

CSUSB ScholarWorks

Electronic Theses, Projects, and Dissertations

Office of Graduate Studies

7-2014

RELATIONSHIP BETWEEN MENTORSHIP AND CHILD WELFARE WORKERS' JOB SATISFACTION, AND INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE

Aleida A. Murcia
California State University - San Bernardino, amurcia4@yahoo.com

Jovanni L. Holloway

California State University - San Bernardino, jovanni.holloway@gmail.com

Follow this and additional works at: http://scholarworks.lib.csusb.edu/etd

Recommended Citation

Murcia, Aleida A. and Holloway, Jovanni L., "RELATIONSHIP BETWEEN MENTORSHIP AND CHILD WELFARE WORKERS' JOB SATISFACTION, AND INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE" (2014). *Electronic Theses, Projects, and Dissertations*. Paper 33.

This Thesis is brought to you for free and open access by the Office of Graduate Studies at CSUSB ScholarWorks. It has been accepted for inclusion in Electronic Theses, Projects, and Dissertations by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

RELATIONSHIP BETWEEN MENTORSHIP AND CHILD WELFARE WORKERS' JOB SATISFACTION, AND INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by

Aleida Amparo Murcia Jovanni Lapre Holloway

June 2014

RELATIONSHIP BETWEEN MENTORSHIP AND CHILD WELFARE WORKERS' JOB SATISFACTION, AND INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE

A Project

Presented to the

Faculty of

California State University,

San Bernardino

by

Aleida Amparo Murcia

Jovanni Lapre Holloway

June 2014

Approved by:

Dr. Zoila Gordon, Faculty Supervisor, Social Work
Dr. Rosemary McCaslin, M.S.W. Research Coordinator



ABSTRACT

This study explored the relationship between mentoring and social workers' job satisfaction and social workers' intention to remain employed in child welfare. This study was conducted in Children Family Services (CFS), San Bernardino. Ninety six child welfare workers completed the survey using the JSS-CW and the IRE-CW instruments. A quantitative research design was utilized to analyze the data. Specifically, an Independent Sample T-Test was used to analyze differences between the social workers who had a mentor and those who did not. Additionally, a Pearson R Correlation Test was conducted to analyze the relationship between mentoring and the different factors influencing the dependent variables. The present study revealed no correlation between informal mentoring and social workers' levels of job satisfaction and their intentions to remain employed in child welfare in San Bernardino County. The study also revealed that although child welfare workers are highly satisfied at their jobs they still intend to leave child welfare if they are presented with a better job opportunity. These findings cannot be generalized because this study was designed specifically for San Bernardino County and the validity and reliability of the JSS-CW is unknown. Further research on mentorship, more specifically formalized mentoring programs, is recommended.

ACKNOWLEDGMENTS

We would like to thank Dr. Zoila Gordon for overseeing this project and for being an a great social worker, mentor, and advisor. We would like to thank Christi Bell and Raul Salcedo for their support in the development of our study. Additionally, we want to thank the Department of Children and Family Services, San Bernardino County for supporting us in the completion of this study. We also would like to thank Professor Susan Culbertson for her constant words of empowerment. Lastly, we want to acknowledge our colleagues (Monday and Wednesday cohort 2014) for being such as great inspiration during the course of this program.

DEDICATION

Me gustaría dedicarle este proyecto a mi familia en Colombia por haber inculcado en mí el valor de la educación. I also want to dedicate this project to my loving and caring husband, Johnny Murcia, and my wonderful children, Joshua and Sarita, for their love and support towards the fulfillment of my personal and professional goals. To my beloved thesis partner, friend, and colleague Jovanni Holloway for her spiritual support and all her kinds words of empowerment. Finally, to all my Cristo Rey brothers and sisters who supported me with their prayers and words of affirmation: Si se pudo!

I would like to thank my Lord and Savior, Jesus Christ for giving me the strength to complete this project and program. Thank you to my mother, Traci Daniels for supporting me through this process. Many thanks to my family at Kingdom Culture Worship Center, for their prayers, support, and help in my times of need. Thank you to all my friends that stood by me and supported me through this long process. Lastly, to my thesis partner, mi compañera, Aleida Murcia, estoy muy agradecida a Dios por ti. Eres una bendición en mi vida.

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	iv
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION	
Problem Statement	1
Purpose of the Study	8
CHAPTER TWO: LITERATURE REVIEW	
Introduction	10
Job Satisfaction	10
Job Retention	11
Job Retention: Personal and Organizational Factors	12
Job Retention: Intention to Leave or Remain in the Agency	14
Mentorship	16
Theories Guiding Conceptualization	21
Summary	22
CHAPTER THREE: METHODS	
Introduction	23
Study Design	23
Sampling	24
Data Collection and Instruments	25
Procedures	26
Protection of Human Subjects	27

Data Analysis	27
CHAPTER FOUR: RESULTS	
Introduction	29
Presentation of the Findings	29
Demographics	30
Job Satisfaction	32
Intention to Remain Employed in Child Welfare Variable	32
Summary	38
CHAPTER FIVE: DISCUSSION	
Introduction	40
Discussion	40
Limitations	43
Recommendations for Social Work Practice, Policy and Research	44
Conclusions	46
APPENDIX A: SAN BERNARDINO COUNTY APPROVAL LETTER	47
APPENDIX B: INFORMED CONSENT	49
APPENDIX C: DEMOGRAPHIC QUESTIONNAIRE	51
APPENDIX D: MENTORING QUESTIONNAIRE	53
APPENDIX E: JOB SATISFACTION SURVEY FOR CHILD WELFARE (JSS-CW) QUESTIONNAIRE	55
APPENDIX F: INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE (IRE-CW) QUESTIONNAIRE	57
APPENDIX G: PERMISSION TO UTILIZE SURVEY	59
APPENDIX H: DEBRIEFING STATEMENT	61

APPENDIX I: TABLES	63
REFERENCES	69
ASSIGNED RESPONSIBILITIES PAGE	73

LIST OF FIGURES

Figure 1.	Role of the Mentor	32
-----------	--------------------	----

CHAPTER ONE

INTRODUCTION

This chapter introduces the concept of job satisfaction and how it has impacted social services organizations, especially child welfare agencies.

Then, an explanation of job retention and its effects in the workforce follows.

Finally, it explains what mentorship is, its different types, and its relationship with employees' job satisfaction and job retention.

Problem Statement

Researchers have identified job satisfaction as a major factor impacting organizations. Organizations balance monetary resources, expert training, and time in order to maintain employee retention rates (Saane, Sluiter, Verbeek, & Frings-Dressen, 2003). Consequently, extensive research has been done on this concept. For the purpose of this study, researchers adopted the definition of job satisfaction introduced by Hombrados-Mendieta and Cosono-Rivas (2013), as "the amount of overall positive affect that individuals have towards their jobs in relation to a series of aspects such as pay, promotion opportunities, the job itself, management style, working conditions, and the workgroup" (p. 232). Job satisfaction can be "viewed" in two ways: personal and organizational characteristics. Personal characteristics related to job satisfaction include: gender, age, education, and ethnicity. Similarly, workload, autonomy, work incentives, salaries, quality of supervision, and support from

colleagues described organizational characteristics affecting job satisfaction (Hombroados-Mendieta & Cosano-Rivas, 2003; Mor Barak, Nissly, & Levin, 2001; Smith & Shields, 2013; Vinokur-Kaplan, 1991).

The effects of job satisfaction are also emphasized in the human services field, more specifically in the social work profession. Social workers tend to experience lower levels of job satisfaction due to frequent exposure to: intense emotional issues, disturbing situations, attacks from the media and the general public, and financial constraints from the bureaucratic institutions (Smith & Shields, 2013).

Workers in the social services field tend to display low levels of job satisfaction, due to the challenges of the job. However, this reality is especially experienced by child welfare social workers (Shim, 2010). As a result of a decrease in job satisfaction, child welfare workers are more likely to leave their place of employment. This turnover rate among child welfare workers causes a disruption of the quality of services provided by the agency, which highly affects their clientele (Braddock & Mitchel, 1992; Ellett, 2009; Strolin-Goltzman, 2010). This study is important to social work practice because, by learning and understanding the importance of job satisfaction for social workers, can result in better service to clients, and the agency as a whole. In addition to the negative effects employee turnover rates have on clients, it also affects the organization. In fact, child welfare organizations suffer financially by having to continuously hire new child welfare social

workers. Social workers' turnover also increases the workload on remaining social workers (Ellet, 2009; Chen & Scannapieco, 2009).

"Workplaces are complex entities, involving characteristics of an organization, of different jobs, of individuals filling the jobs, and interactions among organizational, job, and individual characteristics" (Smith, 2005, p. 154). As a result of this variety of personal and organizational interactions, employee retention becomes a significant challenge for any organization.

Researchers agree that job retention is highly affected by social interactions in the work place as well as organizational factors such as supervisor support, extrinsic incentives, salaries, and opportunity for professional growth (Srolin-Goltzman, 2010; Ellett, 2009; Depanfilis & Zlotnik, 2008). For the purpose of this study, job retention is conceptualized as the employee's desire to continue working for the agency and eventually retire from it.

One of the most challenging issues faced by social service organizations across the country is the retention of competent and committed social workers (Strand & Bosco-Ruggiero, 2010). Several theories attempt to explain the possible reasons for the high rate of turnover among social workers. Among the theories, one of the most prominent is the argument that there is a lack of proper mentorship within the field (Hamilton & Hamilton, 2002; Collins, 1994).

The majority of social service agencies are affected by low levels of employees' retention; however, child welfare agencies are the most affected

by this phenomenon (Drake & Yadama, 1996). In fact, the high rate of turnover among child welfare social workers has detrimental effects on clients, colleagues, and the agency. Clients are affected negatively because the constant rotation of social workers makes it difficult for clients to build appropriate relationships that allow for the development of trust and effective communication, thus hindering the progress of any goals (Strolin-Goltzman, 2010). In addition, it creates more stress for the remaining social workers at the agency because they are obligated to serve those clients who are left without a social worker. Finally, it also affects the agency financially because the agency has to spend more money training new social workers to replace the previous occupant of a position.

There is a vast amount of research on the concept of mentorship in the literature. In fact, mentoring is considered an organizational strategy that helps leaders to develop the skills of their coworkers (Gassman & Gleason, 2011; Collins, Kamya, & Tourse, 2001; Hamilton & Hamilton, 2002).

Wilson and Tilse (2006) state that mentorship is a very useful proactive strategy to promote the retention of child welfare workers. They define mentorship as "one-to-one relationship between a more experienced or expert mentor facilitating or supporting the learning in another" (p. 179). Similarly, Howe and Daratsos (2007), describe mentorship as a relationship between two professionals in which the more experienced professional offers support to the junior professional. Rolfe-Flett (2002) states that mentorship is "an alliance"

of two people that creates a space for dialogue that results in reflection, action, and learning for both" (p. 2). Mentorship is also a work related relationship between a seasoned professional and a beginner professional. This relationship is dynamic and reciprocal (Healy & Welchert, 1990). For the purpose of this study, mentorship is explained as "an interpersonal relationship of a senior person [worker] to a younger person [worker], which is two-sided; provides information, advice and emotional support, and maintains a loyalty that extends over time" (Mijares, Baxley & Bond, 2013, p. 23).

A mentorship relationship in the workplace includes a mentor (experienced worker) and a mentee (junior worker) (Collins, Kamya, & Tourse, 2001; Hamilton & Hamilton, 2006). A mentor is more professionally advanced and offers emotional, social, and professional support to the mentee. The mentee is usually a recently hired worker who needs support to develop their skills to advance in his or her career (Collins, 1994; Collins, Kamya & Tourse, 2001).

According to the research, mentoring relationships are highly beneficial for the mentors, mentees, and for the organization as well (Gassman & Gleason, 2011; Wilson & Tilse, 2006). Specifically, mentorship facilitates personal and professional development. For example, employees who are involved in a mentoring relationship develop more self-confidence and self-esteem. Employees also develop more job skills, further their education, experience more job satisfaction, and become more effective employees

overall (Gassman & Gleason, 2011; Mijares, Baxley, & Bond, 2013).

Furthermore, mentorship has an impact at the organizational level.

Specifically, mentorship enhances employees' ability to socialize with their coworkers, increases employees' commitment to their job, and influences employees' decision to stay for longer time with the same organization (Collins, Kamya, & Tourse, 2011; Gassman & Gleason, 2011; Wrigth & Werther, 1991).

For the purpose of this study, researchers classify mentorship as formal or informal (Gassman & Gleason, 2011). One of the categories of formal mentorship is Supervisory Support (SS). In this relationship a junior worker is assigned a supervisor who is in charge of his or her training, acculturation to the agency, and professional development. They are required to meet regularly to discuss the progress of the junior worker and to resolve his personal and professional challenges within the organization. Another category of formal mentorship is Formalized Mentorship Programs (FMP). These programs are established by the organization and new employees are required to join. The FMP have an established plan of action where new employees receive mentoring from a specialized team during a determined period of time.

Informal mentorship is another way employees become involved in a mentoring relationship. This is accomplished when the junior worker seeks for Veteran Worker Support (VWS). In this process the junior worker informally

chooses another member of the organization as his or her mentor (Hamilton & Hamilton, 2002).

Researchers agree that mentorship is a proactive strategy to promote social workers' job satisfaction and retention rate (Collins-Camargo & Kelly, 2006; Gassman & Gleason, 2011). In social service agencies, the responsibility to train new social workers is often given to supervisors or specialized training units within the organizations. When the supervisors or training units provide training to new workers using mentoring techniques, new social workers tend to adapt easier to agency polices, display higher levels of job satisfaction, and develop a sense of loyalty to the organization (Howe & Daratsos, 2007; Chiller & Crip, 2012; Turner, 2000; Stevens-Roseman, 2009). Furthermore, different studies suggest that the aforementioned results are particularly significant for child welfare social workers (Ellett, Ellis, Westbrook, & Dews, 2007; Shim, 2010; Vinokur-Kaplan, 1991).

Child welfare agencies that foster mentoring connections among their employees are able to retain more workers because the workers feel support from their supervisors, they develop more commitment to the profession and to the agency, and they are happier in their jobs (Strand & Bosco-Ruggiero, 2010; Steven-Roseman, 2009; Shim, 2010).

Children Family Services (CFS) has multiple departments from: adoptions, long term and extended foster care, guardianship, permanency planning, emergency response, and a plethora of other areas. This agency

hires professionals that have experience in child welfare, therapy, psychology, and other areas. Professionals that are hired in this agency, have a degree of at least a Bachelors of Arts or Masters in a variety of fields (social work, sociology, psychology, etc.), and/or a combination of work experience in human services (CFS, 2013).

In San Bernardino County CFS, policies that affect Child Welfare Social Workers are possibly the policies that regulate work hours and work load for child welfare social workers. Many workers have high case loads, and some departments, like Intake, require more hours, often leading into overtime (CFS, 2013). These policies and procedures in San Bernardino County maybe a possible factor in child welfare workers job satisfaction.

Purpose of the Study

Child welfare workers' job retention and job satisfaction is a concern and a pressing issue that creates a new category of responsibility for researchers. Subsequently, there is a need to explore effective mechanisms of resolution to assure that child welfare workers feel more satisfied in their jobs and, consequently, willing to remain employed at the child welfare agencies for a prolonged period of time.

Several studies have shown that agencies which participate in, or have established mentoring programs, have employees who feel more satisfied at their jobs (Hamilton & Hamilton, 2002; Hombrados-Mendieta & Cosono-Rivas,

2013; Strand & Bosco-Ruggiero, 2010). As a result, workers remain with the agency for a longer time and some retire from these agencies.

This study explored the relationship between mentorship and job satisfaction as well as mentorship and intention to remain employed in child welfare among child welfare workers in San Bernardino County. Specifically, the researchers formulated the following hypotheses:

- H₁ There is a relationship between having a mentor and child welfare social workers' levels of job satisfaction.
- H₂ There is a relationship between having a mentor and child
 welfare workers' intention to remain employed in child welfare.

This study was explicitly designed for San Bernardino County,

Department of Children and Family Services where this issue had not been explored.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The researchers explored and reviewed articles on the topics of job satisfaction, job retention, and mentorship. A plethora of articles analyzing job satisfaction coincided with similar reports given in articles exploring job retention. The researchers also utilized articles on mentorship to emphasize its effectiveness, and instructed the readers as to what mentorship is.

Job Satisfaction

Many articles articulate job satisfaction from both an employee's perspective and an organizational view. Vinokur-Kaplan (1991)explored new social workers attitudes towards their job satisfaction in both public and private child welfare offices. The article reported that job satisfaction must consider the factors of personal, organizational, and client related levels of job satisfaction. Job retention is also a result of job satisfaction amongst employees. Vinokur-Kaplan (1991) gathered the data through the use of a survey including a a five point Likert type scale. The study concluded that social workers were more satisfied with their employment when based on the factors of working with their client population, working with other employees, and when workers felt accomplished in their work. Many of the variables related to job satisfaction were mirrored by the workers' accomplishments that

actualized their professional goals and skills sets. Further research for this study could explore social workers who have worked in these same agencies over an extended period of time.

Smith and Shields (2013) reported that job satisfaction is largely related to a workers' motivation and sense of accomplishment in their work. The researchers explored three variables as related to job satisfaction: demographics, maintenance characteristics, and motivation characteristics. Data was collected through the use of a survey of social workers in a training program. A five point Likert type scale was used which measured the three aforementioned dependent variables. The outcomes of the researchers' study indicated that the strongest predictor of job satisfaction was the motivation variable. Motivation was described as a professional sense of self, job flexibility in creativity, and contributions by the worker. Job satisfaction was connected to social workers' identity, as apart from the organization's goals and standards.

Job Retention

Lack of training, mentoring, and professional development opportunities contribute to high rates of turnover. Conversely, when child welfare workers receive adequate supervision, consultation, and mentoring, this leads to higher rates of employee retention. Ellett, Ellis, Westbrook, and Dews (2007) verified the aforementioned information in their quantitative study of 369 child welfare professionals regarding their insights about factors contributing to employee

retention and turnover. Researchers used probability and systematic random sampling to select every 7th employee within the county offices of Child Protective Services in the state of Georgia. The methodology used by the researchers incorporated focus group interviews to collect data on organizational and personal factors contributing to employee turnover and retention in child welfare.

Job Retention: Personal and Organizational Factors

Depanfilis and Zlotnik (2008) conducted a systematic review to investigate personal and organizational factors that contribute to child welfare workers turnover. Researchers included nine studies in their review. These studies analyzed the relationship between organizational and personal factors and their effects on social workers' rates of retention or turnover. Depanfilis and Zlotnik concluded that factors such as workers' commitment to the profession, sense of self-efficacy, and low levels of emotional exhaustion are personal factors that contribute to social workers' decision to stay in the field of child welfare. Furthermore, researchers also concluded that the main organizational factors affecting workers' retention were level of support offered by supervisor and colleagues, job salary, and benefits.

Ellett (2009) conducted a study in Arkansas and Louisiana, including 2,140 child welfare workers, to assess personal and organization attributes contributing to the intention to remain employed in child welfare. This study

utilized the Intent to Remain Employed-Child Welfare (IRE-CW) inventory, the Human Caring Inventory-Social Work (HCI-SW), and Self-Efficacy Assessment-Social Work (SEA-SW), and the Professional Organizational Culture Questionnaire-Social Work (POCQ-SW) as part of a survey packet that was mailed to participants. After analyzing the data collected, the study concluded that personal qualities of high level of human caring and self-efficacy strongly contributed to child welfare workers' retention. The study also found that workers who believed their agency promoted professionalism among their employees, and also felt supported by their supervisors and colleagues had a stronger intention to continue working for child welfare.

Yankeelow, Barbee, Sullivan, and Antle (2009) analyzed a variety of personal and organizational factors influencing job retention in child welfare. Researchers used data from the Kentucky Cabinet for Health and Family Services (CHFS) in a non-experimental, prospective research design. This study was conducted in two phases. In phase one, researchers surveyed 723 new social workers prior to the start of their core training. After completing their training, participants completed a post-training questionnaire. In phase two, researchers obtained employee retention records and matched them to each individual's phase one data. Two groups were identified: stayers those who remained with the agency and leavers those who had left the agency. After analyzing the data, researchers concluded that those social workers who stayed were more attached to their supervisor and considered him or her a

mentor. Therefore, this study suggests that the relationship between worker and supervisor significantly affect job retention in child welfare.

In the meta-analysis conducted by Barak, Nissly, and Levin (2010) that gathered studies which illustrated the relationship between demographic variables, personal perceptions, organizational conditions, and employees intention to leave. This article explored the costs of employee turnover and its consequences on employees and the clients it serves. An employee's demographics (ethnicity, work climate, job satisfaction) were significant predictors to employee turnover and retention. The meta-analysis findings were that intention to quit was related to organizational and professional commitment, burnout and job satisfaction. This research is helpful when looking at the varying variables that affect employee retention.

Job Retention: Intention to Leave or Remain in the Agency

Strolin-Goltzman (2010) conducted a study to examine the effects of organizational factors on workers' intention to leave child welfare. The researcher included 12 child welfare agencies with a chronic turnover of 25% or more for two consecutive years prior to the intervention in a non-equivalent comparison group design. These 12 agencies were randomly assigned either to the Design Team (DT) intervention group or the comparison group. In this study, the dependent variable was intention to leave and the independent variable was the DT Intervention. The DT intervention consisted of groups of employees who worked together to discuss organizational issues influencing

turnover and job retention in their agencies. Five hundred and twenty six frontline caseworkers and supervisors participated in the study; 275 completed the pre-test survey and only 82 of them completed the post-test because by the time the post-test was administered they had already left their agencies. The remaining 169 participants only completed the post-test. This study found that intervening at the organizational level can help child welfare agencies to increase job retention. This study also suggests that agencies should provide better training, supervisory support, and better technological resources in order to decrease workers' intention to leave.

Smith (2004) studied the effects of perceived organizational support, supervisory support, and intrinsic job value on job retention in child welfare. This study collected data from an in-person survey of 296 child welfare workers from child welfare agencies from 12 different counties. Child welfare workers took a 30-60 minutes survey which measured supervisor supportiveness and satisfaction, job tenure, workload, time use, and perceptions about job turnover and retention. According to the study's results, facilitation of life-work balance, supervisor support, and organization characteristics are highly associated with job retention in child welfare.

According to the research study conducted by Shin (2010), organizations that decrease an employee's intention to leave consider organizational climate. Shin hypothesized that "child welfare employees with clearer and more effective incentives and rewards for job performance have

less intention to leave than those with less clear and effective incentives and rewards" (p. 847). The method used to collect the data was a survey taken from various child welfare agencies in the state of New York. Caseworkers and supervisors voluntarily took the survey that included questions of workforce retention and emotional exhaustion. The results of the study indicated that employees with higher values of organizational culture and climate have less intention to leave than those with lower values. In addition, social workers with an emphasis on rewards and clearer objectives had a higher intention to stay.

Mentorship

Researchers have extensively studied the concept of mentoring in the workplace and its impact on workers' job satisfaction and their desire to continue employment with their agency. Hamilton and Hamilton (2002) developed a study that included 42 mentors (experienced supervisors), and 26 mentees (apprentices, interns, students, or employees). The researchers selected work-based learning programs in eight communities in the state of New York, and divided them into two groups. One group received the mentor training program (intervention), and the control group did not receive the mentor training program. In a six month period, mentors were interviewed up to four times, and mentees were interviewed only once, in both the control and treatment group. This study concluded that having a mentor in the workplace aids new employees with the acquisition of new skills, adjusting to the culture

of the workplace, and the participation of network opportunities within the organization.

According to Pare and Masitre (2006), the mentor-mentee relationship plays a significant role in the transition from school to the workplace. The researchers conducted a three year longitudinal study where they included social work students, new-hire social workers, and experienced social workers. The researchers collected information by using on-site observations, scheduled and unscheduled interviews, mixed focus group discussions, and forms related to field education. Pare and Masitre (2006) concluded that mentors were an integral part of mentees' adjustment to the new agency, especially mentors who were facilitators. The study found that mentors who treated new social workers cordially helped them to develop their professional identity, and a sense of belonging to the agency.

The mentor and mentee relationship is reciprocally advantageous to both parties. Strand and Bosco-Ruggiero (2010) concluded that mentees who have a mentor within the child welfare agency develop more confidence, a deeper connection to other employees, and dedicate more time and effort to their responsibilities as a child welfare worker. Additionally, mentors who have a mentee are benefited by having more personal satisfaction and new sense of purpose as a role model within the agency for new employees. Researchers used process and outcome methodology for the purposes of evaluating a two year mentoring program in a child welfare agency in the state of New York.

The study's methodology included a mix of questionnaires, evaluations, Likert-type scale, and concluded follow-ups by phone and email.

Informal mentoring relationships have also demonstrated to help employees in youth-serving organizations understand their job role and responsibilities, increase sense of belonging, and equip youth workers with skills that will be helpful in their future. Gassman and Gleason (2011) focused on the importance of mentoring relationships among youth workers, in a youth-centered program called Camp Adventure Child and Youth Services (CACYS). The information gathered was collected through questionnaires. The surveys were administered to all levels of each departments in CACYS: supervisors, new employees, tenured employees, and staff who worked in administration. The findings from this study revealed that workers felt more educated, more respected, and gained more skills for better job performance from the informal mentoring from their supervisors.

Supervisors play an active role in informal mentoring relationships in child welfare agencies. Camargo and Kelly (2006) studied the role of supervisors as informal mentors and the promotion of professional development in the public child welfare agency. Interviews were given to both women and men who were a mix of local and regional managers and workers. The educational level ranged from not having a social work degree to masters level degrees in social work or public administration. The study found that supervisors who informally mentor their protégés gain personal growth in their

knowledge of child welfare services and were promoted to higher ranking positions in their mentees' future, increasing their sense of self.

Pereira, Valentine, and Wilson (2002) found similar results in their own research, affirming the mutual benefit of mentorship programs. The researchers constructed a study that assessed the view held by new social work faculty regarding their perceptions of mentoring experiences. Interviews were administered with a telephone survey to 18 new social work faculties at various universities. The results from the research indicate that mentoring relationships among faculty increase the sense of belonging for new faculty members at the university, improve their career-related skills, and increase the networking capabilities of new social work faculty and current staff.

Additionally, experienced social workers who mentored new social workers were also found to have an increase in job satisfaction. These social workers can serve as trainers while impacting the retention rates of new employees at their agencies.

Stevens-Roseman (2009) conducted a study to explore the implications of mentoring for both mentors and mentees. He surveyed 22 social workers (21 females and 1 male) ages 55 to 75. The social workers were employed at a non-profit organization and were culturally diverse (African American, Hispanic, and Whites). The researcher used an experimental design where he divided the sample into two groups. Each member of the intervention group was assigned a mentee. Baseline data was collected by using questionnaires

to measure levels of life satisfaction and workplace retention before applying the intervention. After the intervention was applied, post-test data was gathered. This study concluded that experienced social workers who functioned as mentors displayed increased levels of job satisfaction because they felt a sense of usefulness within the agency. These findings suggest that mentors can be a great source of support for mentees and a great training resource for the agency. Furthermore, mentors also influenced new social workers decision to stay longer at the agency, improve their overall quality of work, and increase job satisfaction.

Collins (1994) conducted a study to analyze the effects of mentorship on social workers' career satisfaction, career success, and income level for both mentor and mentee. For the purpose of her research, Collins defines mentorship as a relationship between two professionals at different stages of their careers. Collins stated that the mentor was the person who was more professionally advanced and the mentee was the junior professional. Collins conducted a cross-sectional study where she surveyed 430 social workers using a 16-page questionnaire. In her sample she included social workers who have been a mentor and mentee, a mentor but not a mentee, a mentee but not a mentor, or neither a mentee or a mentor. The results of this study suggest that having a mentor or being a mentor has a significant impact on social workers' career success. In fact, those social workers who were mentors and mentees displayed the highest levels of career success.

Furthermore, the results also indicated being in a mentor-mentee relationship had significant impact on social workers' job satisfaction. Lastly, the study's results also suggested social workers who were mentors had higher levels of income as compared to those who only were mentees or who had no involvement in a mentoring relationship.

California Social Work Education Center (CALSWEC) (2001) explored the effects of mentorship on child social welfare workers' job satisfaction and job retention in the state of California. This organization created a Mentor Development Team to review the correlation between mentorship and the child welfare workers' desire to stay with their agencies for a longer period of time. Although this team wrote a document where they summarized their findings, no formal studies were conducted. Due to the lack of scientific evidence to support CalSWEC recommendations, a formal study is needed to produce conclusive findings.

Theories Guiding Conceptualization

Through the application of Maslow's Hierarchy of Needs, the theorist explained how humans need their fundamental (physiological) needs fulfilled before reaching self-actualization (Lesser & Pope, 2011). When exploring job satisfaction through a theoretical lens of Malsow's Hierarchy of Needs, researcher's gained an understanding that child welfare social workers safety (security of environment, employment, resources) in their workplace is

necessary in their job satisfaction. This theory can be used as guiding framework when exploring theoretically the components of job satisfaction.

Erik Erikson's eight stages of development, can also be used to explore theoretically the concept of job retention. Erikson explored stages named, "Intimacy vs. Isolation and Generativity vs. Stagnation", where there was a strong emphasis on relationships and work (Lesser & Pope, 2011). Research from past exploration on job retention, have used similar concepts found in Erickson's research. There is an overall shared ideal between Eric Erickson's staged of human development, and job retention: fulfillment from one's work, relationships with those around you, sense of accomplishment, and sense of belonging. In addition to job retention, these concepts can also be found similarly in the literature involving mentorship. There are many shared concepts and constructs with these theories, and from past research.

Summary

The researchers have gathered from the literature that the independent variables of job satisfaction and retention are relatable to the topic of mentorship. Children family social workers are influenced from their personal and organizational characteristics when pertaining to job satisfaction, job retention, and mentorship.

CHAPTER THREE

METHODS

Introduction

This chapter outlines the design of the present study including sample size, procedures for data collection, and the instrument description. This chapter reviews protection of human subjects' policies and research methodology for data analysis.

Study Design

This study explored the relationship between having a mentor and job satisfaction as well as having a mentor and intention to remain employed in child welfare among child welfare workers in San Bernardino County.

Specifically, this study strived to determine that social workers who have a mentor have higher levels of job satisfaction and higher levels of intention to remain employed in child welfare.

For the purpose of this study, the researchers used a quantitative research method to determine a relationship between the variables, to assess the strength of this relationship. Participants received a self-administered questionnaire online via Qualtrics.

The researchers' first hypothesis for this study was that there was a relationship between having a mentor and job satisfaction. The researchers'

second hypothesis was that there was a relationship between having a mentor and intention to remain employed in child welfare.

Sampling

The data was obtained from Children Family Services child welfare social workers from San Bernardino County, by using convenience sampling. This non-probability sampling method allowed the researchers to include in the study people who were the most accessible and available. The researches collected data from an array of experienced social workers from supervisors, Coaching Training Unit (CTU), managers, Licensed Clinical Social Workers (LCSW), Masters of Social Work (MSW), and Bachelors of Social Work (BASW) to social workers without a college degree who are currently working for San Bernardino County CFS.

The criterion to participate in this study was that the social workers must have worked for three years or more as a child welfare worker in San Bernardino County. This criterion was established because literature shows that the third year working in child welfare is a critical time where many social workers decide to leave child welfare (Strolin-Goltzman, 2010). The survey was sent via email to 400 social workers in four regions of San Bernardino County (Easter, Western, Central, North). However, the desired sample size was 100 child welfare workers.

Data Collection and Instruments

This research study was approved by the San Bernardino County

Department of Legislation and Research (see Appendix A). Before initiating
the survey, participants completed a consent form (see Appendix B). Data was
then collected through a self-administered survey conducted online that
included four parts. The first part of the survey included questions about
participants' demographics such as: geographical location, gender, age,
education level, and years of service in child welfare in San Bernardino County
(see Appendix C).

The second part of the survey included questions that measured the independent variable, mentorship. These questions were created by the researchers to determine if participants had a mentor, and if so, how long they had known the mentor (see Appendix D).

The third part of the survey measured the dependent variable, job satisfaction. To gather this information, researchers utilized the Job Satisfaction Survey for Child Welfare (JSSCW) (see Appendix E). This questionnaire used a five point Likert-type scale ranging from 'disagree very much' (1) to 'agree very much' (5). This part of the instrument evaluated the main factors influencing job satisfaction: quality of supervision, perceived value of the job and its impact in society, and supportive relationship with coworkers and supervisors. This instrument was created for this study by the

researchers, therefore, consistency reliability and validity correlation have not been tested.

The last part of the survey measured the dependent variable of intention to remain employed in child welfare. In order to measure the dependent variable, intention to remain employed in child welfare, the researchers utilized questionnaire Intent to Remain Employed-Child Welfare (IRE-CW), developed by Alberta Ellett (see Appendix F). This scale consisted of 10 items rated on a four point, forced-choice, Likert-type scale ranging from strongly disagree (1) to strongly agree (4). The coefficient alpha of this scale is .87 (Ellis, Ellett, & DeWeaver, 2007). Permission was obtained from Alberta Ellett to use her scale in this study (see Appendix G).

Procedures

The researchers consulted with the expert in the field of mentorship at San Bernardino County, manager of County Training Unit (CTU), Terri Elliott to discuss the feasibility of the research topic. Ms. Terri stated that this topic was indeed needed for research in San Bernardino County, Department of Children Family Services (Personal Communication, October 17, 2013). Once permission was granted, data was collected through a self-administered survey composed of 24 questions. This survey took 5 minutes to be completed. Surveys were administered online through Qualtrics. An email was sent to all county child welfare social workers with a link to the survey. The survey contained certain screening questions to help participants determine if

they were eligible to take the survey questionnaire. A total of 94 participants completed the survey at their jobs. The researchers collected data from January 2014 February 2014. Results were analyzed during March 2014 and results were published in May 2014.

Protection of Human Subjects

In order to be compliant with the Protection of Human Subjects Act, this survey did not include any personal identifying information. Therefore, there is no way to relate participants' responses to participants' demographics.

Participation was anonymous. All information collected has been recorded, analyzed, and properly deleted.

Participants received and completed an informed consent where they voluntarily accept to participate in this study. Participants were asked to check a box agreeing to take the survey. In addition to the informed consent, participants also received a debriefing statement (see Appendix H) once their participation in the study was concluded. This statement included information regarding the study results and how the public can access them.

Data Analysis

This study explored the relationship between having a mentor and job satisfaction and mentorship and intention to remain employed in child welfare among child welfare workers in San Bernardino County. Specifically, this study strived to determine if there was a relationship between having a mentor and

job satisfaction and having a mentor and intention to remain employed in child welfare. The researchers utilized univariate (mean, mode, median, and standard deviation) and bivariate quantitative methods (Independent Sample T-test and Pearson R correlation) to analyze data.

More specifically, it was expected that there was a positive linear relationship between the independent variable, mentorship, and the dependent variable job satisfaction. It was also expected that a positive linear relationship between the independent variable of mentorship and dependent variable of social workers' intention to remain employed in child welfare existed.

An independent Sample T-Test was conducted to examine the relationship between mentoring and social workers' job satisfaction and mentoring and social workers' intention to remain employed in child welfare. Additionally, A Pearson r Correlation was conducted to examine the relationship between mentoring and the different factors of the dependent variable job satisfaction and intention to remain employed in child welfare.

CHAPTER FOUR

RESULTS

Introduction

This chapter outlines the results of the survey. First, it discusses the amount of respondents and the criteria used to select the valid questionnaires. Next, this chapter explains the univariate, and bivariate statistical analysis used to analyze the data. Followed by the results obtained from the statistical analysis.

Presentation of the Findings

Researchers sent out their survey link via email to the four regions of San Bernardino Children Family Services, which is approximately 400 surveys. 96 surveys were returned. Out of the 96 surveys received, 9 were discarded because participants did not sign the informed consent. An additional 6 surveys were discarded because they were incomplete. Another survey was removed because it skewed the data due to singularity in education. A total of 80 valid surveys were used for data analysis purposes.

Univariate statistical analysis was conducted to analyze each variable separately and to describe the most relevant characteristics of the sample in regards to: demographics, mentoring, job satisfaction, and intention to remain employed in child welfare. Measures of Central Tendencies (mean, median,

mode, and standard deviation), and frequencies were calculated as appropriate for each variable.

Bivariate statistical analysis was conducted to evaluate the differences between the group that reported having a mentor versus the group that reported not having a mentor, and their levels of job satisfaction and their intent to remain employed in child welfare. As part of this analysis, researchers reverse scored items 6, 18, 20, and 22 from the survey, and then conducted an independent sample T-Test.

A Pearson R correlation was calculated to explore the relationship between the independent variable, mentoring, and each factor of the dependent variables: job satisfaction, and intention to remain employed in child welfare. Additionally, correlations were done between each factor of the dependent variable job satisfaction against each factor of the dependent variable intention to remain employed in child welfare.

Demographics

The study sample was 83.8 percent females (n = 67), and 16.3 percent males (n = 13). Age varied with 9 participants between the ages of 20-29, 25 participants between the ages of 30-39, 15 participants between the ages of 40-49, 18 participants between the ages of 50-59, and 10 participants between the ages of 60 and older.

In terms of education, 82.5 percent of the participants have a master's degree, 13.8 percent have a bachelor's degree, and 3.8 percent have a doctorate degree.

Twenty participants work for the Eastern Region, 18 participants work for the Western Region, 17 participants work for the Central Region, 13 participants work for Countywide, and 12 participants work for the North Desert Region. The length of employment of social workers range from 27.5 percent have worked for less than 3 years for CFS, 35 percent have worked for less than 10 years, 30 percent have worked less than 20 years, and 6.3 percent have worked less 30 than years.

Fifty five participants reported having a mentor. 25 participants reported not having a mentor. 47.3 percent reported the role of their mentor was a veteran worker, 30.9 percent reported their supervisor as their mentor, 16.4 percent reported their colleague as their mentor, and 5.5 percent reported other.

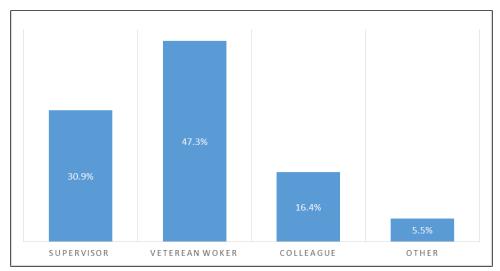


Figure 1. Role of the Mentor

Job Satisfaction

In regards to job satisfaction, 86.3 participants reported they find enjoyment in their job as child welfare workers. 95.1 percent strongly agreed, and agreed by serving as a social worker they are making a difference in people's lives. 97.6 percent believed their work is important to society, and 96.3 percent believed their coworkers were helpful when they had job related problems.

Intention to Remain Employed in Child Welfare Variable

Participants did not fully complete this portion of the survey, therefore the sample size varies for each question. More specifically, 7.9 percent of participants (n = 63) reported that they intend to remain in child welfare as their long term professional career; however 68.3 percent do not intend to remain in child welfare as a long term professional career. Forty one percent

of participants (n = 46) would leave child welfare if they are offered a position outside of child welfare with a higher salary. Also, 55.4 percent of participants (n = 56) would not leave child welfare, even when offered a job for the same salary with less stress. Additionally, 64.8 percent of participants (n = 54) believed that the personal and professional benefits do not outweigh the difficulties and frustrations of working in child welfare. Forty nine percent of participants (n = 53) are not actively seeking another employment while 47.2 percent of participants are actively seeking employment outside of child welfare. Furthermore, 64.4 percent of participants (n = 59) believed that the personal and professional gratification of working in child welfare is not greater than those in other professions. Forty five percent of participants (n = 51) are not thinking about quitting their job in child welfare, whereas 41.1 percent are thinking of quitting their job in child welfare. Seventy six percent of participants (n = 67) reported that they are not committed to working in child welfare. Eight percent of participants (n = 50) reported they strongly agree or agree that their intention to remain employed in child welfare is stronger than that of most of their colleagues. Forty four percent neither agreed nor disagreed with this statement, whereas 48 percent of participants reported their intent to remain employed in child welfare is not as strong than that of most of their colleagues.

Hypothesis number one, there is a relationship between having a mentor and child welfare social workers' levels of job satisfaction. The result anticipated there was a significant relationship between having a mentor and

child welfare workers' job satisfaction. An independent sample T-Test was completed to compare mean scores. No significant difference was found between the variables; therefore, hypothesis one was not supported by the data.

Hypothesis number two, there is a relationship between having a mentor and child welfare social workers' intention to remain employed in child welfare. An independent sample T-Test was completed to compare mean scores. No significant difference was found between the variables; therefore, hypothesis two was not supported by the data.

A Pearson R Correlation Test was conducted to test the relationship between mentoring and the factors influencing job satisfaction and intention to remain employed in child welfare. The significant relationships found were between: having a mentor and social workers feeling that their jobs are important to society (r = .030), having a mentor and being happy as a child welfare social worker (r = .047), having a mentor and thinking about quitting (r = .024), and having a mentor and having a helpful supervisor (r = .007). Significant correlations were found between some factors of the dependent variable job satisfaction and some factors of the dependent variable intention to remain employed in child welfare. Specifically, having a helpful supervisor is positively correlated to having a mentor r(78) = .283, p < .01. There is a strong correlation between finding enjoyment in the job and feelings of making a difference in people's lives r(78) = .464, p < .01, able to provide help to people

in need r(78) = .448, p < .01, perception of job as important to society r(78) = .227, p < .05, having helpful coworkers r(78) = .464, p < .01, having helpful supervisors r(78) = .339, p < .01, and being happy at Children Family Services r(78) = .688, p < .01.

A significant correlation was found between finding enjoyment in job and the following factors of the dependent variable intention to remain employed in child welfare: leave child welfare if offered a job for the same salary but with less stress r(54) = .199, p < .05, the personal and professionals benefits outweighs the difficulties and frustrations of working in child welfare r(52) = -.235, p < .05, actively seeking another employment r(51) = -.290, p < .05, the feeling of personal and professional gratification of working in child welfare to be greater than those in other professions r(57) = -.248, p < .05, social workers' commitment to working in child welfare even though it can be quite stressful at times r(65) = -.249, p < .05 and social workers' intention to remain employed in child welfare is stronger than most of their colleagues r(48) = -.369, p < .01.

A significant correlation was found between social worker's feelings that their jobs are making a difference in people's lives and the following factors of the dependent variable job satisfaction: finding enjoyment in the job r(78) = .463, p < .01, able to provide help to people who need my assistance r(78) = .650, p < .01, social workers' beliefs their work is important to society r(78) = .437, p < .01, having helpful coworker r(78) = .354, p < .01, having a

helpful supervisor r(78) = .364, p < .01, being happy at CFS r(78) = .631, p < .01.

A significant correlation was found between making a difference in people's lives and the following factors of the dependent variable intention to remain employed in child welfare: intent to remain in child welfare as my long-term professional career r(61) = -.215, p < .05, remain in child welfare even if offered a position with higher salary r(44) = -.190, p < .05, personal and professional benefits outweigh the difficulties and frustrations of working in child welfare r(52) = -.340, p < .01, committed to working in child welfare even with stress r(65) = -.239, p < .05.

A significant correlation was found between social worker's feelings that they provide help to people who need their assistance and the following factors of the dependent variable job satisfaction: finding enjoyment in their job r(78) = .448, p < .01, social workers' beliefs their work is important to society r(78) = .437, p < .01, having helpful coworkers r(78) = .469, p < .01, having a helpful supervisor, being happy at CFS r(78) = .544, p < .01.

A significant correlation was found between social workers' feelings that they are able to provide help to people in need and some factors of the dependent variable intention to remain employed in child welfare: intent to remain in child welfare as my long-term professional career r(61) = -.289, p < .01, personal and professional benefits outweigh the difficulties and frustrations of working in child welfare r(52) = -.292, p < .01, committed to

working in child welfare even with stress r(65) = -.239, p < .05, and social workers' intention to remain employed in child welfare is stronger than most of their colleagues r(48) = -.201, p < .05.

A significant correlation was found between social worker's beliefs that their job is important to society and some factors of the dependent variable job satisfaction: finding enjoyment in their job r(78) = .448, p < .05, making a difference in people's lives r(78) = .437, p < .01, providing help to people who need assistance r(78) = .469, p < .01. For the factor of the dependent variable intention to remain employed in child welfare; social workers' beliefs that their job is important to society, and the factor of job satisfaction, personal and professional benefits outweigh the difficulties and frustrations of working in child welfare, there is a significant correlation r(52) = -.242, p < .05.

A significant correlation was found between having helpful coworkers and the following factors of the dependent variable job satisfaction: finding enjoyment in their job r(78) = .285, p < .01, making a difference in people's lives r(78) = .354, p < .01, providing help to people who need assistance r(78) = .351, p < .01, having a helpful supervisor r(78) = .265, p < .01, and being happy at CFS r(78) = .238, p < .05.

A significant correlation was found between having helpful supervisors and the following factors of the dependent variable job satisfaction: finding enjoyment in their job r(78) = .339, p < .01, making a difference in people's lives r(78) = .354, p < .01, and being happy at CFS r(78) = .462, p < .01.

A significant correlation was found between having helpful supervisors and the following factors of the dependent variable intention to remain employed in child welfare: intent to remain in child welfare as my long-term professional career r(61) = -.194, p < .05, and personal and professional benefits outweigh the difficulties and frustrations of working in child welfare r(52) = -.245, p < .05.

A significant correlation was found between the dependent variable factor job satisfaction, happy at CFS, and the factor of job satisfaction, makings a difference in people's lives: r(78) = .631, p < .01.

A significant correlation was found between being happy at CFS and the following factors of the dependent variable intention to remain employed in child welfare: intent to remain in child welfare as my long-term professional career r(61) = -.296, p < .05, personal and professional benefits outweigh the difficulties and frustrations of working in child welfare r(52) = -.267, p < .05, committed to working in child welfare even with stress r(65) = -.392, p < .01, and intent to remain is stronger than that of their colleagues r(48) = -.285, p < .05.

Summary

The results obtained from the independent t-test and the Pearson R

Correlations tests were used to test the hypotheses. The results indicated that there was not significant relationship between the variables, therefore, the hypotheses were not supported by the data. The Pearson R Correlation test

indicated there was some significant relationships between having a mentor and some factors influencing job satisfaction and intention to remain employed in child welfare.

CHAPTER FIVE

DISCUSSION

Introduction

This chapter outlines the discussion of the results, limitations to the study, implications, and recommendations for future research. First it evaluates the hypotheses, and discusses the significant correlations found in the study. Next, this chapter explains the limitations to the present study. Lastly, it provides implications and recommendations for future research.

Discussion

No significant correlations were found when researchers analyzed the relationship between having a mentor and social workers' levels of job satisfaction. Therefore in the first hypothesis, there is a relationship between having a mentor and child welfare social workers' levels of job satisfaction which was not supported by the data. Similarly, there was no significant correlations between having a mentor and social workers' intention to remain employed in child welfare. With this information, the second hypothesis, there is a relationship between having a mentor and child welfare social workers' intention to remain employed in child welfare, which was also, not supported by the data.

Although the hypotheses were not supported by the data, the varying factors of both job satisfaction and intention to remain employed in child

welfare, had significant correlations when compared to each individual factors of the variables. Overall, the research shows that child welfare social workers are satisfied with their job as child welfare social workers. The vast majority of child welfare social workers in San Bernardino County, feel that their work is making a difference in people's lives, and that their job is important to society. In addition to having fulfillment in their work, social workers feel that their colleagues are helpful when they have job related issues. The data does not specify if pay, promotion opportunities, working environment, management, etc. (Hombrados-Mendieta & Cosono-Rivas, 2010) were the factors to the child welfare workers' job satisfaction, but it is evident from the high percentage that indicates social workers are satisfied with their employment in Children and Family Services in San Bernardino County.

In addition to child welfare social workers feeling satisfied with their employment in San Bernardino County, the T-Test results shows over half of the child welfare social worker intend to remain employed in child welfare, even if they are offered employment with less stress. However, more than half of participants believe that the personal and professional benefits do not outweigh the difficulties and frustrations of working in child welfare. In addition, only less than ten percent of participants intend to remain in child welfare as their long term professional career, however the data shows that the participants are not planning to quit in their immediate future. These results do

coincide with the literature that indicates the struggle to retain social workers in child welfare (Strand & Bosco-Ruggiero, 2010).

As aforementioned, the hypotheses were not supported by the data, however a Pearson R Correlation Test revealed that varying factors between the dependent variable of job satisfaction and intention to remain employed in child welfare, yielded strong correlations. Specifically, having a helpful supervisor was positively correlated to having a mentor. This can postulate that supervisors can be influential mentors. A third of participants indicated that their mentor was their supervisor. These outcomes align with previous studies (Howe & Daratsos, 2007; Chiller & Crip, 2012; Turner, 2000; Stevens-Roseman, 2009).

When isolating the factors of the dependent variable job satisfaction, the data showed there was a positive correlation between the individual factors of job satisfaction. These positive correlations support the literature which claims that the personal and organizational factors are pertinent to social workers' levels of job satisfaction (Depanfilis & Zlotnik, 2008).

By analyzing the factors of job satisfaction and its influence on the factors of the dependent variable intention to remain employed in child welfare, the data showed a negative correlation between the factors. These results indicate that although child welfare workers are happy in their place of employment, they still desire to work in another agency when offered more money, greater sense of autonomy, and various other benefits. These

outcomes align with the literature which stresses the importance that job retention is affected by social workers' commitment to the job, the agency, and the clients (Ellett, Ellis, Westbrook, & Dews, 2007).

Limitations

For several reasons, it is not plausible to generalize the findings from this study to all Children and Family Services (CFS) social workers. The main limitation to this study was the sample size. Approximately 400 surveys were sent out, only 96 were returned. This indicates a response rate of 24 percent. In addition to the low response rate, researchers had to discard 16 surveys because they were missing either an informed consent, or responses skewed the data.

One of the limitations of this study was the research methodology used. Because this study utilized correlation and T-Test tests, the researchers were not able to determine causality. Another limitation to this study was the instrument used to measure job satisfaction; the Job Satisfaction Survey for Child Welfare (JSSCW). This instrument was created by the researchers for this specific study, thus its validity and reliability has not been tested.

Another limitation in this study was the lack of responses towards the IRE-CW portion of the survey. Researchers could not indicate why so many responses were missing. Only half of the surveys were totally completed, which resulted in less responses, and thus affecting the outcomes of the results. The last limitation researchers experienced, was the modification to

the IRE-CW survey Likert Scale. Researchers modified the scale to keep consistency with the JSSCW scale. This modification could have had an effect on the data and results.

Recommendations for Social Work Practice, Policy and Research

Results of the present study are highly beneficial for the San Bernardino County Department of Children and Family Services. Although the hypotheses were not supported, the data collected indicated that the child welfare workers of San Bernardino County are highly satisfied with their job. Its recommended that San Bernardino County explores further strategies to increase social workers' level of intention to remain in child welfare. Additionally, researchers suggest that San Bernardino County implement a formal mentoring program for the child welfare social workers, similar to the established program developed by Orange County (Shrek, 2002). By enacting this formal program, it may help new social workers adjust to the duties of their job, increase job satisfaction, and encourage a stronger loyalty to the agency. Aside from the study's implications for San Bernardino County, these results can be used to support CalSWEC's research on mentoring program models for child welfare workers in California. These research results can motivate other social work researchers to design similar studies to explore this topic in other counties in California.

For further research, researchers recommend an individual study on child welfare social workers' intention to remain employed in child welfare, by including more focus on organizational factors such as job promotion opportunities, rewards systems, and salary. Also there should be more consideration and focus on formalized mentoring programs by conducting a study on this topic.

Researchers recommend to child welfare agencies to include effective mentoring strategies in the training, supervision, and professional development of new and veteran social workers. It is also recommend for child welfare agencies to promote social workers' job satisfaction by increasing their perception of self-efficacy in their jobs, job salaries, benefits and incentives, quality of supervision, and by decreasing their levels of emotional exhaustion.

Researchers also recommend more legislations that protects the dignity of the social work profession. In fact, it is necessary that social workers feel more proud of their titles and the significant impact that they have in society. One of this legislation could be the title protection for social workers (AB 252) which provides "prohibits an individual from representing himself or herself as a social worker, unless he or she possesses certain academic qualifications" (AB 252). Furthermore, researchers also recommend to create more laws that entitle social workers more financial benefits such as better retirement plans so they can feel more motivated to stay in the child welfare field for a longer time.

Conclusions

This study explored the relationship between mentoring and social workers' job satisfaction and social workers' intention to remain employed in child welfare. The present study revealed no correlation between informal mentoring and social workers' levels of job satisfaction and their intentions to remain employed in child welfare in San Bernardino County. The study also revealed that although child welfare workers were highly satisfied at their jobs they still intend to leave child welfare if they were presented with a better job opportunity. These findings cannot be generalized because this study was designed specifically for San Bernardino County and the validity and reliability of the JSS-CW is unknown. Further research on mentorship, more specifically formalized mentoring programs, is recommended.

APPENDIX A SAN BERNARDINO COUNTY APPROVAL LETTER



CHILDREN AND FAMILY SERVICES

150 South Lena Road San Bernardino CA 92415-0515

COUNTY OF SAN BERNARDINO HUMAN SERVICES

RANDALL L. SCHULZ DIRECTOR

January 14, 2014

Dr. L. Smith Department of Social Work California State University San Bernardino 5500 University Parkway San Bernardino, CA 92407-2397

Dear Dr. Smith:

This letter serves as notification to the Department of Social work at California State University San Bernardino that Jovanni Holloway and Aleida Murcia have obtained consent from Bernardino County Children and Family Services to conduct the research project entitled Relationship Between Mentorship and Social Worker's Job Satisfaction and Intention to Remain Employed in Child Welfare.

Sincerely,

Laura Lee, Deputy Director

GREGORY C DEVEREAUX ROBERT A LOVINGOOD. First District JAMES RAMOS. Third District Civil's Exceptive Officer JANICE RUTHERFORD Second District GARY C. OVITT. Fourth District JOSIE GONZALES. Fifth District

APPENDIX B INFORMED CONSENT

INFORMED CONSENT

Relationship between mentorship and job satisfaction and mentorship and intention to remain employed in child welfare among child welfare workers in San Bernardino County.

The study in which you are being asked to participate is designed to explore the relationship between mentorship and child welfare workers' job satisfaction as well as mentorship and child welfare workers' intention to remain employed in child welfare in San Bernardino County. This study is being conducted by Aleida Murcia, MSW Student, CSUSB, and Jovanni Holloway, MSW Student, CSUSB under the supervision of Dr. Zoila Gordon. This study has been approved by the School of Social Work Sub-Committee of the Institutional Review Board California State University, San Bernardino.

PURPOSE: This study is seeking to explore if having a mentor has a relationship with child welfare workers' job satisfaction and intention to remain employed in child welfare in San Bernardino County.

DESCRIPTION: Your participation will consist of taking a survey online that takes from 15 to 20 minutes and has 43 questions. You have been identified to participate in this study because you are currently working for the San Bernardino, Department of Children and Family Services.

PARTICIPATION: Your participation in this study is voluntary. A refusal to participate will involve no penalty of loss of benefits to which you are otherwise entitled. You may discontinue or withdraw your consent to participate in this study at any time without penalty or loss of benefits to which you are otherwise entitled.

CONFIDENTIALITY: This is a confidential study, and all researchers will diligently work to ensure that any identifying information provided will be kept confidential. The informed consent form and any other identifying information will be kept in a locked office. Upon completion of this study, all data collected will be properly locked with a password and kept for five years.

DURATION: The surveys is expected to take 15-20 minutes.

RISKS: There are not foreseeable risks or discomforts to you if you participate in this study.

BENEFITS: The findings of the research may assist San Bernardino County to identify areas for future training and support.

CONTACT: If you have questions about the research or your rights as participant, please contact Dr. Zoila Gordon at zgordon@csusb.edu, and/or (909)537-7222.

RESULTS: Results of this study can be located in the CSUSB Library after September, 2014.

CONFIRMATION STATEMENT: I have read the information above and agree to participate in your study.

SIGN: Place check the box below if you agree to the conditions of this study and volunteer to participate.

Mark:	Date:

APPENDIX C DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHIC QUESTIONNAIRE

Part I: Demographic Information

1.	 a. North Desert b. Western c. Eastern d. Central e. Countywide (PRD, PDD, Court, PERC)
2.	What is your gender? a. Male b. Female c. Transgender d. Other, please indicate:
3.	What is your age range? a. 20-29 years b. 30-39 years c. 40-49 years d. 50-59 years e. 60 years or older
4.	What is the highest level of education you have attained? a. High School Diploma b. Associate's Degree, please indicate specific degree: c. Bachelor's Degree, please indicate specific degree: d. Master's Degree, please indicate specific degree: e. Doctorate Degree, please indicate specific degree:
5.	How many years have you worked for San Bernardino County CFS? a. Less than 3 years b. 3-10 years c. 11-20 years d. 21-30 years e. More than 30 years

Created by Aleida Murcia & Jovanni Holloway

APPENDIX D MENTORING QUESTIONNAIRE

MENTORING QUESTIONNAIRE

Part II: Mentoring Questionnaire

Please answer each question by selecting the most appropriate answer

- 6. Have you ever had a person you consider a mentor at San Bernardino County CFS?
 - a. yes
 - b. no
- 7. What was the role of the person you consider to be your mentor?
 - a. Supervisor
 - b. Veteran worker (someone who has worked more years than you have)
 - c. Colleague (someone who has worked about the same number of years as you have)
 - d. Other: please indicate:
- 8. How long did/have you worked with this mentor?
 - a. Less than 5 years
 - b. 6-10 years
 - c. 11-15 years
 - d. 16-20 years
 - e. More than 20 years

APPENDIX E JOB SATISFACTION SURVEY FOR CHILD WELFARE (JSS-CW) QUESTIONNAIRE

JOB SATISFACTION SURVEY FOR CHILD WELFARE (JSS-CW) QUESTIONNAIRE

Part III: JOB SATISFACTION SURVEY FOR CHILD WELFARE (JSS-CW) Please click on the number that most accurately reflects your personal views and opinions.

SCALE: 1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Neither Agree nor Disagree 4=Agree (A) 5 = Strongly Agree (SA)

		<u>SD</u>	<u>D</u>	<u>AD</u> 3	<u>A</u>	<u>SA</u> 5
1	. I find enjoyment in my job	1	2	3	4	5
2	. By serving as a social worker, I feel I am making a difference in people's lives	1	2	3	4	5
3	. As a Social Worker I am able to provide help to people who need my assistance	1	2	3	4	5
4	. I believe that my work as a social worker/case manager is important to Society	1	2	3	4	5
5	. My coworkers are helpful when I have job-related problems	1	2	3	4	5
6	. My supervisor is helpful when I have job-related problems	1	2	3	4	5
7	. I feel happy being a child welfare social worker	1	2	3	4	5

Created by Aleida Murcia & Jovanni Holloway

APPENDIX F INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE (IRE-CW) QUESTIONNAIRE

INTENTION TO REMAIN EMPLOYED IN CHILD WELFARE (IRE-CW) QUESTIONNAIRE

Part IV: Intention to Remain Employed in Child Welfare (IRECW)

This section of the survey asks you to make a series of judgments about your personal attitudes and beliefs. The best answer is the one that most accurately reflects your personal views and opinions. Please respond to each statement using the scale provided below. Click on the number for each item that best corresponds to the strength of your disagreement or agreement.

SCALE: 1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Agree (A) 4 = Strongly Agree (SA)

8.	I intend to remain in child welfare as my long-term professional career.	<u>SD</u> 1	<u>D</u> 2	<u>A</u> 3	<u>SA</u> 4
9.	I will remain in child welfare even though I might be offered a position outside of child welfare with a higher salary.	1	2	3	4
10.	I would leave child welfare work tomorrow if I was offered a job for the same salary but with less stress.	1	2	3	4
11.	The personal and professional benefits outweigh the difficulties and frustrations of working in child welfare.	1	2	3	4
12.	I am actively seeking other employment.	1	2	3	4
13.	I feel the personal and professional gratification of working in child welfare to be greater than those in other professions.	1	2	3	4
14.	I frequently think about quitting my job.	1	2	3	4
15.	I am committed to working in child welfare even though it can be quite stressful at times.	1	2	3	4
16.	My intention to remain employed in child welfare is stronger than that of most of my colleagues.	1	2	3	4

Ellett, A. J. (2000). *Intent to remain employed in child welfare* (IRE-CW). University of Georgia

APPENDIX G PERMISSION TO UTILIZE SURVEY

PERMISSION TO UTILIZE SURVEY

Permission to use instrument IRE-CW (2)

Nov 5, 2013

Hello Aleida,

I am granting you permission to use the Intent to Remain Employed-Child Welfare measure as long as attribution is made that Alberta Ellett is the developer of the IRE-CW. I would like to find out about the results of your study as we have found that professional commitment of the Human Caring measure has a much stronger correlation to intent to remain than job satisfaction (JS), although JS was also positively correlated with IRE. Quality and positive supervision (perhaps similar to your mentoring) was also a strong correlate of IRE in two large statewide studies that we completed. I hope your study goes well.

Stay in touch.

--

Alberta Ellett, PhD University of Georgia School of Social Work Tucker Hall Athens, GA 30602 Ph: 706-542-5409

Fax: 706-542-6644 Email: aellett@uga.edu

APPENDIX H DEBRIEFING STATEMENT

Study of Mentorship in Child Welfare Services Debriefing Statement

This study you have just completed was designed by Aleida Murcia and Jovanni Holloway to explore the relationship between mentorship and job satisfaction, and mentorship and intention to remain employed in child welfare among child welfare workers in San Bernardino County. In this study two variables were measured: job satisfaction and intention to remain employed in child welfare. In previous literature, a relationship has been shown to exist between mentorship, job satisfaction, and intention to remain employed in child welfare.

Thank you for your participation and willingness to take this online survey. If you have any questions about the study, please feel free to contact Dr. Zoila Gordon at zgordon@csusb.edu, and/or (909)537-7222. If you would like to obtain a copy of the group results of this study, please contact Dr. Gordon at the end of Summer Quarter of 2014.

APPENDIX I
TABLES

Table 1. Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	67	83.8	84.0	84.0
Male	13	16.3	16.0	100.0
Total	80	100.0	100.0	

Table 2. Age

	Frequency	Percent	Valid Percent	Cumulative Percent
20-29	9	11.1	11.5	11.5
30-39	25	30.9	32.1	43.6
40-49	15	18.5	19.2	62.8
50-59	18	23.5	24.4	87.2
60 or older No response Total	10 2 80	12.3 3.7 100.0	12.8 100.0	100.0
. otal		100.0		

Table 3. Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Bachelor's Degree	11	13.8	13.8	13.8
Masters' Degree	66	82.5	82.5	96.3
Doctorate Degree	3	3.8	3.8	100.0
Total	80	100.0	100.0	

Table 4. Geographic Region

	Frequency	Percent	Valid Percent	Cumulative Percent
North Desert	12	15.0	15.0	15.0
Western	18	22.5	22.5	37.5
Eastern	20	25.0	25.0	62.5
Central	17	21.3	21.3	83.8
Countywide (PRD,PDD, Court, PERC)	13	16.3	16.3	100.0
Total	80	100.0	100.0	

Table 5. Length of Employment

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 3 years	22	27.5	27.8	27.8
3 to 10 years	28	35.0	35.4	63.3
11 to 20 years	24	30.0	30.4	93.7
21 to 30 years	5	6.3	6.3	100.0
Total	79	98.8	100.0	
No response	1	1.3		
	80	100.0		

Table 6 Have a mentor

	Frequency	Percent	Valid Percent	Cumulative Percent
yes	55	68.8	68.8	68.8
no	25	31.3	31.3	100.0
Total	80	100.0	100.0	

Table 8. Job Satisfaction

JOD Satisfaction	
I find enjoyment in my job I find enjoyment in my job n = 72	
Disagree	3
Neither Agree nor Disagree	6
Agree	46
Strongly Agree	23
By serving as a social worker, I feel I am making a difference in people's lives n = 80	
Neither Agree nor Disagree	4
Agree	41
Strongly Agree	35
As a Social Worker I am able to provide help to people who need my assistance n = 80	
Disagree	1
Neither Agree nor Disagree	5
Agree	43
I believe that my work as a social worker/case manager is important to society n = 80	
Neither Agree nor Disagree	2
Agree	31
Strongly Agree	47
My coworkers are helpful when I have job-related problems n = 80	
Neither Agree nor Disagree	3
Agree	29
Strongly Agree	48
My supervisor is helpful when I have job-related problems N = 80	
Strongly Disagree	1
Disagree	3
Neither Agree nor Disagree	6
Agree	37
Strongly Agree	33
I feel happy being a child welfare social worker N = 80	
Disagree	2
Neither Agree nor Disagree	12
Agree	35
Strongly Agree	29

Table 8. Intention to Remain Employed in Child Welfare

I intend to remain in child welfare as my long-term professional career n = 63	
Strongly Disagree	11
Disagree	32
Neither Agree nor Disagree	15
Agree	4
Strongly Agree	1
I will remain in child welfare even though I might be offered a position outside n = 46	
Strongly Disagree	6
Disagree	13
Neither Agree nor Disagree	14
Agree	6
Strongly Agree	7
I would leave child welfare work tomorrow if I was offered a job for the same salary but with less stress n = 56	
Strongly Disagree	16
Disagree	15
Neither Agree nor Disagree	15
Agree	7
Strongly Agree	3
The personal and professional benefits outweigh the difficulties and frustrations of working in child welfare n = 54	
Strongly Disagree	4
Disagree	31
Neither Agree nor Disagree	11
Agree	4
Strongly Agree	4
I am actively seeking other employment n = 53	
Strongly Disagree	21
Disagree	5
Neither Agree nor Disagree	2
Agree	10
Strongly Agree	15

I feel the personal and professional gratification of working in child welfare to be greater than those in other professions n=59	
Strongly Disagree	4
Disagree	34
Neither Agree nor Disagree	15
Agree	4
Strongly Agree	2
I frequently think about quitting my job n=51	
Strongly Disagree	16
Disagree	7
Neither Agree nor Disagree	7
Agree	12
Strongly Agree	9
I am committed to working in child welfare even though it can be quite stressful at times n=67	
Strongly Disagree	8
Disagree	43
Neither Agree nor Disagree	14
Agree	2
My intention to remain employed in child welfare is stronger than that of most of my colleagues $n=50$	
Strongly Disagree	6
Disagree	18
Neither Agree nor Disagree	22
Agree	3
Strongly Agree	1

REFERENCES

- Braddock, D., & Mitchell, D. (1992). Residential services and developmental disabilities in the United States: A national survey of staff compensation, turnover and related issues. Washington, DC: American Association on Mental Retardation.
- Camargo, C. C., & Kelly, J. M. (2006). Supervisor as informal mentor:

 Promoting professional development in public child welfare. *The Clinical Supervisor*, 25(1/2), 127-146.
- Chen, S. Y., & Scannapieco, M. (2009). The influence of job satisfaction on child welfare worker's desire to stay: An examination of the interaction effect of self-efficacy and supportive supervision. *Children and Youth Services Review, 32*, 482-486.
- Children and Family Services (CFS), San Bernardino. (2013). *Handbook of policies and operations*. San Bernardino, CA: Author.
- Chiller, P., & Crisp, B. R. (2012). Professional supervisor: A work force retention strategy for social work? *Australian Social Work, 65*(2), 232-242.
- Collins, P. (1994). Does mentorship among social workers make a difference? An empirical investigation of career outcomes. *Social Work, 39*(4), 413-419.
- Collins, P., Kamya, H. A., & Tourse, R. (1997). Questions of racial diversity and mentorship: An empirical exploration. *Social Work, 42*(2), 145-152.
- DePanfilis, D., & Zlotnik J. L. (2008). Retention of front-line staff in child welfare: A systematic review of research. *Children and Youth Services*, 30, 995-1008.
- Drake, B., & Yamada, G. (1996). A structural equation model of burnout and job exit among child protective services workers. *Social Work Research*, *20*(3), 179-187.
- Ellett, A. J. (2000). *Intent to remain employed in child welfare* (IRE-CW). University of Georgia
- Ellett, A. (2009). Intentions to remain employed in child welfare: The role of human caring, self-efficacy beliefs, and professional organizational culture. *Children and Youth Services Review*, *31*, 78-88.

- Ellet, A., Ellis, J., Westbrook, T. M., & Dews, D. (2007). A qualitative study of 369 child welfare professionals' perspectives about factors contributing to employee retention and turnover. *Children and Youth Services Review*, 29, 264-281.
- Gassman, J., & Gleason, M. (2011). The importance of mentoring relationships among youth workers. *New Directions for Youth Development*, 55-76.
- Hamilton, M. A., & Hamilton, S. F. (2002). Why mentoring in the workplace. *New Directions for Youth Development*, *93*, 59-89.
- Healy, C. C., & Welchert, A. J. (1990). Mentoring relations: A definition to advance research and practice. *Educational Researcher*, 19(9), 17-21.
- Hombrados-Mendieta, I., & Cosono-Rivas, F. (2011). Burnout, workplace support, job satisfaction and life satisfaction among social workers in Spain: A structural equation model. *International Social Work, 56*(2), 228-246.
- Howe, J., & Daratsos, L. (2007). Zelda Foster: A social work mentor's legacy. Journal of Social Work in End-of-Life and Palliative Care, 3(1), 47-56.
- Lesser, J., & Pope, D. (2011). *Human behavior and the social environment*. Upper Saddle River, NJ: Pearson.
- Manz, C., & Sim, J. H. (1982). Vicarious learning: The influence of modeling on organizational behavior. *Academy of Management Review*, 6(1), 105-123.
- Mijares, L., Baxley, S., & Bond, M. L. (2013). Mentoring: A concept analysis. The Journal of Theory Construction and Testing, 17(1), 23-28.
- Mor Barak, M. E., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare workers, social work, and other human service employees: What can we learn from past research? A review and metaanlysis. *Social Service Review*, 75(4), 625-661.
- Pare, A., & Le Maistre, C. (2006). Active learning in the workplace: Transforming individuals and institutions. *Journal of Education and Work*, 19(4), 363-381.
- Pereira, A., Valentine, D., & Wilson, P. P. (2002). Perceptions of new social work faculty about mentoring experiences. *Journal of Social Work Education*, 38(2), 317-333.

- Rolfe-Flett, A. (2002). *Mentoring in Australia*. Pearson Education, Australia: Sydney.
- Saane, N., Sluiter, J. K., Verbeek, J. H. A. M., & Fringes-Dresen, M. H. W. (2003). Reliability and validity of instruments measuring job satisfaction: A systematic review. *Occupational Medicine*, 53, 191-200.
- Shim, M. (2010). Factors influencing welfare employee's turnover: Focusing on organizational culture and climate. *Children and Youth Services Review*, 32, 847-856.
- Shrek, J. (2001). *Exploring mentoring program models for child welfare workers*. California Social Work Education Center. Berkley, CA.
- Smith, B. D. (2005). Job retention in child welfare: Effects of perceived organizational support, supervisor support, and intrinsic job value. *Children and Youth Services Review*, 27, 153-169.
- Smith, D. B., & Shields, J. (2013). Factors related to social service workers' job satisfaction: Revisiting Herzberg's motivation to work. *Administration in Social Work*, *37*, 189-198.
- Stevens-Rosemam, E. S. (2009). Older mentors for new workers: Impact of a worker-driven intervention on later life satisfaction. *Journal of Workplace Behavioral Health*, *24*, 419-426.
- Strand, V. C., & Bosco-Buggiero, S. (2010). Initiating and sustaining a mentoring program for child welfare staff. *Administration in Social Work,* 34, 49-79.
- Strolin-Goltzman, J. (2010). Improving turnover in public child welfare: Outcomes from organizational intervention. *Children and Youth Services Review*, *32*, 1388-1395.
- Turner, B. (2000). Supervision and mentoring in child and family social work: The role of the first-line manager in the implementation of the post-qualifying framework. *Social Work Education*, *19*(3), 231-240.
- Van Saane, J. K., Sluiter, J. H., & Frings-Dresen. (2003). Reliability and validity of instruments measuring job satisfaction-a systematic review. *Occupational Medicine*, *53*, 191-200.
- Vinokur-Kaplan, D. (1991). Job satisfaction among social workers in public and voluntary child welfare agencies. *Child Welfare*, *40*(1), 81-91.

- Wilson, S., & Tilse, C. (2006). Mentoring the statutory child protection manager—a strategy for promoting proactive, outcome focused management. *Social Work Education*, 25(2), 177-188.
- Wright, R. G. & Werther, W. B. Jr. (1991). Mentors at work. *The Journal of Management Development*, 10(3), 25-32.

ASSIGNED RESPONSIBILITIES PAGE

This was a two-person project where authors collaborated throughout.

However, for each phase of the project, certain authors took primary responsibility. These responsibilities were assigned in the manner listed below.

1. Data Collection:

Team Effort: Aleida Murcia & Jovanni Holloway

2. Data Entry and Analysis:

Team Effort: Aleida Murcia & Jovanni Holloway

- 3. Writing Report and Presentation of Findings:
 - a. Introduction and Literature

Team Effort: Aleida Murcia & Jovanni Holloway

b. Methods

Team Effort: Aleida Murcia & Jovanni Holloway

c. Results

Team Effort: Aleida Murcia & Jovanni Holloway

d. Discussion

Team Effort: Aleida Murcia & Jovanni Holloway