. In addition, no significant effects were found for the dimensions benevolence and community mental health ideology dimension. Significant effects were found for educational level on global attitudes toward mental illness and on the dimensions authoritarianism and social restrictiveness. This study supported Rabkin's (1974) finding: More advanced professional training leads to more favorable attitudes toward people with mental illness. Rabkin states that individuals with more advanced professional training are less authoritarian and less socially restrictive in their attitudes toward the mentally ill. This study found similar results in examining attitudes toward people with mental illness among college students majoring in helping professions.
REFERENCES


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Cohen, J., & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental health...


Six, S. (1993). Rehabilitation counseling student's


APPENDIX A

Community Attitudes Toward the Mentally Ill Scale
COMMUNITY ATTITUDES TOWARD THE MENTALLY ILL SCALE

Please circle the letter that best corresponds to your personal opinion.
SA = strongly agree
A = agree
N = neither agree or disagree
DA = disagree
SDA = strongly disagree

1. Mental illness is an illness like any other.
   SA-----A-----N-----DA-----SDA

2. The mentally ill don't deserve our sympathy.
   SA-----A-----N-----DA-----SDA

3. Mental health facilities should be kept out of residential neighborhoods.
   SA-----A-----N-----DA-----SDA

4. The mentally ill should not be denied their individual rights.
   SA-----A-----N-----DA-----SDA

5. One of the main causes of mental illness is a lack of self-discipline and will power.
   SA-----A-----N-----DA-----SDA

6. The mentally ill are a burden on society.
   SA-----A-----N-----DA-----SDA

7. Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community.
   SA-----A-----N-----DA-----SDA
8. Mental patients should be encouraged to assume the responsibilities of normal life.

9. The best way to handle the mentally ill is to keep them behind locked doors.

10. The mentally ill have for too long been the subject of ridicule.

11. The best therapy for many mental patients is to be part of a normal community.

12. The mentally ill should not be given any responsibility.

13. The mentally ill should not be treated as outcasts of society.

14. Increased spending on mental health services is a waste of tax dollars.

15. As far as possible, mental health services should be provided through community based facilities.
16. The mentally ill should be isolated from the rest of the community.

SA----A----N------DA------SDA

17. Less emphasis should be placed on protecting the public from the mentally ill.

SA----A----N------DA------SDA

18. More tax money should be spent on the care and treatment of the mentally ill.

SA----A----N------DA------SDA

19. Local residents have good reasons to resist the location of mental health services in their neighborhood.

SA----A----N------DA------SDA

20. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.

SA----A----N------DA------SDA

21. There is something about the mentally ill that makes it easy to tell them from normal people.

SA----A----N------DA------SDA

22. We need to adopt a far more tolerant attitude toward the mentally ill in our society.

SA----A----N------DA------SDA

23. Locating mental health services in residential neighborhoods does not endanger local residents.

SA----A----N------DA------SDA
24. I would not like to live next door to a person who has been mentally ill.

SA-------A--------N--------DA--------SDA

25. Mental hospitals are an outdated means of treating the mentally ill.

SA-------A--------N--------DA--------SDA

26. Our mental hospitals seem more like prisons than like places where the mentally ill can be cared for.

SA-------A--------N--------DA--------SDA

27. Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great.

SA-------A--------N--------DA--------SDA

28. Anyone with a history of mental problems should be excluded from taking public office.

SA-------A--------N--------DA--------SDA

29. Virtually anyone can become mentally ill.

SA-------A--------N--------DA--------SDA

30. There are sufficient existing services for the mentally ill.

SA-------A--------N--------DA--------SDA

31. It is frightening to think of people with mental problems living in residential neighborhoods.

SA-------A--------N--------DA--------SDA
32. The mentally ill are far less of a danger than most people suppose.

33. As soon as a person shows signs of mental disturbance, he should be hospitalized.

34. We have a responsibility to provide the best possible care for the mentally ill.

35. Locating mental health facilities in a residential area downgrades the neighborhood.

36. No one has the right to exclude the mentally ill from their neighborhood.

37. Mental patients need the same kind of control and discipline as a young child.

38. It is best to avoid anyone who has mental problems.

39. Most women who were once patients in a mental hospital can be trusted as babysitters.
40. Residents have nothing to fear from people coming in their neighborhood to obtain mental health services.

SA------A------N------DA------SDA
APPENDIX B

Informed Consent Form
INFORMED CONSENT FORM

Please read the consent form and sign at the bottom of this page if you decide to participate.

You are invited to participate in a research project, which involves the completion of one questionnaire. The questionnaire measures your attitudes toward the mentally ill. In addition to the questionnaire, you are asked to fill out a short demographic profile.

Information obtained in this research project is kept strictly confidential. This form which includes your name will be kept separate from your response to the questionnaire. Therefore, there is no way to match your name with your response. Therefore, it is very important that you answer how you honestly feel or believe.

You may discontinue your participation at any time during the research. There is no risk or discomfort involved in completing the study. If you have any questions or comments about this study, feel free to ask the researcher.

I, ____________________________, have read the above information and have decided to participate in this study. I understand that my participation is voluntary and that I may withdraw at any time.

Signature: ______________________ Date: ______________________
APPENDIX C

Demographic Profile
Demographic Profile

1. Age: __

2. Gender: M F
   (circle one)

3. Educational Level: (circle one)
   Freshmen Junior Sophomore Senior Graduate

4. Major: __________________

5. Did you ever use mental health services? Yes No
   (circle one)

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

Annette Pomberg
Signature of Author
July 28, 1998
Date

An Examination of the Effects of Gender and Education on Attitudes Toward People with Mental Illness Among College Students
Title of Thesis

Loug Cooper
Signature of Graduate Office
Staff Member
July 28, 1998
Date Received