An exploratory investigation of gender discrimination against school psychologists

Samantha Hug
AN EXPLORATORY INVESTIGATION OF GENDER DISCRIMINATION AGAINST SCHOOL PSYCHOLOGISTS

by

Samantha R. Hug

A Thesis

Submitted to the
Department of Psychology
College of Science and Mathematics
In partial fulfillment of the requirement
For the degree of
Masters of Arts in School Psychology
at
Rowan University
May 6, 2014

Thesis Chair: Roberta Dihoff, Ph.D.
Abstract

Samantha R. Hug
AN EXPLORATORY INVESTIGATION OF GENDER DISCRIMINATION AGAINST SCHOOL PSYCHOLOGISTS
2013/14
Roberta Dihoff, Ph.D.
Master of Arts in School Psychology

The purpose of this explanatory investigation was to A) investigate the general attitudes towards genders typically in a school based setting, B) examine if the report quality ratings will be significantly higher when the report is written by a male than by a female, and C) explore if there will be significant differences in report quality ratings based on the gender of the author/school psychologist. An analysis of the current literature on this topic displays implication that gender does play a role in acceptance toward certain viewpoints in certain settings. In order to effectively investigate these attitudes, data was collected via 60 Rowan student’s completion of the Psychological Report Survey, a survey derived from the principal researcher and then ran in the SPSS system. A One-way analyses of variance revealed that factors related to acceptance of views and the gender of the school psychologist were correlated with the level of acceptance of the views of the school psychologist. The study is discussed in more detail along with the implications and limitations included in the study.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vi</td>
</tr>
<tr>
<td>List of Tables</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Need for Study</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Purpose</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Hypothesis 1</td>
<td>1</td>
</tr>
<tr>
<td>1.4 Hypothesis 2</td>
<td>2</td>
</tr>
<tr>
<td>1.5 Operational Definitions</td>
<td>2</td>
</tr>
<tr>
<td>1.6 Assumptions</td>
<td>2</td>
</tr>
<tr>
<td>1.7 Limitations</td>
<td>2</td>
</tr>
<tr>
<td>1.8 Summary</td>
<td>3</td>
</tr>
<tr>
<td>Chapter 2: Literature Review</td>
<td>4</td>
</tr>
<tr>
<td>2.1 Why is the History of the School Psychology Occupation Important?</td>
<td>4</td>
</tr>
<tr>
<td>2.2 Women vs. Men: Genders in the Work Force</td>
<td>6</td>
</tr>
<tr>
<td>2.3 Gender Inequality in the Work Force</td>
<td>8</td>
</tr>
<tr>
<td>2.4 Equalizing the Gender Gap</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 3: Methodology</td>
<td>16</td>
</tr>
<tr>
<td>3.1 Participants</td>
<td>16</td>
</tr>
<tr>
<td>3.2 Materials</td>
<td>16</td>
</tr>
<tr>
<td>3.3 Variables</td>
<td>17</td>
</tr>
<tr>
<td>3.4 Procedure</td>
<td>17</td>
</tr>
</tbody>
</table>
# Table of Contents (Continued)

## Chapter 4: Results 19

4.1 Analysis Investigating Overall Report Satisfaction 19  
4.2 Conclusions Regarding Individual Survey Questions 22

## Chapter 5: Discussion 26

5.1 Results Regarding Hypothesis 1 26  
5.2 Results Regarding Hypothesis 2 26  
5.3 Limitations 26  
5.4 Further Advices 27

References 29
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Comparing mean differences from all participants on question 1 on survey 20</td>
<td></td>
</tr>
<tr>
<td>Figure 2</td>
<td>Comparing mean differences from all participants on question 6 on survey 20</td>
<td></td>
</tr>
<tr>
<td>Figure 3</td>
<td>Comparing mean differences from all participants on question 8 on survey 21</td>
<td></td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1 Question 7 Results from the Report Evaluations</td>
<td>22</td>
</tr>
<tr>
<td>Table 2 Questions 1,2,5,6, and 9 Results from the Report Evaluation</td>
<td>23</td>
</tr>
<tr>
<td>Table 3 Survey Rubric for Report Evaluations</td>
<td>25</td>
</tr>
</tbody>
</table>
Chapter 1
Introduction

Need for Study

Due to the increasing rates of children being classified as learning disabled, and the ever-increasing need for more school psychologists, research based in educational settings is essential. The current study concentrated on overall attitudes of genders in school settings. Specifically, this study explored how individuals generally accept the viewpoints of male school psychologists rather than female. Through both conscious and unconscious actions, males and females tend to have a bias reaction towards the two genders in society particularly in work related fields. If the current studies hypothesis is true, that views of male psychologist are more widely accepted, it will be necessary to further explore gender equality in the school, and for educators and specifically school psychologist to be mindful of their own possible gender bias.

Purpose

The current study explore the impact that gender has on the acceptance and views of educators and parents, based on the gender of the school psychologist giving the child’s assessment.

Hypothesis 1

There will be significant differences in report quality ratings based on the gender of the author/school psychologist.
Hypothesis 2

The report quality ratings will be significantly higher when the report is written by a male than by a female. This difference will occur across both conditions, “poorly written report and well written report.”

Operational Definitions

-Gender Bias- Prejudice or unfair treatment against an individual due to their gender

-Sexual Discrimination- “unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature” (What is Sex Discrimination under the Law, 2010)

Assumptions

All participants involved in the experiment are presently enrolled in one of Rowan University’s college courses in which the researcher conducted the experiment. It is assumed that the participants in this study understood the school psychologist’s report provided for this study, despite the fact that participants with non-educational majors were not excluded from this study. The researcher did not take into account the gender of the participant but it could be likely that the gender played a role in the results.

Limitations

A small sample group of 60 participants were used for this study due to time restraints and the lack of willing participants. Participants taking part in the experiment were only taken from one college campus but ranged from freshman to seniors. There were 39 female participants and 21 male participants that took part in the experiment.
There were 15 participants that completed the questionnaire after reading the *good male* report, 15 participants with the *bad male* report, 15 participants with the *good female* report, and 15 participants with the *bad female* report.

**Summary**

The attached literature review summarized by chapter two aids in outlining school psychologist’s duties, the meanings and history of gender discrimination, the history of school psychology, general discrimination, and gender bias in the workplace.
Chapter 2
Literature Review

Why is the History of the School Psychology Occupation Important?

School Psychologists are highly trained professionals who incorporate both psychology and education to help support children and adolescents in reaching their potential in numerous fields such as academics, social settings, emotions and behaviors (What is a School Psychologist, 2000). Within the field, School Psychologists interact with not just students, but also teachers, administrators, community members, and the family members. Not only do they assist children with learning disabilities, they help with behavioral problems and help them cope with family difficulties and overall life stressors (What is a School Psychologist, 2010). Due to the rate of learning disabilities fluctuating around 5% and accelerating each year in school districts, (Lyon & Moats, 1988) school psychologists are an imperative service in the success of improving and ensuring an efficacious future for the children.

School Psychologists aid with learning disabilities which range from seven different areas oscillating from mathematics to science, yet about 57% of all referrals of students are due to reading disabilities (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002; NASP). Alongside learning disabilities, they deal with behavior problems such as Oppositional defiant disorder and conduct disorder (Disruptive Behavior Disorders, 2011). Oppositional defiant disorder is usually shown through disobedient behavior and is prevalent in 1-6% of school age children, primarily in boys before the onset of puberty. If Oppositional Defiant Disorder is not addressed, Conduct Disorder can occur which is a more disruptive behavior disorder which occurs in about 1-4% of the
school age population but is more prevalent in boys (Child and Adolescent Mental Illness and Drug Abuse Statistics, 2009). It is imperative to implement proactive strategies to prevent against the child surpassing the preliminary stages of disobedience which aids any further complications that might transpire (Hawkin and Hess, 2006). By uniting intervention, assessment, and consultation, the school psychologist is able to efficiently accommodate to the child’s needs.

School Psychology dates back to 1925 when the first school psychology training plan was implemented due to the increase of standardized testing after World War 1. The first doctoral level training for psychology was applied in the 1930s which excluded many practicing school psychologists since they did not have the right qualifications. By the late 1930’s, the American Association of Applied Psychologists was formed and gained many members due to being less strict. By 1969, the National Association of School Psychologists was formed which brought both groups of practitioners together. In 1975, Congress passed Education for All Handicapped Children Act which made School Psychologists a necessity due to the rate of “free appropriate public education” increasing for children with disabilities (History of School Psychology Timeline, 1990). With time, not only did the National Association of School Psychologists acquire more responsibilities, state associations almost tripled within twenty years. By 2004, there were about 38,000 certified and licensed school psychologists in the United States with the rate increasing each year due to their need in school districts (NASP Study: How many School Psychologists Are There, 2005).

Over the past fifty years, the prominent gender of psychologists have ranged dramatically, with women making up only 20% of the individuals who held PhDs in
Psychology in the 1970’s, to recently increasing to 72% within the past seven years. The increase of women success is not just projected in psychology, but also in science and engineering which has a rate of 44% doctoral degrees for women and 60% female rate in non-science doctoral degrees (Cynkar, A., 2007). Carol Williams-Nickelson states that, “just by their sheer numbers, women are changing the field of psychology” (Carol Williams-Nickelson; Cynkar, A., 2007).

Dating back to the 1980’s, men used to be the predominant gender for school psychologists, in which it has now changed the majority gender of the field being women: with every three out of every four school psychologists being female (Castillo, Curtis and Gelley, 2013). Not only has the gender of school psychologists changed dramatically over the years, the age of school psychologists has decreased. Castillo, Curtis, and Gelley (2013) foresee this trend progressing due to the rate of students partaking in school psychology graduate programs containing roughly 80% women based compared to male students.

**Women vs. Men: Genders in the Work Force**

The Department of Profession Employees state that women make up about half of the technical and professional work force and are earning post-secondary degrees at a faster rate than males yet the wage gap between males and females is still a protruding subject in the work force (Women in the Professional Workforce, 2013). Even though women make up about 67 million workers in the United States, they make up less than forty percent of the management positions and about 90 percent of speech pathologists and kindergarten teachers. Although women make up 46% of the working individuals in the United States, 59% of those women make less than $8 per hour. Many studies have
also shown that it takes women about three extra years to move to a higher up position and get a pay increase at their job compared to a male employee (The Gender Gap, 2013).

The struggle that females face to move up in their job status and get a pay increase is a solid example of workplace discrimination. Discrimination in the workplace deals with unfairness in aspects such as pay, employment, firing, job assignments, training, promotions, and layoffs (Sex-Based Discrimination, n.d.). Avery, McKay, and Wilson (2007) found that females are 12.5 times more likely to experience sex-based discrimination rather than a companies’ male employees. Ferraro (1984) stated that since the 1960’s, women in the work force have more than doubled but surprisingly statistics in 1980 showed that about 60% of those women earned less than $10,000 per year. In the 1980’s, the average male high school dropout earned more than a female college graduate, in which people tended to blame it on experience and lower skill level (Ferraro, 1984).

According to the Bureau of Labor Statistics, only 18% of wives earned more than their husband in 1987. When asked which spouse out of a married-couple was employed, 30.4 % showed the husband being the only spouse employed compared to a rate of only 6.9% showing the wife to be the only employed spouse in the relationship (Employment status of parents, 2012). The average woman makes 73 cents for every dollar earned by a male with African American and Hispanic women averaging only 60 cents for every Caucasian male dollar (Sex Discrimination in the American Workplace: Still a Fact of Life, 2000). Although the National Women’s Law Center (2000) took into consideration gender differences such as level of education, occupation, and experience, it still found that 43% of the pay difference is due to gender discrimination alone.
Gender Inequality in the Work Force

Pay difference in the workplace might be the product of a term called “the glass ceiling.” This term refers to the barrier that women and other minorities face in the work force when they are striving to get a more powerful position or an increase in pay. Furthermore, the term “glass cliff” refers to certain genders or other minorities being thought of as more likely to fail compared to the other employees (The Glass Cliff, n.d.). Elizabeth Judge from the Times Newspaper wrote an article titled, “Women on board: help or hindrance?” in which she states, “Analysis of FTSE 100 shares shows that companies that decline to embrace political correctness by incorporating women onto the board perform better than those that actively promote sexual equality at the very top” (2003).

Despite attempts to promote sexual equality, the EEOC stated that in 2008 there was 28,372 filed complaints on gender discrimination which was actually a 15% increase from the previous year (King, Dunleavy, Jaffer, Morgan, Elder, and Graebner, 2010; EEOC, 2008). Many gender discrimination cases are made with females being the victim yet many cases are dismissed by the EEOC due to the lack of evidence. (Elkins, Phillips, Konopaske, 2002) In a study conducted by Elkin, Phillips, and Konopaske (2002), their observations presented that in a court setting, there will be a positive interaction between observer and plaintiff during a discrimination case if a female juror is listening to a female plaintiff. These results show that females are more likely to feel empathy and be more open to gender bias cases involving female discrimination or even be more accepting to females that take on “male-gender” occupations.
When people think “male-gender” occupations, they tend to think manager, boss, and even president. The National Women’s History Museum states that at least 35 women, known or unknown, have at one point run for president and evidently lost, every time (2010). Why is it that we have had so many years of male presidents, including a newly added African-American president, and yet no female has been elected? If lacking leadership traits is holding us back from electing a female president, the statistics of the crime rate in the United States should be evaluated. Out of the two million individuals serving time in a United States prison, ninety three percent of them are male occupants (Rooney, A., 2006).

The TMTM model is an abbreviation for “think manager- think male,” which subsequently refers to how people often associate managerial positions with male employees rather than female employees (Ryan, Haslam, Hersby, Bongiorno, 2011). In an article written by Schein, Mueller, Lituchy, and Liu, (1998) they stated that in the early 1970’s, their research proved that both male and female participants felt that characteristics of men were more likely suitable for managerial positions in the workplace. Although some individuals still feel this way, research has shown that women are now feeling more confident that they can carry the same characteristics to be successful in higher up positions. The “think manager-think male” model isn’t just present in the United States, in Japan, only 5% of managerial positions are held by women even though women make up more than 40% of the work force which subsequently means most females make less money than males.

Discrimination, whether it be with gender, age, or minorities, stems from individual’s perceptions that alter their actions. “One recurring problem throughout
history has been one of perception, but today much of our trouble isn’t the perception between different countries or cultures, it is one concerning the difference between females and males” (Female Perception vs. Male Perception, 2007). King, Dunleavy, Jaffer, Morgan, Elder, and Graebner (2010) state that one of the most influential identity groups is gender and that frequently discrimination is presented through speech or behavior whether it is conscious or unconscious (King, Dunleavy, Jaffer, Morgan, Elder, and Graebner, 2010). An experiment conducted by Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1970) demonstrated a gender bias when they asked participants to answer a several questions about what they thought a “healthy adult” was. The results of the experiment showed that characteristics of a male were classified as “healthier” compared to the female due to their balance of work and family.

In Prime, Carter, and Welbourne’s (2009) research, they had 296 managers take an online survey in which they asked them about their past experiences with females and males and certain traits that each gender held. Their findings clearly stated that feminine features tend to deal with team building, rewarding, supporting, networking, and inspiring other coworkers around them. On the contrary side, the survey showed that the masculine features included problem solving, delegating, and overall were positively influential. Although this research does not belittle females in any sense, it does show how different characteristics and traits are comparable between genders. Rudman and Goodwin (2004) state, “Throughout history, men possess enormous advantages in terms of political power and economic resources as well as a greater endowment of perceived competence, rationality, and physical strength.”
Forsyth, Heiney, and Wright (1997) conducted an experiment in which it examined how people perceive women in leadership roles. They had people perform certain tasks in three different groups that was under the control of a female leader. Each female leader had a different role in which they had to stress either task-driven or relationship-oriented. The women would have to make eight comments throughout the entire procedure depending on whether they were supposed to be task driven or relationship-oriented. After the task was performed, the participants in the group had to rate the female leader on their behavior and their ability of performance.

The results from Forsyth, Heiney, and Wright (1997) showed extreme gender bias with the findings being that “men were overall primarily better in the leader role.” The results showed that the females who were relationship oriented were not “successful leaders” because they cared too much about the feelings of the group and they weren’t as effective as a male would be. The females who were task driven got very low scores when it came to their “likeability.” Forsyth, Heiney, and Wright (1997) stated that “group members expected their leaders to be dominant, friendly, and instrumentally controlled.” When female leaders are friendly, they are perceived as weak; and when they are dominant, they are generalized as cold and bitter. This study showed great examples of how people actually perceive males and females in leadership roles along with their personality. Numerous females, as young as school age, might be called domineering and overbearing if they are independent and forthright, but Sheryl Sandberg states, “That little girl on the playground isn't being bossy, that little girl has executive leadership skills” (2013).
Heilman, Wallen, Fuchs, and Tamkins (2003) conducted an experiment in which they gave a questionnaire to 20 men, 27 women and 1 gender not indicated participant. The participants were to read background information on employees in which all held positions in a popular company. The positions were for an aircraft company in which their job duties was more targeted to the “male based” population. They asked questions about which gender the reader thought the jobs were more targeted towards, in which 100% of the participants stated that they thought the jobs were held by men. The subjects were then told which jobs were held by women and which ones were held by men. The participants were more surprised to see that more prestigious positions, such as an assistant vice president in the aircraft company, were females rather than males. This study showed that people view women as less competent and goal driven when compared to men. With the results of this study showing the true unconscious bias that people have towards women, it shows why there are huge differences in pay and employment among men and women.

The Civil Rights Monitor (2011) stated that minorities and women made up about 2/3 of the population yet they only made up 3% of the Senior Management positions at Fortune 1000 Industrial Corporations. The supposed reason for this gender discrimination is that the population of females are not as driven as men, due to the fact that women are more likely to fit family matters into their life along with their career rather than males who usually are mainly career focused. The stigma against women states that they are more family oriented and not as much of their focus can go into their professional life due to the fact that they are sharing their focus on both their career and “family and personal relationships,” (Lyness, Thompson, 1997). Since only about 53% of companies pay
women while they are on maternity leave, it makes it more difficult for families to have another child when their pay is already being compromised by the lack of replacement pay (The Gender Gap, 2013). By not being supported during maternity leave, it makes the women have to choose whether they want to make a living in the workforce or to just stay at home to help raise the children. The National Women’s Law Center states, “Our message to every institution providing health insurance in the country is that treating pregnancy differently, including by omitting it from health insurance coverage, is sex discrimination pure and simple and as such violates the law.” (Complaints highlight groundbreaking law, 2013).

**Equalizing the Gender Gap**

There were several acts that were implemented to help females against gender discrimination that they were facing in the 1960’s. The Equal Pay Act of 1963 stated that both male and female must be paid the same for doing similar tasks; it is not necessary for them to have the same job title, only similar skills are needed for the tasks (Equal Pay act of 1963, 2005). The Civil Rights Act of 1964 was implemented shortly after the Equal Pay Act of 1963 in hopes to prevent against discrimination based on gender, race, color, or nationality (Recess Reading: An Occasional Feature From The Judiciary Committee, n.d.). The Civil Rights Act of 1964 helped demolish unequal discrimination not only in the workplace but also at schools.

The Workshop Activity for Gender Equity Simulation (WAGES) is a movement which helps educate individuals on discrimination. The activity is about 90 minutes long and aids in demonstrating gender bias along with other minority biases. Although equality helps both males and females, unconscious biases might be persistent in the
workplace involving work opportunity, salary, and advancement which needs to be eliminated (Why WAGES? A Demonstration, 2013). The Workplace Gender Equality Act of 2012 was established to help eliminate discrimination in the workplace and to also help create an open environment for interaction between employees incase discrimination is felt by an employee. (About the Workplace Gender Equality Act, 2013).

The Paycheck Fairness Act which was introduced by Barrack Obama was twice introduced to congress and both times were rejected. With the female salary decreasing from 2011 from 82% to now 80% of what a male employee makes, the bill had hopes of closing the hole between the gender gap. Forbes (2013) stated that the gap between the genders has not been this big since years ago in 2005 (The Gender Pay Gap Got Worse, Not Better, In 2012--And It's Great For Women, 2013). If the pay difference between men and women had kept going like it was for the past couple of years, it would have taken another fifty years for the pay between genders to be equal (Pay Equity and Discrimination, 2010). If the Paycheck Fairness Act were to be implemented throughout the United States, there might be hope to speed up the gap between incomes of male versus female employees.

Gender stereotyping in the workplace can be disabling for females in certain occupations due to the patient or client not responding to them fully. Dr. Karen Sibert states in, Motherlode Book Club, that some jobs, like doctors and practitioners just aren’t meant to be occupied by women that also have a family. She states, “My patients can count on the fact that when I am at work, my full attention is with them, and the rest of the time — well, I do my best, and luckily I never set my sights on the award for Mother of the Year” (Sibert, 2011). But for the first time ever, women outnumber male
participants in the Olympics along with the women making up 47% of the workforce due to the need to make their own career choices and become economically independent (Palmer, 2012).

Diversity in the workforce can lead to many positive benefits within a company such as a more effective decision making process and more diverse opinions in problem solving in the work place (Finkelman, 2007). Darden (2012) states that diversity in the workforce is a worry to many leaders in the managerial world due to the rise of minorities recently making up about half of the work force. Between the diversity groups growing at an exponential rate and the baby boomers staying in part time jobs longer, business owners are going to have to work to keep the diversity fair in their organization (Darden, 2012).
Chapter 3
Methodology

Participants

The subjects in the study consisted of the Rowan University population only. The sample size consisted of 12 freshman, 23 sophomores, 12 juniors, and 13 senior participants. The study was conducted in five various classrooms containing 39 females and 21 males, although the gender of the participant was not a factor in the research. The study consisted of 60 subjects in which they received one out of the four versions of the school psychologist report. The students were given the option on whether to participate, and no extra credit or rewards were given for participation.

The participants that were not eligible for the study included students under the age of eighteen. Due to the fact that this study was voluntary for students, the results were self-selecting. All of the participants were to read a certain version of a school psychologist report in which the type of report that the individual was given was randomly selected by the researcher. All of the surveys were to be read and filled out while in the classroom and during the fifteen minutes that the researcher gave for the participants. The surveys were read and filled out in the classroom, participants were given fifteen minutes to complete the surveys.

Materials

The participants were given a packet containing 5 pages to examine and complete. The first four pages entailed one of the reports written up by the school psychologist and the final page was a survey that was to be completed. The survey consisted of 12 questions including the first two questions asking for the participant’s gender and year in
college. The last ten questions consisted of their opinions on how well the report was written in which they had to rate it 1-5 on the Likert scale, with 5 being excellent and 1 being very poor. The survey is labeled Table 3 and can be viewed on page 25. An Alternate Consent form was also included in the experiment to comprise any information that the participant might need if any questions about the research surfaced.

Variables

The school psychologist reports used in this study were mock psychological report samples that are also used in a school psychology graduate training program. The reports are a realistic version of what an authentic report entails yet are not actual reports from actual school psychologists. The study consisted of four different variations yet used the same survey in each variation. The report variations consisted of: a well written report by a female school psychologist, a well written report by a male school psychologist, a poorly written report by a female school psychologist, and a poorly written report by a male school psychologist.

Procedures

First, the researcher contacted professors who were willing to let the researcher conduct the experiment on the students during their class time. Once the researcher found willing professors, a date and time was set up for the conduction of the experiment. Once the researcher was in the classroom, an alternative consent form was read by all of the individuals that were over the age of eighteen and that were willing to participate. The participants received one out of the four mock reports, which was either a “well written report by a male,” “well written report by a female,” “poorly written report by a male,”
or a “poorly written report by female” on a simulated child. After reading the report, the participant had to then answer the ten question survey based on the report that they had just read.

The primary researcher developed two hypotheses including 1) there will be significant differences in report quality ratings based on the gender of the author/school psychologist and 2) The report quality ratings will be significantly higher when the report is written by a male than by a female. This difference will occur across both conditions, “poorly written report and well written report.” The independent variable included in the study was the gender of the school psychologist that wrote the report and the dependent variable included the satisfaction of the participant that was reading the school psychologist report. Analyses of variance was the most common approach used to test the material collected. The information collected from the surveys was analyzed to examine whether there was a significant difference in quality of reports along with the gender of the school psychologist. Analysis was also conducted to see if both the “poorly written and well written” reports written by the male school psychologist had a higher rating in overall quality compared to the female school psychologist reports.
Chapter 4

Results

A Likert scale was used in the analysis of the ten questions asked in the Psychological Report Survey. The numerical scale ranged from one to five in which these numbers represented these answers: (1) Very poor (2) Poor (3) Average (4) Good (5) Excellent. All ten of the questions were worded in a way that if the participant responded with a mean score of a 4 or 5, it signified that the participant believed the school psychologist had written the report Well or Excellent. A mean score of 3 from the participant indicated neutral or average feelings towards the psychologist’s report and a mean score of 2 or 1 represented attitudes of the participant being negative towards the report.

Analysis Investigating Overall Report Satisfaction

The following statistical process was used to find which version of the School Psychologist report was rated highest among the Likert Scale. By averaging the means of all ten questions answered by the 60 participants, the results showed the “good male” showing the highest scores. The results were as followed: “good male” - 4.36, “good female” - 3.86, “bad male” - 3.53, “bad female” - 3.37.
Figure 1. Comparing mean differences from all participants on question 1 on survey.

A one-way analysis of variance (ANOVA) was calculated to measure the participant’s evaluations of each question that was included in the survey.

Figure 2. Comparing mean differences from all participants on question 6 on survey.
Figure 2 shows the scores of male reports (both poor and good) were significantly higher than the female’s scores. Even though Figure 2 seems to prove the investigator’s first hypothesis, (the report quality ratings will be significantly higher when the report is written by a male than by a female and the difference will occur across both conditions, “poorly written report and well written report,”) Figure 3 shows that that hypothesis was not true for every question, in which the “bad male report” ranged much lower than that “bad female report.” Figure 3 shows the results from question eight which reads, “Report is organized, logical, meaningful, and appropriate in length.”

**Figure 3.** Comparing mean differences from all participants on question 8 on the survey.
Conclusions Regarding Individual Survey Questions

Although the sample size used in the experiment was small and could have skewed some results in the study, the findings revealed substantial information about the sample population. First, participants conveyed a high level of agreement while reading the “good male report” in response to question 7, “Report is readable, absent of jargon, consistent, and easy to understand” (M=4.40, SD=.736). Comparable to the “good male report” in question 7, the “good female report” scored a mean of 3.86 and a standard deviation of .99. For the same question, the “bad male report” showed a mean of 3.4 and a standard deviation of .83 which rated significantly lower than the “bad female report” (M=3.76, SD=.89).

Table 1

<table>
<thead>
<tr>
<th>Descriptives</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7 GoodMale</td>
<td>15</td>
<td>3.4000</td>
<td>.62808</td>
<td>.21381</td>
<td>2.9414</td>
<td>3.8566</td>
<td>2.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>GoodMale</td>
<td>15</td>
<td>4.4000</td>
<td>.73679</td>
<td>.19024</td>
<td>3.9020</td>
<td>4.8060</td>
<td>3.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>BadFemale</td>
<td>15</td>
<td>3.8667</td>
<td>.69974</td>
<td>.23231</td>
<td>3.1684</td>
<td>4.1649</td>
<td>2.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>GoodFemale</td>
<td>15</td>
<td>3.8667</td>
<td>.99043</td>
<td>.29573</td>
<td>3.3182</td>
<td>4.4151</td>
<td>2.00</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

Question 7 Results from the Report Evaluations
Scores ranged from 1.00 to 5.00. (1) Very poor (2) Poor (3) Average (4) Good (5) Excellent

By looking at Table 1, it disproves the hypothesis, “The report quality ratings will be significantly higher when the report is written by a male than by a female. This difference will occur across both conditions, “poorly written report and well written report.” Subsequently, the “bad male report” had an average mean of .26 lower than the “bad female report,” which refuted the hypothesis. Although question seven invalidates
that hypothesis, Table 1 shows questions 1, 2, 5, 6, and 9 which all support the hypothesis, “There will be significant differences in report quality ratings based on the gender of the author/school psychologist.” The table validates this hypothesis by displaying that the “bad male reports” always showed a higher mean than the “bad female reports,” along with the “good male reports” also showing a higher mean than the “good female reports.”
<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1. Reason for referral presents a clear guide for the evaluation. Referral questions offered.
2. Background information is clear and relevant.
3. Observations are written clearly and in observable terms.
4. Cognitive test results are clearly explained.
5. Summary provide the essential information regarding the student, avoids introducing new data, and offers a summary of strengths and needs.
6. Recommendations are realistic and consistent with evaluation findings, and can be understood by the reader.
7. Report is readable, absent of jargon, consistent, and easy to understand.
8. Report is organized, logical, meaningful, and appropriate in length.
9. Content is free of typographical errors
10. Grammar structure are appropriate.
Chapter 5

Discussion

Results Regarding Hypothesis 1

**Hypothesis 1:** There will be significant differences in report quality ratings based on the gender of the author/school psychologist. This hypothesis was supported in the study, yet it should be clarified that the “good” male report was significantly higher than the “good” female report when compared to the “poor” male and female report. In every question, the mean of the “good” male report was significantly higher than the “good” female report. The mean of the “poor” male report was higher than the “poor” female report on many of the questions, but not all ten of the questions.

Results Regarding Hypothesis 2

**Hypothesis 2:** The report quality ratings will be significantly higher when the report is written by a male than by a female. This difference will occur across both conditions, “poorly written report and well written report.” This hypothesis was supported by research due to the fact that the male school psychologist reports, both “good” and “poor”, showed a higher mean score on the Likert Scale on almost all of the questions included in the survey. Although not every question showed a significant difference between the two genders, the majority of questions supported this hypothesis.

Limitations

Limitations included in this explanatory investigation contain numerous variables that could be confounding in the skewing of the results of this study. The gender of the
participants, which was not collected in this research, could have had a significant contribution to the rating of the school psychologist’s reports. Secondly, the participants were not mandated to have obtained a certain level of education or type of degree in order to participate in this survey; by not being an “education” major, the participant might not have fully comprehended the material and the vocabulary that was used in the report. Lastly, the reports written by the “good” male and female psychologist tended to be longer in length compared to the “poor” male and female reports. By being longer and more tedious, the attention of the participant might have declined by the end of the fifteen minutes. The lead researcher hopes to have had a bias free and valid experiment in which the researcher can use the information that was collected to help others further their education in this subject.

**Further Advices**

The limitations listed give direction to further researchers in hopes of avoiding certain confounding variables presented in the study. First, researchers should only pick participants that are “education” based majors, more precisely, the participant should have completed at least two years of their bachelor’s degree in education. By having completed numerous “education” based courses, their knowledge on the subject should help diminish certain confounding variables that were present in the study above. Lastly, the gender of the participant should be noted due to the fact that there could be a correlation between the gender of the participant and the scores of the different genders.

Further research should be conducted on this topic due to the significance and importance of this topic. The purpose of this explanatory investigation was to determine if there was an unconscious bias in the professional field, particularly in school
psychology. This study could be replicated in further research with consideration of the limitations listed above. School psychologists have become more of a crucial profession in school districts within the past decade and research should be done for all aspects of equality of the profession.
References


Darden, Derrick C., Diversity in the Workplace. (2012). Available at SSRN: http://dx.doi.org/10.2139/ssrn.2126829


