ABSTRACT:

Charli L. Klotz, GENDER, GENDER IDENTITY AND UNDERGRADUATES'
PERCEPTIONS OF SCHOOL PSYCHOLOGY AS A CAREER CHOICE (Under the direction
of Dr. Michael B. Brown) Department of Psychology, April 2012.

The purpose of this study was to determine if males and females differ in their
perceptions of school psychology as a career and to determine if gender identity has an effect on
individuals' perception of school psychology. One hundred and four participants completed a
survey that assessed their gender identity, knowledge of four career fields in psychology, their
perceived gender ratings of different helping professions, and their perception of how well
school psychology could fulfill their career needs. Males and females did not differ in their
reported knowledge and perceived gender ratings of school psychology. Males and females did
not differ in their perception of school psychology fulfilling their career needs. Participants were
sorted into four gender identity groups, and none of the gender identity groups significantly
differed in their perceptions of school psychology fulfilling their career needs. Males, females
and the gender identity groups rated similar career satisfiers as being fulfilled by school
psychology. Although there were no significant differences between the groups on these
measures, further study of efforts to recruit more males into the profession of school
psychologists is recommended.

GENDER, GENDER IDENTITY AND UNDERGRADUATES' PERCEPTIONS AS SCHOOL

PSYCHOLOGY AS A CAREER CHOICE

A Thesis

Presented to

the Faculty of the Department of Psychology

East Carolina University

In Partial Fulfillment

of the Requirement for the Degree

Master of Arts in School Psychology

By

Charli Klotz

April 2012

www.manaraa.com

GENDER, GENDER IDENTITY AND UNDERGRADUATES' PERCEPTIONS OF SCHOOL

PSCYHOLOGY AS A CAREER CHOICE

by

Charli Klotz

APPROVED BY:

DIRECTOR OF THESIS   _____

Michael B. Brown, Ph.D.

COMMITTEE MEMBER   _____

Christy Walcott, Ph.D.

COMMITTEE MEMBER   _____

Larry Bolen, Ph.D.

CHAIR FOR THE DEPARTMENT OF PSYCHOLOGY

_____

Kathleen A. Row, Ph.D.

DEAN OF THE GRADUATE SCHOOL

_____

Paul Gemperline, Ph.D.

Acknowledgements

I would like to thank Dr. Michael Brown for his direction throughout this thesis. I would also like to thank Dr. Christy Walcott and Dr. Larry Bolen for their help, advice and insight that they provided during this project. I would also like to thank Kevin for his support, patience and advice during this process. I do not think that this would have been possible without your support.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I: INTRODUCTION

There is currently a shortage of practicing school psychologists, and it is likely to continue to increase in the coming years. It is predicted that approximately one-third of school psychologists will exit the field, either due to retirement or attrition, by 2010 (Curtis, Grier, & Hunley, 2004a). The shortage is estimated to persist at least through 2020, though the number of vacant positions is likely to decrease over time as graduates of school psychology programs fill available positions (Curtis et al.). More recent research suggests that the predicted retirement of many school psychologists has begun, and many open positions are being filled by younger practitioners (Lewis, Truscott, & Volker, 2008). A survey of current practitioners across the United States found that approximately one-third of school psychologists had less than five years of experience (Lewis et al.). Though younger practitioners are filling some positions, a shortage still exists, and retirements will continue to occur over the next decade, prompting a need for additional school psychologists.

One of the major reasons for this situation is that over the past 20 years the average age of school psychologists increased. In 1980, the average age of practitioners was 38.8 years, and, by 2000, the average age was 45.2 years (Curtis et al., 2004a). The number of school psychologists under the age of 40 decreased approximately 12% during the same 20 years (Curtis et al.). As more school psychologists retire and are replaced by younger practitioners, the average age has decreased slightly to 43.5 years (Lewis et al., 2008). Though the average age has decreased slightly, Lewis and colleagues found that approximately 31% of practitioners were 51 years or older, and, therefore, likely to retire in the next decade.

Other Changes in School Psychology

The face of school psychology has changed dramatically over the past several decades. In 1970, approximately 60% of school psychologists were men (Curtis et al., 2004a). By 1980, the number of men in school psychology had fallen to 55%, and the number of men continued to decrease to approximately 35% by 1990. In 2000, 70% of school psychologists were women (Curtis et al., 2004b). Research indicates that the percentage of women in the field may have stabilized at approximately 70% (Lewis et al., 2008). The increase of women in school psychology is also apparent within training programs; during 1996-1997, 80.5% of students in school psychology training programs were women (Curtis et al., 2004a).

Although there is a shortage of school psychologists, it does not appear that dissatisfaction with the job is a primary reason. School psychologists report high overall job satisfaction. Over 80% of practitioners report that they are satisfied or very satisfied with their career (Brown, Swigart, Bolen, Hall & Webster, 1998). Approximately 92% of school psychologists intend to remain with the profession for the next five years, and approximately 74% intend to remain in the same position they currently hold for the next five years (Brown et al.). The areas school psychologists found the most satisfying were social service, independence, and moral values (Worrell, Skaggs, & Brown, 2006). The level of satisfaction reported by practitioners has remained high for the past 20 years (Worrell et al.).

Shortage Implications

The shortage of school psychologists affects the number of students for which each practitioner is responsible and the services they can provide to these students (Curtis, Walker, Hunley, & Baker, 1999; Curtis et al., 2004b). With fewer school psychologists, the student to psychologist ratio increases. The National Association of School Psychologists (NASP, 1997)

recommends that the student to school psychologist ratio should not be greater than 1,000 to 1 for effective service delivery. The average student to practitioner ratio in the United States is approximately 1,621 students to each school psychologist (Charvat, 2005). In many schools, the actual ratio may be more than double the NASP recommendation (Curtis et al., 1999; Davis, Mcintosh, Phelps, & Kehle, 2004). The main services provided by school psychologists are assessment, evaluation, consultation, intervention, and prevention. Most practitioners spend at least half of their time conducting assessments and attending meetings and conferences (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002), which are only a fraction of the services school psychologists are trained to perform. Practitioners would prefer to provide consultation and counseling services (Curtis et al., 1999), but as student ratios increase, practitioners are limited in the time they can dedicate to these services. With higher student to practitioner ratios, school psychologists are limited in the services they are able to provide.

There are two major goals of school psychologists: 1) help students develop and increase their competencies and 2) work to better the systems that are in place to meet the needs of all students (Ysseldyke et al., 2006). In order to accomplish these goals, Ysseldyke and colleagues recommend a three-tier delivery system of school psychological services that varies the intensity of services based on students' needs. The first tier is directed at meeting the needs of all students via school-wide interventions, such as a reading curriculum and behavior programs. The second tier involves targeted interventions for students with academic or performance difficulties. The third tier involves individualized and intensive interventions for students whose needs are not met by the previous two tiers. As the student to school psychologist ratio increases, practitioners spend more time conducting assessments (Curtis et al., 1999), which are interventions included in the third tier, as the assessments are conducted for students with specialized needs. When

3

school psychologists need to spend additional time conducting assessments, they may be unable to effectively fulfill the other roles of intervention, prevention, consultation and counseling. These additional roles allow school psychologists to provide services to students at all three tiers. As the goals of school psychologists are to provide services to all students, it is a disservice to students for school psychologists to neglect many of the roles they are able to perform, in favor of assessment.

Statement of the Problem

There is currently a shortage of school psychologists, which is primarily the result of an increase in the retirement of practitioners. It is likely that the shortage will continue for the next decade as more practitioners reach retirement age and leave the field. School psychologists, overall, are very satisfied with their careers, but positions remain unfilled as new practitioners do not fill the vacancies left by retiring practitioners. Additionally, the profession is primarily composed of women, with men constituting less than one-third of the field. This situation may reduce the supply of potential graduate students (and practitioners) if few men consider school psychology as a profession. Few men are becoming school psychologists despite the high job satisfaction and numerous vacant positions. Better understanding of why men are not entering the field at the same rate as women may help determine effective recruitment strategies and help offset the shortage of practitioners.

Research Questions

The purpose of this study is to examine if male undergraduate psychology majors have different perceptions of school psychology as a career in comparison to females' perceptions. Five questions will be examined. First, is school psychology considered to be masculine, feminine or gender neutral, and are there sex differences in males' and females' ratings? Are

4

there sex differences between self-reported familiarity of the field of school psychology? Are there differences in the career satisfiers that masculine, feminine, androgynous and undifferentiated individuals believe will be fulfilled by school psychology? Are there sex differences in the career satisfiers males and females believe will be fulfilled by school psychology?

CHAPTER II: REVIEW OF LITERATURE

Knowledge of Fields in Psychology

Gilman and Handwerk (2001) surveyed 622 undergraduates from five universities across the United States to assess their perceptions of different sub-disciplines in psychology. Participants were students with majors in a variety of disciplines, including psychology and education. Participants rated their knowledge of clinical, counseling, school, social, neuropsychology, industrial organizational, developmental, educational, experimental, and sport psychology, and indicated the source of information they primarily used to learn about the sub-disciplines. Undergraduates from all majors rated their knowledge of school psychology as significantly higher than their knowledge of clinical psychology. Psychology majors, however, reported similar knowledge of school and clinical psychology. Male and female undergraduates reported similar knowledge of both fields. Additionally, undergraduates' reported knowledge increased as their class standing increased, from freshman to senior. Gilman and Handwerk were surprised that undergraduates were more knowledgeable about school psychology, as the field is often ignored in undergraduate education. Although the knowledge ratings were higher for school psychology, undergraduates reported that they were only somewhat knowledgeable about the field, indicating just a basic understanding of the discipline.

Undergraduates primarily learned about school psychology as a result of personal experiences with school psychologists (Gilman & Handwerk, 2001). Personal experiences included meeting a school psychologist or knowing a friend or family member that met a school psychologist. Undergraduates who planned to attend graduate school, however, reported that they were more likely to apply to clinical and counseling psychology programs. Few undergraduates reported that they were likely to apply to school psychology programs.

Participants also indicated the roles they believed practitioners in each sub-discipline performed. Psychology majors reported that clinical psychologists were more likely to conduct assessments and consultations, although these are primary roles of school psychologists. The results of the survey indicate that while undergraduates report that they are more knowledgeable about school psychology, their knowledge may be inaccurate about the services that school psychologists provide.

Stark-Wroblewski, Wiggins and Ryan (2006) surveyed 83 undergraduate psychology majors to determine their familiarity and interest in counseling, clinical, school, forensic psychology, and criminal profiling. Participants reported that they were more familiar with clinical and counseling psychology than they were with school psychology, with participants reporting little knowledge about school psychology. Undergraduates reported that they were more interested in all the other sub-disciplines than they were in school psychology, with little to moderate interest in the field. The undergraduates had greater knowledge of school psychology than interest in pursuing a career in the field. Undergraduates appear to have insufficient knowledge about sub-disciplines in psychology, which makes it difficult to choose a career in psychology.

Two previous studies examined specific student groups' knowledge about school psychology. Waite (2007) surveyed African American undergraduate psychology majors about their familiarity with different sub-disciplines of psychology. Fewer than one in four African American students in her sample reported being familiar or very familiar with school psychology. Over 40% of students in her study were familiar with clinical psychology and over 60% were familiar with counseling psychology. Only 6.5% of the students were very familiar with industrial organizational psychology. Cuthrell (2008) surveyed male and female

7

undergraduate psychology majors. Seventy percent of students in her sample reported that they had little or no knowledge about school psychology. The undergraduates in her sample reported greater familiarity with counseling and clinical psychology and less familiarity with industrial organizational psychology. Very few students reported being extremely knowledgeable about any of the fields.

Overall, undergraduates in previous studies generally report that they are more knowledgeable about school psychology than some sub-disciplines, such as industrial organizational psychology, but less knowledgeable about school psychology than other sub-disciplines, such as clinical and counseling psychology. Although students may report greater knowledge of school psychology than other sub-disciplines, they demonstrate limited knowledge of the field and the services provided by school psychologists. These undergraduate students generally report limited interest in the field and are more likely to plan to pursue a career in clinical or counseling psychology.

School Psychology as a Career

School psychologists are trained to provide a number of services. Bramlett and colleagues (2002) surveyed practicing school psychologists across the United States about nine primary roles they performed. Practitioners spent approximately half of their time conducing assessments. Two other primary roles of school psychologists are consultation and interventions, accounting for approximately 16% and 13% of their time, respectively. School psychologists also spend approximately 8% of their time counseling students, 7% in conferences, and 3% receiving and providing supervision. Practitioners spend only approximately 1% of their time on inservice activities, conducting research and parent training. Amount of time spent in each role varies depending on the school district. In general, school psychologists in rural districts conduct

more re-evaluations than do urban and suburban practitioners, and school psychologists in urban and suburban schools consult more than rural practitioners (Curtis et al., 2002). Although school psychologists are able to provide a number of services, they spend a majority of their time conducting assessments, interventions and consultations.

During the early 1990s, Brown and colleagues (1998) surveyed 232 doctoral and non-doctoral practicing school psychologists across the United States. Practitioners reported high levels of satisfaction with the field, with very few practitioners reporting dissatisfaction. Both groups planned to remain in their current positions and within the profession for at least the next five years. The doctoral and non-doctoral school psychologists were similarly satisfied with their careers and intended to stay in their current positions.

Worrell and colleagues (2006) surveyed 234 full-time school psychologists to determine their job satisfaction compared to levels of satisfaction reported over the past several decades. Ninety percent of practitioners were satisfied or very satisfied with their jobs, which is an approximate five percent increase within 22 years. Additionally, 83 percent of school psychologists planned to remain in the profession for at least five more years. The practitioners rated their satisfaction with 20 different job domains and reported that they were satisfied with 18 of the domains. In addition, 18 of the 20 domains were rated as more satisfying than they had been rated in previous decades. The domains experiencing the largest increase in satisfaction were security, compensation, working conditions, achievement and co-workers. The domains that school psychologists found satisfying and dissatisfying have remained the same over the past 22 years.

There appear to be two main areas of dissatisfaction for school psychologists. Worrell and colleagues (2006) found that the two job domains rated as dissatisfying by practitioners were

9

advancement and policies and procedures. Reschly (2000) found that the lack of opportunities for promotion and career advancement were the main source of job satisfaction for school psychologists. Curtis, Hunley and Grier (2002) found that the practitioners were dissatisfied with the school system policies and procedures, primarily the amount of time spent conducting assessments. Most school psychologists would prefer to have more time devoted to interventions and consultation.

School psychology is considered a great career not only by practicing school psychologists. US News and World Report publishes a list of the best careers every year. Some criteria considered when choosing the best careers are the job-growth projections, job satisfaction, and average salary earned by practitioners in the profession (Grant, 2010). School psychologist has been considered one of the best healthcare careers every year since 2007 and made the list again for 2011 (Baden, 2010, Wolgemuth, 2009). Based on the list of best careers for 2011, school psychology is expected to remain a great career for at least the next decade (Grant).

School psychology appears to provide a satisfying career. Practitioners are able to perform a number of diverse and interesting roles. Additionally, school psychologists report high levels of satisfaction, and a majority of practitioners plan to remain in their current positions and within the profession for at least five more years. The level of satisfaction has remained relatively stable over the past several decades, with a slight increase in recent years. The areas school psychologists rate as most satisfying and least satisfying have not changed within the past 20 years. US World and News Report also considers school psychology a great career, including the profession on their list of best careers for the past five years and expecting to it remain a

good career for the next decade. Overall, school psychology is considered a very satisfying career and has remained so for several decades.

Gender and Careers

Shinar (1975) asked 120 undergraduate students to rate a variety of careers based on their perceptions of the career as masculine or feminine using a 7-point Likert scale. Careers whose mean ratings fell at the lower end of the scale were considered masculine. Careers whose mean ratings fell in the center of the scale were considered gender neutral. Likewise, careers whose mean ratings fell at the upper end of the scale were considered feminine. Males and females gave similar ratings to all the careers, but males were more likely to rate careers as masculine. The survey included two sub-disciplines of psychology. School psychology was rated as gender neutral, meaning the participants considered it to be appropriate for both males and females. Counseling psychology was also rated as gender neutral. Examples of careers that were rated as masculine were electrician, engineer, and dentist. Examples of careers that were rated as feminine were elementary school teacher, receptionist, and dental hygienist.

White, Kruczek, Brown and White (1989) re-examined the masculinity and femininity of careers. One hundred seventy-seven undergraduate students rated 106 careers using a 7-point Likert scale. Twenty-seven of these careers had been included in Shinar's (1975) study. Males and females did not differ in their ratings. White et al. found that fifteen of the careers included in Shinar's study were rated significantly different, with an overall trend towards gender neutral. White et al. only included the career 'psychologist' on the survey, and it was rated as gender neutral.

Careers that are associated with females are considered gender atypical careers for males. Likewise, careers that are associated with males are gender atypical careers for females (Sax &

Bryant, 2006; Shinar, 1975). There are two criteria that need to be considered when determining if a career is gender atypical for males or females. The first criterion for determining gender atypicality is the sex composition of the profession. Careers that are predominantly comprised of females are gender atypical careers for males, and careers predominantly comprised of males are gender atypical careers for females (Sax & Bryant). The second criterion for determining gender atypicality is the perceived masculinity or femininity of the career (Shinar). If a career is perceived to be feminine, it is a gender atypical career for males. If a career is perceived as masculine, it is a gender atypical career of females. Additionally, a career can be considered gender neutral, which is a gender typical career for both males and females. Though previous studies have found that undergraduates perceive school psychology to be a gender neutral career, school psychology is a gender atypical career for males as a majority of practitioners are females (Curtis et al., 2004b).

Sax and Bryant (2006) surveyed 17,637 undergraduates as they entered college and again after four years to identify males' and females' perceptions and interests of careers. They examined whether the careers to which undergraduates aspired were considered to be gender typical, gender neutral, or gender atypical. A career was considered to be gender atypical for males if the percent of females aspiring to enter the career was more than twice the amount of males aspiring to enter the career. Likewise, a career was considered gender atypical for females if the percentage of males aspiring to enter the career was more than twice the amount of females aspiring to enter the career. Examples of gender atypical careers for males were nurse, elementary school teacher and therapist, and examples of gender atypical careers for females were farmer, engineer, and computer programmer.

12

Sax and Bryant (2006) found that males and females overwhelmingly chose careers that are gender typical or gender neutral. During the four year period, approximately 30% of undergraduates changed career aspirations from their initial category of gender typical, gender neutral, or gender atypical to a different category. However, the movement was generally between gender neutral careers and gender typical careers, with less than 10% of males and females switching to a gender atypical career. It appears that undergraduates rarely choose to enter into gender atypical careers.

There are a number of variables that influence males to choose and enter into gender atypical careers. Lease (2003) surveyed 354 undergraduate students when they began college and again four years later. She found that males who had more liberal social attitudes, including those about gender roles, were more likely to have careers in which there were a larger percentage of females in them. These males may have had more flexible gender role attitudes and were able to choose careers they preferred, regardless if the careers were considered gender typical or atypical.

Simpson (2005) interviewed 40 men employed in gender atypical careers, including elementary school teachers, flight attendants, librarians, and nurses. There were three career paths that led men into gender atypical careers. The first group of males actively pursued these careers. Other males in gender atypical careers passively chose the career while looking for a job. A third group ended up settling in these careers after being dissatisfied with more gender typical careers. Additionally, Simpson found that males may enter into gender atypical careers because of specific intrinsic or extrinsic motivation. One extrinsic motivator may be money, although it probably is not a major one, because careers typically held by females often pay less than male dominated careers. Males in female dominated careers, however, still often received

higher pay than females in the same field and reached higher positions more quickly. An intrinsic motivator for a number of males in gender atypical careers is the nature of the work in these careers. After trying more gender typical jobs, some males changed occupations and became more satisfied in gender atypical careers.

McLaughlin, Muldoon and Moutray (2010) surveyed 384 first year nursing students. The survey measured students' gender identity as masculine, feminine or androgynous using the Bem Sex Role Inventory. The survey also included gender ratings of different nursing sub-disciplines using a 7-point Likert scale. At the end of the nursing program, attrition rates were calculated to determine the characteristics of students who completed the program. Male students' gender identity did not affect their likelihood of completing of the program. Males who identified themselves as psychologically masculine were equally likely to complete the training program as males who identified themselves as androgynous or feminine. Males were more likely to drop out of the program when they entered with the view that nursing was gender neutral and an appropriate profession for both males and females. Males who initially held gender-typed views of nursing were more likely to complete the training program, possibly because they were more aware of the challenges males may face in a gender atypical field.

Simpson (2005) found that gender atypical careers may present some difficulties for males. Some males reported feeling embarrassed, uncomfortable or ashamed that they are in an occupation comprised primarily of females. Some reported feeling so embarrassed that they lied about their career or were vague about their actual positions. For example, a male may say that he is in education, rather than reveal that he is a primary school teacher. Males in these careers felt that working in a gender atypical field is a threat to their masculinity. They reported that

14

friends, family members and co-workers often view them as less masculine or think that they are homosexual.

Males in gender atypical careers may face additional challenges when the careers involve working with children. Cushman (2005) interviewed 17 male primary school teachers from New Zealand. All participants expressed concern involving close contact with young children. The male teachers were held to different standards compared to female teachers. Female teachers were allowed some physical contact with children, such as holding a child's hand, but the male teachers felt pressure to never touch children in any circumstance.

Males and females generally choose careers that are gender neutral or gender typical, with very few individuals entering into gender atypical careers. Males that enter into gender atypical fields, such as nursing and education, face numerous challenges. Given that school psychologists are predominantly female, it is important to understand how males view the field and the challenges they may face.

Increases in Males and Females in Gender Atypical Careers

The number of females in some gender atypical careers has increased. The number of females in engineering almost doubled within the ten years, between 1988 and 1999, with an increase from 5.8 percent to 10.6 percent (Küskü, Özbilgn, & Özkale, 2007). Internationally, females now compromise approximately 20 percent of students enrolled in engineering and science subjects in the industrialized world (Küskü et al., 2007).

Males are also increasingly entering some fields traditionally held by females. In 1960, only one percent of nurses were males (Evans, 2004). The percentage of males in nursing has slowly grown to approximately five to ten percent today throughout the United States, Canada, and the United Kingdom (Brown, 2009). The number of males in top management positions

15

within nursing has dramatically increased. Males in Britain held approximately 33 percent of top nursing posts in 1970 (Evans, 2004). By the late 1980s, over 50 percent of all chief nurse positions were held by males (Evans, 2004).

Individuals generally do not choose to enter into gender atypical careers. However, there has been a dramatic increase in the amount of men and women in some gender atypical careers, including engineering and nursing. The number of women in engineering rapidly increased within a short period of time and is likely to continue to increase as more women are majoring in engineering. The number of males has increased in nursing, particularly in management positions. The amount of men and women in some gender atypical careers has increased, indicating that the perception of a career as gender atypical can be changed. Given that school psychology is a gender atypical career for men, it is possible that the field may become gender typical for both men and women.

Factors Related to Entering School Psychology

Graves and Wright (2007) surveyed 307 doctoral and non-doctoral school psychology graduate students to identify reasons that they chose to enroll in a school psychology program. The highest rated factors important to the field of school psychology for both doctoral and non-doctoral students were the desire to work with children, working in the school environment, job stability, public school work schedule and income potential. The only significant differences were that non-doctoral students rated the public school work schedule and job stability as more important reasons for entering the field than did doctoral students.

Cuthrell (2008) surveyed 60 undergraduate students to determine how well they believed school psychology could meet their career needs. Both males and females indicated that school psychology would best fulfill the same five career satisfiers: social service, accomplishment, job

16

security, activity, and using their abilities. The satisfiers males and females believed would be least satisfied by school psychology included advancement, authority and policies and procedures.

Waite (2007) surveyed 31 African American undergraduate psychology majors to determine which career satisfiers they believed would be fulfilled by a career in school psychology. They received a short information session that provided an overview of the field, how to become a school psychologist, and the benefits of a career in school psychology. The highest rated career satisfiers following the information session were social service, employment security, work consistent with moral values, responsibility, using their abilities, achievement and creativity.

Different groups of graduate and undergraduate students believe that school psychology can be satisfying career. Doctoral and non-doctoral school psychology graduate students chose to enter into a career in school psychology for similar reasons. Male and female undergraduate psychology majors believe that a career in school psychology can fulfill similar career satisfiers. African American undergraduate psychology majors believe that school psychology can fulfill many of their career needs. Many of the areas identified as being fulfilled by school psychology were identified by all of the student groups. It appears that graduate and undergraduate students have similar views about the satisfaction areas that a career in school psychology can fulfill.

CHAPTER III: METHOD

Participants

One hundred and four undergraduates participated in the study. Participants were declared psychology majors currently enrolled in a large southeastern university. Participants were recruited via email from a list of current undergraduate psychology majors and from undergraduate psychology courses held during the summer sessions. As an incentive, all participants were entered into a raffle for one of two gift cards to local stores.

Instrumentation

Each participant completed a survey assessing their perception of school psychology as a career. The survey identifies demographic information, including the participants' ages, class standing, sex and intention to attend graduate school.

Participants completed the Bem Sex Role Inventory, which includes 60 personality characteristics. They rated each characteristic on a scale from one to seven, with one being never or almost never true and seven being always or almost always true. Twenty of the traits are considered masculine, twenty are considered feminine, and twenty are considered neutral items (Bem, 1974). An individual is considered masculine if he endorses masculine characteristics, while also rejecting feminine characteristics. Likewise, an individual is considered feminine if he endorses feminine characteristics and rejects the masculine ones. An individual is considered androgynous if he endorses both masculine and feminine characteristics equally. An individual is considered undifferentiated if he does not endorse either masculine or feminine characteristics. The Bem Sex Role Inventory has an internal reliability of .95 for Masculinity scale, .92 for the Femininity scale (Holt & Ellis, 1998). The Bem Sex Role Inventory has adequate validity with

all of the masculinity items rated as more desirable for males and all but two of the feminine items rated as more desirable for females (Holt & Ellis).

Participants were asked to rate twenty helping careers based on their perceived masculinity, femininity, or gender neutrality. The survey includes different sub-disciplines in psychology, including school psychology, education, medicine and other common helping professions. Participants rated the careers using a 7-point Likert scale, with one being masculine, four being gender neutral, and seven being feminine.

Participants were asked to report their familiarity with different fields in psychology, including school psychology, clinical psychology, counseling psychology and industrial organizational psychology. Participants rated the fields using a 5-point Likert scale, with the options being don't know, not at all familiar, slightly familiar, familiar, and very familiar.

Participants were then asked to complete a 20 item questionnaire assessing how well they believed school psychology could meet their career needs in specific areas. Each item relates to a different career satisfier (see Table 1). They rated each statement using a 5-point Likert scale that included not at all, slightly, well, very well, and extremely well. The questionnaire was adapted from the career satisfaction subscales of the Minnesota Job Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967).

Procedure

Participants were recruited via email and via visits to undergraduate psychology courses. Each received a short explanation of the study and possible risks that may occur from participating in the study. All participants recruited via email completed the survey online, and all participants recruited via the psychology courses completed the survey in-person.

19

Table 1

Career Satisfiers

Career Satisfiers			
Ability Utilization	Compensation	Moral Values	Social Service
Achievement	Co-workers	Policies and Procedures	Social Status
Activity	Creativity	Recognition	Supervision
Advancement	Human Relations	Responsibility	Variety
Authority	Independence	Security	Working Conditions

Participants' demographic information was analyzed using descriptive statistics. A multivariate analysis of variance (MANOVA) was computed to determine sex differences between reported familiarity with school, clinical, counseling, and industrial organizational psychology. A univariate analysis of variance (ANOVA) was conducted for each of the four sub-disciplines to determine sex differences in reported familiarity. A MANOVA was computed to determine sex differences between the gender ratings of school, clinical, counseling and industrial organizational psychology.

The mean and standard deviation for each of the 20 career satisfiers were calculated. The satisfiers were rank ordered based on the mean scores to identify the top five career satisfiers for males and females and the lowest five career satisfiers for males and females. The top five and lowest five career satisfiers were also computed for the masculine, feminine, androgynous, and undifferentiated groups. A MANOVA was computed to identify whether significant differences in career satisfier ratings existed between participants who identify as masculine, feminine, androgynous, and undifferentiated. The MANOVA also determined whether significant differences in career satisfier ratings existed between males and females.

CHAPTER IV: RESULTS

Demographic Information

Thirty-one males and 73 females completed the survey (see Table 2). The mean age of the participants was 23.0 years with a range of 19 to 49. The mean age of males was 23.2 and the mean age of females was 22.9. Approximately 58 percent of participants were seniors in college, 38 percent were juniors, and four percent were sophomores. Most of the participants planned on attending graduate school, with approximately 80 percent indicating they planned to attend and 4 percent indicating that they did not plan to attend graduate school, and 16 percent indicating that they were unsure at the time of the survey.

Familiarity with School Psychology

Participants rated their familiarity with different applied fields in psychology, consisting of clinical, counseling, school and industrial organizational psychology, on a scale from 1 to 5 (see Table 3). Participants were most familiar with counseling psychology and least familiar with industrial organizational psychology. The mean rating of females for school psychology was 3.7 and the mean rating for males was 3.4. These ratings fall between slightly familiar and familiar.

A multivariate analysis of variance (MANOVA) was computed to determine if males and females differed in their reported knowledge of the different fields. Males and females significantly differed on their reported knowledge of the sub-disciplines in psychology, $F_{(4, 99)}$ = 2.634, p = 0.039. Four univariate analysis of variances (ANOVAs) were conducted to determine if significant differences existed between males' and females' reported knowledge for the four sub-disciplines. Significant differences did not exist between males' and females' knowledge of school psychology, clinical psychology, and industrial organizational psychology. There was a significant difference in males' and females' knowledge of counseling psychology,

Table 2

Demographic Information

		Males	Females	Total
Age		Mean 23.2	Mean 22.9	Mean 23.0
Education Level				
	Sophomore	3%	4%	4%
	Junior	29%	43%	38%
	Senior	68%	53%	58%
Graduate School				
	Yes	68%	85%	80%
	No	3%	4%	4%
	Unsure	29%	11%	16%

Table 3

Familiarity with Fields of Psychology

	Males		Females	
	Mean	SD	Mean	SD
Clinical Psychology	3.77	0.88	4.05	0.78
Counseling Psychology	3.68	0.83	4.11	0.83
School Psychology	3.42	1.09	3.71	0.91
Industrial Organizational Psychology	3.32	1.22	2.85	1.20

F (1) = 5.931, *p* = 0.017, with females reporting that they were more knowledgeable about the field than males.

Gender Ratings of Sub-disciplines in Psychology

Participants rated various helping occupations as masculine, gender neutral or feminine on a scale from 1 to 7. Included in the list of occupations were clinical, counseling, school and industrial organizational psychology. Participants rated school psychology the most feminine and industrial organizational psychology as the most masculine (see Table 4). Males' mean rating of school psychology was 5.10 and females' mean rating was 5.25. Using Shinar's (1975) classification system, school psychology was rated as a gender neutral career. A MANOVA was conducted to determine if males and females differed in their gender ratings of the sub-disciplines of psychology. Males and females did not significantly differ in their ratings of the careers, F (4, 99) = 1.057, *p* = 0.382.

Career Satisfiers For Males and Females

The mean scores for each of the 20 career satisfiers were rank ordered to determine the top five and lowest five career satisfiers for males and females (see Tables 5 and 6). Social service was rated highest for both males (M = 4.32, SD = 0.75) and females (M = 4.27, SD = 0.90). Responsibility, achievement and ability utilization were included in the top five for males and females. Males rated security (M = 3.74, SD = 1.09) as the third highest and co-workers (M = 3.45, SD = 0.89) as the fifth highest career satisfier. Females rated creativity (M = 3.51, SD = 1.02) as the fifth highest. The lowest rated career satisfiers for males and females were advancement and authority. Independence and compensation were included in the lowest five career satisfiers for males and females. Males rated human relations (M = 3.10, SD = 0.91) as the third lowest, supervision (M = 3.12, SD = 0.96) as the fourth lowest, and recognition (M = 3.13,

25

Table 4

Gender Ratings of Sub-Disciplines in Psychology

	Males		Females	
	Mean	SD	Mean	SD
School Psychology	5.10	1.08	5.25	1.02
Clinical Psychology	3.81	1.14	4.27	1.03
Counseling Psychology	4.52	1.09	4.75	1.15
Industrial Organizational Psychology	3.45	1.15	3.42	1.21

Table 5

Career Satisfiers for Males and Females

Career Satisfier	Males		Females		F
	M	SD	M	SD	
Ability Utilization	3.74	1.09	3.95	0.97	1.04
Achievement	3.71	1.07	4.01	1.01	0.72
Activity	3.42	0.99	3.34	0.99	0.43
Advancement	2.68	0.94	2.66	1.25	0.00
Authority	2.68	1.05	2.52	1.08	0.01
Compensation	3.10	1.16	2.96	1.16	0.00
Co-workers	3.45	0.89	3.37	0.96	0.30
Creativity	3.35	0.98	3.51	1.02	0.03
Human Relations	3.10	0.91	2.97	0.94	0.28
Independence	2.74	1.18	2.67	1.17	0.03
Moral Values	3.29	1.30	3.45	1.11	0.41
Policies and Procedures	3.19	1.25	2.74	1.00	5.57
Recognition	3.13	0.92	3.14	1.10	0.00
Responsibility	3.84	0.93	3.64	1.02	1.89
Security	3.74	1.09	3.40	1.08	1.48
Social Service	4.32	0.75	4.27	0.90	0.25
Social Status	3.35	1.05	3.42	1.15	0.66
Supervision	3.12	0.96	3.11	1.01	0.01
Variety	3.16	0.97	3.19	0.98	0.77
Working Conditions	3.39	0.99	3.33	0.97	0.00

27

Table 6

Career Satisfiers Rank-Ordered for Males and Females

	Males	Females
Highest	1. Social Service	1. Social Service
	2. Responsibility	2. Achievement
	3. Ability Utilization, Security	3. Ability Utilization
	4. Achievement	4. Responsibility
	5. Co-workers	5. Creativity
Lowest	1. Advancement, Authority	1. Authority
	2. Independence	2. Advancement
	3. Human Relations, Compensation	3. Independence
	4. Supervision	4. Policies and Procedures
	5. Recognition	5. Compensation

SD = 0.92) as the fifth lowest career satisfier. Females rated policies and procedures (M = 2.74, SD = 1.00) as the fourth lowest career satisfier.

A MANOVA was conducted to determine if males and females differ in the career satisfiers they believe school psychology would fulfill. Males and females did not differ significantly in their ratings, $F_{(20, 83)} = 0.728$, $p = 0.787$.

Career Satisfiers for Gender Identity Based Groups

Participants were sorted into the masculine, feminine, androgynous or undifferentiated groups based on their results on the Bem Sex Role Inventory. The masculine group contained 28 participants; the feminine group contained 25 participants; the androgynous group contained 27 participants; and the undifferentiated group contained 24 participants. The mean score for each of the 20 career satisfiers were rank ordered to determine the highest and lowest five career satisfiers for all groups.

Social service was the career satisfier rated most likely to be fulfilled by school psychology by all of the groups (see Tables 7 and 8). Ability utilization, achievement, and responsibility were also included as some of the highest rated career satisfiers by all of the groups. The career satisfiers rated least likely to be fulfilled by school psychology for the four groups included advancement, authority, independence, policies and procedures, and compensation.

A multivariate analysis of variance (MANOVA) was conducted to determine if the four groups differed in the career satisfiers they believed school psychology would fulfill. There were no significant differences between the ratings of each group, $F_{(60, 242.494)} = 0.845$, $p = 0.780$.

Table 7

Career Satisfiers for Gender Identity Based Groups

	Masculine		Feminine		Androgynous		Undifferentiated		
Job Satisfiers	M	SD	M	SD	M	SD	M	SD	F
Ability Utilization	3.68	1.02	4.20	0.87	3.96	1.16	3.71	0.91	1.88
Achievement	3.68	1.02	4.32	1.07	4.00	1.00	3.71	0.96	0.99
Activity	3.21	1.10	3.20	0.82	3.74	1.06	3.29	0.86	0.96
Advancement	2.54	1.11	3.04	1.17	2.74	1.26	2.33	1.05	1.99
Authority	2.68	0.98	2.40	0.96	2.74	1.26	2.42	1.06	0.65
Compensation	3.00	1.22	3.20	1.32	3.07	0.92	2.71	1.16	1.13
Co-workers	3.39	0.83	3.72	0.98	3.33	1.00	3.12	0.90	0.64
Creativity	3.14	1.08	3.84	0.85	3.56	1.01	3.33	0.96	2.07
Human Relations	3.04	1.07	3.44	0.82	2.74	0.90	2.83	0.76	1.41
Independence	2.79	1.10	2.96	1.17	2.74	1.23	2.25	1.11	1.52
Moral Values	3.32	1.22	3.52	1.16	3.56	1.34	3.21	0.88	0.52
Policies and Procedures	2.82	1.22	3.20	1.12	2.85	1.03	2.63	1.09	0.75
Recognition	3.07	0.90	3.60	1.04	2.93	1.17	2.96	0.96	1.50
Responsibility	3.57	0.84	4.04	0.079	3.89	1.05	3.29	1.16	1.50
Security	3.61	1.29	3.80	0.91	3.37	1.01	3.21	1.06	0.26
Social Service	4.21	0.88	4.60	0.58	4.22	1.01	4.13	0.85	1.97
Social Status	3.39	1.17	3.44	0.96	3.56	1.09	3.21	1.29	1.38
Supervision	3.04	1.07	3.60	0.87	3.04	1.02	2.79	0.83	1.89
Variety	3.25	1.01	3.16	0.80	3.33	1.07	2.96	1.00	0.88
Working Conditions	3.46	0.96	3.44	1.04	3.26	1.10	3.21	0.78	0.20

Table 8

Career Satisfiers Rank-Ordered for Gender Identity Based Groups

	Masculine	Feminine	Androgynous	Undifferentiated
Highest	1. Social Service	1. Social Service	1. Social Service	1. Social Service
	2. Ability Utilization, Achievement	2. Achievement	2. Achievement	2. Ability Utilization, Achievement
	3. Security	3. Ability Utilization	3. Ability Utilization	3. Creativity
	4. Responsibility	4. Responsibility	4. Responsibility	4. Activity, Responsibility
	5. Working Conditions	5. Creativity	5. Activity	5. Moral Values, Security, Social Status, Working Conditions
Lowest	1. Advancement	1. Authority	1. Advancement, Authority, Human Relations, Independence	1. Independence
	2. Authority	2. Independence	2. Policies and Procedures	2. Advancement
	3. Independence	3. Advancement	3. Recognition	3. Authority
	4. Policies and Procedures	4. Variety	4. Supervision	4. Policies and Procedures
	5. Compensation	5. Activity, Compensation, Policies and Procedures	5. Compensation	5. Compensation

CHAPTER V: DISCUSSION

The purpose of the study was to examine if male undergraduate psychology majors have different perceptions of school psychology as a career in comparison to females' perceptions. Given the continuing increase of females in the field, the study's aim was to determine if male undergraduate students view school psychology as a career choice differently than females do. A subsequent aim of the study was to examine whether individuals' gender identification, rather than sex alone, influenced the perception of school psychology satisfying career needs. Understanding how males view school psychology may help develop recruitment strategies that can enhance the recruitment of men into the profession.

Familiarity with School Psychology

Participants reported their familiarity with four sub-disciplines in psychology. Males and females differed significantly in their ratings of counseling psychology, with females reporting greater knowledge of the field. Males and females did not differ in their reported knowledge of school psychology, clinical psychology or industrial organizational psychology. Participants reported that they were slightly familiar to familiar with the field of school psychology. Participants were more familiar with clinical and counseling psychology compared to school psychology, but less familiar with industrial organizational psychology.

Previous research has also found that undergraduates possess low levels of knowledge of school psychology compared to other sub-disciplines. Stark-Wroblewski and colleagues (2006) found, like the current study, that undergraduates reported less familiarity of school psychology than of clinical and counseling psychology. Similarly, Cuthrell (2008) found similar lower levels of knowledge about school psychology when compared to clinical and counseling psychology. As in the current study, Cuthrell found that undergraduates did report more knowledge of school

psychology than of industrial organizational psychology. Gilman & Handwerk (2001) reported some results that differ from the current study. In their research, they reported that undergraduates majoring in psychology reported being equally familiar about school psychology as the other sub-disciplines in psychology. Across undergraduates of all majors, participants reported greater knowledge of school psychology than other sub-disciplines. However, as in the current study, Gilman & Handwerk reported that both male and female undergraduates reported similar levels of familiarity with school psychology.

One possible explanation of why males enter school psychology less frequently than females is a lack of awareness of the field. If males simply were not aware of the nature and benefits of the field, recruitment efforts could specifically target increasing the familiarity of the profession among men. However, since males and females reported similar levels of familiarity of school psychology, these results do not support this explanation for the lack of male practitioners. Similar levels of familiarity of the field between females and males may be expected. As Gilman &Handwerk (2001) suggest, most undergraduates report becoming familiar with school psychology through experiences with practitioners in primary and secondary education. Since males and females encounter the profession through the shared experience of education, they both likely learn about the profession at similar rates. However, since undergraduates in the current study and many previous studies demonstrate low overall levels of familiarity with school psychology, boosting knowledge of the profession among undergraduates and increasing the overall visibility of the profession may help bolster recruitment efforts.

Gender Ratings of Sub-Disciplines in Psychology

Participants rated 20 helping professions, including four sub-disciplines in psychology, as masculine, feminine or gender neutral. Males and females did not differ significantly in their

33

gender ratings of school psychology. Using Shinar's (1975) method of classification, the mean rating of school psychology places it in the gender neutral category.

Shinar (1975) previously found that school psychology was rated as gender neutral by undergraduate students, with a mean rating of 4.00, and no difference between males' and females' ratings. Similarly, the current study found that school psychology was rated as a gender neutral career by males and females, with a mean male rating of 5.10 and a mean female rating of 5.25. White and colleagues (1989) re-examined the gender ratings of the careers and found that both males and females rated psychologist as gender neutral. Although school psychology was not included, it supports the current study's findings, as the overall field of psychology was perceived as gender neutral.

Two factors determine the gender atypicality of a career: 1) the actual gender composition of the profession, and 2) the perception of the career as masculine or feminine. A career is considered gender atypical for males when a majority of practitioners are female or if it is perceived as feminine. Given that school psychology is predominantly composed of females (Curtis et al., 2004b), the first factor for determining gender atypicality is met; thus, school psychology is a gender atypical career for males. It is expected that males would have reduced interest in school psychology, as individuals generally have more interest in gender typical or gender neutral careers (Sax & Bryant, 2006). It seems that males do have little interest in the field, as less than one-third of practitioners are male (Curtis et al.). As to the second factor, perceived gender atypicality, the current study and previous research found that undergraduate students perceived school psychology as a gender neutral career. Undergraduates indicated that school psychology was a career appropriate for both males and females, a surprising finding given the demographic composition of the field

School psychology is a gender atypical career for males because a majority of practitioners are females. Yet, undergraduate students did not view it as a feminine career. One possible reason that students did not view the field as feminine was their lack of knowledge of the field. The current and previous studies had found that undergraduates possess little knowledge of the profession and the services provided by practitioners (Gilman & Handwerk, 2001; Stark-Wroblewski et al., 2006). It may be that undergraduates are not aware that the number of female practitioners has increased to a majority. Another possible explanation is that undergraduates may associate a career with a gender, not only because of the gender composition of the profession, but because of other factors. For example, it may be that undergraduates rate school psychology as gender neutral because it offers the opportunities for ability utilization and responsibility, and these opportunities might be more associated with gender neutral careers.

One hypothesis to explain the disparity between males and females in school psychology is that school psychology is perceived to be associated with females. Since males and females rated the career as gender in neutral in the current study, the current study does not support this explanation.

Career Satisfiers for Males and Females

Participants rated twenty career satisfiers based on how well they believed school psychology would fulfill these career satisfiers. There were no significant differences between the ratings given by males and females. Males and females rated social service as the highest career satisfier. Included in the top satisfiers rated by both males and females were responsibility, achievement and being able to use their abilities (ability utilization). The career satisfiers rated by both males and females as least likely to be fulfilled by school psychology were advancement, authority, independence and compensation.

Like the current study, Cuthrell (2008) found that undergraduate males and females did not differ in their ratings of the career satisfiers. She found similar career satisfiers rated as being fulfilled by a career in school psychology as the current study found. The satisfiers rated the highest in both studies include social service, ability utilization, and achievement. Additionally, Waite (2007) found that African American undergraduates rated social service, responsibility, achievement, and ability utilization among the career satisfiers most likely to be fulfilled by a career in school psychology, which are the career satisfiers rated highly in the current study.

Undergraduates in the current study identified many areas satisfied by a career in school psychology that practitioners also identify as satisfying. Worrell et al. (2006) found that school psychologists reported that they were very satisfied with the field. The practitioners rated that school psychology fulfilled almost all of the job domains, with high satisfaction reported for the social service, achievement, ability utilization, and responsibility domains. The job domains that practitioners found satisfying are many of the same career satisfiers that undergraduates in the current study believed would be fulfilled by school psychology. Undergraduates seemed able to accurately identify the features of a career in school psychology that are satisfying, as their perceptions of the career satisfiers identify many of the areas of job satisfaction that practitioners report.

One possible explanation for why males do not choose a career in school psychology is that they do not believe that it will satisfy their career needs. Given that the current study found no differences in males' and females' ratings of the career domains, this explanation is not supported. Males also identified many of the same areas that practitioners find satisfying, indicating that they are accurately aware of the areas of satisfaction associated with a career in school psychology. These results are somewhat surprising because it could be expected that if

males share similar beliefs with females that certain career satisfiers would be fulfilled by school psychology, males would choose a career in school psychology at similar rates as females.

Career Satisfiers for Gender Identity Based Groups

Participants were divided into masculine, feminine, androgynous and undifferentiated groups. There were no significant differences in career satisfier ratings given by the four groups. Social service was rated by all of the groups as the career satisfier most likely to be fulfilled by school psychology. Ability utilization, achievement, and responsibility were also included in the highest rated career satisfiers for all the groups. The career satisfiers considered least likely to be fulfilled by the four groups were advancement, authority, independence, policies and procedures, and compensation.

The gender identity groups reported similar career satisfaction domains as the male and female groups did. The gender identity groups rated social service, ability utilization, achievement and responsibility as areas most likely to be fulfilled by school psychology, which are the same areas the male and female groups rated as likely to be fulfilled. Previous research by Cuthrell (2008) found that undergraduates identified the same career satisfaction domains as did the four gender identity groups in the current study.

All gender identity groups reported similar areas of career satisfaction that correspond to many of the areas of job satisfaction as reported by practicing school psychologists surveyed by Worrell et al. (2006). It seems likely then that undergraduates, regardless of gender identity, have accurate perceptions of the satisfaction and benefits a career in school psychology may bring. If so, it is not the case that individuals of one gender group, for example those who identify as masculine, minimize or have a different understanding of the satisfaction of working in the profession.

37

The four gender groups did not differ in their ratings of the career satisfiers, suggesting that all the groups believed that school psychology can fulfill their career needs to same the degree. The similar ratings among the four groups indicate that it is unlikely that males who identify as feminine, androgynous or undifferentiated are more attracted to the field than males who identify as masculine. It may be that gender identity is not an important factor in determining why males are less likely to enter the field than females.

Implications

The primary implications of this study include considerations to guide efforts to recruit more school psychologists, especially males, into the field. Increasing knowledge about the field is likely to be an effective recruitment strategy, as undergraduates of both sexes report low awareness of school psychology as a career. Both males and females reported similar areas of satisfaction that a career in the profession would fulfill. Efforts can be directed to help men become more aware of the potential satisfactions that are offered by a career in school psychology. For example, men may be more interested in the opportunities for independence and authority that are provided by a career in school psychology. Understanding why undergraduates rate the career as gender neutral, despite the large majority of female school psychologists, may be beneficial in furthering efforts to attract more individuals to the field.

The study also suggests that gender identity may not be an important factor in determining an individual's perception of school psychology. Since undergraduates of all four gender identity groups report similar beliefs about satisfiers a job in school psychology would fulfill, focusing on changing the perceptions of the individuals in one gender identity group may not be an effective recruitment strategy.

Directions for Future Research

Future research should focus on further examining the differences between male and female undergraduate students and their views on a career in school psychology. It would be helpful to repeat this study using a larger sample to determine if a larger and/or more diverse sample will provide additional useful information. It is also important to determine the challenges undergraduate males anticipate facing with a career in school psychology, and the extent to which perceived barriers influence males' interest in entering the field. Future research should examine males currently in the field to determine their views of gender atypicality in school psychology.

Limitations

It is important to take into account the composition and size of the sample used when applying the results. The major limitation of this study is the composition and size of the sample. Although the sample is relatively small, it does include approximately one-third of declared psychology majors at the university and the sample might therefore represent psychology majors at this university. Since the sample is comprised of declared psychology majors at only one large southeastern university it is not known how generalizable these results are to students at other universities.

REFERENCES

Baden, B. (2010). Best careers 2011: School psychologist. *US World and News Report*.

    Retrieved from http://money.usnews.com/money/careers/articles/2010/12/06/best-careers

    -2011-school-psychologist.

Bem, S. L. (1974). The measurement of psychological androgyny. *The Journal of Consulting*

    and Clinical Psychology, 42, 155-162.

Bramlett, R. K., Murphy, J. J., Johnson, J., Wallingsford, L., & Hall, J. D. (2002). Contemporary

    practices in school psychology: A national survey of roles and referral problems. *Psychology*

    in the Schools, 39, 327-335.

Brown, B. (2009). Men in nursing: Re-evaluating masculinities, re-evaluating gender.

    Contemporary Nurse: A Journal for the Australian Nursing Profession, 33, 120-129.

Brown, M. B., Swigart, M. L., Bolen, L. M., Hall, C. W., & Webster, R. T. (1998). Doctoral and

    nondoctoral practicing school psychologists: Are there differences? *Psychology in the*

    Schools, 35, 347-354.

Charvat, J. (2005). National Association of School Psychologists study: How many school

    psychologists are there? *Communique, 33*(6), 12-14.

Curtis, M. J., Grier, J. E. C., & Hunley, S. A. (2004a). The changing face of school psychology:

    Trends in data and projections for the future. *School Psychology Review, 33,* 49-66.

Curtis, M., Hunley, S., & Grier, E. (2002). Relationship among the professional practices and

    demographic characteristics of school psychologists. *School Psychology Review, 31,* 30-42.

Curtis, M. J., Hunley, S., & Grier, E. (2004b). The status of school psychology: Implications of a

    major personnel shortage. *Psychology in the Schools, 41,* 431-442.

Curtis, M., Hunley, S. A., Walker, K. J., & Baker, A. C. (1999). Demographic characteristics and professional practices in school psychology. *School Psychology Review, 28,* 104-116.

Cushman, P. (2005). Let's hear it from the males: Issues facing male primary school teachers. *Teaching and Teacher Education, 21,* 227-240.

Cuthrell, M. L. (2008). *Sex Differences in Undergraduates' Perceptions of School Psychology As a Career Choice.* Thesis, East Carolina University, 2008.

Davis, A., Mcintosh, D., Phelps, L., & Kehle, T. (2004). Addressing the shortage of school psychologists: A summative overview. *Psychology is the Schools, 41,* 489-495.

Evans, J. (2004). Men nurses: A historical and feminist perspective. *Journal of Advanced Nursing, 47,* 321-328.

Gilman, R. & Handwerk, M. L. (2001). Undergraduate students' perceptions of school psychology: Findings and implications. *School Psychology Review, 30,* 120-134.

Grant, A. (2010). The 50 best careers of 2011. *Us World and News Report.* Retrieved from http://money.usnews.com/money/careers/articles/2010/12/06/the-50-best-careers-of-2011?s_cid=related-links:TOP

Graves, S. L. Jr., & Wright, L. B. (2007). Comparison of individual factors in school psychology graduate students: Why do students pursue a degree in school psychology? *Psychology in the Schools, 44,* 865-872.

Holt, C. L. & Ellis, J. B. (1998). Assessing the current validity of the bem sex-role inventory. *Sex Roles, 39,* 929-941.

Küskü, F., Özbilgn, M., & Özkale, L. (2007). Against the tide: Gendered prejudice and disadvantage in engineering. *Gender, Work, and Organization, 14,* 109-129.

41

Lease, S. H. (2003). Testing a model of men's nontraditional occupational choices. *The Career Development Quarterly, 51,* 244-258.

Lewis, M. F., Truscott, S. D., & Volker, M. A. (2008). Demographics and professional practices of school psychologists: A comparison of NASP members and non-NASP school psychologists by telephone survey. *Psychology in the Schools, 45*, 467-482.

McLaughlin, K., Muldoon, O. T., & Moutray, M. (2010). Gender, gender roles and completion of nursing education: A longitudinal study. *Nurse Education Today, 30*, 303-307.

National Association of School Psychologists. (1997). *Standards for the provision of school psychological services.* Washington, DC: Author.

Reschly, D. (2000). The present and future status of school psychology in the United States. *School Psychology Review, 29,* 507-522.

Sax, L., & Bryant, A. (2006). The impact of college on sex-atypical career choices of men and women. *Journal of Vocational Behavior, 68,* 52-63.

Shinar, E.H. (1975). Sexual stereotypes of occupations. *Journal of Vocational Behavior, 7*, 99-111.

Simpson, R. (2005). Men in non-traditional occupations: Career entry, career orientation and experience of role strain. *Gender, Work and Organization, 12,* 363-380.

Stark-Wroblewski, K., Wiggins, T. L., & Ryan, J. J. (2006). Assessing student interest and familiarity with professional psychology specialty areas. *Journal of Instructional Psychology, 33,* 273-277.

Thomas, A. (2000). School psychology 2000: Personnel needs in the next millennium. *Communique, 28*(4), 28.

Ysseldyke, J., Morrison, D., Burns, M., Ortiz, S., Dawson, P., Rosenfield, S., Kelley, B., Telzrow, C. (2006). School psychology: A blueprint for training and practice III. Bethesda, MD: National Association of School Psychologists.

Waite, S. M. (2007). *Does Providing Information Change African American Undergraduates' Perceptions of School Psychology?* Thesis, East Carolina University, 2007.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis, Minnesota: University of Minnesota.

White, M. J., Kruczek, T. A., Brown, M. T., & White, G. B. (1989). Occupational sex stereotypes among college students. *Journal of Vocational Behavior, 34,* 289-298.

Wilson, M. S. & Reschly, D. J. (1995). Gender and school psychology: Issues, questions, and answers. *School Psychology Review, 24*, 45-62.

Wolgemuth, L. (2009). The 50 best careers of 2010. *US World and News Report*. Retrieved from http://money.usnews.com/money/careers/articles/2009/12/28/the-50-best-careers-of-2010

Worrell, T. G., Skaggs, G. E., & Brown, M. B. (2006). School psychologists' job satisfaction: A 22-year perspective in the USA. *School Psychology International, 27,* 1-15.

APPENDIX A: SURVEY

1. Educational Level

   Freshman   Sophomore   Junior   Senior

2. Age _____

3. Gender

   Male   Female

4. Do you plan to attend graduate school?

   Yes   No   Unsure

5. Major _____

6. Please rate yourself on the following traits from never to always

1 never
2
3
4
5
6
7 always

self-reliant	Never	1	2	3	4	5	6	7	Always
yielding		1	2	3	4	5	6	7	
helpful		1	2	3	4	5	6	7	
defends own beliefs		1	2	3	4	5	6	7	
cheerful		1	2	3	4	5	6	7	
moody		1	2	3	4	5	6	7	
independent		1	2	3	4	5	6	7	
shy		1	2	3	4	5	6	7	
conscientious		1	2	3	4	5	6	7	
athletic		1	2	3	4	5	6	7	
affectionate		1	2	3	4	5	6	7	
theatrical		1	2	3	4	5	6	7	
assertive		1	2	3	4	5	6	7	
flatterable		1	2	3	4	5	6	7	
happy		1	2	3	4	5	6	7	
strong personality		1	2	3	4	5	6	7	
loyal		1	2	3	4	5	6	7	
unpredictable		1	2	3	4	5	6	7	
forceful		1	2	3	4	5	6	7	
feminine		1	2	3	4	5	6	7	
reliable		1	2	3	4	5	6	7	
analytical		1	2	3	4	5	6	7	
sympathetic		1	2	3	4	5	6	7	
jealous		1	2	3	4	5	6	7	
has leadership abilities		1	2	3	4	5	6	7	
sensitive to the needs of others		1	2	3	4	5	6	7	
truthful		1	2	3	4	5	6	7	
willing to take risks		1	2	3	4	5	6	7	
understanding		1	2	3	4	5	6	7	
secretive		1	2	3	4	5	6	7	
makes decisions easily		1	2	3	4	5	6	7	
compassionate		1	2	3	4	5	6	7	
sincere		1	2	3	4	5	6	7	

CONTINUED
Please rate yourself on the following traits from never to always (continued):

     1 never
     2
     3
     4
     5
     6
     7 always

self-sufficient	1	2	3	4	5	6	7
eager to soothe hurt feelings	1	2	3	4	5	6	7
conceited	1	2	3	4	5	6	7
dominant	1	2	3	4	5	6	7
soft-spoken	1	2	3	4	5	6	7
likable	1	2	3	4	5	6	7
masculine	1	2	3	4	5	6	7
warm	1	2	3	4	5	6	7
solemn	1	2	3	4	5	6	7
wiling to take a stand	1	2	3	4	5	6	7
tender	1	2	3	4	5	6	7
friendly	1	2	3	4	5	6	7
aggressive	1	2	3	4	5	6	7
gullible	1	2	3	4	5	6	7
inefficient	1	2	3	4	5	6	7
acts as a leader	1	2	3	4	5	6	7
childlike	1	2	3	4	5	6	7
adaptable	1	2	3	4	5	6	7
individualistic	1	2	3	4	5	6	7
does not use harsh language	1	2	3	4	5	6	7
unsystematic	1	2	3	4	5	6	7
competitive	1	2	3	4	5	6	7
loves children	1	2	3	4	5	6	7
tactful	1	2	3	4	5	6	7
ambitious	1	2	3	4	5	6	7
gentle	1	2	3	4	5	6	7
conventional	1	2	3	4	5	6	7

7. Please rate the following occupations from 1 to 7 based on whether you think they are primarily feminine, masculine or neutral:

1 masculine
2
3
4 neutral
5
6
7 feminine

		1	2	3	4	5	6	7	
School Principal	Masculine	1	2	3	4	5	6	7	Feminine
Clinical Psychologist		1	2	3	4	5	6	7	
School Psychologist		1	2	3	4	5	6	7	
High School Teacher		1	2	3	4	5	6	7	
Counseling Psychologist		1	2	3	4	5	6	7	
Occupational Therapist		1	2	3	4	5	6	7	
Elementary School Teacher		1	2	3	4	5	6	7	
Nurse		1	2	3	4	5	6	7	
Minister		1	2	3	4	5	6	7	
Librarian		1	2	3	4	5	6	7	
Dentist		1	2	3	4	5	6	7	
Chiropractor		1	2	3	4	5	6	7	
Athletic Trainer		1	2	3	4	5	6	7	
Speech Language Pathologist		1	2	3	4	5	6	7	
Physical Therapist		1	2	3	4	5	6	7	
Special Education Teacher		1	2	3	4	5	6	7	
School Counselor		1	2	3	4	5	6	7	
Ophthalmologist		1	2	3	4	5	6	7	
Industrial Organization Psychology		1	2	3	4	5	6	7	
Medical Doctor		1	2	3	4	5	6	7	

8. Please rate your familiarity with the following fields of psychology.

     1 - Do Not Know
     2 - Not At All Familiar
     3 - Slightly Familiar
     4 - Familiar
   5 - Very Familiar

Clinical Psychology	1	2	3	4	5
Counseling Psychology	1	2	3	4	5
School Psychology	1	2	3	4	5
Industrial Organizational Psychology	1	2	3	4	5

9. We have chosen one of the above careers in order to see how you feel about it as a perspective career. Based on what you currently know about school psychology, please rate the following items on a scale of 1 to 5, based on how well you think school psychology can meet the following career satisfactions for your personal career needs:

    1 - Not At All
    2 - Slightly
    3 - Well
    4 - Very Well
    5 - Extremely Well

Being able to keep busy all the time	1	2	3	4	5
The chance to work alone on the job	1	2	3	4	5
The chance to do different things from time to time	1	2	3	4	5
The chance to be "somebody" in the community	1	2	3	4	5
The way my boss handles his/her workers	1	2	3	4	5
The competence of my supervisors in making decisions	1	2	3	4	5
Being able to do things that don't go against my conscience	1	2	3	4	5
The way my job provides for steady employment	1	2	3	4	5
The chance to do things for other people	1	2	3	4	5
The chance to tell people what to do	1	2	3	4	5
The chance to do something that makes use of my abilities	1	2	3	4	5
The way company policies are put into place	1	2	3	4	5
The pay and the amount of work I do	1	2	3	4	5
The chances for advancement on this job	1	2	3	4	5
The freedom to use my own judgment	1	2	3	4	5
The chance to try my own methods of doing this job	1	2	3	4	5
The working conditions	1	2	3	4	5
The way my co-workers get along with each other	1	2	3	4	5
The praise I get for doing a good job	1	2	3	4	5
The feeling of accomplishment I get from the job	1	2	3	4	5

APPENDIX B: INSTITUTIONAL REVIEW BOARD APPROVAL
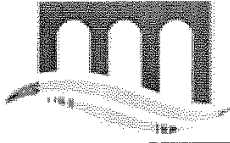
EAST CAROLINA UNIVERSITY

University & Medical Center Institutional Review Board Office
1L-09 Brody Medical Sciences Building• 600 Moye Boulevard • Greenville, NC 27834
Office **252-744-2914** • Fax **252-744-2284** • **www.ecu.edu/irb**

Date: March 17, 2011

Principal Investigator: Charli Klotz, MA
Dept./Ctr./Institute: Department of Psychology
Mailstop or Address: klotzc09@students.ecu.edu

RE: **Exempt Certification**
UMCIRB#   **11-0188**
Funding Source: Unfunded

Title: "Gender, Gender Identity and Undergraduates' Perceptions of School Psychology as a Career Choice"

Dear Ms. Klotz:

On 03/16/2011, the University & Medical Center Institutional Review Board (UMCIRB) determined that your research meets ECU requirements and federal exemption criterion #2 which includes research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior on subjects 18 years of age or older, unless:

> (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and
> (b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

It is your responsibility to ensure that this research is conducted in the manner reported in your Internal Processing Form and Protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB Office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification Request at least 30 days before the end of the five year period.

Sincerely,

Chairperson, University & Medical Center Institutional Review Board

pc: Dr. Michael Brown

APPENDIX C: INSTITUTIONAL REVIEW BOARD REVISION APPROVAL

UMCIRB #:

UNIVERSITY AND MEDICAL CENTER INSTITUTIONAL REVIEW BOARD
REVISION FORM

UMCIRB #: 11-0188   Date this form was completed: 5/20/2011

Title of research: Gender, Gender Identity and Undergraduates' Perceptions of School Psychology as a Career Choice

Principal Investigator: Charli Klotz

Sponsor: Unfunded

Fund number for IRB fee collection (applies to all for-profit, private industry or pharmaceutical company sponsored project revisions requiring review by the convened UMCIRB committee). If you are a non-ECU entity payment is required at the time of submisison:

Fund	Organization	Account	Program	Activity (optional)
		73059		

Version of the most currently approved protocol:
Version of the most currently approved consent document:

CHECK ALL INSTITUTIONS OR SITES WHERE THIS RESEARCH STUDY WILL BE CONDUCTED:

☑ East Carolina University   ☐ Beaufort County Hospital
☐ Pitt County Memorial Hospital, Inc ☐ Carteret General Hospital
☐ Heritage Hospital   ☐ Boice-Willis Clinic
☐ Other

The following items are being submitted for review and approval:
☐ Protocol: version or date
☐ Consent: version or date
☐ Additional material: version or date

Complete the following:
1. Level of IRB review required by sponsor: ☐ full ☐ expedited
2. Revision effects on risk analysis: ☐ increased ☑ no change ☐ decreased
3. Provide an explanation if there has been a greater than 60 day delay in the submission of this revision to the UMCIRB.
4. Does this revision add any procedures, tests or medications? ☐ yes ☑ no If yes, describe the additional information:
5. Have participants been locally enrolled in this research study? ☑ yes ☐ no
6. Will the revision require previously enrolled participants to sign a new consent document? ☐ yes ☑ no

Briefly describe and provide a rationale for this revision Students will be recruited from psychology classes held during summer sessions to increase recruitment

Charli Klotz	Charli Klotz	5/20/2011
Principal Investigator Signature	Print	Date

Box for Office Use Only

The above revision has been reviewed by:
☐ Full committee review on _____   ☑ Expedited review on 5/25/11

The following action has been taken:
☑ Approval for period of 5/25/11 to no Expiration
☑ Approval by expedited review according to category Exempt #2
☐ See separate correspondence for further required action.

Susan McCammon	Susan McCammon	5/25/11
Signature	Print	Date

UMCIRB Version 2/21/06   Page 1 of 1