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Perceptions of Clinical Psychologists Relative to Other Mental Health Providers

Glenora Nelson
Old Dominion University

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**PERCEPTIONS OF CLINICAL PSYCHOLOGISTS RELATIVE TO
OTHER MENTAL HEALTH PROVIDERS**

by

Glenora Nelson
B.S. May 1992, Old Dominion University

A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
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Approved by:

Louis H. Janda (Director)

Robin J. Lewis (Member)

Janis Sanchez (Member)

ABSTRACT

PERCEPTIONS OF CLINICAL PSYCHOLOGISTS RELATIVE TO OTHER MENTAL HEALTH PROVIDERS

Glenora Nelson
Old Dominion University, 2000
Director: Dr. Louis H. Janda

There is a myriad of job titles that exist within the mental health profession. Public perception about the differences between these professionals has been the focus of many studies and the results generally suggest that the public cannot clearly distinguish among these mental health professionals. The present study is also concerned with perceptions about the various mental health professionals, in particular, perceptions of clinical psychologists relative to other professionals in this field. Undergraduate psychology students age 18-47 participated in a study of perceptions and attitudes about the qualifications and competence of clinical psychologists, professional counselors, psychiatrists and clinical social workers. Participants were randomly assigned to two groups: an education group, which received educational information regarding professional requirements and typical roles and functions, and a non-education group, which received a case study dealing with psychopathology, but no information about the four professionals. All participants were then asked to rate the professionals' level of training and level of competence to treat six problem-types. Results indicated that in general, clinical psychologists were viewed relatively competent and effective and similar to psychiatrists and significantly different from professional counselors and clinical social workers to treat the various problem-types. However, psychiatrists were rated as having had significantly more training than clinical psychologists, professional

counselors and clinical social workers. Also, the two groups of participants did not differ significantly in their ratings for clinical psychologists, therefore suggesting that the educational information did not have a significant effect on perceptions about these professionals. It is suggested that perhaps participants rated the professionals based on their preconceptions rather than the information that was provided to them. Suggestions for further investigations are discussed.

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INTRODUCTION

Several studies have explored the public's perceptions of various mental health professionals with regard to professional requirements, roles and capabilities, the extent these professionals differ from one another, and the reasoning behind the perceived differences. Of particular interest here are those studies that have focused on clinical psychologists relative to other mental health professionals, their perceived areas of expertise and their perceived level of competence to treat various conditions. Results have generally suggested that the public appears to be unfamiliar with clinical psychologists with respect to their training, education, skills and capabilities to deal with a variety of mental, emotional and behavioral conditions. When compared to other mental health professionals, findings often suggested lack of confidence in clinical psychologists' competence to deal with various conditions. The purpose of the present study was to further examine confidence level in clinical psychologists' competence relative to other mental health providers, and to examine the effects of information regarding qualifications on perceptions and attitudes about these professionals.

Description of Professionals and Requirements

Professionals in the various specialty areas in this field undergo different types of training whose length and emphasis differ according to the field of study. The 1995 *A Consumer's Guide to Mental Health Services* and The 1991 *Dictionary of Occupational Titles* define four disciplines that are of particular interest to the present study. First, psychiatrists are medical doctors who can order medical tests and prescribe medication.

Professional Psychology: Research and Practice is the journal model used in this research for the placement of table titles, figure titles and format of the reference section.

Their treatment methods include biomedical treatments and psychotherapy. The professional requirements include graduating from medical school, a completed year of internship, three years of specialty training, and to be board certified (Virginia Board of Medicine, 1998). Clinical psychologists diagnose or evaluate mental, emotional and behavioral disorders and they formulate and administer programs of treatments. They also administer and interpret personality and other psychological tests. Their treatment methods include psychotherapy and counseling as well as various other psychological techniques. The professional requirements include a doctoral degree with specialized training, extensive direct clinical training in pre-internship and internship work, experience and licensure (Virginia Board of Psychology, 1998). Clinical social workers conduct individual, family and group counseling. They work in close collaboration with physicians and other health care providers in client evaluation and treatment to further their understanding of important social and environmental factors underlying client problems. They are also trained to provide information and community resources to clients, as well as intervene with government and civic agencies. The professional requirements include a master's degree, two years of supervised post-graduate experience in a clinical setting, and licensure or certification (Virginia Board of Social Work, 1998). Licensed professional counselors provide counseling and utilize principles of human development, learning theory and group dynamics to help individuals and families. Their emphasis is to assist clients to identify personal and interactive problems, and to achieve effective individual and family development and adjustment. A master's degree, two years of post-graduate supervised experience in a clinical setting, and certification are the

professional requirements for these individuals (Virginia Board of Licensed Professional Counselors, Marriage and Family Therapists, 1997).

Review of Research on Public Perceptions

Findings from several studies that examined public perceptions of various mental health professionals suggest that the public lacks knowledge about the expertise and professional roles and functions of clinical psychologists. Webb and Speer (1986) asked undergraduates who had not taken a psychology course to write a descriptive paragraph of psychiatrists, psychologists, physicians, counselors, teachers and scientists. The most frequently mentioned descriptive features were then extracted and tabulated, resulting in a final list of 40 features. A second group of participants clustered these features for similarity of meaning. Cluster analysis identified 11 independent adjective clusters. A third group of participants consisting of freshmen and their parents rated each of the professionals on each of the 11 descriptors. The results indicated that participants had limited familiarity with the discipline of psychology. In the first stage of the project, when participants were asked to describe the six professions, 33 % could not describe psychologists, 2% could not describe counselors, 1% could not describe physicians, 4% could not describe psychiatrists, 5% could not describe scientists and 3% could not describe teachers. The authors concluded from their findings that participants did not perceive a clearly defined role for psychologists. Also in the first stage of the project, 15% of the participants considered psychologists to be identical to psychiatrists.

Evans and Wanty's (1979) survey examined undergraduate students' perceptions about the professional requirements for four titles in psychology, three in psychiatry, two in social work, psychoanalysts and marriage counselors. Their results suggested that

even participants who seem likely to be a little more knowledgeable about mental health professionals do not appear to be significantly different from the general public. They found that 72% of the participants either incorrectly assumed or did not know the requirements for these professionals. Their participants completed questionnaires designed to gather information about their knowledge of whether or not these professionals were required to pass an oral exam and a practical exam prior to practicing psychotherapy; and whether or not they were required to pass a periodic review of their skills. The authors commented that although their sample could not be interpreted as representative of the entire community's knowledge of these issues, it deserved mentioning that not only did these participants major in health-related fields, but 85% of them reported permanent residence in the community. The community included a State Psychiatric hospital, a VA hospital with a large psychiatric service, and numerous other agencies and private practitioners offering psychotherapeutic services.

Public attitude about psychologists was one of the areas examined in a research conducted toward the development of a public education campaign for the American Psychological Association. Findings from this research, which included eight focus groups and a national telephone survey of 1200 participants, also suggested that the public generally lacks understanding about the professional requirements for psychologists. Respondents from the telephone survey felt that state licensure, training in human behavior and skills in therapy were important. However, only a few understood these requirements for psychologists. It was found that participants generally had positive attitudes toward psychologists. However, it was not clear on what these attitudes were based, as they appeared to have limited knowledge about these professionals.

Participants were generally able to accurately describe psychiatrists. They viewed these professionals as generally the ones who treat serious mental disorders, but appeared to be somewhat negative in their perceptions that psychiatrists tend to over-emphasize the use of medication to treat problems. With regard to perceptions about areas of expertise, when asked which professionals specialized in mental and emotional problems, participants named psychiatrists first and more often than psychologists. These participants as well as those from the focus groups associated psychiatrists with treatment of “the more serious” problems and psychologists with problems related to family issues and stress, such as loss of job, serious illness, troubled children, death and divorce (Farberman, 1997).

The consensus seems to be that knowledge about qualifications (training, skills and capabilities) is directly related to perceptions about competence. Some research findings suggest that lack of knowledge about level of expertise may consequently lead to lack of confidence in clinical psychologists’ competence and effectiveness to treat various psychological conditions. Warner and Bradley (1991) examined undergraduate psychology students’ perceptions of psychiatrists, psychologists and counselors. Their findings suggested that participants lacked information about psychologists’ clinical function and lacked confidence in their ability to treat five cases: adjustment disorder with academic inhibition, avoidant personality disorder, major depression recurrent with psychotic features, marital problems and adjustment disorder with depressed mood. Participants rated the professionals on expertise with regard to education, training and treatment focus (i.e., prescription writing; personality testing; etc.). Then participants rated the professionals on 11 descriptors generated from Webb and Speer’s (1986) study.

Lastly, participants were provided with paragraphs describing the five cases and asked to rate the ability of each professional to treat each of the cases. The results indicated that participants rated counselors and psychiatrists as more effective than psychologists in treating avoidant personality disorder. Psychiatrists were rated more effective than psychologists and psychologists more effective than counselors in treating major depression. Counselors were rated more effective than both psychologists and psychiatrists in treating marital problems. Counselors and psychiatrists were both rated more effective than psychologists in treating adjustment disorder with depressed mood; and the three professionals were rated similarly in treating adjustment disorder with academic inhibition. Finally, participants were asked to explain their decision process in rating the professionals' ability to treat the problem types. Participants explained that they matched the problems with the type of training they thought the professionals received.

As for descriptive ratings, psychiatrists received higher negative ratings such as alienated and arrogant than both psychologists and counselors. Counselors had higher positive ratings such as helpful and understanding than psychiatrists or psychologists. With regard to professional focus, phrases such as "deals with mental problems" and "studies behavior" were associated more with psychiatrists than with psychologists and more with psychologists than with counselors. Psychiatrists and psychologists were both rated as more inquisitive than were counselors. Psychiatrists were perceived to be researchers just as much as psychologists and psychologists were perceived as less caring than counselors. The authors concluded that participants were clearly limited in their knowledge about the discipline of psychology. Their data showed that psychiatrists were

the favored therapists when the condition was perceived to be "severe" such as major depression with psychotic features, and counselors were favored over psychologists for the remaining three cases.

Other research findings not only suggest lack of confidence, but also perhaps ambiguity about clinical psychologists' competence to treat various conditions with various levels of severity. Also, there seems to be consistency in the findings that psychiatrists are perceived as generally more educated, experienced and more competent than other mental health professionals. Shindler, Berren, Hannah, Beigel and Santiago (1987) conducted a survey with outpatients at community mental health centers and non-patient members of civic groups about the competence level of psychiatrists, psychologists, non-psychiatric physicians and clergy. Participants rated the ability of these individuals to treat ten conditions (an alcoholic housewife; a sexually abused person; a young couple who physically fought; a suicidal man; a depressed woman; a teenager who used drugs; a disinterested couple; a lonely student; an overactive child and a paranoid man). Participants also rated the professionals on eight qualities (warmth, education, expertise, caring, professionalism, listening skills, skills dealing with mental health problems and stability). Both mental health professionals were rated as more competent in treating all ten conditions than were non-psychiatric physicians and clergy. Psychiatrists were rated as most competent to treat the alcoholic housewife, the sexually abused person and the paranoid man. Psychologists were rated as most competent to treat the couple who physically fought, the disinterested couple and the lonely student. However, there were no differences in the ratings for treating the depressed woman, the suicidal man or the overactive child. Psychologists were rated as warmer and more

caring than psychiatrists, and psychiatrists as more educated and more experienced than psychologists. Clergy were rated as warmer, more caring and more stable than both mental health professionals; and the mental health professionals were rated more educated, more experienced and more skilled in dealing with mental health conditions than both clergy and non-psychiatric physicians.

It has also been suggested that lack of knowledge about clinical psychologists' qualifications is the rationale for rating these professionals as falling between psychiatrists and counselors in the "competence continuum". Wollersheim and Walsh (1993) conducted a similar study to Warner and Bradley's (1991) study. These authors surveyed a random sample of adult residents of a mid-size community in the northwestern part of the U.S. to evaluate their perceptions about professional qualities, expertise, and ability of clinical psychologists, psychiatrists and counselors to treat five conditions. Participants read five vignettes describing various conditions. Three of these vignettes described adjustment disorder with academic inhibition, marital problems and major depression - recurrent with psychotic features. The remaining two described borderline personality disorder and post-traumatic stress disorder. Participants rated their trust in each of the three professionals to treat each condition. They also rated the professionals on the 11 descriptive clusters generated from Webb and Speer's (1986) study. Their results were consistent with previous studies in that participants did not perceive a clearly defined role for psychologists; and therefore, no clearly defined area of expertise. Results indicated that in four out of five conditions, perceived level of competence between psychiatrists and counselors were significantly different, suggesting that participants could clearly distinguish between the two professionals. Psychologists'

level of competence, on the other hand, tended to fall between the two professionals. Participants favored psychologists over psychiatrists and counselors in treating adjustment disorder with academic inhibition. Psychiatrists were favored over psychologists and counselors in treating borderline personality disorder, post-traumatic stress disorder and depression with psychotic features. Counselors were favored over psychologists and psychiatrists in treating marital problems. Ratings on the 11 descriptors again indicated that psychiatrists were perceived as more alienated and arrogant than psychologists and counselors. Psychologists and psychiatrists were both rated more dedicated than counselors, and counselors and psychologists more helpful and understanding than psychiatrists. Psychiatrists were rated significantly higher than were psychologists, who were rated significantly higher than were counselors as being inquisitive, psychological and scholarly.

The Present Study

Past research clearly suggests that the public lacks knowledge about the qualifications of clinical psychologists to treat problems with various levels of severity. That is, they seem unaware of the professional requirements (such as type and level of training and experience prior to licensure), skills and capabilities of these professionals. It seems logical and seems to be suggested that there's a direct relationship between knowledge about qualifications and ratings of competence. Perhaps if the public is well informed about the professional requirements (such as type and level of training prior to licensure) and skills of clinical psychologists, then confidence in their effectiveness to deal with various mental, emotional and behavioral issues may be higher. It seems fair to assume that the public has varying degrees of knowledge about clinical psychologists.

Those who have been exposed to the field of clinical psychology may be more cognizant about the qualifications of these professionals than those who have not had this experience. For instance, individuals who have taken advanced courses such as abnormal psychology may have more knowledge about the qualifications of these professionals than would the general public. The present study further examined perceptions about competence and effectiveness of clinical psychologists to treat various mental, emotional and behavioral conditions relative to other mental health providers. Additionally, this study examined the effects of educational information concerning professional requirements and typical roles and functions on views and attitudes about competence and effectiveness of clinical psychologists. Undergraduate psychology students' perceptions about clinical psychologists, psychiatrists, clinical social workers and professional counselors were compared prior to and following provision of educational information to half the participants.

There were three hypotheses associated with the present study. First, it was predicted that prior to provision of educational information to half the participants, all participants would rate psychiatrists significantly different from the other three professionals with regard to general competence and effectiveness to treat mental, emotional and behavioral conditions. Participants' ratings for clinical psychologists were not expected to differ significantly from their ratings for professional counselors and clinical social workers. Therefore, suggesting lack of confidence in clinical psychologists' competence and effectiveness to treat various conditions.

Second, it was hypothesized that participants who were provided with educational information concerning professional requirements and typical roles and functions of the

four professionals would differ significantly from participants who did not get this information in their perceptions about these professionals' qualifications. Provision of educational information was expected to have a significant effect on knowledge about professional requirements as measured by ratings in three areas of training: etiology of disorders, utilization of psychotherapy and counseling and utilization of medication to treat disorders. Psychiatrists were expected to receive significantly different ratings from the other professionals with regard to training in the utilization of medication to treat disorders. Clinical psychologists were expected to receive significantly different ratings from professional counselors and clinical social workers with regard to training in the etiology of disorders and utilization of psychotherapy and counseling. Professional counselors and clinical social workers were not expected to differ significantly in all three areas of training. Participants' scores on the questionnaire that measured acquired knowledge following the educational information was also expected to indicate the positive effect of information.

Finally, the third hypothesis was associated with the effect of educational information on perceptions and attitudes about clinical psychologists. Since provision of educational information was predicted to have a significant effect on knowledge about professional requirements, provision of educational information was also expected to have a significant effect on perceptions and attitudes about competence and effectiveness of clinical psychologists to treat the various problem-types presented in the study.

METHOD

Participants

One hundred-fifty undergraduate psychology students at Old Dominion University in Norfolk, Virginia voluntarily participated in the study. Participants were 98 females and 52 males, between 18 and 47 years old. Participants were given extra course credit for their participation in the study.

Description of Problem-Types

Six paragraphs, which described major depression, eating disorder (bulimia and anorexia), panic disorder, marital problems, conduct disorder and substance abuse were provided for all participants to familiarize them with the problem-types (see Appendix A). Definitions of the mental, emotional and behavioral conditions were obtained from the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (1994). The problems used here were selected because they were similar to those used in previous studies. They have a relatively high prevalence rate, a wide range of severity and are to some degree treatable by psychotherapy.

Description of the Four Professionals

Educational materials which described the professional requirements (i.e., educational requirements and training prior to licensure and certification) and typical roles and functions of each professional were provided for the education group (see Appendix B). The following were the sources used to obtain information about the four disciplines. The 1991 *U. S. Department of Labor Dictionary of Occupational Titles*; the 1995 *A Consumer's Guide to Mental Health Services*; Virginia Board of Psychology; Virginia Board of Medicine; Virginia Board of Social Work; and Virginia Board of

Licensed Professional Counselors, Marriage and Family Therapists and Substance Abuse Treatment Professionals.

Case Study

A case study, called "The case of Mr. J," taken from *Psychological Assessment: A Conceptual Approach* by Maloney & Ward (1976) was provided for the group of participants who did not receive educational information about the professionals (see Appendix C). Provision of the case study and the questions about it that followed was an attempt to keep things similar between the two groups of participants; it did not provide information about the four categories of professionals.

Questionnaires

Participants completed an initial four-item questionnaire to measure their general views and attitudes about the four professionals regarding qualifications and general competence and effectiveness to treat mental, emotional and behavioral conditions. In this questionnaire, participants rated psychiatrists, professional counselors, clinical psychologists and clinical social workers on a scale ranging from (1) not at all competent and effective to (7) extremely competent and effective (see Appendix D). The purpose of this questionnaire was to examine whether or not the participants had similar perceptions of the various professionals prior to being provided with the educational information. Participants who received educational information about the four professionals completed a 16-item, multiple-choice questionnaire designed to obtain information about their acquired knowledge regarding professional requirements and typical roles of these individuals (see Appendix E). Participants who did not receive educational information about the four professionals completed a four-item, multiple-choice questionnaire

regarding a case study they were given to read (see Appendix F). Lastly, all participants completed a 15-item questionnaire to obtain information about their perceptions and attitudes about the level of expertise regarding training and competence of clinical psychologists, psychiatrists, clinical social workers and professional counselors (see Appendix G). In this questionnaire, participants rated the professionals' training in the etiology of disorders, utilization of psychotherapy and counseling and utilization of medication to treat disorders, along a 7-point scale ranging from (1) no training at all to (7) a very great deal of training. Participants also rated the professionals on competence and effectiveness to treat major depression, eating disorders, panic disorder, marital problems, conduct disorder and substance abuse, again using a 7-point scale ranging from (1) not at all effective to (7) extremely effective. This questionnaire was also designed to gather information on the reasoning behind the participants' ratings by asking them to provide a brief explanation of their ratings. A question that asked participants which professional they would consult for psychological problems and an explanation of this decision was also included. Finally, along with a question that asked participants their gender and a question that asked their age, a question that asked them what types of psychology courses they have taken was also included.

Pilot Tests

Pilot tests were performed on the description of problem-types and the description of the four professionals to determine whether or not they were readable and understandable (see Appendix H for materials used in pilot tests). Ten individuals from the Northern Virginia area whose age ranged from 34 to 47 participated in the pilot test. The participants were tested individually rather than in a group. All participants were

instructed to take their time to read the description of problem-types and the description of professional-types as well as to complete the questionnaire that followed each form. The materials were given to participants in the following order: First, the description of problem-types was given to the participants and instructed to take their time to read the descriptions and return it when they finished. Then participants were given a six-item questionnaire to determine whether or not the descriptions were readable and understandable. After this questionnaire was completed and returned, then participants were handed the description of professional-types and instructed to take their time to read over the descriptions. Finally, when the participants finished reading the description of professional-types and returned it, then they were handed a modified version of the 16-item questionnaire to determine whether or not the descriptions were readable and understandable. This questionnaire differed from the original in two ways: First, the order in which the questions were asked. For example, the first four questions asked about educational requirements, advanced courses, post-graduate training and typical roles of clinical psychologists. The next four questions asked the same for psychiatrists, etc. Whereas in the original, the first four questions asked the educational requirements for each discipline separately, the next four questions asked about advanced courses for each discipline separately, etc. Second, in this version participants were asked to select one answer regarding advanced courses and typical roles, whereas in the original participants were asked to select two with regards to these two questions. Because participants' commented that it was a little difficult to "keep track" of the requirements and roles of each professional, by the end of the pilot test on the third participant, the description of professional-types was modified. The modification was made on the

format in which the descriptions were presented. The difference between the two forms is that the original was in paragraph format, whereas the modified version listed the requirements and roles of each professional (a more precise outline describing the four professionals). Comparison of responses to the 16-item questionnaire that measured acquired knowledge and comments from participants suggested that the modified version of the description of professional-types was more comprehensible than the original version, and therefore used in the study.

Procedure

Two types of survey packets were utilized in this study. In the first, participants were provided with information about the professional requirements of the various categories of professionals and a questionnaire about acquired knowledge of the four professionals. Participants who received this packet were the education group. Participants who received the other packet, which contained a case study and a questionnaire about it, was the non-education group.

Participants were randomly assigned a survey packet. The packets were number-coded for organization purposes and so each participant was assigned a code or case number. The materials in the packets were given to participants one at a time, and they were instructed to take their time to read the materials and to complete the forms and questionnaires and return it when they finished. As participants returned materials or completed forms, they were then handed the next form to read and complete.

The materials were given to participants in the following order. First, participants were handed the notification sheet and asked to read and sign it. Once they read, signed and returned the notification sheet, participants were handed the initial four-item

questionnaire on which they rated each professional on qualifications and general competence and effectiveness to treat mental, emotional and behavioral problems. Once participants completed and returned this questionnaire, they were then handed the description of problem-types to familiarize them with the six problems. This form included six paragraphs that described conduct disorder, substance abuse, eating disorders, panic disorder, major depression and marital problems. Once participants read through this material and returned it, then the participants who were assigned a survey packet containing educational materials (education group) read materials that described professional requirements, such as education and training prior to licensure or certification, and descriptions of typical roles and functions of the four professionals. Participants who were assigned a survey packet that did not contain educational materials (non-education group), but instead a case study, read the case study called "The case of Mr. J". Once the education group read through their materials and returned it, then they were handed the 16-item questionnaire consisting of multiple-choice questions to measure acquired knowledge about the four disciplines. Similarly, once the non-education group read through the case study and returned it, they were handed the questionnaire about the case study. Finally, once these questionnaires were completed and returned to the investigator, participants were handed the 15-item questionnaire designed to measure perceptions and attitudes about expertise regarding training and competence of the four professionals. Participants were not limited to the amount of time they could spend on any of the materials. In fact, they were instructed to take their time as materials were handed to them. On average, participants spent approximately 10 minutes reading over the descriptions of the problem-types, and approximately 10

minutes reading over the information that described the professional-types. Since these forms were returned to the investigator, participants were not able to refer back to the materials.

RESULTS

Of the 150 surveys, five were incomplete, and therefore omitted from the analyses leaving a total sample size of 145. Fourteen-percent (21) of these participants had taken a course in abnormal psychology. Of these 21 participants, twelve were assigned the survey packet that contained educational information (education group) and nine were assigned the other survey packet that contained the case study (non-education group).

Since it was possible that having had course work in abnormal psychology would affect participants' ratings of the professionals, and therefore affect the results, the statistical analyses used in this study was analysis of covariance (ANCOVA) to control for any effects of this covariate on the dependent variables. The means, therefore, were also adjusted to reflect the removal of any effects of having had course work in abnormal psychology.

Result of the Analysis That Tested the First Hypothesis

The hypothesis that prior to provision of educational information all participants would rate psychiatrists significantly different from the other professionals, and that ratings for clinical psychologists would not differ significantly from ratings for professional counselors and clinical social workers was tested with a 2 X 4 mixed design ANCOVA. This ANCOVA was conducted to analyze the responses to the initial 4-item questionnaire, which measured participants' preconceptions about qualifications and general competence and effectiveness of the four professionals to treat mental, emotional and behavioral conditions. The four types of professionals was the within subjects variable and educational materials versus no educational materials was the between

subjects variable. The covariate was whether the participants had previously taken a course in abnormal psychology.

This analysis resulted only in a significant interaction effect, $F(3, 405) = 4.63, p < .01$. Neither the educational group main effect nor the professional-type main effect were significant, ($p = .76$ and $p = .09$ respectively). The covariate was also not significant ($p = .07$). The significant interaction effect was followed up with simple effects analyses for further examination of the variables. First, four one-way between subjects ANCOVAs were conducted to examine differences between the participants who later received educational information (education group) and the participants who did not receive this information (non-education group) in their ratings of each professional. The results of these analyses were not significant. The second set of simple effects analyses examined differences in ratings among the professional-types at each level of group assignment. Two one-way within subjects ANCOVAs were conducted. The first analysis examined the differences between the ratings the professionals received from the education group and the second analysis examined the differences between the ratings the professionals received from the non-education group. These analyses resulted in a significant professional-type main effect for the education group, $F(3, 199) = 2.90, p < .05$ and non-significant main effect for the non-education group ($p = .76$). Multiple comparisons were conducted to follow-up the significant professional-type main effect to determine the differences among the professionals. The Bonferroni approach was used to control for family-wise error rate across these tests. Table 1 lists the means and mean comparisons. As can be seen from Table 1, prior to educational information psychiatrists and clinical psychologists were rated significantly different from professional counselors and clinical

social workers. Professional counselors were also rated significantly different from clinical social workers. Psychiatrists and clinical psychologists were not rated significantly different.

Figure 1 depicts the pattern of ratings for the four professionals prior to provision of educational information to half the participants. As can be seen from Figure 1, participants did not differ in their perceptions about the level of general competence and effectiveness of each professional. They did, however, differ in their perceptions between psychiatrists and professional counselors. The education group rated these professionals as significantly different with psychiatrists as more competent and effective (Mean = 5.40 compared to Mean = 4.68), whereas the non-education group's ratings of psychiatrists were not significantly different from their ratings of professional counselors (Mean = 5.14 compared to Mean = 4.81).

Table 1

Mean Ratings of Education Group's Perceptions about the Professionals' General Competence and Effectiveness Prior to Receiving Educational Information

Professional-type	Mean ¹	SD
Professional Counselor	4.68 _a	1.12
Psychiatrist	5.40 _b	1.07
Clinical Social Worker	4.01 _c	1.20
Clinical Psychologist	5.65 _b	1.01

¹ Adjusted for covariate: had abnormal psychology course = 1.83.
Means that have different subscripts are significantly different at the .05 level.

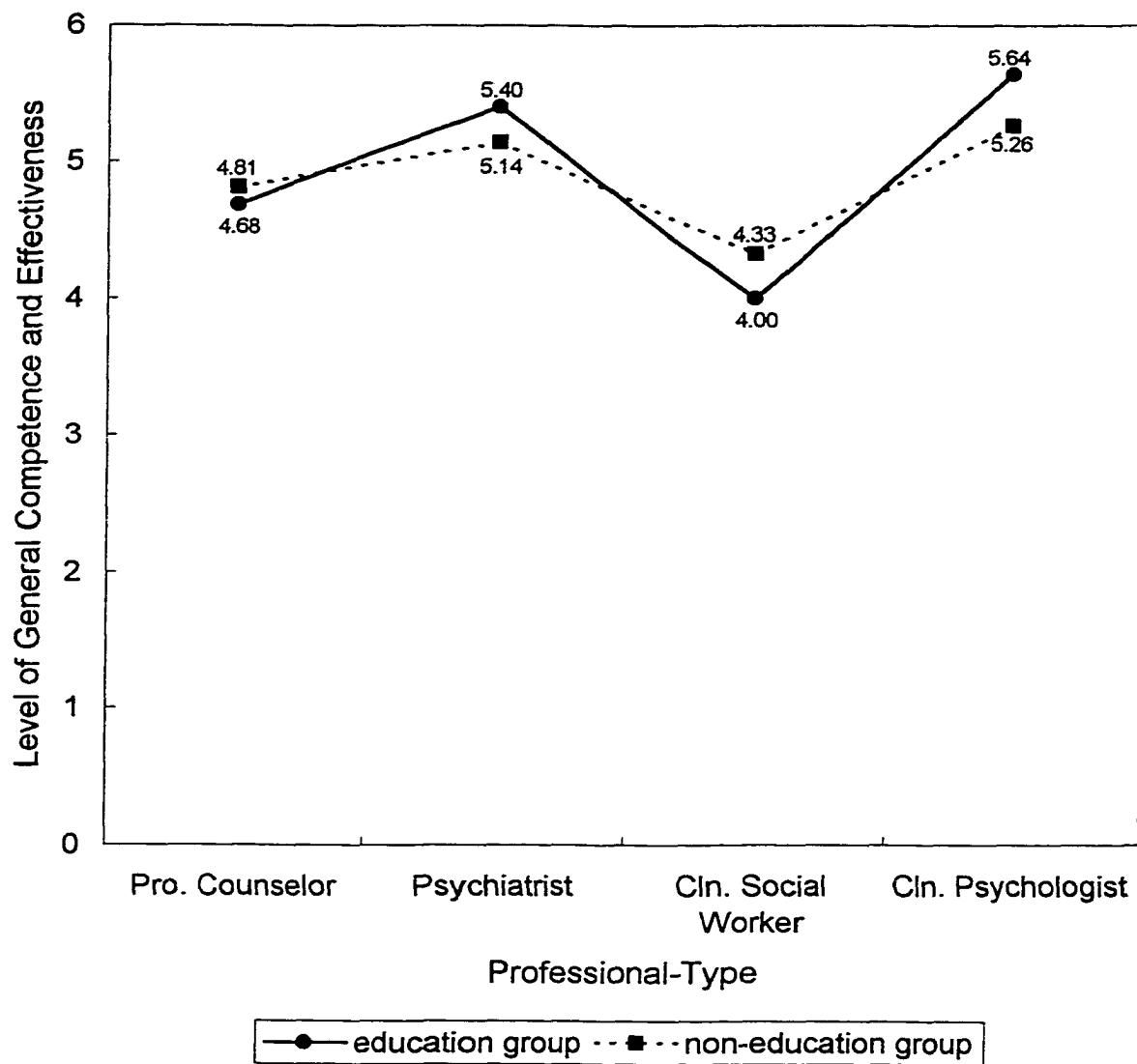


Figure 1. Participants' ratings of professionals' level of general competence and effectiveness prior to provision of educational information to the education group.

Results of the Analyses That Tested the Second Hypothesis

The results regarding the level of training of the four professions in the etiology of disorders, the utilization of psychotherapy and counseling and the utilization of medication to treat disorders were analyzed with 2 X 4 mixed design ANCOVAs. Type of professional was the within subjects variable and group assignment (education versus non-education) was the between subjects variable. These analyses tested the hypothesis that provision of educational information would have a significant effect on knowledge about professional requirements as measured by ratings in the three areas of training. That is, that participants who were provided with educational information concerning professional requirements and typical roles and functions would differ significantly from participants who did not get this information in their perceptions about these professionals' qualifications. It was predicted that psychiatrists would be rated significantly different from the other professionals with regard to the utilization of medication to treat disorders. Clinical psychologists would be rated significantly different from professional counselors and clinical social workers with regard to level of training in the etiology of disorders and utilization of psychotherapy and counseling; and professional counselors and clinical social workers would not be rated significantly different in all three areas of training. It was also predicted that participants' scores on the questionnaire that measured acquired knowledge following the educational information would indicate the positive effect of educational information.

These analyses resulted only in significant professional-type main effects for the items dealing with level of training in the etiology of disorders and training in utilization of medication to treat disorders, $F(3, 405) = 10.11, p < .01$ and $F(3, 390) = 11.17, p < .01$

respectively. There was not a significant group effect for these two items ($p = .29$ and $p = .99$ respectively) nor were the interactions significant ($p = .95$ and $p = .35$ respectively). The covariate was also not significant for both items ($p = .33$ and $p = .11$ respectively). With regard to training in the utilization of psychotherapy and counseling, there were no significant main effects nor was the interaction effect significant.

Multiple comparisons were conducted to follow-up the significant main effects for the first two items to determine the pattern of differences among the professionals. The Bonferroni approach was used to control for family-wise error rate across these tests. The adjusted means and mean comparisons are listed in Table 2 and Table 3. These comparisons revealed that for training in the etiology of disorders, the professionals were viewed as significantly different except between professional counselors and clinical social workers. Psychiatrists were viewed as having had the highest level of training in this area followed by clinical psychologists and then professional counselors. The pattern of ratings the professionals received for training in the utilization of medication to treat disorders was similar to that of training in the etiology of disorders. The professionals were viewed as significantly different except between professional counselors and clinical social workers. Again, psychiatrists received the highest ratings followed by clinical psychologists.

Participants' scores on the 16-item questionnaire, which measured acquired knowledge from the educational information provided to them, is listed in Table 4. Four questions were asked about each professional so that there were four sets of scores, one for each professional. The highest possible score was four and the lowest was zero. A score of four meant that all four questions were answered correctly for that particular

professional. A score of three meant that only three answers were correct; two if only two answers were correct; one if only one answer was correct and zero if none of the answers were correct. As can be seen from Table 4, only 26% of participants correctly answered all four questions that pertained to clinical psychologists. Sixty-percent correctly answered all four questions that pertained to clinical social workers. Participants' scores to questions about psychiatrists and professional counselors were very similar, 32% correctly answered all four questions concerning these professionals. Participants were able to correctly answer three questions that pertained to clinical psychologists 39% of the time; and 36%, 33% and 28% of the time to questions that pertained to psychiatrists, clinical social workers and professional counselors respectively.

Table 2

Mean Ratings of Professionals' Level of Training in the Etiology of Disorders

Professional-type	Mean ¹	SD
Professional Counselor	4.75 _a	1.32
Psychiatrist	6.27 _b	.97
Clinical Social Worker	4.57 _a	1.30
Clinical Psychologist	5.93 _c	1.04

¹ Adjusted for covariate: had abnormal psychology course = 1.86.
Means that have different subscripts are significantly different at the .05 level.

Table 3

Mean Ratings of Professionals' Level of Training in the Utilization of Medication to Treat Disorders

Professional-type	Mean ¹	SD
Professional Counselor	3.10 _a	1.63
Psychiatrist	6.09 _b	1.35
Clinical Social Worker	3.14 _a	1.73
Clinical Psychologist	4.90 _c	1.74

¹ Adjusted for covariate: had abnormal psychology course = 1.86.
Means that have different subscripts are significantly different at the .05 level.

Table 4
*Participants' Total Scores on Acquired Knowledge about Professional Requirements
 for Each of the Four Professionals Following Educational Information to the Education
 Group*

Professional Title	Score	Frequency	Percent
Professional Counselor			
	0	2	2.8
	1	8	11.1
	2	19	26.4
	3	20	27.8
	4	23	31.9
Psychiatrist			
	0	2	2.8
	1	8	11.1
	2	13	18.1
	3	26	36.1
	4	23	31.9
Clinical Social Worker			
	1	1	1.4
	2	4	5.6
	3	24	33.3
	4	43	59.7
Clinical Psychologist			
	0	2	2.8
	1	8	11.1
	2	15	20.8
	3	28	38.9
	4	19	26.4

n = 72

Results of the Analyses That Tested the Third Hypothesis

The results regarding the effectiveness of the various professionals in treating the six problem-types were analyzed using 2 X 4 mixed design ANCOVAs. These analyses tested the hypothesis that provision of educational information would have a significant effect on perceptions and attitudes about competence and effectiveness of clinical psychologists to treat the various problem-types. The results indicated no significant effects associated with the items dealing with the effectiveness of treatment of marital problems, conduct disorder or substance abuse. The item dealing with the effectiveness of treatment of major depression did yield a significant main effect for professional-type, $F(3, 387) = 3.85, p < .05$, and a significant covariate effect, $F(1, 142) = 4.07, p = .05$. Multiple comparisons were conducted to follow-up the significant main effect, and the Bonferroni approach was used to control for family-wise error rate across these tests. Table 5 lists the means and mean comparisons for the professional-type main effect. As can be seen from Table 5, the professionals were perceived as significantly different from each other in their effectiveness to treat major depression. Psychiatrists received the highest ratings followed by clinical psychologists and then professional counselors and finally clinical social workers.

For the item dealing with the effectiveness of treating an eating disorder, the ANCOVA yielded a significant professional-type main effect, $F(3, 380) = 4.07, p < .05$, and a significant group main effect $F(1, 142) = 7.71, p < .01$. The covariate effect was not significant ($p = .34$). Table 6 lists the means and mean comparisons for the professional-type main effect, and Table 7 lists the means for the significant group effect. Multiple comparisons were conducted to follow-up the significant professional-type main

effect, and the Bonferroni approach was used to control for family-wise error rate across these tests. As can be seen from Table 6, the results indicated that clinical psychologists were viewed as being similar in their level of competence with psychiatrists and significantly different from professional counselors and clinical social workers in treatment of an eating disorder. Significant differences in ratings were also found between the other three professionals. Finally, as can be seen in Table 7, the significant group main effect was observed only for ratings of professional counselors. That is, the two groups of participants differed only in their ratings of professional counselors' competence to treat an eating disorder. The education group had significantly higher ratings for these professionals than did the non-education group.

Table 5

Mean Ratings of Professionals' Competence and Effectiveness to Treat Major Depression

Professional-type	Mean ¹	SD
Professional Counselor	5.22 _a	1.32
Psychiatrist	5.99 _b	1.15
Clinical Social Worker	4.17 _c	1.50
Clinical Psychologist	5.68 _d	1.22

¹ Adjusted for covariate: had abnormal psychology course = 1.86.
Means that have different subscripts are significantly different at the .05 level.

Table 6

Mean Ratings of Professionals' Competence and Effectiveness to Treat Eating Disorders

Professional-type	Mean ¹	SD
Professional Counselor	4.96 _a	1.40
Psychiatrist	5.59 _b	1.25
Clinical Social Worker	4.02 _c	1.59
Clinical Psychologist	5.58 _b	1.33

¹ Adjusted for covariate: had abnormal psychology course = 1.86.
Means that have different subscripts are significantly different at the .05 level.

Table 7

Mean Difference Between Education Group and Non-Education Group Rating of Professionals' Competence and Effectiveness to Treat Eating Disorders

Type of Professional	Group Assignment	Mean ¹	SD
Professional Counselor	Education group	5.36*	1.38
	Non-education group	4.56*	1.32
Psychiatrist	Education group	5.77	1.32
	Non-education group	5.42	1.16
Clinical Social Worker	Education group	4.20	1.65
	Non-education group	3.84	1.53
Clinical Psychologist	Education group	5.78	1.32
	Non-education group	5.38	1.31

¹ Adjusted for covariate: had abnormal psychology course = 1.86.

* The mean difference is significant at the .05 level.

With respect to the treatment of panic disorder, a significant professional-type main effect was obtained, $F(3, 391) = 7.75, p < .01$. The group, interaction and covariate effects were not significant ($p = .16, p = .86$ and $p = .14$ respectively). Multiple comparisons were conducted to follow-up the significant professional-type main effect and the Bonferroni approach was used to control for family-wise error rate across these tests. Table 8 lists the means and means comparisons. The pattern of results was similar to those obtained with eating disorder. Clinical psychologists and psychiatrists were not viewed as significantly different in effectiveness. Professional counselors and clinical social workers differed from both psychiatrists and clinical psychologists as well as from each other.

Table 8

Mean Ratings of Professionals' Competence and Effectiveness to Treat Panic Disorder

Professional-type	Mean ¹	SD
Professional Counselor	4.84 _a	1.46
Psychiatrist	5.90 _b	1.13
Clinical Social Worker	4.17 _c	1.54
Clinical Psychologist	5.70 _b	1.18

¹ Adjusted for covariate: had abnormal psychology course = 1.86.
Means that have different subscripts are significantly different at the .05 level.

Results Associated With the Open-ended Questions

Assessment of responses to the open-ended question that asked participants to explain their ratings and the factors that influenced their ratings of the four professionals revealed four main categories and an “Other” category for ambiguous and non-specific responses. Thirty-seven percent (53) rated the professionals based on perceived level of education, training and experience. Twenty-six percent (38) rated the professionals by matching the type of professional with the type of problem. Twenty-one percent (30) rated the professionals based on what they knew about each professional and/or problem and how effectively each could treat the particular problem. Six- percent (9) did not perceive much difference between the four professionals; and ten- percent (15) gave ambiguous or non-specific responses. Table 9 lists three examples of participants’ responses for each of the five categories.

Table 9

Participants' Rationale for the Ratings They Gave the Four Professionals

I. Ratings based on professionals' level of education, training and experience:

1. "Psychologists and psychiatrists have more education and training on more complex problems; and social workers and counselors are better with problems of everyday life such as family and marital issues."
2. "Amount and type of education."
3. "Rated psychiatrist highest because they have highest level of education." "Rated counselors higher than social workers because they have more experience."

II. Ratings based on matching the type of professional with the type of problem:

1. "Psychiatrist are better for severe disorders." "Psychologist help those with minor disorders; social workers deal better with family issues of separation and abuse; and counselors give general advise about anything"
2. "Rated psychiatrist high for problems I thought needed medication." "Psychologists and counselors have the most experience with counseling, so I rated them higher on most problems."
3. "Psychiatrist and psychologist are best with mental and emotional problems and can use medication if needed." "Counselor and social workers are best with problems such as marital, family and conduct disorder."

III. Ratings based on participants' knowledge about each professional and/or problem and how effectively each could treat a particular problem:

1. "I rated the professionals based on what I know about the problem and who I thought would be better to treat each."
2. "I rated the professionals based on what the problem is and the level of experience I thought the professional had in treating the particular problem."
3. "Rated the professionals according to what I know about each and using their titles as a guidance." "I wish I would have paid more attention to the descriptions given to me in this project."

IV. Don't perceive much difference between the professionals:

1. "I think all the professionals are generally the same and equally effective to treat various problems."
2. "All professionals are similar in ratings."
3. "Rated professionals equally because they receive similar amounts of training and experience."

Table 9 Continued

V. Other- ambiguous and non-specific responses:

1. "Rated psychologist highest because it sounded good."
 2. "I rated the professionals based on what I've seen in life, readings and movies."
 3. "The different professionals specialize in some areas more than others."
-

Assessment of responses to the question of which professional the participants would consult for psychological problems and the reason for selecting the particular individual revealed that twenty-eight percent (40) said they would consult a clinical psychologist. Participants gave a variety of reasons for selecting this professional with the majority of reasons relating to their level of training in dealing with psychological issues. Forty-five percent gave this reason. Examples of some of these responses include the following: "studied in depth psychological problems", "they are the ones most likely to have training in psychological problems" and "they would seem to have more training in diagnosis and treatment of psychological problems". Ten percent reasoned that psychologists could prescribe medication, another 10% said, "they can provide proper treatment or therapy". Twenty-one percent (30) would consult a psychiatrist and another 21% (30) would consult a professional counselor. Thirty-seven percent of those who would consult a psychiatrist gave reasons related to the fact that these professionals can prescribe medication to treat disorders. Another 37% gave the response that psychiatrists have the highest level of education and training. Twenty-three percent reasoned that they specialize in psychological problems. Fifty percent of those who would consult a professional counselor reasoned that they were the best place to begin because they can

determine the problem and make referrals if needed. Seventeen percent of responses were related to personal qualities such as “they are more personable” and “I would feel more comfortable talking with them”. Finally, 10% said these professionals can determine if a real problem exist. Three participants (2%) would consult clinical social workers and the reasons provided were related to referral reasons. Twelve (8%) selected more than one professional. Of these, six chose psychologist or psychiatrist, five chose psychologist or professional counselor and one chose psychologist or social worker. The majority of explanations participants gave for selecting these professionals related to education, training, knowledge and experience dealing with psychological problems. Eleven (8%) said they would consult their friends or family because these individuals knew them best and had more trust in them than professionals. Seven (5%) responded with “it depends”. Three (2%) would consult their medical doctor and another 2% said they wouldn’t consult any of the professionals. Two (1%) would consult their clergy, less than 1% each said they would consult their professor and social service and 1% did not appear to understand the question.

Perceived levels of education, training and experience appear to be the most influential factors for consulting a particular professional as evident by the participants’ explanations of why they rated the professionals the way they did in this study. In general, psychiatrists and clinical psychologists were rated as more competent and effective than professional counselors and clinical social workers. With the various problems that were presented to the participants, the professionals were not viewed as significantly different in their effectiveness to treat those that were perceived as interpersonal and social in nature.

DISCUSSION

The primary focus in this research was public perceptions and attitudes about clinical psychologists' competence and effectiveness relative to other mental health professionals; and the effects of educational information about these professionals, since education is an important factor that influence perceptions and therefore attitudes. This research further examined the relationship between knowledge about qualifications and perceptions about competence. Participants' confidence in clinical psychologists, psychiatrists, clinical social workers and professional counselors to treat mental, emotional and behavioral problems were compared prior to and following provision of information to half the participants to examine whether or not educational information had an effect on perceptions about competence.

Results of the initial measurement of participants' confidence level in the four professionals' general competence and effectiveness to treat mental, emotional and behavioral conditions suggested that prior to educational information, psychiatrists were perceived significantly more competent than professional counselors and clinical social workers, but similar in competence to clinical psychologists. The results, therefore, did not support the hypothesis that psychiatrists would be viewed significantly different from the other three professionals. Also not supported was the prediction that participants' confidence level in clinical psychologists would not differ significantly from their confidence level in professional counselors and clinical social workers. In sum, results were inconsistent with prior research findings that suggested lack of confidence in clinical psychologists' competence to treat a variety of conditions. In the present study clinical psychologists were perceived as generally competent and effective to treat

mental, emotional and behavioral problems. They were rated significantly different from professional counselors and clinical social workers and similar to psychiatrists.

With regard to the effect of educational information on perceptions about qualifications (training, skills and capabilities) of the four disciplines, findings suggested that the educational information regarding professional requirements and typical roles and functions that was provided to half the participants did not have a significant effect. The participants who received educational information did not differ significantly from those who did not receive this information in their perceptions about the professional requirements for these professionals. The results suggested that the four professionals were not viewed significantly different in their level of training in the utilization of psychotherapy and counseling. Also, participants' ratings suggested that psychiatrists were perceived as having had significantly more training in the etiology of disorders and utilization of medication to treat disorders than the other professionals. Clinical psychologists were perceived as having had significantly more training in these two areas than professional counselors and clinical social workers. Therefore, the hypothesis that educational information would have a significant effect on knowledge about professional requirements was not supported. The predicted positive effect on perceptions about clinical psychologists' level of training in the etiology of disorders and utilization of psychotherapy and counseling was not observed. These findings that suggested that psychiatrists were perceived more qualified than the other mental health professionals is consistent with those of Warner and Bradley (1991), Wollersheim and Walsh (1993) and Shindler, Berren, Hannah, Beigel and Santiago (1987). Their research findings also

suggested that psychiatrists were generally perceived as having had significantly more education, training and experience than other mental health professionals.

With regard to the effect of educational information on perceptions and attitudes about clinical psychologists' competence to treat the various problem-types that were presented, results followed those of the non-significant effect of educational information on knowledge about qualifications. The two groups of participants did not differ significantly in their ratings of clinical psychologists' competence. Further, for the group of participants who received information, their perceptions about clinical psychologists' competence prior to and following the educational information were not significantly different (Means: 5.65 versus 5.58¹). Therefore, the hypothesis that educational information would have a significant effect on perceptions and attitudes about clinical psychologists' competence and effectiveness to treat the various problems was not supported. Findings, however, suggested that both groups of participants had a great deal of confidence in clinical psychologists to treat the various problem-types. In the areas in which the four professionals were rated significantly different in their competence to treat specific disorders, clinical psychologists were second to psychiatrists only in the treatment of major depression and significantly more competent than the other two professionals. The group difference that was observed for treatment of eating disorders suggested that the educational information was effective only for the perceptions of professional counselors. Clinical psychologists were viewed significantly more competent than professional counselors and clinical social workers, and similar to psychiatrists in treating this problem-type.

¹Mean of the education group's ratings of clinical psychologists' competence to treat the six problem-types after receiving educational information. Based on means adjusted for covariate: had abnormal psychology.

That clinical psychologists were generally perceived competent and effective was not in accordance with prior research findings that suggest lack of confidence in these professionals' competence to deal with various psychological conditions. Also inconsistent with prior research is the suggestion of ambiguity about these professionals' competence. Participants in the present study did not appear uncertain about clinical psychologists' competence as evident by the consistency in their ratings of these professionals relative to professional counselors and clinical social workers and relative to psychiatrists. That psychiatrists were rated significantly different from the other professionals in their competence to treat major depression is in accordance with Warner and Bradley, Wollersheim and Walsh and Farberman's (1997) findings that psychiatrists were perceived as more competent than clinical psychologists to treat conditions often perceived as more pathological. As with Warner and Bradley's participants, participants in the present study explained that they matched the type of professional with the type of problem. That they rated the professionals based on the professional's training and experience with the particular problem. The finding that psychiatrists were rated as having had the highest level of training in the utilization of medication is the suggestion that perhaps it has become commonly known that a psychiatrist is the mental health professional qualified to prescribe medication and that major depression is often treated with medication. This would be consistent with the finding in the present study as well as in prior studies that psychiatrists were perceived as significantly more competent and effective than other mental health professionals in the treatment of major depression. Also in support of this suggestion is the observation of a significant covariate effect for

the treatment of major depression. This disorder would most likely be extensively explored in abnormal psychology courses.

The finding that clinical psychologists were perceived as having had significantly less training than psychiatrists in the etiology of disorders is an interesting finding in the present study because these participants had a great deal of confidence in clinical psychologists. They rated these professionals highly competent and similar to psychiatrists in treating most of the problem-types. It would seem logical that since clinical psychologists were perceived to be similarly competent and effective as psychiatrists, then they would be viewed as having had similar levels of training in the etiology and possible treatment of various conditions. Also inconsistent was that more participants selected clinical psychologists than psychiatrists as the professional to consult for psychological problems. Results indicated that 40 participants selected clinical psychologists relative to 30 who selected psychiatrists. The reasons participants provided for their selection of clinical psychologists were related to education and training in diagnoses and treatment of psychological problems. Reasons for selecting a psychiatrist were related to having had the highest level of education, specialization in psychological problems and the ability to prescribe medication. It is possible that because these participants were psychology students, they may have been biased towards clinical psychologists; and therefore, they preferred these professionals more than they did psychiatrists.

Limitations of the Study

There are certain factors associated with the participants that should be considered. In this research 68% of the participants were females relative to 32% males;

and 79% were age 18 to 21 relative to 13% who were between 22 and 26 and 8% who were between 27 and 47 years old. Of the 79% age 18 to 21, 55% were females relative to 24% males. It is clear that there were a great deal more females than males, and that the majority of the participants were between 18 and 21 years old. It is possible that perhaps young adult females are more likely to seek these types of services, if they perceived a need to do so, than would young adult males. Therefore, it would follow that females are probably more likely to have positive attitudes toward mental health professionals. Additionally, since the participants in the present study were undergraduate psychology students, it is possible that these participants were biased in favor of clinical psychologists, even though they did not appear to be very knowledgeable about these professionals' qualifications. This could help explain the high ratings clinical psychologists received in competence and effectiveness and why they were selected more often than the other professionals as the one to consult for psychological problems.

As for the educational information that was provided to half the participants, the information may not have been salient enough for the participants to detect differences, particularly with the information regarding psychiatrists and clinical psychologists. The information with regard to the areas of study for psychiatrists and clinical psychologists were very similar. Additional information with emphasis on differences between the professionals' qualifications may have allowed the participants to better distinguish between them. Also, the inclusion of practical information might have been more informative for the participants. For instance, the inclusion of examples related to real-life situations and how the four disciplines deal with these situations may have provided a clearer picture of these professionals' functions. Detailed information of the hands on

experience during training such as those involved in internship might also have improved the effectiveness of the educational information. Finally, the participants in the pilot test, which was performed to determine whether or not the information about the professional-types was readable and understandable, differed from the participants in the research. The participants in the pilot test were 34 to 47 year-old individuals with varying professions, and were equal in number of males and females. The difference in the results of the questionnaire that measured acquired knowledge between these two samples of participants might be due to differences associated with the participants.

Related to the limitations associated with the educational information were those associated with the measurements utilized in this study. With regard to the 15-item questionnaire, additional questions with regard to perceptions about qualifications such as questions about professional roles and functions of the four disciplines should have been included. That is, in addition to questions about level of training in etiology of disorders, utilization of psychotherapy and counseling and utilization of medication to treat disorders, perhaps questions regarding these professionals' roles in a clinical setting should have been included. Similarly, the initial questionnaire that measured preconceptions should have included these same questions rather than merely a question that asked participants their views and attitudes of general qualifications and competence level for each professional. The results might have been more informative if precise measures of knowledge and perceptions prior to provision of educational information were conducted. That is, if knowledge about professional requirements and professional functions as well as perceptions and attitudes about competence level to treat each specific problem-type were measured before provision of educational information. In

essence, conduct pre and post-tests of knowledge about qualifications and professional functions and pre and post-tests of perceptions about competence level to determine whether or not the information is effective. Finally, it is not clear why a difference between the participants appeared in the initial measurement of perceptions of general competence and effectiveness. That the participants who later received educational information rated professional counselors and psychiatrists significantly different and the participants who did not receive this information rated them similar is perplexing because this measurement was prior to educational information, and therefore there should not have been a difference between the participants. It is possible that this result was merely a random effect. On the other hand, it is also possible that this result was due to extreme scores. If, in fact, this was the case in the initial measurement of perceptions, the true measure of participants' preconceptions regarding these two professionals may have been obscured.

CONCLUSION

Although the educational information did not have an effect on knowledge about clinical psychologists' qualifications, these professionals were perceived relatively competent and effective to deal with various mental, emotional and behavioral conditions. This was indicated by the high ratings these professionals received from all participants prior to and following the provision of information to half the participants. The results, therefore, did not support others' findings that suggest lack of confidence in clinical psychologists' competence. On the contrary, these professionals were perceived highly competent and similar to psychiatrists to treat the problem-types presented. Although the participants in this study were psychology students, and therefore might have been biased in favor of clinical psychologists, these findings suggest improved attitudes relative to prior studies, which included various segments of the population including psychology students. It is not clear why the educational information did not have an effect on perceptions and attitudes about clinical psychologists. Several possible reasons exist. First, it is possible that participants did not retain the information because they did not spend much time reading the materials provided. This would be consistent with their scores on the questionnaire that followed the educational information, which measured their acquired knowledge. Second, it is possible that the information may have been too technical (it lacked practical examples) and therefore lacked the ability to gain the participant's attention. Finally, it is quite probable that the educational information was limited. Additional information particularly with regard to clinical psychologists' functions in a clinical setting should have been included. Although the educational information was not effective in this research, this does not suggest that educational

campaigns aimed at improving public knowledge about clinical psychologists will be destined to fail. Rather, the results are highly suggestive of the challenging nature in the development of effective educational campaigns that will improve public knowledge about the qualifications and competence of clinical psychologists.

In this study the suggested relationship between perceptions about qualifications and perceptions about competence appeared to be much clearer with regard to psychiatrists than it was with clinical psychologists. Participants' positive attitudes toward psychiatrists' competence appeared to be based on participants' perceptions that these professionals are highly qualified as indicated by their high ratings concerning the areas of training. Whereas, the participants' positive attitudes about clinical psychologists' competence was less clear. With the exception of the differences in ratings regarding the effectiveness to treat major depression, these two professionals were rated equally competent; yet clinical psychologists were not rated equally qualified, but they were selected more often than psychiatrists as the professional to consult for psychological problems. As suggested by the participants' explanations, the ability to prescribe medication appeared to be associated with having had the highest level of qualification (i.e., higher level of education, training and specialization). This could have important implications for clinical psychology in their efforts to move toward prescribing of psychotropic medication. It would be interesting to determine if the ability to prescribe medication would have a similar effect for psychology. Also, though not explored and therefore not observed in the present study, prior studies suggested that when compared with psychiatrists, psychologists were often perceived as more caring

and understanding. It seems fair to assume that perceptions of personal qualities are important contributing factors in the decision to seek a particular professional.

The results of the present research and those of prior research suggest a need for further investigations of the factors that influence the decisions as to which professional to seek for particular situations. Certainly, perception about competence is highly influential in the decision-making process. Perception about competence is influenced by awareness of qualifications, and therefore knowledge of qualifications is a significant factor that merits further investigations. That is, examine what the public knows about qualifications and how education regarding qualifications will affect perceptions about competence. It seems that other qualities of the particular professional are also important factors that influence the decision-making process. Since past research have suggested that the public generally has positive attitudes toward psychologists regarding personal qualities, it would be interesting to determine to what degree this variable influences the decision-making process. Future research could further examine the effects of knowledge about qualifications on perceptions about competence. In addition, examine attitudes about personal qualities associated with the professionals and examine the relative effects and the combined effects of these variables on the decision-making process. The results might help to better understand if and how these factors relate in the decision to seek one professional over another for the treatment of a particular problem.

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APPENDIX A

DEFINITIONS OF PROBLEM-TYPES

Conduct Disorder: Children or adolescents with this disorder often initiate aggressive behavior and react aggressively to others. They may display bullying, threatening, or intimidating behavior; initiate frequent physical fights; use a weapon that can cause serious harm (i.e., knife, gun, or broken bottle); be physically cruel to people or animals; or steal (i.e., mugging, armed robbery, or breaking into houses or cars). Other characteristic features of conduct disorder may include deliberate destruction of others' property (i.e., smashing car windows and school vandalism); frequent lying or "conning" other people; and truancy.

Substance Abuse: The basic feature of substance abuse is the maladaptive pattern of substance use resulting in failure to fulfill major roles and obligations at work, school or home. For example, repeated absences or poor work performance related to repeated hangovers. While intoxicated, the individual may neglect children or household duties. The person is repeatedly intoxicated in situations that are physically hazardous such as driving a car or operating machinery. There may be repeated substance-related legal problems such as arrests for disorderly conduct, assault and battery, or driving under the influence. The person continues to use the substance despite repeated social or interpersonal consequences, such as marital difficulties, divorce, or verbal and physical fights.

Eating Disorders (Anorexia and Bulimia): The basic features of both disorders are the distorted image of one's body and weight and the fear of gaining weight. Anorexia is characterized by a refusal to maintain a minimally normal body weight. Intense fear of gaining weight or becoming fat is usually not alleviated with weight loss. Weight loss is viewed as an impressive achievement and a sign of extraordinary self-discipline, whereas weight gain is perceived as failure of self-control. Although some may acknowledge being thin, they typically deny serious medical implications of being malnourished. Bulimia is characterized by repeated episodes of binge eating followed by self-induced vomiting, misuse of laxatives, fasting, or excessive exercising. The most common compensatory technique is vomiting after an episode of binge eating. The immediate effects of vomiting often include reduction of fear of gaining weight. In some cases, vomiting becomes a goal in itself, and the person will binge in order to vomit or will vomit after eating just a small amount of food. Binge eating is typically triggered by dysphoric mood states; interpersonal stressors; or feelings related to body weight, shape, and food.

Panic Disorder: The basic feature of panic disorder is repeated, unexpected panic attacks followed by persistent concern about having another attack, worry about the possible implications or consequences of the panic attacks, or a significant behavioral change related to the attacks. Some individuals fear that the attacks indicate the presence of an undiagnosed, life-threatening illness (i.e., cardiac disease or seizure disorder). Despite repeated medical testing and reassurance, they may remain frightened and unconvinced that they do not have a life-threatening illness. Others feel that the panic attacks are an indication that they are "going crazy" or losing control or are emotionally weak. Some individuals with recurrent panic attacks significantly change their behavior (i.e., quit a job) in response to the attacks. Concerns about the next attack are often associated with development of avoidant behavior such as agoraphobia. In addition to worry about panic attacks, many individuals with panic disorder also report constant or periodic feelings of anxiety that are not focused on any specific situation or event.

Major Depression: The basic feature of a major depressive disorder is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. The individual also experiences additional symptoms which may include changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts. The symptoms persist for most of the day, nearly every day, for at least 2 consecutive weeks. The episode is accompanied by significant impairment in social, occupational, or other important areas of functioning. The episode is often described by the person as depressed, sad, hopeless, discouraged, or “down in the dumps”.

Marital Problems: The basic feature of marital problems is that the couple is having a great deal of difficulty getting along or keeping the marriage together. Marital problems can vary widely. Problems can range anywhere from lack of communication to infidelity. As an example, a woman has an issue she feels very strongly about and has repeatedly communicated it to her husband for several weeks, but he has interpreted her efforts as nagging or complaining and has not responded. She becomes frustrated and feels he lacks concern about her feelings which results in her becoming disinterested in him and negatively affects intimacy between them. The husband becomes frustrated and can't understand the reason for her developed lack of interest in him. The result is excessive arguments between them and a struggle for both to be heard by the other.

APPENDIX B

PROFESSIONAL REQUIREMENTS TO PROVIDE MENTAL HEALTH SERVICES AND TYPICAL ROLES AND FUNCTIONS

Please read the following list of professional requirements and typical roles of four disciplines:
clinical social work, clinical psychology, professional counselor, and psychiatry:

I. Clinical Social worker:

The following are requirements prior to licensure to practice in the state of Virginia:

1. A master's degree in social work.
2. 3,000 hours supervised post-graduate experience in a clinical setting, of which 15 hours per week is spent in face-to-face client contact.
3. Graduate course work in human behavior and social environment; social policy; research; clinical practice with individuals and groups; and a clinical practicum focused on diagnostic, prevention and treatment services.
4. Passing a written exam prescribed by the Virginia Board of Social Work.

The following is a list of typical roles and functions of clinical social worker:

1. Provide clients with information; referral; intervention with government and civic agencies; and community resources.
2. Performs assessments and diagnoses.
3. Provides preventative and early intervention services.
4. Provides treatment services, including psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment.
5. Works in close collaboration with physicians and other health care providers in client evaluation and treatment to further understand important social and environmental factors underlying client problems.

II. Clinical psychologist:

The following are requirements prior to licensure to practice in the state of Virginia:

1. A doctoral degree in professional psychology accredited by the American Psychological Association.
2. One year, full-time internship in a clinical setting.
3. One-year, full-time post-doctoral residency involving clinical training.
4. Supervised practicum in assessment, diagnosis, psychotherapy, and counseling.
5. Graduate course work in each of the following areas of study: Personality theory; diagnostic interviewing and behavioral assessment; psychometric, psychodiagnostic and projective testing; psychopathology; and individual, family, and group psychotherapy and counseling.
6. Passing a written exam prescribed by the Virginia Board of Psychology.

The following is a list of typical roles and functions of clinical psychologist:

1. Provides diagnoses and treatment of mental, emotional, and behavioral disorders.
2. Provides a wide variety of treatment methods including individual psychotherapy, marital and family therapy, group therapy, behavior therapy, psychoanalysis, hypnosis, biofeedback, and other psychological interventions.
3. Provide psychological evaluation or assessment of intelligence, abilities, aptitudes, personality, neuropsychological functioning, and other psychological attributes.
4. Engage in psychological research, interpret or report on scientific theory and research, and present expert psychological or clinical opinion.

III. Professional counselor:

The following are requirements for licensure prior to practice in the state of Virginia:

1. A master's degree in counseling.
2. 4,000 hours supervised post-graduate experience in counseling with various populations, theoretical approaches, and clinical problems.
3. Graduate course work in the areas of professional identity; function and ethics; theories and techniques in counseling, psychotherapy, and group dynamics; theories of human behavior, learning, and personality; career development; appraisal, evaluation, and diagnostic procedures; and abnormal behavior.
4. Passing a written exam prescribed by the Board of Licensed Professional Counselors.

The following are typical roles and functions of professional counselor:

1. Provides individual, marital and family counseling services.
2. Collects information about clients through interview, case history, observational techniques and appraisal, and assessment methods.
3. Analyzes information to determine advisability of counseling or referral to other specialists or institutions.
4. Evaluates results of counseling methods to determine reliability and validity of treatment used.
5. Interacts with other professionals to discuss therapy or treatment, new resources or techniques, and to share information.

IV. Psychiatrist:

The following are requirements for licensure prior to practice in the state of Virginia:

1. A medical degree with specialty in psychiatry is the educational requirements for psychiatrists.
2. After medical school, psychiatrists are required to complete residency in psychiatry involving clinical training in a hospital setting, which usually lasts three to four years.
3. Training in psychotherapy, professional ethics, psychological assessments, hypnosis, etc., which usually occurs in residency.
4. Psychiatrists gain licensure when they graduate from medical school and may choose to be board certified. Board certification requires additional clinical experience.

The following are typical roles and functions of psychiatrist:

1. Diagnose and treats mental, emotional, and behavioral disorders.
2. Collects information concerning client's family and medical history.
3. Examine clients to determine general physical condition.
4. Orders laboratory and other special diagnostic tests and evaluates them to determine nature and extent of mental disorders and develop treatment program.
Treats or directs treatment of clients, using a variety of psychotherapeutic methods and medication.

APPENDIX C

CASE STUDY OF MR. J

Mr. J is a fifty-one-year old Caucasian man who was referred for assessment in conjunction with a pending trial for, in his words, "child stealing." He appears to be of average height and mildly obese. Although he was neatly dressed, his hair, which is balding, was mussed and his glasses were drooped on his nose, giving him a mildly disheveled appearance.

Mr. J was born and reared in a small town in Kansas. His father "worked all his life" in a granary and his mother was a "housewife." He has one brother, ten years older, who, from his report "was too old to do anything with ... we never talked much." Mr. J presents his family as a "good, happy Christian family-we lived by the rules." The family's social life appeared to revolve around church functions, which they regularly attended. Although his report was vague, it appeared that the home environment was emotionally barren. He reports minimal physical contact with his parents as a child, and little spontaneous conversation. The family typically woke up in the morning, had meals, and retired in the evening, all at specified times.

Mr. J attended local schools, where he completed tenth grade. After school he held a number of jobs, but never developed a career. He was never "fired" from work and was never promoted. Job changes were reportedly due to "bad times" or "I thought I could get better pay."

Mr. J was married at twenty-seven and divorced fifteen years later. His report was very vague regarding the marriage and his one son, now age twenty-four. His responses to questions regarding their relationships were general and superficial, for example "everything was fine." He did mention, however, that his wife was "stepping out" and did finally leave him.

Mr. J reports having no hobbies and no consistent leisure activities other than watching television. He states that he is "a good Christian," and attends church regularly, is a member of churchmen's club, and does not drink. He states that he has "many friends," but on closer

evaluation these appear to be relatively superficial relationships typically revolving around church activities.

Approximately four years ago, Mr. J met a family (mother and three children) which he “adopted.” He reportedly spent a great deal of time with the children - taking them to shows, the park, and so on, and often had them stay at his apartment overnight. He became especially attached to the eleven-year old Molly, whom he reports he loves like a daughter. After hearing of the mother’s plan to marry and move to Georgia, Mr. J drove to Oregon with Molly and her brother in an apparently unplanned, impulsive manner. The children’s mother was unaware of the trip until the children were “missing” that evening.

Mr. J reports he went to Oregon to visit his son, whom he had not seen for over ten years. Apparently, his son summoned the police, not understanding why his father was there with the two children.

The above account was formulated after the initial interview and reflects the subject’s own report. The following is a report on Mr. J’s behavior during the interview:

Mr. J talks in a flat, soft-spoken, quiet manner, often ending his responses with “sir” or “mam.” His replies were short, often a single word, using “yes” or “no” whenever possible. While he appeared to be cooperative and attempted to answer all questions, he was vague and offered nothing spontaneously. During the interview he sat on the edge of his chair most of the time, occasionally breathing rapidly, rocking his torso back and forth, and drumming his fingers on the arm. His facial expression might best be described as vacant or expressionless. He rarely made eye contact with the examiner. When eye contact was made, he quickly averted his gaze. At times his voice became shaky, and he stuttered and faltered on words. This was especially true when he was asked open-ended questions or questions dealing with feelings and relationships. For example, when asked “Tell me a little about your marriage,” he responded by faltering, “Well ... ah ... umm ... I ... ah ... and finally, “I don’t know what you want-it was - okay, fine.” When asked how he felt about various events (divorce, arrest, family relationships as

a child), he appeared to be at a total loss for what to say and responded with such terms as “good,” “bad,” or “okay.” At such times he was not evasive or guarded but simply was unable to respond. Word usage was mediocre (used only high frequency words), and syntax was simple.

APPENDIX D

GENERAL COMPETENCE AND EFFECTIVENESS

We would like your general views and feelings about the following professionals' **qualifications and effectiveness** to treat a variety of mental, emotional and behavioral problems. Please rate the professionals using a scale of 1 to 7, with 1 being **NOT** at all **competent and effective** and 7 **EXTREMELY competent and effective**.

1. On a scale of 1 to 7, with 1 being **NOT** at all **competent and effective** and 7 **EXTREMELY competent and effective**. How **competent and effective** do you think a psychiatrist is in treating mental, emotional and behavioral problems such as depression, alcohol, conduct disorder and eating disorder?

1 2 3 4 5 6 7

2. On a scale of 1 to 7, with 1 being **NOT** at all **competent and effective** and 7 **EXTREMELY competent and effective**. How **competent and effective** do you think a clinical social worker is in treating mental, emotional and behavioral problems such as depression, alcohol, conduct disorder and eating disorder?

1 2 3 4 5 6 7

3. On a scale of 1 to 7, with 1 being **NOT** at all **competent and effective** and 7 **EXTREMELY competent and effective**. How **competent and effective** do you think a professional counselor is in treating mental, emotional and behavioral problems such as depression, alcohol, conduct disorder and eating disorder?

1 2 3 4 5 6 7

4. On a scale of 1 to 7, with 1 being NOT at all **competent and effective** and 7 **EXTREMELY competent and effective**. How **competent and effective** do you think a clinical psychologist is in treating mental, emotional and behavioral problems such as depression, alcohol, conduct disorder and eating disorder?

A horizontal scale consisting of a solid line with vertical end caps. Below the line, the numbers 1, 2, 3, 4, 5, 6, and 7 are printed in order from left to right, corresponding to the scale points.

APPENDIX E

ACQUIRED KNOWLEDGE ABOUT THE FOUR DISCIPLINES

Please answer the following questions based on the descriptions that was provided about each of the four disciplines.

1. What is the educational requirement for a **clinical social worker**?
 - a. M.D. degree
 - b. Master's degree
 - c. Doctoral degree

2. What is the educational requirement for a **Psychiatrist**?
 - a. Doctoral degree
 - b. Master's degree
 - c. M.D. degree

3. What is the educational requirement for a **clinical psychologist**?
 - a. Master's degree
 - b. M.D. degree
 - c. Doctoral degree

4. What is the educational requirement for a **professional counselor**?
 - a. M.D. degree
 - b. Doctoral degree
 - c. Master's degree

5. What are some advanced courses that **clinical social workers** are required to complete?

(SELECT 2)

- a. Human behavior and social environment
- b. Hypnosis
- c. Social policy
- d. Diagnostic interviewing and behavioral assessment
- e. Psychodiagnostic and projective testing
- f. Professional identity
- g. Career development
- h. Professional ethics

6. What are some advanced courses that **clinical psychologists** are required to complete?

(SELECT 2)

- a. Social policy
- b. Psychodiagnostic and projective testing
- c. Professional identity
- d. Diagnostic interviewing and behavioral assessment
- e. Hypnosis
- f. Human behavior and social environment
- g. Career development
- h. Professional ethics

7. What are some advanced courses that **psychiatrists** are required to complete?

(SELECT 2)

- a. Professional ethics
- b. Career development
- c. Social policy
- d. Hypnosis
- e. Professional identity
- f. Psychodiagnostic and projective testing
- g. Human behavior and social environment
- h. Diagnostic interviewing and behavioral assessment

8. What are some advanced courses that professional counselors are required to complete?
(SELECT 2)
- a. Career development
 - b. Hypnosis
 - c. Professional ethics
 - d. Professional identity
 - e. Psychodiagnostic and projective testing
 - f. Social policy
 - g. Human behavior and social environment
 - h. Diagnostic interviewing and behavioral assessment
9. Which **ONE** of the following post-graduate training is required for **clinical social workers**?
- a. 3,000 hours of supervised post-graduate experience in a clinical setting
 - b. 4,000 hours of supervised post-graduate experience in various populations including clinical
 - c. Three to four years full-time post-doctoral residency in a hospital setting
 - d. One year internship and one year post-doctoral residency in a clinical setting
10. Which **ONE** of the following post-graduate training is required for **professional counselors**?
- a. One year internship and one year post-doctoral residency in a clinical setting
 - b. 3,000 hours of supervised post-graduate experience in a clinical setting
 - c. Three to four years full-time post-doctoral residency in a hospital setting
 - d. 4,000 hours of supervised post-graduate experience in various populations including clinical

11. Which **ONE** of the following post-graduate training is required for **clinical psychologists**?
- a. Three to four years full-time post-doctoral residency in a hospital setting
 - b. One year internship and one year post-doctoral residency in a clinical setting
 - c. 3,000 hours of supervised post-graduate experience in a clinical setting
 - d. 4,000 hours of supervised post-graduate experience in various populations including clinical
12. Which **ONE** of the following post-graduate training is required for **psychiatrists**?
- a. 4,000 hours of supervised post-graduate experience in various populations including clinical
 - b. One year internship and one year post-doctoral residency in a clinical setting
 - c. 3,000 hours of supervised post-graduate experience in a clinical setting
 - d. Three to four years full-time post-doctoral residency in a hospital setting
13. Which of the following are typical roles and functions of **clinical social workers**?
- (SELECT 2)**
- a. Analyzes client information to determine advisability of counseling or referral to other specialists or institutions
 - b. Provides information and community resources to clients
 - c. Treats clients using a variety of psychotherapeutic methods and medication
 - d. Provides a variety of psychotherapeutic services including behavior therapy, hypnosis, and biofeedback
 - e. Provides preventative and early intervention services
 - f. Provides assessment of intelligence, personality, and neuropsychological functioning
 - g. Evaluate results of counseling methods to determine reliability and validity of treatment used
 - h. Examine clients' general physical condition

14. Which of the following are typical roles and functions of **psychiatrists**?

(SELECT 2)

- a. Provides preventative and early intervention services
- b. Provides information and community resources to clients
- c. Treats clients using a variety of psychotherapeutic methods and medication
- d. Evaluate results of counseling methods to determine reliability and validity of treatment used
- e. Examine clients' general physical condition
- f. Analyzes client information to determine advisability of counseling or referral to other specialists or institutions
- g. Provides assessment of intelligence, personality, and neuropsychological functioning
- h. Provides a variety of psychotherapeutic services including behavior therapy, hypnosis, and biofeedback

15. Which of the following are typical roles and functions of **professional counselors**?

(SELECT 2)

- a. Analyzes client information to determine advisability of counseling or referral to other specialists or institutions
- b. Examine clients' general physical condition
- c. Treats clients using a variety of psychotherapeutic methods and medication
- d. Evaluate results of counseling methods to determine reliability and validity of treatment used
- e. Provides assessment of intelligence, personality, and neuropsychological functioning
- f. Provides a variety of psychotherapeutic services including behavior therapy, hypnosis, and biofeedback
- g. Provides preventative and early intervention services
- h. Provides information and community resources to clients

16. Which of the following are typical roles and functions of clinical psychologists?

(SELECT 2)

- a. Treats clients using a variety of psychotherapeutic methods and medication
- b. Provides information and community resources to clients
- c. Provides a variety of psychotherapeutic services including behavior therapy, hypnosis, and biofeedback
- d. Provides assessment of intelligence, personality, and neuropsychological functioning
- e. Analyzes client information to determine advisability of counseling or referral to other specialists or institutions
- f. Evaluate results of counseling methods to determine reliability and validity of treatment used
- g. Examine clients' general physical condition
- h. Provides preventative and early intervention services

APPENDIX F

ASSESSMENT OF MR.J

Several inferences can be made from the case history report and observations during the interview of Mr. J. The following are examples of four possible inferences that can be made from the data on Mr. J. Please answer the following questions based on the information that was provided.

1. What are some supportive observations that Mr. J was somewhat **anxious**?

(SELECT 3)

- a. Flat voice quality
- b. Drumming fingers
- c. Mediocre of word usage and syntax
- d. Shaky voice
- e. Answers to questions about feelings and relationships are general
- f. Moving about in chair

2. What might be some supportive observations that Mr. J was **depressed**?

(SELECT 3)

- a. Mediocre of word usage and syntax
- b. Expressionless facial expressions
- c. Flat voice quality
- d. Rapid breathing
- e. Minimal responsiveness
- f. Rocking his torso back and forth

3. What might be some supportive observations that Mr. J has difficulty experiencing or expressing feelings?

(SELECT 2)

- a. Rapid breathing
- b. Answers to questions about feelings and relationships are general
- c. Rarely made eye contact
- d. Inability to respond to questions regarding events such as divorce or family relationships

4. What might be some supportive observations that Mr. J probably has low intelligence?

(SELECT 2)

- a. Answers to questions about feelings and relationships are general
- b. Rocking his torso back and forth
- c. Mediocre of word usage and syntax
- d. His educational and occupational level

APPENDIX G

QUESTIONNAIRE

We would like your opinion about the expertise of various mental health professionals. We would like your views about the ability of these professionals in helping people with mental, emotional, and behavioral problems. Please rate the following professionals on **competence** and **effectiveness** to treat six cases. At the end of the questionnaire, please provide a brief explanation on how you decided on your ratings.

1. On a scale of 1 to 7 with 1 being NO training at all and 7 a VERY GREAT DEAL of training, how much training do you think each of the following professionals have had in the causes of mental disorders? Training means experience and knowledge gained through work and education.

A. Professional Counselor	-----
	1 2 3 4 5 6 7
B. Psychiatrist	-----
	1 2 3 4 5 6 7
C. Clinical Social Worker	-----
	1 2 3 4 5 6 7
D. Clinical Psychologist	-----
	1 2 3 4 5 6 7

2. On a scale of 1 to 7 with 1 being NO training at all and 7 a VERY GREAT DEAL of training, how much training do you think each of the following professionals have had in the use of psychotherapy and counseling? Training means experience and knowledge gained through work and education.

A. Psychiatrist

1	2	3	4	5	6	7
---	---	---	---	---	---	---

B. Clinical Social Worker

1	2	3	4	5	6	7
---	---	---	---	---	---	---

C. Clinical Psychologist

1	2	3	4	5	6	7
---	---	---	---	---	---	---

D. Professional Counselor

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3. On a scale of 1 to 7 with 1 being NO training at all and 7 a VERY GREAT DEAL of training, how much training do you think each of the following professionals have had in the use of medication in the treatment of mental disorders? Training means experience and knowledge gained through work and education.

A. Clinical Psychologist

1 2 3 4 5 6 7

B. Professional Counselor

1 2 3 4 5 6 7

C. Psychiatrist

1 2 3 4 5 6 7

D. Clinical Social Worker

1 2 3 4 5 6 7

4. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating major depression? For example, a person who feels excessive sadness, loss of interest in all activities, decreased energy, worthlessness, difficulty concentrating, and loss of sleep.

A. Clinical Psychologist

|-----|

1 2 3 4 5 6 7

B. Clinical Social Worker

|-----|

1 2 3 4 5 6 7

C. Psychiatrist

|-----|

1 2 3 4 5 6 7

D. Professional Counselor

|-----|

1 2 3 4 5 6 7

5. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating eating disorder such as bulimia and anorexia? A distorted image of one's body and weight and the fear of gaining weight. Anorexia is characterized as refusal of maintaining a minimally normal body weight, and bulimia is characterized by repeated episodes of binge eating followed by compensatory techniques of vomiting, misuse of laxatives, fasting, or excessive exercise.

A. Clinical Social Worker

1 2 3 4 5 6 7

B. Professional Counselor

1 2 3 4 5 6 7

C. Clinical Psychologist

1 2 3 4 5 6 7

D. Psychiatrist

1 2 3 4 5 6 7

6. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating panic disorder? Repeated, unexpected panic attacks followed by persistent concern about having another attack and worry about the possible consequences of the attacks. Fear that the attacks may indicate the presence of an undiagnosed, life-threatening illness despite medical tests that prove otherwise.

A. Professional Counselor

|-----|

1 2 3 4 5 6 7

B. Psychiatrist

|-----|

1 2 3 4 5 6 7

C. Clinical Social Worker

|-----|

1 2 3 4 5 6 7

D. Clinical Psychologist

|-----|

1 2 3 4 5 6 7

7. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating marital problems? For example, lack of communication resulting in excessive arguments causing threat to the marriage.

A. Psychiatrist

|-----|

1 2 3 4 5 6 7

B. Clinical Social Worker

|-----|

1 2 3 4 5 6 7

C. Clinical Psychologist

|-----|

1 2 3 4 5 6 7

D. Professional Counselor

|-----|

1 2 3 4 5 6 7

8. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating conduct disorder? Children or adolescents who exhibit bullying, threatening, or intimidating behavior; initiate frequent fights; use weapons that can cause serious harm such as a knife or gun; physical cruelty to people or animals; or steals such as mugging, armed robbery, or breaking into houses and cars.

A. Clinical Psychologist

|-----|

1 2 3 4 5 6 7

B. Professional Counselor

|-----|

1 2 3 4 5 6 7

C. Psychiatrist

|-----|

1 2 3 4 5 6 7

D. Clinical Social Worker

|-----|

1 2 3 4 5 6 7

9. On a scale of 1 to 7 with 1 being NOT effective at all and 7 EXTREMELY effective, how effective do you think each professional is in treating substance abuse such as alcohol and drug abuse? For example, a person who continues to use the substance despite repeated social or interpersonal consequences, such as marital difficulties, divorce, or verbal and physical fights. Repeated substance-related legal problems such as arrests for disorderly conduct, assault and battery, or driving under the influence.

A. Professional Counselor

|_____|

1 2 3 4 5 6 7

B. Psychiatrist

|_____|

1 2 3 4 5 6 7

C. Clinical Psychologist

|_____|

1 2 3 4 5 6 7

D. Clinical Social Worker

|_____|

1 2 3 4 5 6 7

10. Please explain how you decided to rate these professionals. What factors influenced your ratings? Explain why you rated a particular professional as more effective than another professional in treating a particular problem.

11. If you or someone you knew had a psychological problem, who would you consult?

12. Please provide reasons why you would consult this individual.

13. What is your age?

14. What is your gender? Male Female

15. What courses have you taken in psychology?

APPENDIX H

MATERIALS USED IN PILOT TESTS

I. Definitions of Problem-Types

Conduct Disorder: Children or adolescents with this disorder often initiate aggressive behavior and react aggressively to others. They may display bullying, threatening, or intimidating behavior; initiate frequent physical fights; use a weapon that can cause serious harm (i.e., knife, gun, or broken bottle); be physically cruel to people or animals; or steal (i.e., mugging, armed robbery, or breaking into houses or cars). Other characteristic features of conduct disorder may include deliberate destruction of others' property (i.e., smashing car windows and school vandalism); frequent lying or "conning" other people; and truancy.

Substance Abuse: The basic feature of substance abuse is the maladaptive pattern of substance use resulting in failure to fulfill major roles and obligations at work, school or home. For example, repeated absences or poor work performance related to repeated hangovers. While intoxicated, the individual may neglect children or household duties. The person is repeatedly intoxicated in situations that are physically hazardous such as driving a car or operating machinery. There may be repeated substance-related legal problems such as arrests for disorderly conduct, assault and battery, or driving under the influence. The person continues to use the substance despite repeated social or interpersonal consequences, such as marital difficulties, divorce, or verbal and physical fights.

Eating Disorders (Anorexia and Bulimia): The basic features of both disorders are the distorted image of one's body and weight and the fear of gaining weight. Anorexia is characterized by a refusal to maintain a minimally normal body weight. Intense fear of gaining weight or becoming fat is usually not alleviated with weight loss. Weight loss is viewed as an impressive achievement and a sign of extraordinary self-discipline, whereas weight gain is perceived as failure of self-control. Although some may acknowledge being thin, they typically deny serious medical implications of being malnourished. Bulimia is characterized by repeated episodes of binge eating followed by self-induced vomiting, misuse of laxatives, fasting, or excessive exercising. The most common compensatory technique is vomiting after an episode of binge eating. The immediate effects of vomiting often include reduction of fear of gaining weight. In some cases, vomiting becomes a goal in itself, and the person will binge in order to vomit or will vomit after eating just a small amount of food. Binge eating is typically triggered by dysphoric mood states; interpersonal stressors; or feelings related to body weight, shape, and food.

Panic Disorder: The basic feature of panic disorder is repeated, unexpected panic attacks followed by persistent concern about having another attack, worry about the possible implications or consequences of the panic attacks, or a significant behavioral change related to the attacks. Some individuals fear that the attacks indicate the presence of an undiagnosed, life-threatening illness (i.e., cardiac disease or seizure disorder). Despite repeated medical testing and reassurance, they may remain frightened and unconvinced that they do not have a life-threatening illness. Others feel that the panic attacks are an indication that they are "going crazy" or losing control or are emotionally weak. Some individuals with recurrent panic attacks significantly change their behavior (i.e., quit a job) in response to the attacks. Concerns about the next attack are often associated with development of avoidant behavior such as agoraphobia. In addition to worry about panic attacks, many individuals with panic disorder also report constant or periodic feelings of anxiety that are not focused on any specific situation or event.

Major Depression: The basic feature of a major depressive disorder is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. The individual also experiences additional symptoms which may include changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts. The symptoms persist for most of the day, nearly every day, for at least 2 consecutive weeks. The episode is accompanied by significant impairment in social, occupational, or other important areas of functioning. The episode is often described by the person as depressed, sad, hopeless, discouraged, or “down in the dumps”.

Marital Problems: The basic feature of marital problems is that the couple is having a great deal of difficulty getting along or keeping the marriage together. Marital problems can vary widely. Problems can range anywhere from lack of communication to infidelity. As an example, a woman has an issue she feels very strongly about and has repeatedly communicated it to her husband for several weeks, but he has interpreted her efforts as nagging or complaining and has not responded. She becomes frustrated and feels he lacks concern about her feelings, which results in her becoming disinterested in him and negatively affects intimacy between them. The husband becomes frustrated and can't understand the reason for her developed lack of interest in him. The result is excessive arguments between them and a struggle for both to be heard by the other.

II. Questionnaire of Problem Types

Please answer the following questions regarding the definitions of the problem-types.

1. In your opinion, how clear were the definitions for each of the six mental, emotional and behavioral problems? On a scale of 1 to 7, with 1 being NOT at all readable and 7 EXTREMELY readable. How readable were the definitions?

1	2	3	4	5	6	7

2. On a scale of 1 to 7, with 1 being NOT at all understandable and 7 EXTREMELY understandable. How understandable were the definitions?

1	2	3	4	5	6	7

3. On a scale of 1 to 7, with 1 being NOTHING at all and 7 A GREAT DEAL. How much did you learn about panic disorder from the definition provided?

1	2	3	4	5	6	7

4. On a scale of 1 to 7, with 1 being NOTHING at all and 7 A GREAT DEAL. How much did you learn about eating disorder from the definition provided?

1 2 3 4 5 6 7

5. On a scale of 1 to 7, with 1 being NOTHING at all and 7 A GREAT DEAL. How much did you learn about conduct disorder from the definition provided?

1 2 3 4 5 6 7

6. Please provide any comments or questions you may have about the definitions of the various Problems.

III. Professional Requirements to Provide Mental Health Services and Typical Roles and Functions

Please read the following list of **professional requirements** and **typical roles** of four disciplines: clinical social work, clinical psychology, professional counselor, and psychiatry.

I. Professional requirements for clinical social worker:

The following are the requirements prior to licensure to practice in the state of Virginia: A master's degree in social work. Full-time supervised post-graduate experience in a clinical

setting. This totals to 3,000 hours of work experience, of which 15 hours per week shall be spent in face-to-face client contact. Graduate course work in human behavior and social environment, social policy, research, clinical practice with individuals, families, groups, and a clinical practicum which focus on diagnostic, prevention and treatment services. These individuals are required to pass a written exam prescribed by the Virginia Board of Social work.

Typical roles and functions of clinical social worker:

Provides information, referral, intervention with government and civic agencies, and community resources to clients. Performs assessments and diagnoses. Provides preventive and early intervention services and treatment services, including psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment. Works in close collaboration with physicians and other health care providers in client evaluation and treatment to further understand important social and environmental factors underlying client problems.

2. Professional requirements for clinical psychologist:

The following are some requirements prior to licensure to practice in the state of Virginia. A doctoral degree in professional psychology accredited by the American Psychological Association. Graduate courses in each of the following areas of study: Personality theory, diagnostic interviewing and behavioral assessment, psychometric, psychodiagnostic and projective testing, psychopathology, and psychotherapy, both individual and group. Supervised practicum in assessment/diagnosis and psychotherapy and one year full-time internship. In addition, these professionals are required to successfully complete a one-year, full-time post-doctoral residency training. At the end of the residency period, the supervisor must submit to the board of psychology, a written evaluation of performance. These individuals are required to pass a written exam prescribed by the Virginia Board of Psychology.

Typical roles and functions of clinical psychologist:

Provide diagnoses and treatment of mental, emotional, and behavioral disorders. Provides a wide variety of treatment methods including individual psychotherapy, marital and family therapy, group therapy, behavior therapy, psychoanalysis, hypnosis, biofeedback, and other psychological interventions. These individuals also provide psychological evaluation or assessment of intelligence, abilities, aptitudes, personality, neuropsychological functioning and other psychological attributes. They engage in psychological research, interpret or report on scientific theory or research, and present expert psychological or clinical opinion.

3. Professional requirements for professional counselor:

The following are requirements prior to licensure to practice in the state of Virginia: A master's degree in counseling. Course work in the areas of professional identity; function and ethics; theories and techniques in counseling and psychotherapy and group dynamics; theories of human behavior, learning, and personality; career development; appraisal, evaluation and diagnostic procedures; and abnormal behavior. They are required to complete 4000 hours supervised post-graduate experience in counseling with various populations, theoretical approaches, and clinical problems. These individuals are required to pass a written exam prescribed by the Board of Licensed Professional Counselors.

Typical roles and functions of professional counselor:

Provide individual, marital, and family counseling services. Collects information about clients through interview, case history, and observational techniques, and appraisal and assessment methods. Analyzes information to determine advisability of counseling or referral to other specialists or institutions. Evaluate results of counseling methods to determine reliability and validity of treatment used. Makes diagnoses, and develops treatment plan. Interacts with other professionals to discuss therapy or treatment, new resources or techniques, and to share information.

4. Professional requirements for psychiatrist:

A medical degree with specialty in psychiatry is the educational requirements for psychiatrists. After medical school, psychiatrists are required to complete residency in psychiatry involving clinical training in a hospital setting, which usually lasts three to four years. Training in psychotherapy, professional ethics, psychological assessments, hypnosis, etc. usually occur during residency. Psychiatrists gain licensure when they graduate from medical school and may choose to be board certified. Board certification requires additional clinical experience.

Typical roles and functions of psychiatrist:

Diagnose and treats mental, emotional, and behavioral disorders. Collects information concerning client's family and medical history. Examine clients to determine general physical condition. Orders laboratory and other special diagnostic tests and evaluates them. Determines nature and extent of mental disorders and develops treatment program. Treats or directs treatment of clients, using a variety of psychotherapeutic methods and medication.

IV Professional Requirements to Provide Mental Health Services and Typical Roles and Functions (Modified version)

Please read the following list of **professional requirements and typical roles** of four disciplines: clinical social work, clinical psychology, professional counselor, and psychiatry.

I. **Clinical Social worker:**

The following are requirements prior to licensure to practice in the state of Virginia:

1. A master's degree in social work.
2. 3,000 hours supervised post-graduate experience in a clinical setting, of which 15 hours per week is spent in face-to-face client contact.
3. Graduate course work in human behavior and social environment; social policy; research; clinical practice with individuals and groups; and a clinical practicum focused on diagnostic, prevention and treatment services.
4. Passing a written exam prescribed by the Virginia Board of Social Work.

The following is a list of typical roles and functions of clinical social worker:

1. Provide clients with information; referral; intervention with government and civic agencies; and community resources.
2. Performs assessments and diagnoses.
3. Provides preventative and early intervention services.
4. Provides treatment services, including psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment.
5. Works in close collaboration with physicians and other health care providers in client evaluation and treatment to further understand important social and environmental factors underlying client problems.

II. Clinical psychologist:

The following are requirements prior to licensure to practice in the state of Virginia:

1. A doctoral degree in professional psychology accredited by the American Psychological Association.
2. One year, full-time internship in a clinical setting.
3. One-year, full-time post-doctoral residency involving clinical training.
4. Supervised practicum in assessment, diagnosis, psychotherapy, and counseling.
5. Graduate course work in each of the following areas of study: Personality theory; diagnostic interviewing and behavioral assessment; psychometric, psychodiagnostic and projective testing; psychopathology; and individual, family, and group psychotherapy and counseling.
6. Passing a written exam prescribed by the Virginia Board of Psychology.

The following is a list of typical roles and functions of clinical psychologist:

1. Provides diagnoses and treatment of mental, emotional, and behavioral disorders.
2. Provides a wide variety of treatment methods including individual psychotherapy, marital and family therapy, group therapy, behavior therapy, psychoanalysis, hypnosis, biofeedback, and other psychological interventions.
3. Provide psychological evaluation or assessment of intelligence, abilities, aptitudes, personality, neuropsychological functioning, and other psychological attributes.
4. Engage in psychological research, interpret or report on scientific theory and research, and present expert psychological or clinical opinion.

III. Professional counselor:

The following are requirements for licensure prior to practice in the state of Virginia:

1. A master's degree in counseling.
2. 4,000 hours supervised post-graduate experience in counseling with various populations, theoretical approaches, and clinical problems.
3. Graduate course work in the areas of professional identity; function and ethics; theories and techniques in counseling, psychotherapy, and group dynamics; theories of human behavior, learning, and personality; career development; appraisal, evaluation, and diagnostic procedures; and abnormal behavior.
4. Passing a written exam prescribed by the Board of Licensed Professional Counselors.

The following are typical roles and functions of professional counselor:

1. Provides individual, marital and family counseling services.
2. Collects information about clients through interview, case history, observational techniques and appraisal, and assessment methods.
3. Analyzes information to determine advisability of counseling or referral to other specialists or institutions.
4. Evaluates results of counseling methods to determine reliability and validity of treatment used.
5. Interacts with other professionals to discuss therapy or treatment, new resources or techniques, and to share information.

IV. Psychiatrist:

The following are requirements for licensure prior to practice in the state of Virginia:

1. A medical degree with specialty in psychiatry is the educational requirements for psychiatrists.
2. After medical school, psychiatrists are required to complete residency in psychiatry involving clinical training in a hospital setting, which usually lasts three to four years.
3. Training in psychotherapy, professional ethics, psychological assessments, hypnosis, etc., which usually occurs in residency.
4. Psychiatrists gain licensure when they graduate from medical school and may choose to be board certified. Board certification requires additional clinical experience.

The following are typical roles and functions of psychiatrist:

1. Diagnose and treats mental, emotional, and behavioral disorders.
2. Collects information concerning client's family and medical history.
3. Examine clients to determine general physical condition.
4. Orders laboratory and other special diagnostic tests and evaluates them to determine nature and extent of mental disorders and develop treatment program.
5. Treats or directs treatment of clients, using a variety of psychotherapeutic methods and medication.

V. Questions About the Four Disciplines: (Modified version of the 16-item Questionnaire to assess acquired knowledge)

The following questions are designed to determine whether or not the information about professional requirements and roles of the various professionals is readable and understandable. Please answer the following questions based on what you have read about clinical psychologist, professional counselor, psychiatrist and clinical social worker.

Please circle the appropriate answer for each professional.

1. The educational requirements for a clinical psychologist is a ...
 - a. Master's degree
 - b. M.D. degree
 - c. Doctorate degree

2. Clinical psychologists are required to have advanced course work in ...
 - a. social policy
 - b. diagnostic interviewing and behavioral assessment
 - c. professional ethics
 - d. career development

3. Which one of the following post-graduate training is required for a clinical psychologist?
 - a. 3,000 hours supervised experience in a clinical setting
 - b. three to four years full-time residency in a hospital setting
 - c. 4,000 hours supervised experience in various populations including clinical
 - d. one year full-time residency in a clinical setting

4. Which one of the following roles is typical for a clinical psychologist?
 - a. uses a variety of psychotherapeutic methods and medication
 - b. provides information and community resources to clients
 - c. uses psychotherapeutic methods such as behavior therapy, hypnosis and biofeedback
 - d. analyzes client information for advisability of counseling or referral

5. The educational requirements for a psychiatrist is a ...
 - a. M.D. degree
 - b. Master's degree
 - c. Doctorate degree

6. Psychiatrists are required to have advanced course work in ...
 - a. professional ethics
 - b. diagnostic interviewing and behavioral assessment
 - c. social policy
 - d. career development

7. Which one of the following post-graduate training is required for a psychiatrist?
 - a. one year full-time residency in a clinical setting
 - b. three to four years full-time residency in a hospital setting
 - c. 4,000 hours supervised experience in various populations including clinical
 - d. 3,000 hours supervised experience in a clinical setting

8. Which one of the following roles is typical for a psychiatrist?
 - a. uses a variety of psychotherapeutic methods and medication
 - b. analyzes client information for advisability of counseling or referral
 - c. uses psychotherapeutic methods such as behavior therapy, hypnosis and biofeedback
 - d. provides information and community resources to clients

9. The educational requirements for a clinical social worker is a ...
- Doctorate degree
 - M.D. degree
 - Master's degree
10. Clinical social worker are required to have advanced course work in ...
- diagnostic interviewing and behavioral assessment
 - career development
 - professional ethics
 - social policy
11. Which one of the following post-graduate training is required for a clinical social worker?
- 3,000 hours supervised experience in a clinical setting
 - one year full-time residency in a clinical setting
 - 4,000 hours supervised experience in various populations including clinical
 - three to four years full-time residency in a hospital setting
12. Which one of the following roles is typical for a clinical social worker?
- uses psychotherapeutic methods such as behavior therapy, hypnosis and biofeedback
 - provides information and community resources to clients
 - analyzes client information for advisability of counseling or referral
 - uses a variety of psychotherapeutic methods and medication
13. The educational requirements for a professional counselor is a ...
- Master's degree
 - M.D. degree
 - Doctorate degree
14. Professional counselors are required to have advanced course work in ...
- career development
 - diagnostic interviewing and behavioral assessment
 - professional ethics
 - social policy

15. Which one of the following post-graduate training is required for a professional counselor?
- a. 4,000 hours supervised experience in various populations including clinical
 - b. three to four years full-time residency in a hospital setting
 - c. 3,000 hours supervised experience in a clinical setting
 - d. one year full-time residency in a clinical setting
16. Which one of the following roles is typical for a professional counselor?
- a. analyzes client information for advisability of counseling or referral
 - b. provides information and community resources to clients
 - c. uses psychotherapeutic methods such as behavior therapy, hypnosis and biofeedback
 - d. uses a variety of psychotherapeutic methods and medication

VITA

Glenora Nelson

Educational Background:

Bachelor of Science degree in Psychology from Old Dominion University, May 1992.
Old Dominion University, Department of Psychology, Norfolk, Virginia 23529-0267.

Master of Science degree in Psychology from Old Dominion University, December 2000.
Old Dominion University, Department of Psychology, Norfolk, Virginia 23529-0267.

Professional Experience:

I have had four years experience working in the research field beginning with data collection for the Medical College of Virginia/Virginia Commonwealth University Twin Stress and Coping project. In this position I conducted face-to-face interviews in the Northern Virginia, Southern Maryland and Washington, D.C. area utilizing a semi-structured questionnaire. In this questionnaire information regarding the stressors that were possible causes to emotional distress, and the manner in which the respondents coped with particular situations were obtained. The main function of this position was to generate profiles of the individuals based on their responses to the items of the questionnaire.

My most recent experience in the research field involved analyses of responses to survey questionnaires regarding public opinion polls for Princeton Survey Research in Washington, D.C. This position involved manipulation of the data files to obtain information on relationships between variables. The main function of this position was to generate Tables and Toplines utilizing computer softwares and programs such as Wincross and SPSS.