

Curriculum Vitae
Allison L. West, MSW, LCSW-C

Education

- 2015 **Ph.D.** School of Social Work, University of Maryland, Baltimore
Dissertation title: “The Benefits and Costs of Caring: A Mixed-Methods Study of Early Head Start Home Visitors”
Chair: Lisa Berlin, Ph.D.
- 2000 **Master of Social Work**, University of Maryland, Baltimore
- 1996-97 **Graduate Coursework**, Psychology, Washington University
- 1994 **Bachelor of Science**, Psychology, Washington and Lee University

Research Interests

- Maternal and infant mental health
- Primary prevention
- Mixed methods
- Workforce development
- Interdisciplinary collaboration
- Dissemination & implementation

Competitive Grants and Awards

- 2014-2015 **Early Care and Education Research Scholars: Head Start Graduate Student Research Grant (HHS-2014-ACF-OPRE-YR-0785)**, Administration for Children and Families Office of Planning, Research, and Evaluation (\$25,000)
- 2013 **Home Visiting Research Network Early Career Scholar**
- Competitive award to attend the Pew National Summit on Quality in Home Visiting and receive tailored mentoring from national experts in home visiting research

Employment

- 2011 – 2015 **Graduate Research Assistant**
University of Maryland School of Social Work (UMSSW)
Project: Partners for Parenting (P4P)
Funded by the Administration for Children and Families, 2011-2016
Co-PIs: Lisa Berlin and Brenda Jones Harden
- Assisted in all aspects of a multi-site randomized controlled trial investigating the effects of home-based Early Head Start with and without a supplemental, attachment-based intervention, the *Attachment and Biobehavioral Catch-Up Program (ABC)*
 - Provided clinical supervision to MSW-level ABC Parenting Coach
- 2013 – 2014 **Graduate Research Assistant**
The Institute for Innovation and Implementation, UMSSW
Project: Maryland LAUNCH Home Visiting Training Evaluation
- Assisted with the evaluation of the Home Visitor Infant Mental Health Training component of Maryland LAUNCH; collected and analyzed focus group data; analyzed trainee satisfaction as well as pre- and post-test data; prepared results for dissemination

- 8/03 – 6/11 **Director of Child Abuse Prevention**
 (Manager from 8/05 – 6/10, Coordinator from 8/03 – 7/05)
 Catholic Charities of Baltimore
- Developed, implemented, and evaluated a continuum of awareness, education and prevention programs for adults and children
 - Collaborated with public and private agencies to promote abuse prevention and trauma-informed care throughout diverse systems
 - Facilitated workshops for the Illuminations and Child Safe programs, nationally
 - Coordinated research projects with external agencies, including the University of Maryland School of Social Work, the University of Baltimore Criminal Justice Program, and the Baltimore County Department of Social Services Juvenile Sex Offender Treatment Program
 - Created and managed an innovative national online training program completed by over 20,000 staff and volunteers at youth-serving organizations, as well as parents, foster parents, and other caregivers
 - Maintained funding, managed personnel
- 8/00 – 9/02 **Social Worker**
 Kennedy Krieger High School, Baltimore, MD
- Conducted individual and group psychotherapy for students with multiple complex learning and behavioral challenges as indicated on their Individualized Education Plans
 - Provided case management services and prepared annual psychosocial assessments and quarterly progress reports to inform parents, local jurisdictions, and collaborating agencies of students' progress
- 6/00 – 8/00 **Research Assistant**
 University of Maryland Center for School Mental Health
- Assisted in the creation of a treatment manual for sexually abused girls
- 9/98 – 8/99 **Research Assistant**
 University of Maryland Child Welfare Research and Training Group
- Conducted statistical analyses of state-wide Department of Social Services front-line caseworker surveys and TCA (Temporary Cash Assistance) customer assessment profiles; assisted in the preparation of reports to the Maryland Department of Human Resources (DHR)
- 8/97 – 8/98 **Research Assistant**
 Regional Economic Studies Institute, Towson, MD
- Evaluated similarities and differences among former and current welfare recipients; trained and supervised interviewers to administer human service surveys using computer-assisted telephone interviews (CATI); assisted in constructing surveys; prepared reports for clients
- 8/96 – 8/97 **Research Assistant**
 Washington University Depts. of Psychiatry and Radiology, St. Louis, MO
- Administered structured telephone interviews for a study assessing breast cancer knowledge and screening compliance in African American women over age 50 who were receiving Medical Assistance
 - Interviewed and tested abstinent alcoholics and their families as part of a multi-center study on the genetics of alcoholism; assisted in the preparation of research proposals and grant applications

1/95 – 7/96 **Research Assistant**

National Rehabilitation Hospital, Washington, DC

- Administered neuropsychological tests in an investigation of the effects of and recovery from mild closed head injury; conducted literature reviews and assisted in the preparation of grant proposals

Peer-Reviewed Manuscripts

West, A. (2015). Associations among adult attachment style, burnout, and compassion fatigue in health and human service workers: A systematic review. *Journal of Human Behavior in the Social Environment*. Advance online publication. doi:10.1080/10911359.2014.988321

Finger, S., Gehr, S.E., & West, A.L. (2001). 'Dual brain action': The case studies of Lewis C. Bruce in the 1890s. *History of Psychiatry*, 12(45), 59-71.

Reports

IOM (Institute of Medicine) and NRC (National Research Council). (2013). *New Directions in child abuse and neglect research*. Washington, DC: The National Academies Press (listed consultant).

Born, C., Charlesworth, L., & West, A. (1999). *Assessment: An overview*. Prepared for the Family Investment Administration, Maryland Department of Human Resources.

Invited Articles

West, A. & Jones Harden, B. (2015, January). Mindful moments: Using reflective practice and reflective supervision to enhance infant and early childhood home visitation. *Maternal, Infant, and Early Childhood Home Visiting Technical Assistance Coordinating Center E-Newsletter*. Retrieved from <http://campaign.r20.constantcontact.com/render?ca=ae34d8eb-dafb-4992-b539-ef009d36a947&c=7d556780-75e0-11e3-bc76-d4ae527b77f8&ch=7dd34a10-75e0-11e3-bd2f-d4ae527b77f8>

Manuscripts in Preparation

West, A., Miller, S., & Leitch, J. *Professional socialization and attitudes towards interprofessional collaboration among graduate social work students*. Manuscript submitted for publication.

West, A., Berlin, L. & Jones Harden, B. *Associations among adult attachment style, parenting stress, and parenting behavior in low-income Latina mothers*. Manuscript in preparation.

West, A., Aparicio, L., Berlin, L., & Jones Harden, B. *Partners for Parenting: Home visitor perceptions of a supplemental parenting program in Early Head Start*. Manuscript in preparation.

Berlin, L., Martoccio, T. L., West, A., et al. *Associations among maternal abuse history, receipt of early home visiting, and infant-mother attachment*. Manuscript in preparation.

Refereed Conference Presentations

West, A., Shdaimah, C., Ahn, H., Ha, Y., Houser, L., Kahn, J., & Ros Pilarz, A. *Research and advocacy in early child care and education: Where is social work?* Roundtable session to be presented at the 20th Annual Conference of the Society for Social Work Research, Washington, D.C.

West, A., Berlin, L., Jones Harden, B., & Aparicio, L. (May 29, 2015). *Real-world sustainability of Early Head Start + parenting: Home visitors' strengths, needs, and perceptions*. Paper symposium presented at the 2015 Society for Prevention Research 23rd Annual Meeting, Washington, D.C.

West, A., Berlin, L. & Jones Harden, B. (March 21, 2015). *Associations among adult attachment style, parenting stress, and parenting behavior in low-income Latina mothers*. Poster presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Deal, K. & West, A. (November 2, 2013). *Social work supervision of multidisciplinary paraprofessionals*. Roundtable session presented at the 57th Annual Program Meeting of the Council on Social Work Education, Dallas, TX.

West, A., Miller, S., & Leitch, J. (November 1, 2013). *Professional socialization and attitudes towards interprofessional collaboration among graduate social work students*. Poster presented at the 57th Annual Program Meeting of the Council on Social Work Education, Dallas, TX.

Teaching Interests

- Social science theory
- Research methods
- Social work practice
- Intervention & prevention research

Teaching Experience

Fall 2015	Adjunct Instructor , Towson University FMST 201: Family Resources (Undergraduate course)
Spring 2015	Adjunct Instructor , University of Maryland School of Social Work SOWK 670: Social Work Research – Hybrid Format (MSW course)
Fall 2014	Adjunct Instructor , University of Maryland School of Social Work SOWK 645: Human Behavior and the Social Environment (MSW course)
Spring 2014	Teaching Assistant , University of Maryland School of Social Work SOWK 645: Human Behavior and the Social Environment - Hybrid Format (MSW course)
2006-2008	Field Instructor for MSW students , Catholic Charities of Baltimore

Recent Presentations & Training Workshops

- 2015 CEU Workshop: *Learning to Look: Formal Art Observation as a Tool for Social Workers*, Baltimore, MD
- 2014 Rosemount Center Early Head Start, *Using Relationship-Based Practice to Support Adult Learning*, Washington, D.C.
- 2011 CUE Center for Missing Persons National Roundtable, Wilmington, NC, *Illuminations**
St. Joseph's Child Protection Task Force, Grand Rapids, MN, *Illuminations*
Maryland State Council on Child Abuse and Neglect, *Illuminations*
Maryland Children's Justice Act Committee, *Illuminations*
Maryland Family Violence Council, *Illuminations*
- 2010 Baltimore County Police Dept. Child Abuse and Neglect Seminar, *Illuminations*
Maryland Criminal Injuries Compensation Board, *Illuminations*
Archdiocese of Baltimore, New Faculty Orientation, *Child Sexual Victimization*
St. Mary's Seminary, *Child Sexual Victimization*
- 2009 One Child, Many Hands Conference, Philadelphia, PA, *Illuminations*
National Child Advocacy Center Conference, Huntsville, AL, *Illuminations*
University of Maryland Department of Psychiatry, Baltimore, MD, *Illuminations*

**Illuminations* is a national training program designed to increase empathy and understanding among professionals who work with victims of child sexual abuse and their families.

Service

- 2015 *Journal Manuscript Reviewer, Advances in Social Work*
- 2013-2015 *PhD Student Panelist*, School of Social Work, University of Maryland, Baltimore
○ Presented information about the PhD program to prospective students
- 2013 *Reviewer*, Zero to Three Core Competency Workgroup
○ First 5 LA Prenatal Through Three Workforce Development Project: *Alignment of Prenatal Through 3 Core Competency Domains with Work Sector Domains*

Professional Affiliations

Society for Prevention Research ▪ Society for Research on Child Development ▪ Society for Social Work Research ▪ National Association of Social Workers ▪ Council on Social Work Education

Abstract

Title of Dissertation: The Benefits and Costs of Caring: A Mixed Methods Study of Early Head Start Home Visitors

Allison L. West, Doctor of Philosophy, 2015

Dissertation Directed by: Lisa J. Berlin, Ph.D., Associate Professor, School of Social Work, University of Maryland, Baltimore.

Early Head Start (EHS) home visitors are the lynchpin connecting program goals with service outcomes, yet scant attention has been paid to issues concerning the home visiting workforce. In particular, the ways in which EHS home visitors are affected by prolonged relationships with low-income, high risk families are not well understood. Guided by a strengths-based, developmental-ecological framework, this mixed methods study examined the influence of individual, occupational, and organizational factors on compassion satisfaction, secondary traumatic stress, and burnout. Home visitor compassion satisfaction, secondary traumatic stress, and burnout were also examined as predictors of (a) home visitor turnover and (b) family engagement.

In the quantitative phase of this study, 77 home visitors from Maryland and the District of Columbia completed pencil and paper surveys that assessed individual, occupational, and organizational characteristics that prior research and theory have shown are associated with compassion satisfaction, secondary traumatic stress, and burnout. Survey data from a subsample of 27 home visitors were linked with family-level data from the Partners for Parenting study in order to examine associations between home visitor compassion satisfaction, secondary traumatic stress, burnout, and EHS family demographic and psychological risk. Home visitor survey data were also linked to home visitor turnover at 6 months post-survey and with indicators of EHS family engagement.

In the qualitative phase, seven home visitors from the larger sample completed semi-structured interviews addressing occupational stress.

EHS home visitors in this sample evidenced moderate to high compassion satisfaction and low to moderate secondary traumatic stress. The quantitative and qualitative results supported an ecological approach to understanding compassion satisfaction, secondary traumatic stress, and burnout. Results from bivariate correlation analyses suggested that lower attachment avoidance and perceptions of low supervisor support were associated with six month turnover. Higher levels of compassion satisfaction, greater material hardship, greater perspective taking ability, larger caseloads, and higher levels of EHS family cumulative risk were associated with more positive home visitor ratings of working alliance. Results are discussed in terms of their implications for practice, policy, and research.

The Benefits and Costs of Caring: A Mixed-Methods Study of
Early Head Start Home Visitors

by
Allison L. West

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, Baltimore in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2015

© Copyright 2015 by Allison L. West

All rights Reserved.

Acknowledgements

I would like to express my heartfelt gratitude for the many people who supported me through my years in the PhD program and the writing of this dissertation. I would first like to thank my dissertation chair and mentor, Lisa Berlin, for your support and guidance over the past several years. I would also like to thank my committee members, Drs. Donna Harrington, Jodi Jacobson Frey, Nancy Dickinson, and Brenda Jones Harden, for your time, interest, and contributions to this dissertation. I would like to give special thanks to Donna Harrington, for the wisdom and unwavering support that that you provide to all of the Ph.D. students each day. Thank you also to Debbie Gioia, Corey Shdaimah, and members of the Qualitative Interest Group for your feedback on the qualitative phase of the study.

I am incredibly grateful to my family and friends. To my family, I cannot express how much I have appreciated your loving support throughout this process. Thank you for believing in me. It warms my heart to remember the enthusiasm with which my children, Taylor and Ella Kate, embraced the idea that I was returning to school to pursue my Ph.D. Not once do I remember them complaining about my workload. I thank Taylor for frequently asking “How many pages did you write today?,” which motivated me and helped me reach my daily writing goals. I thank Ella Kate for her patience and understanding, and for her smiles and hugs. Special thanks to my husband, Jay, who never once questioned my idea to return to graduate school. You make me want to be the best person I can be, and your support during this process has confirmed that we are greater than the sum of our parts. Many thanks to my in-laws Butch and Peggy, who were always so supportive and willing to pitch in when needed. To my mom, dad, sister and brother, who made me the person I am today. You encouraged me to aim high. I am also grateful for all of my friends in the UMB Social Work PhD program. You have been a great source of strength, comfort, and humor throughout this process.

I am so grateful to the Early Head Start programs and home visitors who agreed to participate in this study. Thank you for your willingness to take the time to share a bit of yourselves, your thoughts, and your stories. You have taught me so much. Most importantly, thank you for all that you do for vulnerable children and families each and every day.

Lastly, funding for this study was generously provided by the Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services (Award # 90YR0079). This funding allowed me to increase the scope of my project, compensate participants, and hire research staff. Moreover, the Head Start Scholars program introduced me to a network of other researchers with common interests with whom I look forward to working in the future.

Thank you.

Table of Contents

CHAPTER 1: Introduction	1
Background and Significance.....	1
Purpose	5
Relevance to the Social Work Profession	8
CHAPTER 2: Theoretical Foundations	11
Developmental-Ecological Framework.....	11
The Professional Quality of Life Model	15
The Strengths Perspective	18
CHAPTER 3: Literature Review	20
Terminology	21
Antecedents of Compassion Satisfaction and Compassion Fatigue.....	26
Compassion Satisfaction, Compassion Fatigue, and Risk for Turnover.....	37
Compassion Satisfaction, Compassion Fatigue, and Family Engagement	38
Compassion Satisfaction and Fatigue in Early Head Start Home Visitors	42
Gaps in the Literature	47
CHAPTER 4: Method	50
Overview	50
Study Design	50
Sample and Participant Selection	51
Procedures	52
Measures.....	58
Summary of Research Questions and Methods.....	75

Data Analysis Plan	75
CHAPTER 5: Results.....	81
Preliminary Analyses	81
Principal Analyses.....	94
CHAPTER 6: Discussion	161
Principal Findings	161
Strengths and Limitations.....	174
Implications.....	178
Conclusion.....	190
Appendix A: Flow Chart of Study Enrollment.....	191
Appendix B: EHS Program Information Sheet	192
Appendix C: Consent Form.....	195
Appendix D: Home Visitor Survey	199
Appendix E: Cumulative Risk Indices	214
Appendix F: Qualitative Interview Guide	218
Appendix G: Bivariate Correlations among Individual and Occupational Characteristics	221
References.....	224

List of Tables

1. Summary of Measures and Sources.....	61
2. Cut Scores for the ProQOL.....	72
3. Overview of Research Questions and Methods.....	75
4. Internal Consistency Reliabilities, Means, and Standard Deviations for Measurement Instruments.....	84
5. Participant Characteristics.....	86
6. Bivariate Correlations between Individual and Occupational Characteristics and Key Outcome Variables.....	92
7. Differences between Latina and Non-Latina Home Visitors on Key Study Variables.....	93
8. EHS Home Visitors' Scores on the Compassion Satisfaction and Secondary Traumatic Stress Scales of the ProQOL.....	94
9. Unconditional Intraclass Correlation Coefficients (ICC's) for Key Study Variables.....	96
10. Unstandardized Fixed Effect Estimates and SE's for Models Predicting Compassion Satisfaction.....	98
11. Unstandardized Fixed Effect Estimates and SE's for Models Predicting Secondary Traumatic Stress.....	100
12. Unstandardized Fixed Effect Estimates and SE's for Models Predicting Burnout.....	102
13. Differences between P4P and non-P4P Home Visitors on Key Study Variables.....	104
14. Unstandardized Fixed Effect Estimates and SE's for Models Predicting Compassion Satisfaction from Home Visitor Characteristics and EHS Family Risk.....	106
15. Unstandardized Fixed Effect Estimates and SE's for Models Predicting Secondary Traumatic Stress from Home Visitor Characteristics and EHS Family Risk.....	107
16. Unstandardized Fixed Effects Estimates and SE's for Models Predicting Burnout from Home Visitor Characteristics and EHS Family Risk.....	109

17. Bivariate Correlations among Compassion Satisfaction, Secondary Traumatic Stress, Burnout, and Job Withdrawal.....	110
18. Bivariate Correlations between Home Visitor Individual and Occupational Characteristics and Job Withdrawal.....	111
19. Unstandardized Fixed Effect Estimates and SE's for Models of the Predictors of Job Withdrawal.....	114
20. Bivariate Correlations: Home Visitor Characteristics and Six Month Job Turnover.....	115
21. Bivariate Correlations: Occupational Characteristics and Six Month Job Turnover.....	116
22. Bivariate Correlations between Individual, Occupational, and Organizational Characteristics and Home Visitors' Global Working Alliance Ratings.....	118
23. Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor-Rated Working Alliance.....	120
24. Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor Ratings of the Working Alliance from Home Visitor Characteristics and EHS Family Demographic and Psychological Risk.....	122
25. Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor Ratings of the Working Alliance from Home Visitor Characteristics and EHS Family Cumulative Risk.....	123
26. Descriptive Statistics for EHS Mothers' Scores on the Working Alliance Inventory and the Helping Relationship Inventory.....	125
27. Summary of Quantitative Results in Full Sample: Individual Characteristics.....	127
28. Summary of Quantitative Results in Full Sample: Occupational Characteristics.....	128
29. Qualitative Interview Participant Characteristics.....	129
30. Variety of Home Visitor Duties.....	135

List of Figures

1. Impact of Professional Quality of Life on Program Quality.....	15
2. The Professional Quality of Life (ProQOL) Model.....	16
3. Diagram of Study Design.....	51

CHAPTER 1

INTRODUCTION

Background and Significance

In 2011, there were over 16 million children (23% of all children), living under the federal poverty line of \$22,350 for a family of four (Annie E. Casey Foundation, 2013). The detrimental impacts of poverty on school readiness, educational attainment, and long term health and well-being are well documented (Brooks Gunn & Duncan, 1997; Knitzer & Perry, 2007; Shonkoff, 2010). Early Head Start (EHS) is the largest federally funded program designed to promote physical, cognitive, language, social, and emotional development in infants and toddlers from low-income families. Although the program currently serves less than 4% of eligible families (Colvard & Schmit, 2012), EHS has the potential to make a substantial impact on the futures of U.S. youth.

EHS aims to provide high-quality, comprehensive child development and parent support services to promote child and family well-being through a variety of program options. Approximately 46% of families served by EHS participate in the home-based option (Walker, 2014), a dual-generational approach in which a home visitor meets with the family weekly for 90 minutes from birth until the child reaches the age of three. In EHS, great emphasis is placed on the home visitor's role in promoting an emotionally secure and supportive parent-child relationship because infant attachment has been shown to be a fundamental building block for healthy social, emotional, and academic development (Weinfeld, Sroufe, Egeland, & Carlson, 2008).

The Crucial Role of EHS Home Visitors

EHS home visitors are seen as the lynchpin connecting program goals with service outcomes, yet little research addresses issues concerning the home visiting

workforce, including how to build effective home-visitor-family relationships that promote family engagement. The recent passage of the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program legislation under the 2010 Affordable Care Act, however, has increased scrutiny of implementation processes in home visiting programs. Consistent with this focus, the federally-funded Home Visiting Research Network (HVRN) recently identified *the need to build a stable, competent home visiting workforce* as one of their top 10 home visiting research priorities (HVRN, 2013). Home visiting workforce research focuses on how particular selection, recruitment, training, and supervision strategies might increase “fit” between workers and programs, increase job satisfaction and staff retention, promote family engagement and service use, and enhance program outcomes. Thus, workforce development is increasingly seen as a vital part of strengthening home visiting effectiveness (Wechsler, 2015).

Professional Quality of Life in EHS Home Visitors

Two issues that require further attention concern (a) how the nature of the work in home visiting impacts the health and well-being of EHS home visitors; and (b) how the health and well-being of the home visitors impacts both proximal and distal program outcomes. *Professional quality of life* is a term used to describe the ways in which emotionally demanding work impacts human service workers (Stamm, 2010).

Professional quality of life is a complex and multifaceted construct that is associated with characteristics of the organization, the occupation, and the individual. Compassion satisfaction and compassion fatigue are two components of professional quality of life that characterize the positive and negative effects, respectively. Both have relevance for better understanding EHS home visitors. Because EHS programs prioritize enrollment for

families with greatest need, families served by EHS often demonstrate multiple risks in addition to poverty (ACF, 2006). Two large national studies found high rates of demographic and psychological risk among EHS families, including single parenthood, teen parenthood, unemployment, low educational attainment, and mental health and substance abuse problems (ACF, 2006; Vogel et al., 2011). Although providing Early Head Start services can be emotionally rewarding, high-risk clients may expose home visitors to their personal trauma histories and exhibit emotional and behavioral challenges that take a high toll on workers (Azar, 2000; Gibbs, 2001; Rupert & Morgan, 2005).

Professional Quality of Life and EHS Program Outcomes

Whereas no known studies to date have examined the impact of compassion satisfaction on program outcomes, a large body of research has demonstrated that compassion fatigue and its purported components, secondary traumatic stress and burnout, are associated with negative outcomes for human service workers, organizations, and clients. Two outcomes of particular interest in this project are home visitor turnover and family engagement. For workers, secondary traumatic stress and burnout can lead to stress-related health outcomes (e.g., substance abuse, physical illness, sleep disturbances, and work/family conflict) and negative psychological and mental health outcomes (e.g., impatience, moodiness, reduced tolerance, negative attitudes towards oneself, and moral distress; Cordes & Dougherty, 1993; Burke, Greenglass, & Schwarzer, 1996; Miller, 2011). In turn, negative impacts on workers may trickle down to negative outcomes for organizations, including low productivity and effectiveness, reduced commitment to the job and/or organization, absenteeism, intent to leave, and actual job turnover (Dickinson & Perry, 2002; Maslach, Schaufli, & Leiter, 2001; Miller,

2011; Swider & Zimmerman, 2010). Findings from one recent study found the turnover rate among EHS home visitors to be approximately 16.3% per year (Vogel et al., 2013). Absenteeism and turnover can ultimately lead to higher stress and financial costs for organizations (Maslach & Leiter, 1997).

Professional quality of life may also impact family engagement. For clients (in this case, EHS families), secondary traumatic stress or burnout may exert effects either directly through the impact on the quality and quantity of client-worker interactions, or indirectly through worker absenteeism and turnover. Burnout compromises worker decision-making as well as the worker's ability to attend fully to the client (Lloyd, King, & Chenoweth, 2002; Maslach, Schaufli, & Leiter, 2001). Moreover, high risk clients, arguably those most important to engage in EHS home visits, have in fact been shown to be the most difficult to engage in services (Spieker, Solchany, McKenna, DeKlyen, & Barnard, 2000), the most likely to drop out of programs (Roggman, Cook, Peterson, & Raikes, 2008), and the least likely to demonstrate benefits from EHS services at age three (ACF, 2006).

Only a handful of conceptual and empirical studies have addressed the topic of well-being in early childhood home visitors (Burrell, McFarlane, Tandon, Fuddy, & Duggan, 2009; Gill, Greenberg, Moon, & Margraf, 2007; Jones Harden, Denmark, & Saul, 2010; Lane, 2011; Lee et al., 2013). Findings indicate cause for concern, however. One longitudinal study of 41 EHS home visitors, for example, found high levels of emotional exhaustion and depression (Gill, Greenberg, Moon, & Margraf, 2007). Other studies found preliminary evidence of occupational stress (Jones Harden, Denmark, & Saul, 2010), poor mental and physical health (Whitaker, 2013), and high rates of intent to

leave (West, Berlin, & Jones Harden, 2013) among EHS home visitors. This evidence raises ethical concerns regarding the potential impact of worker impairment on service quality and family outcomes.

Purpose

Understanding the prevalence of and antecedents for compassion satisfaction, secondary traumatic stress, and burnout in Early Head Start home visitors is paramount to building and sustaining a stable and effective workforce. The purpose of this mixed methods study was to develop an increased understanding of: (a) how the nature of the work in home visiting impacts the health and well-being of EHS home visitors; and (b) how the health and well-being of the home visitors impact both proximal and distal program outcomes. Guided by a strengths-based, developmental-ecological framework, the study examined the relative influences of individual, occupational, and organizational factors on EHS home visitors' compassion satisfaction, secondary traumatic stress, and burnout, and the effects of EHS home visitors' compassion satisfaction, secondary traumatic stress, and burnout on job turnover and indicators of EHS family engagement, including home visitor and EHS family perceptions of the working alliance and helping relationship. The primary data source was quantitative home visitor surveys. Additional, qualitative interviews added to the richness of the data and provided a context in which to interpret the survey findings. In Phase 1 of the study, survey data were collected from EHS home visitors ($N = 77$) from 18 EHS programs throughout Maryland and the greater Washington D.C. area to measure levels of compassion satisfaction, secondary traumatic stress, and burnout in this population and to identify individual, occupational, and organizational factors that contribute to these outcomes. In addition, de-identified family-level data ($N = 102$) collected before the survey were linked with a subsample of home

visitor data from the parent study in order to illuminate associations between home visitor compassion satisfaction, secondary traumatic stress, and burnout and client psychosocial risk. Home visitor compassion satisfaction, secondary traumatic stress, and burnout data were also examined as predictors of home visitor turnover and family engagement at six months post-survey. In Phase 2, qualitative semi-structured interviews with seven EHS home visitors were used to further explore the positive and negative effects of the work. Participants in this phase were purposefully selected on the basis of the quantitative results. In Phase 3, findings from the qualitative phase were used to provide a richer understanding of the quantitative findings. Results from the study will inform EHS workforce development strategies including the recruitment, selection, and training of EHS home visitors. Results will also inform strategies to promote home visitor job satisfaction, work performance, and retention. Thus, findings are anticipated to contribute to Early Head Start research, practice, and policy, particularly by addressing the large gap in knowledge about the wellbeing of home-based staff and its relation to family risk, turnover, and family engagement.

The overall purpose of this research was to increase understanding of EHS home visitor wellbeing, its predictors, and its impacts on home visitor turnover and family engagement. In turn, this knowledge will inform effective means of training and supporting staff to successfully engage and support families. Five specific questions guided this research:

Phase 1 (Quantitative):

- 1. What are the rates of compassion satisfaction, secondary traumatic stress, and burnout in EHS home visitors?** It was hypothesized that EHS home visitors will demonstrate evidence of both compassion satisfaction and compassion fatigue.
- 2. What are the relative effects of individual, occupational, and organizational factors on EHS home visitors' compassion satisfaction, secondary traumatic stress, and burnout?** It was hypothesized that individual, occupational, and organizational factors would each explain unique variance in compassion satisfaction, secondary traumatic stress, and burnout. Furthermore, organizational and occupational factors would be the strongest predictors of the burnout, and individual and occupational factors would be the strongest predictors of the secondary traumatic stress.
- 3. What are the impacts of compassion satisfaction, secondary traumatic stress, and burnout on: (a) home visitor turnover and (b) family engagement?** It was hypothesized that lower levels of compassion satisfaction and higher levels of secondary traumatic stress and burnout would be associated with a higher incidence of home visitor turnover and that higher levels of compassion satisfaction and lower levels of secondary traumatic stress and burnout would be associated with stronger family engagement.

Phase 2 (Qualitative):

- 4. How do home visitors experience their work with EHS families?** This phase was exploratory. It was anticipated that home visitors would describe both positive and negative aspects of their work with EHS families.

Phase 3 (Mixed Methods):

5. **In what ways do the interview data help to explain the quantitative results?** It was anticipated that the qualitative data would allow for a deeper understanding of the quantitative results.

Relevance to the Social Work Profession

Social Work Values

The present study embodied the core Social Work values of social change, social justice, and the central importance of human relationships. In fact, Social Work and home-based EHS share a common history and mission. Home visiting as a method of service delivery to vulnerable families dates back to the 19th century when untrained “friendly visitors” sought to help the poor (Bhavnagri & Krolikowski, 2000). Furthermore, as stated in the NASW *Code of Ethics*, “the primary mission of the social work profession is to enhance human wellbeing and help meet the basic needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty” (NASW, 2008). Similarly, home-based EHS programs aim to promote the social, intellectual, emotional, and physical development of children from low-income, vulnerable families by providing intensive family support services in the home. The current research took a two-tiered approach to promoting this shared mission by seeking to understand the wellbeing and occupational stress experienced by EHS home visitors as well as the ways in which home visitor wellbeing and occupational stress influence the ability to provide high quality services to vulnerable families living in poverty.

Contributions to Social Work Research

EHS programs stand to benefit from the increased involvement of social workers and social work researchers. Social workers bring a valuable perspective to this area of practice and research due to their view of human behavior and the social environment as multidimensional (Hutchison, 2011). Social workers pay keen attention the multitude of micro, meso-, exo-, and macro-level variables that contribute to oppression and inequality (Hutchison, 2011). Given this systems perspective, social workers also value a multidisciplinary approach to solving social problems and thus are well positioned to break down silos and advocate for coordinated systems of care and research (NASW, 2008).

This study used a strengths-based developmental-ecological approach to understanding multiple influences on worker stress and the association between stress and worker, client, and organizational outcomes. At the micro-system level, the current study drew from ecological and developmental theories to help explain how factors within the home visitors' social ecology may have affected the wellbeing of the workers as well as their relationships with clients. At the meso-system level, because home visitors play such a critical role in the success of programs, the study examined whether compassion fatigue undermined workers' abilities to serve families effectively, thus potentially threatening the viability and sustainability of EHS programs. Attending to implementation factors and processes serves the dual purpose of reducing the blame attributed to clients for poor outcomes while also informing service delivery. At the exo-system level, this research may help illustrate how organization-level factors contribute to compassion satisfaction and compassion fatigue as well as how compassion satisfaction

and compassion fatigue impact service delivery and service utilization (i.e., engagement). These factors include, but are not limited to, training, supervision, and organizational climate. A deeper understanding of the interdependent nature of these dimensions will provide evidence to guide the development of more effective strategies to recruit, select, train, and support the EHS workforce. Such evidence may also guide future revisions of EHS performance standards in these domains. Ultimately, this knowledge may lead to the development and implementation of individual, programmatic, and/or systemic changes that could reduce worker stress and thus enhance the capacity of early childhood home visitors to provide high quality services to vulnerable families.

Contributions to Social Work Practice

Finally, this research is highly relevant to the Social Work profession due to the fact that social workers at many different levels of education and experience work in Early Head Start programs. Early Head Start uses a holistic approach to promoting child well-being by providing comprehensive relationship-based family support services. The home-based model removes barriers to participation for some of the most vulnerable families. Home visiting also offers the opportunity to obtain a deeper understanding of the families' social ecology and the myriad of risk and protective factors contributing to children's development. As all of these features are consistent with social work practice principles, the field of home visiting is a strong fit with social work values and holds important opportunities for social workers at all levels. Moreover, a better understanding of how to strengthen and support the workforce will benefit MSW and BSW-level social workers practicing in EHS home visiting programs as program directors, supervisors, mental health consultants, and home visitors.

CHAPTER 2

THEORETICAL FOUNDATIONS

This study was guided by a strengths-based, developmental-ecological approach to understanding the development of compassion satisfaction, secondary traumatic stress, and burnout in EHS home visitors. This framework is useful because (a) it is grounded in a deep understanding of human growth and development across the lifespan and (b) it accounts for risk and protective factors and their interactions across multiple ecologies of the home visitor. Moreover, by emphasizing strengths over deficits, the results will inform workforce development strategies that capitalize on assets and support home visitor wellbeing. The following discussion of theoretical foundations will begin with an overview of the developmental-ecological framework that forms the backdrop for this study. The next section will describe the Professional Quality of Life model of compassion satisfaction and compassion fatigue (Stamm, 2010). The chapter will conclude with a brief discussion of how the strengths perspective was applied to this project.

Developmental-Ecological Framework

The ecological perspective provides a broad framework for conceptualizing complex transactions between people and their environments. Ecologically-based practice dates back to the earliest days of social work (Greene, 1991; Richmond, 1917, as cited in Rotabi, 2007). Carel Germain, who appears to be the first social worker to apply the term “ecosystem” formally to the practice of social casework, emphasized the importance of focusing on the relationship between human beings and their interpersonal and organizational environments (Germain, 1973, as cited by Rotabi, 2007).

Urie Brofenbrenner developed the ecological approach to human development. Specifically, he proposed that the study of human development should consider the “progressive, mutual accommodation, throughout the lifespan, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, both formal and informal, in which the settings are embedded” (1977, p. 514). Brofenbrenner (1994) proceeded to describe a topographically arranged ecological environment composed of a microsystem nested within a mesosystem, an exosystem, and a macrosystem. The final parameter, the chronosystem, incorporates the time dimension, encompassing change and consistency over time related to the person, the environment, and the interactions between the two (Brofenbrenner, 1994). Notably, Brofenbrenner emphasized the interdependence among these systems, and further asserted that “in ecological research, the principal main effects are likely to be interactions” (p. 518).

As outlined by Greene (1991), the ecological perspective is based on several key assumptions, including (a) person and environment are inseparable and thus must be considered jointly, (b) the person and environment form a unitary ecosystem, each shaping the other (focus on reciprocity), and (c) the person and environment mutually influence each other. The ecological approach focuses on the ever-present reciprocity between the person and his or her environment (Greene, 1991). Brofenbrenner’s (1977) ideas initiated a major paradigm shift for many psychologists and other social scientists, whose research until that point had been primarily focused on individuals and dyads.

Although the smallest unit of focus in Brofenbrenner’s model was the microsystem, he also acknowledged the importance of developmentally instigative

characteristics, suggesting that particular qualities of an individual may invite or discourage reactions from the environment, and thus have the potential to foster or inhibit personal growth (Bronfenbrenner, 1989). The ability to connect with other people, to be effective in one's environment, and to adapt to changes in the environment are examples of these personal characteristics. In his seminal paper in which he proposed the application of a developmental-ecological approach to understanding the etiology of child maltreatment, Belsky (1993) was more explicit in the role that personal characteristics, such as personality, play in human development. Although initially discussed within the context of child development, these concepts help explain human development across the lifespan. Theories of personality development make specific predictions regarding relational capacities, motivation, altruism, how people develop certain coping strategies, and how people perceive and appraise stress. For example, whereas Maslach (2001) suggested that six dimensions of work life were associated with burnout (workload, control, reward, community, fairness, and values), the developmental perspective would acknowledge how the worker's attributions, appraisals, and perceptions may reflect prior experiences and thus result in individual differences in susceptibility to and expression of occupational stress. This perspective also suggests that workers change and develop over time within the context of their job and/or career, through professional or personal experience, continuing education, or other means.

The ecological perspective has spawned several mid-range theories that are useful in explaining the development of stress, including occupational stress, in EHS home visitors. Two such theories are the Transactional Model of Stress and Coping (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984) and the Person-

Environment Fit approach (P-E Fit; Edwards, Caplan, & Harrison, 1998). The Transactional Model is a process-oriented approach in which cognitive appraisal and coping are seen as critical mediators of the relations between stressful person-environment relationships and subsequent outcomes. Alternately, according to the P-E fit approach, stress arises from a misfit between characteristics of the worker, client, and program, and good mental health and well-being are functions of minimal mismatch or discrepancies in P-E fit. Both of these theories emphasize the importance of understanding the reciprocal, bidirectional nature of the worker's relationship with his or her environment. Importantly, they also emphasize the importance of the worker's perceptions and appraisals of stressful events, suggesting that the felt appraisal of demands and resources acting at multiple levels predicts outcomes.

Ecological theory also provides an important perspective regarding the impact of home visitor wellbeing on home visiting outcomes. Korfmacher (2012) recently proposed an ecological model of quality in home visiting focusing on the critical importance of the relationship between the home visitor and client, emphasizing the interplay between both *what* the visitor does and *how* they interact with the client. In this model, home visitor competence includes the core components of knowledge, abilities, interpersonal qualities, and professional affiliation. Compassion satisfaction and compassion fatigue have been associated with interpersonal qualities including perspective taking, empathic concern, and personal distress (Gleichgerricht & Decety, 2013) that may influence how a home visitor perceives and interacts with her client. Figure 1 illustrates how professional quality of life may impact the interpersonal qualities and abilities of home visitors and, in

turn, program quality. Although the model presented below depicts a simplified linear process, it is possible that these factors interact in more complex ways.

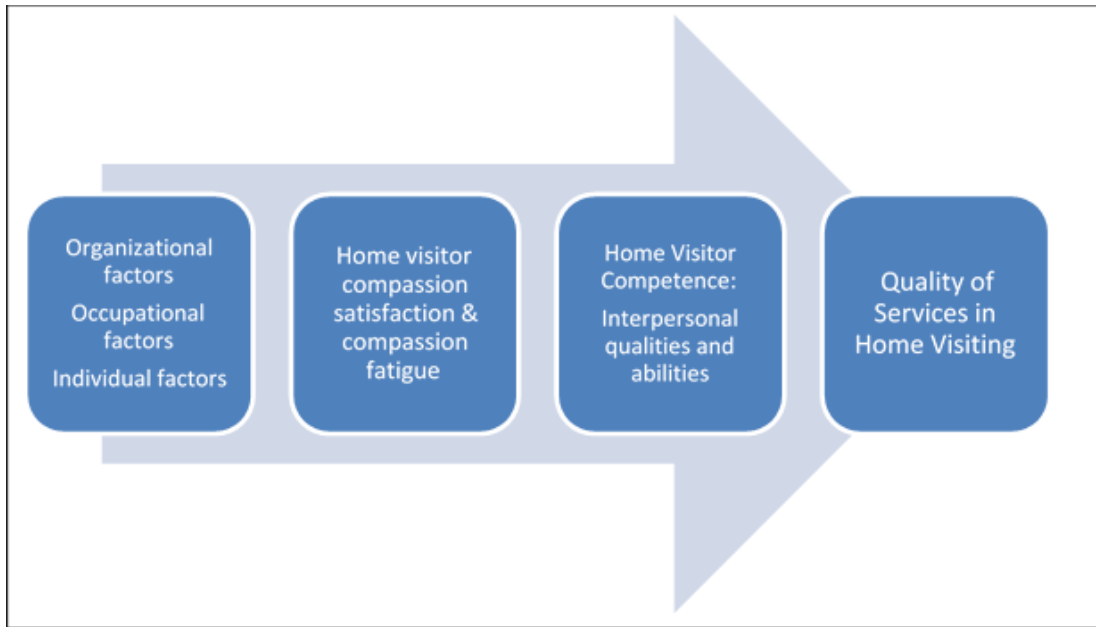


Figure 1. Impact of Professional Quality of Life on Program Quality

The Professional Quality of Life Model

A developmental-ecological approach is well suited to help explain the development of compassion satisfaction, secondary traumatic stress, and burnout. Stamm's (2010) ideas were in keeping with this approach when she proposed the Professional Quality of Life model of compassion satisfaction and compassion fatigue (see Figure 2). Building on the earlier work of Figley, Stamm (2002) coined the phrase *professional quality of life* to refer to individuals' feelings in relation to their work as a helper. Professional quality of life is a complex and multifaceted construct that is associated with characteristics of the work environment, the worker's exposure to primary and secondary trauma in the work setting, and the workers' personal characteristics. Professional quality of life refers to both the positive (compassion satisfaction) and negative (compassion fatigue) aspects of emotionally demanding work.

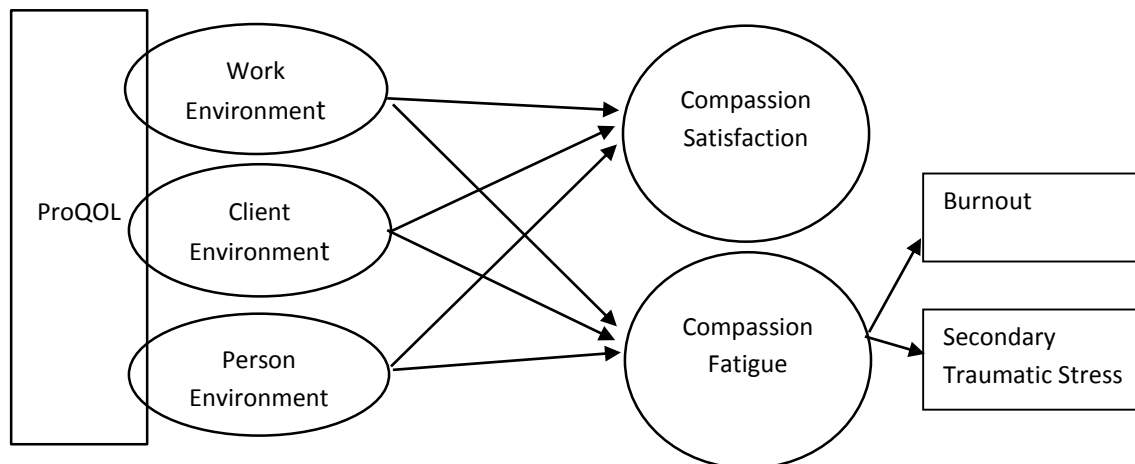


Figure 2. The Professional Quality of Life (ProQOL) Model (Stamm, 2010)

Compassion satisfaction refers to the perceived satisfaction that helping professionals find in their job, the degree to which they feel successful in their job, and the degree to which they feel supported (Stamm, 2002). The term compassion satisfaction recognizes that work as a professional caregiver can be both challenging and rewarding, and that workers can be motivated by a sense of satisfaction with their work (Bride, Radey, & Figley, 2007). Thus compassion satisfaction reflects a worker’s resilience, capacity for personal growth, and ability to find meaning in her stressful work experiences and client relationships. Workers can experience compassion fatigue and compassion satisfaction simultaneously (Stamm, 2002). In fact, research indicates that compassion satisfaction may help prevent the development of compassion fatigue (Conrad & Kellar-Guenther, 2006).

In contrast to compassion satisfaction, compassion fatigue describes the adverse psychological outcomes associated with the stress of helping or wanting to help a traumatized or suffering person (Figley, 2002a). Figley (2002a) asserted that although compassion is a necessary precursor to establishing trust within a helping relationship,

this compassion can also be eroded as a result of working with clients who are suffering. Compassion fatigue is thought to be “the result of a progressive and cumulative process that is caused by prolonged, continuous, and intense contact with clients, the use of self, and exposure to stress” (Coetzee & Klopper, 2010, p. 238). Compassion fatigue is not viewed as a form of pathology; rather, it is recognized as a syndrome that results in physical, emotional, social, mental, and spiritual exhaustion, loss of self-worth, diminished productivity, poor morale, and diminished capacity to enjoy life (Showalter, 2010).

According to Stamm (2010), compassion fatigue has two parts, secondary traumatic stress and burnout. Secondary traumatic stress is the component of compassion fatigue most closely associated with secondary exposure to traumatic material. Secondary traumatic stress results in clusters of symptoms such as intrusive imagery, increased negative arousal, cognitive changes, difficulty separating work from personal life, reduced frustration tolerance, destructive attempts at self-care, loss of hope, reduced feelings of self-competence, and functional impairment (Bride et al., 2004; Bride, Radey, & Figley, 2002; Figley, 2002b; Gentry, Baranowsky, & Dunning, 2002). The second component of compassion fatigue is burnout. Whereas secondary traumatic stress refers to effects specifically associated with secondary exposure to trauma, burnout is a term used to describe an affective reaction to a more general type of ongoing occupational stress and that results in a reduced capacity to maintain an intense and meaningful involvement at work. The burnout component focuses primarily on the emotional exhaustion associated with feelings of hopelessness, anger, frustration, and/or difficulties in coping with the work or in performing one’s job effectively. The onset of these

symptoms is typically gradual. From this point forward, the term “compassion fatigue” will be used when referencing the negative aspects of the work, conceptualized broadly. In most instances, however, secondary traumatic stress and burnout will be discussed as distinct constructs.

In summary, the concept of professional quality of life takes into consideration three important aspects of helping that are directly relevant to EHS home visitors: (a) the myriad of potential contextual influences on worker well-being; (b) the depletion of energy that may be uniquely associated with continuous, long-term interpersonal involvement with vulnerable, high risk, and/or traumatized clients; and (c) the positive effects of helping or wanting to help vulnerable families. Furthermore, theory and prior research suggest that research concerning compassion satisfaction and compassion fatigue should include variables representing multiple levels of the worker’s social ecology. This notion has been empirically supported in numerous studies, as will be demonstrated in a review of the literature, below, and guided the selection of variables in the quantitative phase of this study.

The Strengths Perspective

Finally, although not a theory per se, it is important to note that this study was also grounded in a strengths perspective. Thus the intent is not to identify home visitor deficits but rather to acknowledge and build upon strengths, resilience, and resources (Saleeby, 1992). Challenges will be viewed not as pathology, but as opportunities for home visitors, agencies, and clients. This perspective recognizes that every individual is unique and has something of value to offer. For example, when discussing issues related to personality differences and susceptibility to stress, the focus will be on strengthening the fit between the workers, their occupation, and/or their environment. More targeted

recruitment and hiring practices, enhanced training and supervisory strategies, and reorganization are all ways to strengthen fit. The strengths perspective is also aligned with a constructivist view, which honors the perspective of study participants and views them as collaborators in problem solving (Saleeby, 1992). Bell (2003) successfully applied the strengths perspective to study the issue of secondary trauma in counselors who work with battered women. From this research emerged themes about the counselor's strengths and resources that prevented symptoms of secondary trauma. The strengths perspective guided all phases of the current mixed-methods study.

CHAPTER 3

LITERATURE REVIEW

This dissertation was based on the key assumption that Early Head Start home visitors develop close, long-term working relationships with families who are experiencing poverty and a multitude of other psychosocial challenges, and that the quantity and quality of these transactions leads to positive and negative outcomes, including compassion satisfaction and compassion fatigue. Nevertheless, these assumptions have not been thoroughly tested or confirmed. At this time it is unclear to what extent and in what ways EHS home visitors are affected by the nature of their work. Despite the exploratory nature of this study, the rationale was built upon prior research and theory regarding the prevalence and risk and protective factors associated with various forms of occupational stress shown to be experienced by closely related populations, including professionals, paraprofessionals, and volunteers working or serving in health and human service settings.

This review will begin with some brief clarification regarding occupational stress terminology as it is discussed within the context of health and human service professions, followed by a summary of the literature regarding the antecedents of compassion satisfaction and compassion fatigue. A combination of key words and subject headings/terms was used to locate relevant articles in bibliographic databases including PsychInfo, Social Sciences Citation Index, PubMed, Academic Search Premier, ERIC, SocIndex, and CINAHL. Search terms included: “burnout” OR “emotional exhaustion” OR “compassion fatigue” OR “compassion satisfaction” OR “vicarious trauma” OR “secondary trauma*”. Following a review of titles and abstracts, articles that examined

these phenomena in health and human service professionals and/or paraprofessionals were obtained for further review. Due to the expansive nature of this body of literature, the following review will focus on representative publications and reviews of findings. Finally, the limited literature regarding the professional quality of life of EHS home visitors will be reviewed. To locate this literature, the key word “home visit*” was added to the search strategy above. Because the literature on this topic was very small, additional information on the topic was obtained via Google searches for relevant grey literature, reference harvesting, and personal contacts with experts in the field.

Terminology

There are two reasons for including a discussion of terminology. First, in general, a lack of conceptual clarity continues to plague the literature surrounding professional quality of life. Stamm’s (2002, 2010) Professional Quality of Life framework is one model for understanding the development of compassion satisfaction and compassion fatigue in helping professions. However, this model is relatively new, and researchers continue to use a variety of interrelated terms to describe the positive and negative consequences associated with long-term, continuous involvement in emotionally demanding work situations (Bride, Radley, & Figley, 2007; Pines & Aronson, 1988). The most common of these include *vicarious trauma*, *secondary traumatic stress*, and *burnout*, in addition to *compassion fatigue*. The theoretical frameworks associated with each concept reflect different emphases, and, as will be discussed in greater detail below, each concept also has different correlates. For example, burnout is more commonly associated with workplace demands and chronic organizational stressors (Lee, Lim, Yang, & Lee, 2011), whereas concepts associated with vicarious trauma and secondary traumatic stress reflect direct exposure to traumatic material (Jenkins & Baird, 2002;

Schauben & Frazier, 1995). Years of research have confirmed that the relations among these concepts are complex and depend somewhat on varying theoretical frameworks and measurement instruments (Adams, Boscarino, & Figley, 2006; Cieslak et al., 2013; Stamm, 2010). Some understanding of these concepts, including how they are similar and distinct, is necessary when trying to integrate findings from this vast and highly variable body of literature.

Second, it is currently unclear which terminology in the occupational stress literature is most useful for understanding the experiences of EHS home visitors. Practitioners and scholars have long been aware of the potentially negative effects for the practitioner of working with vulnerable and/or traumatized clients, yet most studies have focused on clinicians who are professionally trained to work with trauma survivors, and who understand important concepts related to the process of trauma work and self-care. It has been theorized that clinicians are at risk as a direct result of exposure to their clients' trauma narratives (Figley, 2002; McCann & Pearlman, 1990). Yet the terms *compassion fatigue*, *vicarious trauma*, and *secondary traumatic stress* have not been used in research on early childhood home visitors who work with high-risk families. For these workers, the direct processing of trauma experiences with clients is not an official part of their job. Home visitors do, however, develop close, long-term working relationships with their clients, many of whom have experienced traumatic events or multiple significant adverse experiences. A deeper understanding of these terms, including how they are conceptually similar or distinct, will help guide the interpretation of the experiences of EHS home visitors.

Secondary Trauma

According to Stamm's (2010) model, secondary traumatic stress is the component of compassion fatigue most closely associated with exposure to traumatic material. First coined by Figley in 1983, the term *secondary traumatic stress* refers to clusters of symptoms that result from therapists' or other helpers' exposure to clients' trauma stories. These symptoms parallel those of trauma survivors (Bride et al., 2004; Bride, Radey, & Figley, 2002; Figley, 2002b; Gentry, Baranowsky, & Dunning, 2002).

Secondary traumatic stress has been observed in mental health professionals (Jenkins & Baird, 2002; Leonard, 2008; Salston & Figley, 2003), employee assistance professionals (Jacobson, 2012), social workers (Bride, 2007), child welfare workers (Sprang, Craig, & Clark, 2011), lay trauma counselors (Ortlepp & Friedman, 2002), nurses (Beck, 2011; Romeo-Ratliff, 2014), clergy (Jacobson, Rothschild, Mizra, & Shapiro, 2012), volunteers (Pardess, Mikulincer, Dekel, & Shaver, 2014), and paraprofessionals (Kulkarni, Bell, Hartman, & Herman-Smith, 2013; Maris, 2013; Ray, Wong, White, & Heaslip, 2013; Vittoria, 2011).

Burnout

The literature on burnout is extensive yet complicated because it is driven by a variety of different conceptual approaches. According to Stamm's (2010) model, burnout is the second component of compassion fatigue. According to this model, whereas secondary traumatic stress refers to effects specifically associated with secondary exposure to trauma, burnout is a term used to describe an affective reaction to a more general type of ongoing occupational stress that results in a reduced capacity to maintain intense and meaningful involvement at work.

Yet another commonly accepted model of burnout was conceptualized by Maslach and colleagues and involves three interrelated dimensions that together describe the building up, maintenance, or erosion of a positive psychological state (Maslach & Leiter, 2008). These dimensions have evolved and been revised over the years, but in their current form are described as exhaustion-energy, cynicism-involvement, and inefficacy-efficacy (Maslach & Leiter, 2008). The corresponding measurement instrument, the Maslach Burnout Inventory (MBI), reflects the multidimensional nature of the construct and has three scales. First, emotional exhaustion refers to a depletion of physical, mental, and emotional resources. Second, cynicism refers to a distant or indifferent attitude towards the job. Third, reduced professional efficacy refers to a condition of poor job-related self-esteem resulting from a tendency to evaluate work performance negatively. According to this model, individual strain must be considered within the social context of the work environment, although a person's perception of both self and others also plays a role (Maslach & Leiter, 2008).

Two alternate approaches were advanced by Pines and Aronson (1988) and Shirom and colleagues (Hobfoll & Shirom, 1993, 2000; Melamed, Kushnir, & Shirom, 1992; Shirom, 1989; Shirom, 2003), respectively. Pines's model focused on the physical, emotional, and mental exhaustion that occurs over time as the result of involvement in emotionally demanding work. The corresponding measurement instrument, the Burnout Measure, is one-dimensional, yielding a single composite score. Critics of the Burnout Measure cite evidence that it lacks discriminant validity and is in actuality simply a general measure of psychological distress (Shirom, 2003). Alternately, Shirom and Melamed (2006) proposed a model of burnout based on Hobfoll's (1998) Conservation of

Resources theory (COR). COR theory suggests that burnout occurs when an individual experiences a cycle of resource loss over a long period of time. According to their model, burnout represents a combination of physical fatigue, emotional exhaustion, and cognitive weariness. Thus, although a lack of consensus remains regarding the nature of burnout, it appears that most scholars agree that emotional exhaustion is a critical factor. Emotional exhaustion is also the focus of the burnout component in Stamm's (2010) model.

Vicarious Trauma

Vicarious trauma is another term that is often confused and used interchangeably with secondary traumatic stress and compassion fatigue, yet there are some critical distinctions. Vicarious trauma has been defined as “the transformation that occurs within the therapist (or other trauma worker) as a result of empathic engagement with clients’ trauma experiences and their sequelae” (Pearlman & MacIain, 1995, p. 558). Vicarious trauma focuses on the cognitive effects of secondary exposure and is thought to result in disturbances in safety, trust, intimacy, esteem, and control in reference to self and others (Pearlman & Saakvitne, 1995). Vicarious trauma is also thought to lead to a negative shift in worldview that impacts both the workers’ quality of life as well as their ability to engage effectively with clients (Pearlman & Saakvitne, 1995). McCann and Pearlman (1990) suggested that although burnout may be associated with working with trauma victims, VT is distinct in that the therapist is exposed to “emotionally shocking images of horror and suffering” (p. 134). Because the nature and extent of the exposure are the defining features of VT, the term has mainly been reserved for use with mental health professionals or others who work within the field of traumatology. As it is not the role of

EHS home visitors to process intense and detailed trauma narratives with clients, vicarious trauma will not be addressed in this study.

Upon consideration of all relevant terminology related to occupational stress, the concepts of compassion fatigue and compassion satisfaction seem the most well suited to describe home visitors' experiences in their work with families. This is because, as conceptualized by Stamm (2010), the concepts (a) include an emotional exhaustion component (burnout) that takes into consideration the myriad of contextual influences on worker well-being; (b) take into consideration the depletion of energy that may be uniquely associated with continuous, long-term interpersonal involvement with vulnerable, high risk, and/or traumatized clients; and (c) recognize the positive effects of helping or wanting to help vulnerable families. In addition, compassion fatigue seems especially appropriate because it has been empirically observed not only in professionals, but also in parents caring for injured or traumatized children (Barres, 1997, as cited in Figley), clergy (Jacobson, Rothschild, Mizra, & Shapiro, 2012), volunteers (Pardess, Mikulincer, Dekel, & Shaver, 2014), and paraprofessionals (Kulkarni, Bell, Hartman, & Herman-Smith, 2013; Maris, 2013; Ray, Wong, White, & Heaslip, 2013; Vittoria, 2011).

Antecedents of Compassion Satisfaction and Compassion Fatigue

Consistent with an ecological approach, antecedents of compassion satisfaction and compassion fatigue are generally discussed as multidimensional and grouped into three levels: organizational, occupational, and individual (Cordes & Dougherty, 1993; Maslach et al., 2001; Shirom et al., 2003). Organizational factors include policies and procedures that impact day-to-day operations, resources, organizational climate, organizational culture, and perceptions of fairness and support. Occupational factors refer to job requirements or characteristics, such as workers' interactions with their clients.

Individual factors refer to demographic and biopsychosocial characteristics of the worker. In light of the conceptual overlap as well as the heterogeneous use of the terms and related instrumentation in the literature, correlates of compassion satisfaction, compassion fatigue, burnout, and secondary traumatic stress will each be discussed in turn.

Antecedents of Compassion Satisfaction

Despite the risk for negative outcomes, many health and human professionals report high levels of job and/or compassion satisfaction, suggesting that there may be some psychological benefits related to working with traumatized and/or vulnerable populations. Again, evidence suggests that these positive results are associated with organizational, occupational, and individual characteristics. Results from one study indicated that workers whose values were consistent with those of the organization reported higher levels of compassion satisfaction (Kulkarni, Bell, Hartman, & Herman-Smith, 2013). Research has also demonstrated that empathy, therapeutic bond, workplace quality, supervision, self-care strategies, personal therapy, and social support are associated with compassion satisfaction in psychotherapists (Figley, 2002; Kraus, 2005; Linley & Joseph, 2007).

Some evidence suggests that specialized trauma training, years of experience, and use of evidenced-based practices are associated with greater levels of compassion satisfaction in trauma workers (Craig & Sprang, 2010; Sprang et al., 2007). The findings related to the worker's personal trauma history are mixed, with some studies finding negative correlations (Baird & Kracen, 2006; Nelson-Gardell & Harris, 2003), and others finding positive correlations with compassion satisfaction or post-traumatic growth

(Baird & Kracen, 2006; Linley & Joseph, 2007; McKim & Adcock, 2014; Nelson-Gardell & Harris, 2003). In a recent study of counselors working with clients healing from traumatic experiences, McKim and Smith-Adcock (2014) investigated the relative influences of the workers' individual and workplace factors in predicting both compassion fatigue and compassion satisfaction. Although the response rate was low and the design cross-sectional, the study found preliminary evidence to suggest that workers who reported more personal trauma experiences and who perceived greater control over their workplace activities exhibited higher levels of compassion satisfaction.

Antecedents of Compassion Fatigue

Antecedents of compassion fatigue and other negative outcomes are usually discussed in terms of risk and protective factors. Synthesis of the available evidence regarding correlates of compassion fatigue is complicated due to the fact that some researchers conceptualize it as a stand-alone phenomenon whereas others view it as a multidimensional construct that includes burnout as one component. Notably, whereas the bulk of the existing research on burnout has emphasized organizational antecedents, for the more encompassing concept of compassion fatigue, studies have focused largely on the personal characteristics of the worker. This is in keeping with evidence that suggests organizational factors may play less of a role. Thompson et al. (2014), for example, found that perceptions of the work environment were more strongly associated with burnout than with secondary traumatic stress. Conversely, occupational factors do appear to factor in the development of compassion fatigue. Higher levels of exposure to clients who have experienced trauma, a higher percentage of people with PTSD on one's caseload, and a greater length of time providing therapy have each been implicated in the

development of compassion fatigue (Adams et al., 2008; Craig & Sprang, 2010; Cunningham, 2003; Kassam-Adams, 1995; Schauben & Frazier 1995; Sprang et al., 2007).

A small collection of studies have investigated workers' individual characteristics as predictors of the development of compassion fatigue. Demographic characteristics that have been associated with increased risk include young age (Ghahramanlou & Brodback, 2000), female gender (Kassam-Adams, 1995), and fewer years of experience (Cunningham, 2003). Some evidence points to an association between a worker's personal trauma history and increased risk for compassion fatigue (Baird & Kracen, 2006; Collins & Long, 2003; Figley, 1995; Jacobson, 2012; Jenkins & Baird, 2002; Salston & Figley, 2003), yet other studies have not found support for this claim (Schauben & Frazier, 1995).

Several studies have examined mindfulness and coping as potential moderators of the relation between stress and the development of compassion fatigue. Thompson et al. (2014) found that mindfulness was associated with reduced risk whereas maladaptive coping was associated with increased risk for compassion fatigue. Similarly, negative coping (Jacobson, 2012) and inability to cope with the demands of caregiving (Adams, Boscarino, & Figley, 2006) have each been found to be associated with increased risk for compassion fatigue.

Risk and Protective Factors for Burnout

The literature on risk and protective factors for burnout is voluminous, much of it emphasizing the role of organizational factors. Organizational characteristics found to be associated with burnout include increased regulation, downsizing (Lewandowski, 1998),

funding sources (Arches, 1991), high caseloads, work pressure, inequality in organizational structure and discipline, inadequate peer and supervisory support, inadequate training (Mor Barak, Nissly, & Levin, 2001), lack of control over work activities, working more hours, and spending more time on administrative tasks and paperwork (Rupert & Morgan, 2005). In addition, Kulkarni, Bell, Hartman, and Herman-Smith (2013) found that individual-organizational mismatch was a risk factor for burnout and secondary traumatic stress in a sample of domestic violence service providers, highlighting the importance of compatibility between the worker's characteristics, the demands of his or her occupation, and the work environment.

Some evidence suggests that supervisory support is associated with reduced levels of burnout (Boyas & Wind, 2010). Maslach (2001) found that supervisor support was more important than coworker support in preventing burnout, although other studies have found coworker support to be a significant predictor as well (Knudsen, Ducharme, & Roman, 2008). Of particular import for the current study, Mena and Baily (2007) conducted a study on the association between supervisory working alliance and burnout in workers from 37 Healthy Families America home visiting programs. The findings were somewhat unexpected, suggesting that supervisory working alliance predicted job satisfaction, but not burnout. Ellett (2009) suggested that frequent supervision is necessary to maintain morale, self-efficacy, and professional competence that may reduce risk for burnout, thus frequency and quality of supervision may each be important factors to consider.

Increasing attention is being paid to the roles that cognitive appraisal and perceptions of control, fairness, support, and empowerment in the organizational

environment play in the development of burnout, above and beyond organizational characteristics. Boyas and Wind (2010) used structural equation modelling to examine how perceptions of support from multiple organizational dimensions (trust, support from coworkers and supervisors, organizational commitment, communication, influence, and fairness) are linked to burnout. The findings suggested that young age, greater influence on organizational processes, greater supervisory support, less organizational commitment, and greater perceived job stress were associated with the emotional exhaustion component of burnout. Results from one meta-analysis suggest that perceptions of higher job demands, lower resources, and lower adaptive organizational attitudes are associated with burnout (Alarcon, 2011). Li et al. (2014) found that greater perceived group cohesion reduced the impact of stress exposure and PTSD symptoms on negative nurse outcomes, including compassion fatigue and burnout. In this same study, low organizational commitment predicted compassion fatigue, whereas high organizational commitment promoted positive outcomes, including job satisfaction and compassion satisfaction. Perceptions of control, such as the ability to participate in decision-making and the capacity to exercise professional autonomy also appear to play a role; Lee et al. (2013) demonstrated that perceived organizational empowerment was associated with decreased burnout in a large sample of healthcare workers. Finally, research has demonstrated that negative perceptions of organizational climate (Ellet, 2009; Strolin-Goltzman, 2010), job security, and job control are also implicated in the development of burnout (Wagner et al., 2013).

Occupational characteristics may also place EHS home visitors at risk for developing burnout, although the boundaries between organizational and occupational

characteristics are not always clearly defined. Prior research has shown that job and role characteristics as well as high expectations are associated with burnout (for a review see Cordes & Dougherty, 1993). Results from a meta-analysis by Lee and Ashforth (1996) suggest that greater role conflict, role stress, work pressure, stressful events, and high workload were all associated with emotional exhaustion. More recent studies provide additional support that role conflict and role ambiguity are important predictors (Acker, 2003). Additional evidence suggests that burnout can be “caught” from co-workers or supervisors via negative communication (Bakker & Schaufeli, 2000).

Client characteristics may also be a source of burnout. As is particularly relevant to health and human service workers, emotionally demanding relationships between human service workers and clients are seen as a major cause of burnout (Maslach & Jackson, 1982; Ratliff, 1988). Following a review of the literature, Cordes and Dougherty (1993) suggested that emotional exhaustion in jobs may be predicted by key aspects of client relationships such as the frequency and intensity of interpersonal interactions. They proposed a model in which workers in jobs that rate high in both aspects, such as social work, nursing, or teaching, would be expected to experience the highest levels of emotional exhaustion. In support of this hypothesis, Acker (1999) found that a higher degree of involvement with clients with severe mental illness increased social workers’ job satisfaction and burnout. Similarly, Rupert and Morgan (2005) found that having to deal with more negative client behaviors was associated with higher levels of emotional exhaustion among doctoral-level psychologists. Interestingly, Linley and Joseph (2007) demonstrated that therapeutic bond was a protective factor for burnout.

Research on correlates of burnout often focuses on organizational and occupational level predictors, with individual differences between workers under-emphasized (Swider & Zimmerman, 2010). Yet despite the growing evidence base regarding the roles that organizational and occupational characteristics play in the development of burnout, within individual organizations and occupations, some workers experience burnout whereas others do not. This suggests that personal characteristics play a role. Studies that have examined personal characteristics as antecedents of burnout have focused mainly on demographics and social support. The findings regarding age, race, marital status, years of experience in profession, and years in current position are somewhat mixed. Some investigators have found that young age and inexperience are associated with higher levels of burnout (Ackerly, Burnell, Holder, & Kurdel, 1988; Boscarino, Figley, & Adams, 2004; Hamama, 2012), whereas other have not (Wagaman & Geiger, 2012). The findings regarding gender are equivocal, and some evidence suggests that gender differences found throughout the literature may be in part due to variation in the scales used to measure burnout as well as the country in which the study was conducted (Ceislak, 2013). Moreover, results from a recent meta-analysis demonstrated that women exhibit more exhaustion than men, yet men exhibit more depersonalization (Purvanova & Muros, 2010). This same study showed that these gender differences did not hold when studies controlled for male versus female dominated profession. Adams et al. (2008) found that gender, race, and marital status were not linked to burnout.

Further evidence suggests that individual personality traits predict burnout in health and human service workers (Cordes & Dougherty, 1993). A recent systematic

review found support for an association between insecure adult attachment style and burnout (West, 2015). Alarcon, Eschelman, and Bowling (2009) conducted a meta-analysis of studies that examined personality variables as predictors of burnout, including the Five-Factor Model of personality characteristics, positive and negative affectivity, optimism, proactive personality, hardiness, and Type A personality. The findings suggested that emotional stability, positive affectivity, and negative affectivity evidenced the strongest associations with emotional exhaustion. Swider and Zimmerman (2010) found that job burnout mediated the relationship between the five factor model and turnover and absenteeism, respectively. It seems likely that occupational and organizational characteristics may serve as moderators in the association between personal characteristics, burnout, and other outcomes. A study of Croatian nurses demonstrated interactions between Big Five personality characteristics and contextual variables (organizational stress and role conflict) in predicting burnout (Hudek-Knežević, Kalebić Maglica, & Krapić, 2011).

Personal resources such as mindfulness, coping, empathy, spirituality, and social support may mitigate the relationship between dispositional traits and burnout. Evidence suggests that isolation increases burnout (Lewandowski, 2003), availability of social support decreases burnout (Um & Harrison, 1998), and workload increases burnout when social support is low (Koeske & Koeske, 1993). Results from two studies suggest that higher levels of mindfulness are associated with lower levels of burnout, even after accounting for workplace factors (Thompson et al, 2014; Vilardaga et al., 2011). Maladaptive coping methods, such as denial, distraction, self-blame, and substance abuse, have also been found to be associated with increased risk for burnout (Jacobson,

2012; Maunder et al., 2006; Thompson et al, 2014). Spirituality (Galea, 2014), greater religious activity (Sprang, Craig, & Clark, 2008), greater spiritual intelligence (Kaur, Sambasivan, & Kumar, 2013), and more frequent use of daily spiritual experiences (Holland & Neimeyer, 2005; Zerach, 2013) have also been found to predict lower rates of burnout. Finally, Wagaman and Geiger (2012) demonstrated that low scores on the self-other awareness component of empathy predicted both burnout and secondary traumatic stress.

Some research has examined the association between depression and burnout because the two phenomena often coexist (Jacobson, Rothschild, Mizra, & Shapiro, 2012; Maslach, Schaufeli, & Leiter, 2001; Toker, & Biron, 2012). However, although the two constructs appear to share considerable variance, evidence suggests that they are in fact distinct concepts that can be distinguished empirically (Glass & McKnight, 1996; Maslach, Schaufeli, & Leiter, 2001). Using structural equation modeling, Glass, McKnight, and Valdismardottir (1993) found that a model depicting depression as an outcome of burnout was a better fit with the data than a model assuming depression as a precursor to burnout.

Risk and Protective Factors for Secondary Traumatic Stress

Research on risk and protective factors associated with secondary traumatic stress is sparser and has emphasized the role of personal and occupational factors. Sprang, Craig, and Clark (2008), for example, found that being young, Hispanic, male, rural, and with a lack of religious participation predicted secondary traumatic stress. Results from two correlational studies indicated that higher levels of empathy were associated with higher levels of secondary traumatic stress (MacRitchie & Leibowitz, 2010; Sheen,

Slade, & Spiby, 2013), although the nature and direction of the association requires further research. Findings from a study by Wagaman and Geiger (2012) suggest that higher scores on a measure of the affective response component of empathy were linked to the development of secondary traumatic stress. Evidence suggests that workers with a personal history of trauma, child abuse, or neglect may also be at increased risk for experiencing secondary traumatic stress (Baird & Kracen, 2006; Bride, Jones & MacMaster, 2007; MacRitchie & Leibowitz, 2010; Nelson-Gardell & Harris, 2003).

Occupational factors have also been implicated in the development of secondary traumatic stress. Kulkarni, Bell, Hartman, and Herman-Smith (2013) found that both individual-organizational mismatch and providers' feelings of having little control over their work were risk factors for secondary traumatic stress. Findings from a research synthesis indicated that the greater the worker's exposure to trauma material (the number of hours with trauma clients, the percentage of trauma clients on the worker's caseload, cumulative exposure to clients with histories of trauma; Baird & Kracen, 2006). Galek, Flannelly, Greene, and Kudler (2011) found that support from family and friends, but not supervisors and work colleagues, was associated with lower levels of secondary traumatic stress. In contrast, some studies have found that support from colleagues was associated with reduced risk (Bride, Jones, & MacMaster; Townsend & Campbell, 2009).

In summary, a host of organizational, occupational, and individual factors have been found to place workers at risk for compassion fatigue and/or the constructs that comprise it (secondary traumatic stress and burnout). Consistent with a developmental-ecological framework, this and future studies should account for variables at each layer of the workers' social ecology.

Compassion Satisfaction, Compassion Fatigue, and Risk for Turnover

Staff turnover is a major concern for home visiting programs. Staff turnover refers to the rate at which workers leave their jobs and must be replaced by others in a given time period (Merriam-Webster's online dictionary, n.d.). Home visitor turnover disrupts relationship-based work with EHS families. Research has demonstrated that staff turnover is associated with reduced program effectiveness and increased family drop-out in home visiting (Gomby, 2007). Turnover is also costly because home visitors who leave take with them skills, knowledge, and experience that are not easily replaced. This point is particularly salient given the high cost of training, and thus the financial investment programs make in their staff (Coffee-Borden, B. & Paulsell, D., 2010; Dickinson & Comstock, 2009; Larson & Hewitt, 2005). Reports of turnover rates in home visiting programs vary widely. In 2006, staff turnover in EHS home visiting programs averaged 24% (OPRE, 2006). A more recent study found EHS home visiting staff turnover rates to be lower, at 10.2% (Vogel et al., 2015). Other home visiting programs have reported turnover rates as high as 30-75% (Radcliff, 2012).

Few studies have examined predictors of job turnover or turnover intent in home visitors (Buchbinder & Duggan, 1997; Burrell et al., 2009), thus much of what we know comes from studies of other human services professionals. Whereas little is known about the influence of compassion satisfaction or secondary traumatic stress on intent to leave or job turnover, burnout has been found to be a consistent predictor of turnover in several studies of child welfare workers (Dickinson & Perry, 2002; Kim & Stoner, 2008; Shim, 2010, Yankeelow et al, 2009) and other human services professionals (Ducharme, Knudsen, & Roman, 2007; Scanlan, Meredith, & Poulson, 2013).

A recent systematic review found that demographic predictors such as age, race, and gender had negligible effects on turnover intent among child welfare workers (Kim, 2013). In contrast, the same review showed that the strongest predictors of turnover intent and turnover were organizational commitment, stress (including burnout), job satisfaction, organizational climate, and perceptions of safety and fairness (Kim, 2013). Results from an earlier meta-analysis found that burnout, job dissatisfaction, availability of employment alternatives, low organizational commitment, lack of social support, and stress predicted either intent to leave or turnover in a wide variety of human services employees (Mor Barak, Nissly, & Leven, 2001). These findings suggest that occupational stress, together with negative perceptions of the work environment, increase risk for job turnover.

Compassion Satisfaction, Compassion Fatigue, and Family Engagement

Family engagement is a key concern in Early Head Start and thus is a critical component of the Head Start Parent, Family, and Community Engagement Framework (PFCE; Head Start Resource Center, 2011). A growing body of evidence suggests that the success of home visitation programs depends on the extent to which parents participate and are engaged in services (Kahn & Moore, 2010; Krysik et al., 2008; Lyons-Ruth & Melnick, 2004; Nievar, Van Egeren, & Pollard, 2010; Paris & Dubus, 2005; Peterson et al., n.d.; Raikes, Green, Atwater, Kisker, Constantine, & Chazan Cohen, 2006; Roggman et al., 2008; Sweet & Applebaum, 2004; Wasik & Bryant, 2001).

The literature on parent engagement is difficult to disentangle due to variations in how the construct has been operationalized. Across the literature, for example, the terms *family engagement*, *family involvement*, and *family participation* have been used

synonymously. Recently scholars proposed that parent engagement is one of two key dimensions underlying the broader concept of parent involvement, with participation being the other dimension (Korfmacher et al., 2008). Whereas participation refers to the quantitative aspects of involvement such as attendance, dosage, attrition, and retention, parent engagement refers to the emotional quality of a family's participation with EHS (Korfmacher, 2008). Parent engagement is thought to be a dynamic process that fluctuates in response to changes in the parents' environment (Wagner et al., 2003). For example, a parent may be highly engaged in initial services, yet become less engaged over time. Participation and engagement are interactive, thus parents who are low-engaged may also be more likely to drop out of services (Brand & Jungmann, 2014).

Theory and prior research point to numerous individual, program, community, and policy level factors that influence parent engagement in home visiting programs (Korfmacher et al., 2008; McCurdy & Daro, 2001). EHS parent and family characteristics that have been shown to influence engagement include ethnicity, age, employment status, marital status, sociodemographic risk, socioemotional functioning, depression, verbal ability, perceptual reasoning, personality, social support, and stress (Ammerman et al., 2006; Booth, Munsell, & Doyle, 2014; Daro, McCurdy, Falconnier, & Stojanovic, 2003; Duggan et al., 2000; Manz, 2012; McGuigan, Katzev, & Pratt, 2003; Olds & Korfmacher, 1998; Raikes et al., 2006; Roggman, Boyce, Cook, & Cook, 2002; Sharp, Ispa, Thornburg, & Lane, 2003). In addition, a growing body of evidence supports a link between mothers' relationship histories and their ability to connect with and benefit from home visiting services (Cluxton-Keller et al., 2014; Korfmacher, Adam, Ogawa, &

Egeland, 1997; Korfmacher, Kitzman, & Olds, 1998; Spieker, Solchany, McKenna, DeKlyen, & Barnard, 2000).

EHS program and organizational features may also influence family engagement. Some evidence suggests that programs with lower caseloads and stronger matches between families and providers have better enrollment patterns (Daro et al., 2003). One study found that mis-match between home visiting program goals and parents' goals and needs contributed to low family retention (Tandon, Parillo, Mercer, Keefer, & Duggan, 2008). Similarly, Roggman et al. (2008) found that home visits with drop-out families were less likely to focus on child development, had more distractions, and were less successful at engaging parents than home visits with families who stayed in the program. The evidence concerning the impact of home visitor turnover on family engagement is equivocal. Gill, Greenberg, Moon, and Margraf (2007) found that staff turnover was associated with longer length of stay in the program. These authors noted that in some cases families requested or were re-assigned to new home visitors if they were not making progress towards their goals.

Available evidence regarding the impact of family risk on parent engagement is inconclusive. Some studies have found that families with higher levels of risk received fewer home visits (Raikes et al., 2006) or were more likely to drop out of home visiting (McGuigan et al., 2003; Roggman et al., 2008). Chin and Teti (2013) demonstrated that higher socioeconomic risk predicted lower engagement after controlling for infant medical risk and mothers' states of mind regarding attachment. Yet another study found that high demographic risk predicted enrollment, whereas low demographic risk predicted program completion (Alonso-Marsden et al., 2013). A few studies, however,

have shown opposite trends. For example, Ammerman et al. (2006) found that increased family risk was associated with increased participation in the Healthy Families America program. Similarly, Daro et al. (2003) demonstrated that high risk families in Healthy Families America were no more likely to drop out than low risk families. Differences in results across studies may be due to differences in home visiting programs' approach to the work, variations in how family risk was conceptualized and measured, and/or differences in the time point at which participation and/or engagement was assessed. For example, some studies rely on maternal or home visitor ratings of engagement, whereas others use observational measures.

A growing body of evidence suggests that the quality of the relationship between the parent and the home visitor is a key predictor of family engagement (Brookes, Summers, Thornburg, Ispa, & Lane, 2006; Korfmacher, Green, Spellmann, & Thornburg, 2007; Krysik, LeCroy, & Ashford, 2008; Sierau, Brand, & Jungmann, 2012).

Relationship quality may be influenced by characteristics of both the parents and the home visitors. For example, home visitor qualities such as conscientiousness, persistence (Brookes, Summers, Thornburg, Ispa, & Lane, 2006), and empathy (Korfmacher, Kitzman, & Olds, 1998) have been associated with high levels of parent engagement. In addition, McFarlane et al. (2010) found that complementary matching between mothers and home visitors in attachment anxiety and attachment avoidance predicted mothers' engagement in services and feelings of trust in the interventionist.

Evidence is lacking regarding the effects of home visitor compassion satisfaction and compassion fatigue on parent engagement. Conceptually, it seems that compassion satisfaction would promote parent engagement, whereas compassion fatigue would have

negative effects. Compassion fatigue, for example, results in physical, social, mental, and spiritual exhaustion, reduced frustration tolerance, and increased negative arousal that are likely to diminish the quality of the working alliance with vulnerable families. (Bride et al., 2004; Bride, Radey, & Figley, 2002; Gentry, Baranowsky, & Dunning, 2002; Showalter, 2010).

Compassion Satisfaction and Fatigue in Early Head Start Home Visitors

The Nature of the Work in EHS Home Visiting

Limited information exists regarding how EHS home visitors respond to their work with high risk families; nevertheless, prior research and theory point to specific organizational, occupational, and individual characteristics of EHS home visiting programs and home visitors that may lead to the development of both positive and negative stress responses. Early Head Start home visitors work in an emotionally demanding environment. Families that participate in EHS home visiting are characterized by low levels of income and high levels of risk (Vogel et al., 2009). The challenges related to working with high risk families are numerous, and home visitors may be overwhelmed by the complexity of the situations they face (LeCroy & Whittaker, 2005). Home visitors often conduct sessions in chaotic, multi-family dwellings. Moreover, due to the percentage of clients who live in neighborhoods characterized by poverty and violence, home visitors at times fear for their personal safety. They may also hear stories or be aware of domestic violence, substance abuse, and/or mental health issues in the families they serve. For example, in one study home visitors from a similar program, Healthy Families, described high rates of intimate partner violence among clients as well as concerns regarding their own safety while in these clients' homes (Chamberlain, 2008). Home visitors may also feel a burden of responsibility as they worry about the

impacts of parental problems on the children and their own ability to serve the families well. Home visitors may desire to “rescue” particularly troubled infants and/or their families, and this unrealistic desire may contribute to strain for the worker (Osofsky, 2009). Finally, home visitors working with immigrant families may experience tension and face ethical dilemmas when trying to provide instrumental support to families with even more limited resources and stress related to legal documentation.

Work with traumatized infants can elicit a variety of intense emotions and reactions for home visitors and other helping professionals (Osofsky, 2009). Lane (2011) described EHS home visitors’ management of strong emotions when engaged in intimate, relationship-based work with vulnerable families, a process she referred to as emotional labor. The concept of emotional labor focuses on the worker’s response to clients. More specifically, Lane (2011) suggested that workers are required to mask their true feelings from the parent through the dual processes of surface acting and deep acting. The antecedents and consequences of emotional labor are very similar to those of compassion fatigue; however, emotional labor focuses more on the act of managing emotions, whereby compassion fatigue is itself an outcome. Lane (2011) used qualitative data from focus groups and interviews to provide examples of emotional labor in the everyday work of EHS staff.

In addition to the stress associated with serving vulnerable families, organizational characteristics of EHS may also impact home visitor stress and wellbeing. EHS home visitors have a long list of responsibilities; they are expected to engage families in services, assess needs of parents and children, and implement child development curricula. They are also required to complete large amounts of paperwork

and participate in regular training and supervision. Finally, the precarious nature of EHS funding may contribute to concerns about job security and potential downsizing that could have an impact organizational climate.

Home visitors' personal characteristics may also elevate risk. Early Head Start, like many home visiting programs, relies heavily on paraprofessional home visitors who often do not have formal degrees or professional training in a human service field (Azzillessing, 2011). That EHS home visitors are often from the communities they serve is seen as an asset, because similarities or "match" between worker and client are thought to facilitate rapport and engagement (Hiatt, Sampson, & Baird, 1998). Nevertheless, an accumulating body of evidence suggests that many home visitors from a variety of programs do not have adequate training, skills, and support to effectively intervene with families with significant risk factors such as mental health problems, substance abuse, and domestic violence (LeCroy & Whittaker, 2005; Tandon, Mercer, Saylor, & Duggan, 2008; Tandon, Parillo, Jenkins, & Duggan, 2005).

Although it remains unclear as to whether poor mental health contributes to occupational stress or vice versa, a handful of studies have demonstrated that mental health problems are not uncommon among EHS home visitors. Some evidence points to high levels of depression in home visitors (Whittaker, Becker, Herman, & Gooze, 2013). Depression and burnout, moreover, frequently co-occur (Maslach, Shaufeli, & Leiter, 2001). Although the findings are inconclusive, some evidence suggests that personal trauma history may increase risk for compassion fatigue (Baird & Kracen, 2006). In addition, some authors have suggested that people may be drawn to helping professions for reasons related to their own personal history, including negative childhood

experiences (Black, 1993; Pines, 2004). In support of this hypothesis, one recent study found that 27% of EHS home visitors reported three or more adverse childhood experiences, with almost one quarter reporting emotional abuse, sexual abuse, and/or parental substance abuse (Whitaker et al., 2014). In contrast, the national prevalence of having three or more adverse childhood experiences is considerably lower at only 9.5% (“Prevalence of Individual Adverse Childhood Experiences,” 2014). A worker’s capacity to serve high-risk clients may be compromised if she is struggling with her own mental health issues, including unresolved trauma. Unresolved trauma may be particularly problematic if the home visitor over-identifies with her clients’ problems.

Empirical Evidence of Occupational Stress in EHS Home Visitors

Very few studies have explored the experiences of EHS home visitors in the workplace, and only one known study has examined the prevalence and correlates of burnout in EHS home visitors. Gill, Greenberg, Moon, and Margraf (2007) examined stress and job satisfaction in a sample of 41 EHS home visitors over a five year period. Results from this study indicated that levels of emotional exhaustion as measured by the Maslach Burnout Inventory started low but increased over time. At one point in the study, 86% of EHS home visitors scored “high” on the emotional exhaustion subscale. Job satisfaction also decreased over time in that sample. The authors noted that a significant challenge and thus limitation of the study was the high turnover rate, as most home visitors left the program within two years. A longitudinal study using a nationally representative sample of 89 EHS programs revealed annual turnover rates of home visitors between 10.5 and 16.3% per year (Vogel et al., 2013; Vogel et al., 2015).

In a landmark study, Whitaker, Becker, Herman, and Gooze (2013) examined the health and well-being of Early Head Start staff using web-based survey data from 2,199 staff from 66 Pennsylvania Head Start programs. Although they did not include burnout and compassion fatigue as outcomes, they found that EHS workers evidenced overall poorer physical and mental health than other women in the U.S. with similar socio-demographic characteristics. Thirty-seven percent of staff met criteria for depression as indicated by scores on the Center for Epidemiologic Studies Depression Scale (CES-D) and/or diagnosis, and nearly 30% reported feeling physically or mentally unhealthy more than two weeks in the previous month. Although the sample included all EHS staff and was not limited to EHS home visitors, these data justify the need to further investigate the health and well-being of EHS home visitors.

Qualitative evidence provides additional support regarding the presence of occupational stress in EHS home visitors. Jones Harden, Denmark, and Saul (2010) used multiple data sources in a qualitative investigation of the experiences of seven EHS home visiting staff and found that staff stress was a major theme in all sources of data. The findings further revealed that home visitors faced several key challenges, including a struggle to maintain personal boundaries with families, a mix of positive and negative perceptions and attitudes towards families, feelings of overwhelming responsibility and incompetence, and lack of administrative support.

Low job satisfaction, intent to leave, and turnover in EHS home visitors may be indicators of compassion fatigue and other forms of occupational stress. Unpublished data from a recent survey of 23 home visitors from four EHS programs indicated that workers who reported lower discretion in how they approach their work as well as lower

decision-making authority were more likely to indicate intent to leave their current position (West, Berlin, & Jones Harden, 2013). This same study found evidence that perceptions of greater demands placed on workers were associated with less worker-job “fit.” In the open-ended responses to this survey, several workers expressed concern or frustration over role ambiguity (e.g., teacher, educator, parent advocate, and community service representative), too much paperwork, low salary, lack of resources, and “disorganized” or “chaotic” work culture.

Studies of occupational stress in home visitors from other program models provide mixed evidence regarding job-related stress. Burrell et al. (2009) examined job satisfaction, burnout, and intent to leave in a sample of 67 home visitors from the Hawaii Healthy Start program and found evidence of generally high job satisfaction as well as low levels of intent-to-leave and burnout. Lee et al. (2013) surveyed home visitors from a statewide voluntary child maltreatment program and found that younger home visitors scored higher on emotional exhaustion than older home visitors and that organizational climate, greater supervisory support, and perceived empowerment predicted lower burnout scores. In this same study, perceived empowerment was found to mediate the association between organizational climate and burnout.

Gaps in the Literature

Taken together, the findings above highlight several gaps in the literature. With few exceptions, most of literature regarding the experiences of EHS home visitors in the workplace has been conceptual, not empirical. The existing qualitative evidence is informative yet limited by small, homogenous samples. Although levels of burnout were assessed in one sample, the prevalence of compassion satisfaction and compassion fatigue among EHS home visitors has not been empirically examined. Consequently, it

has not been determined whether or not EHS home visitors experience secondary traumatic stress reactions in response to their work, or whether negative reactions are more appropriately characterized as a more general form of burnout.

If compassion satisfaction and compassion fatigue are present and prevalent in EHS home visitors, identifying the variables most highly associated with these outcomes would help inform workforce development initiatives. Theory and prior research offer guidance in this area, suggesting that an array of individual, occupational, and organizational variables should be considered for inclusion in the model.

In regards to occupational and organizational characteristics, the extant literature points to numerous factors that play a role. Role stress, role conflict, and role ambiguity have been identified as important predictors. Prior research further suggests that frequency and intensity of workers' interactions with their clients, as well as the degree of negative client behaviors predicts occupational stress outcomes. Yet although the level of exposure to client trauma has been implicated as risk factor, to date no studies have linked actual client characteristics to the development of compassion fatigue and/or compassion satisfaction; this could be an important contribution. At the organizational level, organizational commitment, organizational climate and culture, and supervision are important factors to include. It is important to note, however, that occupational and organizational characteristics are each processed through an individual's perceptual lens. As a result, it may be helpful to account for organizational membership, objectively, as a unique level of analysis, while also examining how perceptions of role, control, and organizational climate vary among individuals within this unique occupation.

As reviewed above, prior research suggests individual characteristics such as worker age, gender, experience, race and ethnicity, dispositional personality characteristics, religiosity, spirituality, and personal trauma history should be strongly considered. In addition, several studies have demonstrated a role for personal resources such as mindfulness, coping, social support, and empathy. Because currently available evidence regarding experience, personal trauma history, and empathy is inconclusive, inclusion of these variables may contribute important knowledge to the field. Moreover, increased understanding of how personality characteristics are linked with positive and negative outcomes may help inform employee hiring, training, and supervision strategies. Adult attachment security seems particularly relevant due to the strong body of evidence linking attachment security with relational capacity as well as coping mechanisms (Mikulincer & Shaver, 2007). The current study will also add to existing knowledge by examining associations among compassion satisfaction, compassion fatigue, job withdrawal, and family engagement.

Prior research is also characterized by methodological limitations. The vast majority of studies of compassion satisfaction and fatigue have relied on cross-sectional data, which is prone to mono-method bias and also limits the ability to make causal inferences (Li et al., 2014; Smith & Adcock, 2014). This dissertation addresses this limitation in three ways. First, the use of multi-level data (family, home visitor, organization) allows for an examination of information from multiple sources and layers of the workers' social ecology. Second, the design establishes temporal precedence by using data collected at multiple time points. Third, the addition of qualitative data helps explain the quantitative findings and thus promote a deeper understanding of the data.

CHAPTER 4

METHOD

Overview

This study employed a mixed-methods approach to answering the research questions. In mixed-methods research, the investigator collects and analyzes both quantitative and qualitative data using a concurrent, sequential, or embedded design (Creswell & Plano Clark, 2011). Mixed-methods research is based on the assumption that there are multiple legitimate approaches to understanding complex phenomena (Greene, 2007). Moreover, it has been argued that a multiplistic approach yields a richer, deeper understanding of the phenomena being studied while also enhancing the validity of the findings (Greene, 2007).

The reasons for selecting a mixed-methods approach for this study were threefold. First, the strategy seemed appropriate due to the current state of the research and exploratory nature of the research questions. As explained in the literature review, limited information exists regarding the antecedents and consequences of compassion satisfaction and compassion fatigue in EHS home visitors. Second, the use of qualitative data in addition to the quantitative data offered the advantages of triangulation and complementarity (Cresswell & Plano Clark, 2011; Greene, 2007). Third, the use of different methods to study the same phenomenon provided opportunities for deeper understanding as well as corroboration of the findings.

Study Design

This study used an expanded sequential explanatory mixed methods design (Creswell & Plano Clark, 2011), consisting of three distinct phases that correspond directly with the study aims (Figure 3). During the first phase, quantitative survey data

were collected and analyzed. During the second phase, qualitative interview data were collected and analyzed. During the third phase, the quantitative and qualitative data were integrated and interpreted together. The purpose of this design was to use the qualitative data as a means of providing a more in-depth explanation of the quantitative results (Creswell & Plano Clark, 2011). This design has two primary strengths: (a) it is relatively straightforward to implement the study and report the results and (b) the second phase can be designed based on what is discovered in the first phase (Creswell & Plano Clark, 2011). Mixed methods scholars have suggested using a notation system to assist in presenting the specifics of study design (Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). In this study, the notation ‘QUAN + qual’ indicates the predominance of the quantitative data in the analysis.

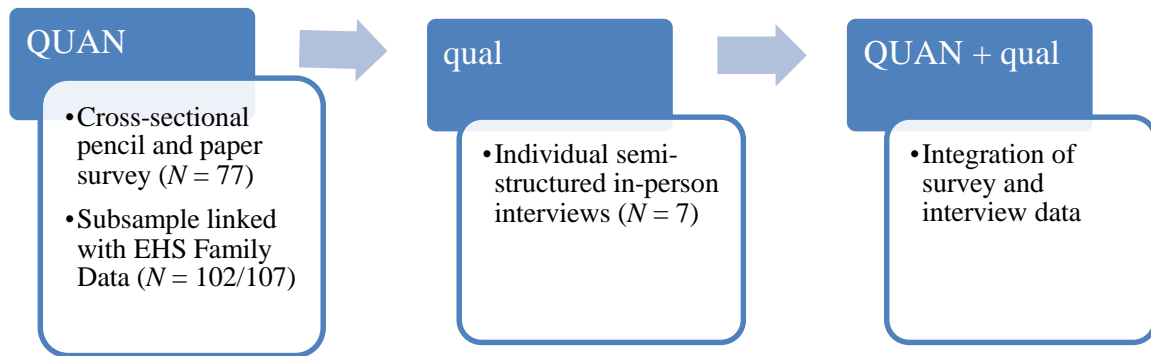


Figure 3. Diagram of study design. Data from 102 EHS families collected before the administration of the home visitor survey were available for linking with home visitor surveys to answer Research Question 2. Engagement data from 5 additional families were available for linking with home visitor surveys to answer Research Question 3.

Sample and Participant Selection

This study both drew from and added to data from an ongoing federally-funded randomized controlled trial, the Partners for Parenting (P4P) project, which was

investigating the effects of home-based Early Head Start with and without a supplemental, attachment-based intervention, Mary Dozier's *Attachment and Biobehavioral Catch-Up* (ABC) Program. The P4P project had five EHS partner programs that were located throughout the greater Washington, D.C. area. This study built on existing relationships that were previously well-established with these five EHS programs. Thus, home visitors from five local EHS programs that were participating in P4P were invited to participate. Combined, these five programs employed 31 home visitors at the time the surveys were administered.

In addition, home visitors from 13 additional EHS programs throughout Maryland were recruited to participate in the pencil and paper survey. These additional programs operated in urban, suburban, and rural areas and serve a wide range of families. These 13 EHS programs represented all EHS home-based programs in Maryland, with the exception of six new programs that were administered by the same agency and that received their initial EHS funding during the summer of 2014. The EHS program director at this agency indicated that it was too early for these programs to participate because they were still in the process of recruiting, hiring, and training home visitors. Thus, 18 of 24 (75%) EHS programs in Maryland participated in the study.

Procedures

Phase 1: Quantitative Procedures

Data sources. The quantitative phase of this study employed a non-experimental design using cross-sectional survey data collected from home visitors ($N = 77$). As will be explained below, the survey data were used in three ways. First all surveys were used in descriptive analyses to examine the relative associations among a number of independent variables and compassion satisfaction, secondary traumatic stress, and

burnout. Second, to determine the relative impact of EHS family cumulative risk on compassion satisfaction, secondary traumatic stress, and burnout, a subset of surveys from partner programs ($N = 27$) were linked with EHS family-level data ($N = 102/107$) that were collected as part of the ongoing parent study (i.e., P4P). Specifically, data from each home visitor were linked with data from each of the families she or he served that was enrolled in the P4P study. The P4P study recruits all home-based EHS families in which the parents (a) are 18 or older, (b) have been in EHS for at least 3 months, (c) speak English or Spanish, (d) have a baby 6-18 months old, and (e) are not receiving Part C early intervention services for a child with a disability. The family-level data of interest for this study consisted of family demographic and psychosocial risk data. These data were collected by the study team during baseline visits to the families' homes. Appendix A includes a flow chart of study enrollment.

Home visitor survey data were also linked with EHS programs' data regarding home visitor turnover six months after the survey was administered. Finally, home visitor survey data were linked with P4P data regarding EHS family engagement. To maintain home visitor and EHS family confidentiality, home visitors were assigned unique study ID numbers that were then used to link home visitor data with EHS family data from the P4P project.

Recruitment of non-P4P EHS programs. Home-based EHS programs were identified through publicly available Program Information Report (Office of Head Start, 2014) data and through the assistance of the Maryland Head Start Association, the Maryland State Department of Education, and word of mouth. All home-based EHS programs in Maryland were invited to participate. Early Head Start program directors and

supervisors were the first point of contact for the study. Because the program directors served as gatekeepers, their approval and cooperation facilitated access to and recruitment of study participants (Padgett, 2008). A brief introductory letter served as the initial mode of establishing contact with the program directors who were not affiliated with the P4P study. The letter included a brief overview of the dissertation study and invited programs to participate. The researcher then placed a follow-up call to request participation, respond to questions, complete the brief screener, and schedule a time to visit the program. In some cases several phone calls and e-mails were necessary to locate the appropriate contact person.

Program administrators were interviewed by the researcher using a brief Program Information Form. Researchers in the Head Start Family Voices Study (Aikens, Bandel, Akers, Lyskawa, & Jerald, 2014) recommended using a similar instrument to complement the information available on the federal Head Start Program Information Report due to variations in the numbers and characteristics of families served. The instrument was a modified version of one used by the Head Start Family Voices Study (Aikens et al., 2014) and included questions about the characteristics of the programs and the families they serve. Although the data obtained by this screener were not used in quantitative analyses, it provided important contextual information when interpreting the study findings. The Program Information Form is provided as Appendix B.

Data collection procedures. Prior to collecting data, all study procedures were approved by the University of Maryland, Baltimore's Institutional Review Board. With the cooperation and assistance of program administrators and supervisors, this researcher visited 17 out of 18 EHS program to review study procedures, obtain consent, and collect

data. This was found to be a successful method of collecting home visitor survey data during the pilot phase of the P4P study, resulting in a high home visitor response rate. The 18th program had only one home visitor and was located in a remote area in that was a three hour drive from the researcher. Because this visit could not be coordinated with another visit in the same region, it was decided that recruitment by a phone call was appropriate and more cost effective than a one-on-one meeting. After describing procedures and informed consent over the phone, a study packet was mailed to the participant with clear instructions, the researcher's contact information, and a postage-paid return envelope.

Prospective participants were provided with (a) a consent form labeled with a unique study ID number and a space to write their name and contact information, (b) a pencil and paper survey with a matching study ID number, and (c) a large envelope in which to place their surveys once completed. Identifying information was collected for three reasons: (a) for the purpose of distributing compensation; (b) to allow for the linkage with EHS family-level data for home visitors in the P4P study; and (c) to facilitate contact with those home visitors who were selected to participate in the qualitative phase of the study. The consent form included a question asking participants for permission to contact them in the future for the purpose of a qualitative interview and/or to collect turnover data. When necessary, study and informed consent procedures were explained in Spanish by a bilingual, bicultural research assistant. Procedures were explained in Spanish at five EHS sites. To ensure privacy, participants were encouraged to complete their survey in a private location. Home visitors were assured that their

responses to all questions would be kept strictly confidential and that the results would be reported in aggregate only. The consent form is included as Appendix C.

The researcher remained on site to collect surveys, distribute compensation, and answer questions. Stamped return envelopes were offered on the rare occasions when home visitors could not complete the survey in the time allotted. This was necessary in two (2.6%) instances in which home visitors had to leave early for home visits. Packets were left on two (2.6%) additional occasions when home visitors were absent from work because they were sick, on vacation, or on visits. In these instances, home visitors received a follow-up phone call or e-mail from the researcher to ask if they had questions about the study or consent procedures. All participating home visitors received a \$25 Amazon or Walmart gift card for their time. Confidentiality and security of information were continually reassured during the introduction to the study, during informed consent procedures, and at the conclusion of data collection.

Phase 2: Qualitative Procedures

The purpose of the qualitative phase of this study was to provide a deeper understanding of the quantitative findings. A systematic two-stage sampling procedure was used to select 10 participants to complete the qualitative interviews. During the first stage, quantitative data were used to identify participants who scored either high or low on the instruments measuring compassion satisfaction and fatigue. Next, respondents from each group (high/low) were selected using a maximal variation strategy (Creswell & Plano Clark, 2011), in which variation was sought based on both demographic characteristics (age, ethnicity, family status) and program. The purpose of this process

was to ensure a balance of homogeneity and heterogeneity that would enhance the richness of the data.

Ten potential participants were first contacted by e-mail using the address they provided. Those who did not respond within three working days received a follow-up phone call and then another e-mail if necessary. Attempts to recruit participants ceased if they did not respond after three contacts. Three potential participants could not be reached, and were considered passive decliners. Of those who agreed to participate, four scored on the “low” end of the range of scores on the measure of secondary traumatic stress, and the other three scored on the “high” end of the range of scores. The participants represented EHS programs that varied in size and served a broad range of families in eastern, western, and central Maryland and Washington, D.C.

Data were collected using face-to-face semi-structured interviews that were designed to last approximately one hour. Actual interviews lasted an average of 57 minutes ($Min = 36$, $Max = 76$, $SD = 15.11$). The time and setting for the interviews was at the discretion of the participant so as to maximize privacy, comfort, and convenience (Padgett, 2008). Although consent to participate in the study was obtained during the quantitative phase, ongoing informed consent was assessed and obtained using a script that preceded the interview (see Interview Guide, Appendix F). The ongoing consent process included reminding participants of key features of study participation such as confidentiality and the right to withdraw at any time. Participants in the qualitative phase were given a \$25 Amazon or Walmart gift card for their time.

All interviews were audiotaped and transcribed verbatim with permission from participants. Four interviews were transcribed by the interviewer and three were

transcribed by a transcription service. Transcription followed the processes and guidelines recommended by Padgett (2008). Audio files, interview transcripts, field notes, and other data pertaining to the process of data collection including dates, times, and settings for individual interviews were maintained in a database and stored in a password-protected file on a secure server.

A large number of home visitors in this sample were known to speak English as a second language. In order to develop a thorough, deep understanding of the phenomena from diverse points of view, native Spanish-speaking home visitors were included in the sample and were interviewed in their language of choice. Six of the seven interviews were conducted in English. One interview was conducted in Spanish by a trained bilingual, bicultural research assistant. This interview was transcribed in Spanish and then translated into English by the same bilingual research assistant.

Phase 3: Mixed Methods Procedures

The final phase of the study involved the integration and subsequent interpretation of the quantitative and qualitative results. The ultimate goal of this process was to improve the quality of inferences overall (Creswell & Plano Clark, 2011). Dedoose v. 6.1.18 (Sociocultural Research Associates, 2014), a web-based application for analyzing qualitative and mixed methods data, was used to facilitate the integration of qualitative and quantitative data.

Measures

Home Visitor Survey

The home visitor survey was constructed using the Tailored Design Method proposed by Dillman, Smyth, and Christian (2009). Attention was paid to visual design,

choice of wording, and selection of closed and open-ended questions. Although the initial draft of the survey was created based on theory and prior research, Partners for Parenting directors and/or supervisors from each program were asked to provide feedback on the content of the home visitor survey via e-mail or a one-on-one conversation. Overall, program directors provided minimal feedback with the exception of one request to add a question to assess income or material hardship.

Survey questions were designed to tap individual, occupational, and organizational-level characteristics and constructs that theory and prior research have shown to be associated with compassion satisfaction and compassion fatigue. The survey was composed primarily of measurement instruments known to have strong psychometric properties. It is worth noting that several of the items and scales on the survey were pilot-tested in an earlier version of the survey that was previously administered to home visitors (West et al., 2013). The survey was pre-tested by research staff and modifications were made as needed.

Because many of the EHS home visitors in this sample are Latina, the survey was translated by a translation service specializing in social science research and attentive to specific Central American dialects that were anticipated in this population. Some instruments were already available in Spanish; these instruments were reviewed by the same translation service and minor modifications were made as needed. All participants were offered the opportunity to take the survey in either English or Spanish. The survey took approximately 45 minutes to complete, although the Spanish version often took five or ten minutes longer. A summary of the survey measures is presented in Table 1. The survey is attached as Appendix D.

Independent Variables

Individual characteristics. Items on the home visitor survey assessed a range of home visitor sociodemographic and psychological characteristics, perceptions of work-related experiences, and personal resources.

Demographics (A1-7). Home visitor race was assessed categorically using seven response options (1 = *American Indian or Alaskan Native*, 2 = *Black or African American*, 3 = *White*, 4 = *Asian*, 5 = *Native Hawaiian or Pacific Islander*, 6 = *Biracial or Multi-racial*, 7 = *Other*). Ethnicity was assessed as a dichotomous variable (1 = *Hispanic, Latino, or Spanish origin*; 0 = *not of Latina, Hispanic, or Spanish origin*). Home visitor age was measured in years. Relationship status was assessed categorically with four response options and was later reduced to two categories (1 = *married or living with a partner*, 0 = *not married or living with a partner*). One dichotomous item was used to assess whether home visitors had children of their own (1 = *yes*, 0 = *no*).

Material hardship (A7) was assessed using a four- item scale developed by Mayer and Jencks (1989). Participants are asked to indicate whether in the past 12 months they received certain types of public assistance, did not have enough money to provide shelter for their family, did not pay all of their bills, and did not have enough money for health care and/or medicines (all coded 1 = *yes*, 0 = *no*). An overall material hardship score was calculated as the sum of all items, with a possible range of 0 to 4 and with higher scores indicating greater hardship. These four items were also used in a recent study of the health and well-being of Head Start staff (Whitaker, 2014).

Table 1. *Summary of Measures and Sources*

SUMMARY OF MEASURES AND SOURCES	
Individual Characteristics (Home Visitor Survey)	
Demographics (A1-7)*	<i>Primary:</i> Race and ethnicity <i>Exploratory:</i> Home visitor age, marital status, material hardship, languages spoken
Education and Experience (B1-4)	<i>Primary:</i> Years of experience as a home visitor, prior experience with high risk families <i>Exploratory:</i> Years of education, field of study
Physical Health and Mental Health (J1-10, K)	<i>Exploratory:</i> Single item assessing general health, depression (CESD-10)
Trauma History (N)	<i>Primary:</i> Adverse Childhood Experiences Scale (ACES)
Personal Resources (K1-2, L1-2, O1-12, M1-18, P5)	<i>Primary:</i> Adult attachment style <i>Exploratory:</i> Spirituality, religiosity, empathy, coping
Occupational Characteristics (Home Visitor Survey, Partners for Parenting Project)	
EHS Family Cumulative Risk	<i>Primary:</i> EHS families' demographic and psychosocial risks (linked from Partners for Parenting project)
Job Characteristics (C1-5, 10, D1-19)	<i>Primary:</i> Job Characteristics Questionnaire (JCQ) <i>Exploratory:</i> Number of hours spent in direct contact with clients, number of families on caseload, languages in which they provide services
Perceived Working Conditions (C6, G1-2, H1-6, P1-5)	<i>Primary:</i> Satisfaction with salary and benefits, advancement opportunities, overall job satisfaction <i>Exploratory:</i> Perceived quality of supervision, work-related rewards and challenges, work-related safety
Home Visitor Perception of the Working Alliance (E1-12)	<i>Exploratory:</i> Working Alliance Inventory (WAI)
Organizational Characteristics (Home Visitor Survey, Program Administrators' Reports, Program Information Reports)	
Organizational Characteristics	<i>Primary:</i> EHS Program size, urban/rural, overall client demographics, frequency of supervision, other supports
Proximal Outcomes (Home Visitor Survey)	
Professional Quality of Life (F1-30)	<i>Primary:</i> Compassion satisfaction and compassion fatigue
Intent to Leave/Job Withdrawal (C7-9)	<i>Primary:</i> Organizational Withdrawal Scale (OWS)
Distal Outcomes (Program Administrators' Reports, Partners for Parenting Project)	
Home Visitor Turnover	EHS programs
Family Engagement	EHS home visitors' and families' reports of the working alliance and helping relationship

Education and experience (B1-4). Years of experience providing home visiting services were assessed categorically (1 = none, 2 = less than 1 year, 3 = 1-2 years, 4 = 3-5 years, 5 = 5-10 years, 6 = more than 10 years). This variable was later recoded as 0 = less than five years and 1 = five years or more. Years of education was assessed categorically using seven categories coded as 1 = some high school, no degree, 2 = high school/GED, 3 = vocational/technical training program, 4 = some college/no degree, 5 = associate's degree, 6 = bachelor's degree, and 7 = master's degree. The data were used in both categorical and continuous forms in analyses.

Physical and mental health (J1-10, K). One exploratory question designed to assess overall physical health (K) was drawn from the Gallup-Healthways Well-Being Index (<http://www.gallup.com/poll/wellbeing.aspx>). The item, "Would you say your health in general is . . .," was rated on a scale ranging from 1 (poor) to 5 (excellent). This question was also used in the Pennsylvania Head Start Health and Wellness Survey (Whitaker, Becker, Herman, & Gooze, 2013). Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D 10; Andresen, 1994), a short, widely-used self-report scale designed to measure depressive symptoms in the general population. The CESD-10 was known to have with high internal consistency reliability (α 's = .84 - .90) and good test-retest reliability ($r = .54$; Radloff, 1977). Response options ranged from 0 (rarely or none of the time) to 3 (most of the time/5-7 days). Positive items were reverse scored and the total score consisted of the sum of all items. The possible range of scores was 0 to 30, with higher scores representing more depressed mood. In this sample, the CES-D had questionable internal consistency reliability ($\alpha = .68$).

Trauma history (NI-10). Home visitor trauma history was assessed using a modified version of the Adverse Childhood Experiences Scale (ACE; Felitti & Anda, 2010). The ACE scale asked participants to respond “yes” or “no” as to whether they had experienced 10 childhood experiences including emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, parental separation or divorce, domestic violence, parental substance abuse, parental mental illness, or parental incarceration. In this study, to maintain privacy, respondents were asked to self-calculate a total score only, thus they were not asked to indicate specifically which adversities they experienced.

Dispositional personality characteristics (OI-13). Two instruments were used to assess adult attachment style. The 12-item Experiences in Close Relationship Scale (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007) was used to assess attachment avoidance and attachment anxiety. Although the original ECR was designed to measure romantic attachment (Brennan, Clark, & Shaver, 1998), the instructions and items have been reworded to measure close relationships in a more general way that is independent from an individual’s current relationship status (Mikulincer & Shaver, 2007). Likert-type response options ranged from 1 (disagree strongly) to 7 (agree strongly). The ECR-S typically shows low correlations between the avoidance and anxiety subscales, indicating the ability to differentiate between the two dimensions, as well as good test-retest reliability (Wei et al., 2007). The two subscales have also been shown to have acceptable internal consistency (.77-.86 for the Anxiety subscale and .78 - .88 for the Avoidance subscale). In this sample, alphas were lower (.66 for both scales). For the Anxiety subscale, the phrasing of item #8 as a double negative (“I do not often worry about being abandoned”) was problematic, particularly for Spanish-speaking participants. For this

reason, and because the item-total correlation for this item was small and negative (-.04), this item was dropped. The final 5-item scale had a much improved Cronbach's alpha of .80. For the Avoidance subscale, although one item evidenced a low item-total correlation, because the coefficient was in the expected direction, and because this is a well-established scale, this item was retained.

A brief single-item, categorical forced-choice measure was also used to assess adult attachment typology. Participants were presented with three statements and were asked to endorse the one statement that best described how they felt about close relationships (Hazan & Shaver, 1987). Each of the three sets of statements corresponded with one attachment type: secure, anxious or avoidant. The three attachment types were individually dummy coded (1 = *yes*, 0 = *no*) for analysis. Although previous studies have demonstrated that this measure has low test-retest reliability, evidence suggests that individual's self-reported classifications are associated in theoretically predictable ways with beliefs about relationships, interpersonal regulation and skills, and experiences in occupational contexts (Mikulincer & Shaver, 2007).

Spirituality (LI-2). Two questions from the Daily Spiritual Experiences Scale (Underwood, 2011) were used to assess spirituality and religiosity. Likert-type responses range from 1 (not at all) to 4 (very). Although the use of single-item measures of religiosity and spirituality limit the type, amount, and depth of information that can be obtained from participants, such items have been shown to have good temporal stability, concurrent validity, and factorial validity in prior research (Abdel-Khalek, 2007). The two items were analyzed individually in all analyses.

Empathy (MI-18). Empathy was included as an exploratory variable. Three separate scales were included that each tapped a distinct component of empathy. The survey included four items from the self-other awareness scale of the Empathy Assessment Index (EAI-SOA; Gerdes, Segal, & Lietz, 2012) and seven items each from the personal distress and perspective taking scales of the Interpersonal Reactivity Index (IRI; Davis, 1980, 1983). The self-other awareness (SOA) scale tapped a cognitive component of empathy, the individual's ability to recognize the difference between the experiences of another person from their own. The perspective taking (PT) scale tapped another cognitive component, the reported tendency to adopt the psychological point of view of others ("I sometimes try to understand my friends better by imagining how things look from their perspective"). The personal distress (PD) scale was designed to assess an affective component of empathy, the tendency to experience distress and discomfort in response to distress in others ("Being in a tense emotional situation scares me"). Likert-type responses ranged from 1 (never) to 5 (always). Scale scores were derived by summing the individual items. In a validation study, Davis (1983) reported Cronbach's alphas ranging from .71 to .77 and test-re-test reliability ranging from .61 to .71 for the perspective taking and personal distress subscales. Prior studies have found Cronbach's alphas for the self-other awareness scale ranging from .68 to .74 (Gerdes, Geiger, Lietz, Wagaman, & Segal, 2012). These scales have been shown in previous studies to be associated with compassion fatigue, compassion satisfaction, and burnout and to have acceptable internal consistency reliability (Thomas, 2013; Wagaman & Geiger, 2012). In this sample, the perspective taking and personal distress scales had acceptable internal

consistency reliability ($\alpha = .83$ and $.77$, respectively). In contrast, the self-other awareness scale had poor internal consistency ($\alpha = .45$) and was used with extreme caution.

Occupational characteristics. EHS family risk, job characteristics, and job satisfaction were the primary occupational variables of interest. In addition, caseload size, home visitors' perceptions of their working alliances with their families, and perceptions of job-related rewards and challenges were included for exploratory purposes.

EHS Family Risk (C10). Levels of family risk were assessed in two ways. First, home visitors were asked to indicate the number of families on their current caseload that were characterized by any of the following risk factors: teen parent, single parent, not employed or in school, homeless, low or no social support, challenges related to immigration status, mental health problems, substance abuse, or domestic violence. A version of these questions was used in the Head Start Family Voices study (HSFV; Aikens et al., 2014) and was amended for this study to include additional risk factors (i.e., immigration status, substance abuse, domestic violence, social support) that have been found to be particularly challenging issues for home visitors to address. Each category was recoded as a dichotomous variable (1 = *has families on caseload with this risk factor*, 0 = *does not have families on caseload with this risk factor*).

Second, EHS family risk data from the Partners for Parenting study were linked with survey data from a subset of 27 home visitors. EHS family risk data were collected by research staff during a baseline visit to the families' homes. Three cumulative risk scores were created for each EHS family: (a) a 7-point EHS family demographic risk score, (b) a 6-point EHS maternal psychological risk score, and (c) a 13-point combined cumulative risk score that was calculated as the sum of all family demographic and

maternal psychological risk variables. Relevant EHS family risk factors were identified based on two criteria following Sameroff et al. (1987). The first was that there was a significant basis in the literature (theoretically or conceptually) suggesting the variable's potential effect on home visitor compassion satisfaction, secondary traumatic stress, or burnout. The second was that the variable was highly reliable. The EHS family demographic risk index was comprised of maternal education, marital status, teen mother at birth of first child, TANF receipt, social cohesion, socioeconomic strain, and number of children in the home. The EHS maternal psychological risk index was comprised of maternal depressive symptoms, maternal anxiety, maternal childhood trauma, parenting stress, intimate partner violence, and adult attachment insecurity. Each of these individual variables was transformed into a new dichotomous variable indicating the presence or absence of risk (1 = *presence of risk*, 0 = *absence of risk*). For continuous variables, established cut scores were used to determine presence or absence of risk when available; otherwise, families in the top quartile were placed in the *presence of risk* category. Dichotomous variables were then summed to create the cumulative risk index. For each cumulative risk index, higher scores indicated higher levels of cumulative risk. Minimal missing data for scale scores were handled in SPSS using ipsative mean imputation. For more detailed information on how the cumulative risk indices were constructed see Appendix E.

Job characteristics (D1-17, C1-5). The survey included 19 items from the Job Characteristics Questionnaire that assessed five domains of potential stress: skill discretion, decision authority, demands, coworker support, and supervisor support (Karasek et al., 1998; Ryff et al., 2010). Response options ranged from 1 (never) to 5

(always). Following Whitaker, Death-Wesly, and Gooze (2015), items from the skill discretion and decision authority subscales were combined into a single subscale, control. In their study, Whitaker et al. (2015) found a Cronbach's alpha of .72 for the control subscale. However, because the newly created subscale demonstrated poor internal consistency reliability in this sample, ($\alpha = .51$), three items with low item-total correlations were dropped, resulting in a six item scale ($\alpha = .71$). Although Whitaker et al. (2015) found higher internal consistency reliability in their study, it is worth noting that they were using the scale in a combined sample of both Head Start home visitors and classroom teachers. The demands, coworker support, and supervisor support subscales have been shown to have acceptable internal consistency reliability (α 's = .76., .70, and .87, respectively). In this sample Cronbach's alphas for the three subscales were .82, .84, and .89, respectively.

A second, exploratory scale was constructed to assess perceived quality of supervision. Four items were adapted by the investigator for this purpose from the Leadership Self-Assessment Tool from Zero to Three (Parlakian & Seibel, 2001). Sample items include, "I feel safe sharing my thoughts and feelings with my supervisor," and "My supervisor leads by example, not just by words." Response options ranged from 1 (not at all true) to 5 (very true). An overall score was calculated with a possible range of 4 to 20, with higher scores indicating higher quality supervision. This scale had excellent internal consistency reliability ($\alpha = .91$). As expected, in this study correlations between this measure of supervision and the JCQ supervisory support scale were strong and positive ($r = .82, p < .001$).

Home visitors were asked to indicate the number of months that they had been employed in their current position, the number of hours each week they spent in direct contact with clients, the number of families on their caseload, and the languages they used to provide services. The first three questions were coded as continuous data, and the responses for the final question were dummy coded as three distinct variables (1 = *provides services in this language*, 0 = *does not provide services in this language*).

Perceived working conditions (C6, P1-4). Perceived working conditions were measured using a four-item scale that previous research has shown to be related to worker retention/turnover (Dickinson & Painter, 2009). Sample items included “I am satisfied with the salary I receive from my agency” and “I have the opportunity for advancement in this agency.” Participants rated the items on a scale from 1 (strongly disagree) to 5 (strongly agree). A total score was calculated by summing all individual items. The summed scores had a possible range of 4 to 20, with higher scores indicating greater satisfaction with benefits. The scale has demonstrated good internal consistency reliability in other samples ($\alpha = .79 - .80$; Strolin-Goltzman, Auerbach, McGowan, & McCarthy, 2008). In this sample the scale had low internal consistency reliability ($\alpha = .52$). A separate but related item, “I feel that my job is secure,” was added to the survey based on committee feedback. Participants rated this item on a scale from 1 (strongly disagree) to 5 (strongly agree). This item was used as an individual variable in analyses. One Likert-type item was used to assess overall job satisfaction, “How satisfied are you in your work with Early Head Start?” Response options range from 1 (very dissatisfied) to 6 (very satisfied).

Home visitor perception of the working alliance (E1-12). The 12-item Working Alliance Inventory-Short Form (WAI - SF; Busseri & Tyler, 2003; Horvath & Greenberg, 1994; Santos, 2005) was used to measure home visitors' perceptions regarding their relationship with clients. Although traditionally used to assess working alliance in dyads, the measure has been used successfully to assess perceptions of overall working alliance in EHS home visitors (Whitaker, 2014). Thus, a modified version of the form was used that would allow each home visitor to provide one global, aggregated assessment of his/her relationships with all of the parents on their caseload. This same modified version was used in the Evidence-Based Home Visiting cross-site evaluation (Boller et al., 2012). Representative items include, "I believe parents like me" and "Parents and I have built mutual trust." Participants rated items on a scale from 1 (never) to 5 (always). An overall working alliance score was calculated by averaging all items. Response options ranged from 1 (never) to 7 (always). Two items were reversed scored. Prior studies have demonstrated internal consistency reliability coefficients of .91 for both the client and worker versions of the WAI-SF (Busseri & Tyler, 2003). In this sample the WAI-SF had good internal consistency reliability ($\alpha = .77$).

Organizational characteristics. Data obtained from program directors on the Program Information Sheet were used to gain a better understanding of general program characteristics. The Program Information Sheet (Appendix B) included questions regarding the number of home visitors employed by the program, the location of the program, EHS family recruitment procedures, and EHS family characteristics (e.g., languages spoken and specific psychosocial challenges facing families).

Professional Quality of Life (F1-30)

Compassion satisfaction and compassion fatigue were measured using the Professional Quality of Life Scale (ProQOL Version 5; Stamm, 2009). The ProQOL is comprised of 30 Likert-style items (1 = *never* to 6 = *very often*) that make up three subscales with 10 items each: compassion satisfaction, secondary traumatic stress, and burnout. Five items were reverse scored, and items for each dimension were summed. Stamm (2010) reported good internal consistency reliabilities ($\alpha = .82, .71, \text{ and } .78$ for compassion satisfaction, burnout, and secondary traumatic stress, respectively). The ProQOL is not without controversy, particularly with regard to its ability to discriminate burnout from secondary traumatic stress (Cieslak et al., 2013). Nevertheless, the instrument has been used successfully in many studies and is currently the only available measure of compassion satisfaction. In this sample, internal consistency reliability coefficients were good for compassion satisfaction ($\alpha = .87$) and acceptable for secondary traumatic stress ($\alpha = .78$) but poor for burnout ($\alpha = .63$). Notably, Cronbach's alphas for the burnout scale have been relatively lower across many studies (Cieslak, 2013; Stamm, 2010). The burnout scale also performed poorly in a sample of paraprofessional black nursing assistants ($\alpha = .53$; Maris, 2013). In light of the similarities between these two populations, and based on recommendations by de Vaus (2002), the decision was made to drop three items with item-total correlations less than .3 ("I have beliefs that sustain me," "I am a very caring person," and "I feel connected to others"). This resulted in a scale comprised of seven items ($\alpha = .78$). Table 2 presents cut scores based on national norms that were created using a data bank of 1,289 cases from multiple studies (Stamm, 2010). These cut scores were used to place home visitors in categories representing "low,"

“medium,” or “high” scores on compassion satisfaction and secondary traumatic stress. Established cut scores were not applicable to the revised burnout scale.

Table 2

Cut Scores for the ProQOL (Stamm, 2010)

	Compassion Satisfaction	Secondary Traumatic Stress
Low	22 or less	22 or less
Medium	23-41	23-41
High	42 or more	42 or more

Dependent Variables

Home visitor intent to leave, job withdrawal, and job turnover (C7-9). Home visitors’ job withdrawal and intent to leave were assessed with three questions: “How often do you think about resigning from your current job?”, “How likely is it that you will resign within the next six months?”, and “All things considered, how desirable would it be for you to resign from your current job?” The wording of the response options varies slightly for each question but, in general range from 1 (never/very unlikely/very undesirable) to 4 (constantly/very likely/very desirable). The items were originally a subscale of the Organizational Withdrawal Scale (OWS; Laczo & Hannish, 1999) and were subsequently adapted and used as a distinct scale in a later study (Hwang & Hopkins, 2012). An overall job withdrawal score was calculated as the mean item score. The scale has demonstrated strong internal consistency reliability in prior research ($\alpha = .84$; Hwang & Hopkins, 2012). In the current sample, Cronbach’s alpha was excellent at .91.

Actual home visitor turnover was assessed in Partners for Parenting EHS programs only. The research team maintains close contact with home visitors in each of these programs, thus turnover was easily identified.

Family engagement. Family engagement was operationalized as EHS mothers' and EHS home visitors' perceptions of the working alliance and helping relationship. Two sets of questions from EHS mothers were linked with EHS home visitor data: (a) the 12-item Working Alliance Inventory – Client Version (WAI; Horvath & Greenberg, 1989) and (b) a 15-item helping relationship scale that was used in a prior studies of EHS home visitors (Roggman, Boyce, Cook, & Jump, 2001). For both sets of questions, EHS mothers rated items on a scale from 1 (strongly disagree) to 5 (strongly agree). Scale scores were calculated by summing all items. The WAI contained only minor changes in wording to that rendered it appropriate for use with EHS mothers. Representative questions from the helping relationship scale included, “My home visitor respects and supports my religion and culture,” and “My home visitor is easy to talk with.” Home visitors' global perceptions of working alliance were also assessed with the WAI (see above). Prior studies have found excellent internal consistency reliability coefficients for both the client and worker versions of the WAI-SF ($\alpha = .91$; Busseri & Tyler, 2003) and for the Helping Relationship Inventory ($\alpha = .99$; Roggman et al., 2001).

Qualitative Interview

Because the goal of the qualitative phase was to help explain the quantitative results (Creswell, Plano Clark, Gutmann, & Hanson, 2003), the content of the interview guide was based on the results from the quantitative phase of the study. The interview guide was designed so as to “uncover the participant's views but otherwise respect the way the participant frames and structures the responses” (Marshall & Rossman, 2011).

The interview guide was developed using the aims of the research, results from the quantitative analyses, and themes from the literature. Feedback on the initial draft of the guide was elicited from and provided by members of the dissertation committee as well as by members of the Qualitative Interest Group at the University of Maryland, Baltimore School of Social Work, which is comprised of students and faculty who have considerable experience and interest in qualitative research. The guide was reviewed and revised following four pilot interviews, which were conducted using both English and Spanish research assistants as participants.

The final semi-structured interview guide contained 19 questions exploring factors thought to contribute to the development of compassion satisfaction and fatigue in EHS home visitors (Appendix F). Interview questions were grouped into four main categories: (a) conceptualization and expectations, (b) experiences with families, (c) coping, and (d) meaning making. A final optional question, “Which parts of the work give you a sense of gratification?” was added to ensure that the interview ended on a positive note. In addition to the prepared questions, follow-up questions and/or probes were used to clarify meaning and to elicit greater detail and enhance the richness of the data (Marshall & Rossman, 2011; Padgett, 2008).

Summary of Research Questions and Methods

To summarize, Table 3 presents an overview of the study research questions and methods.

Table 3. *Overview of Research Questions and Methods*

Research Questions	Study Methods
<p>Phase 1: Quantitative Methods</p> <p>Question 1: What are the rates of compassion satisfaction and compassion fatigue in EHS home visitors?</p> <p>Question 2: What are the relative effects of individual, occupational, and organizational factors on EHS home visitors' levels of compassion satisfaction and compassion fatigue?</p> <p>Question 3: What are the impacts of compassion satisfaction and compassion fatigue on (a) home visitor turnover and (b) family engagement?</p>	<p>Data sources: Quantitative Home Visitor Survey (18 EHS programs, $N = 77$ home visitors); family-level risk data ($N = 102$) and family-level engagement data ($N = 107$) from a subsample of 5 EHS programs from the Partners for Parenting project</p> <p>Questions 1 & 2: Individual, Occupational, Organization IV's → EHS home visitors' compassion satisfaction and compassion fatigue ($N = 77$)</p> <p>Question 3: EHS home visitors' compassion satisfaction and compassion fatigue → home visitor turnover at 6 months post-survey ($N = 30$); client perceptions of working alliance/helping relationship and proportion of EHS home visits expected/completed ($N = 107$)</p> <p>Analyses: Descriptive statistics; bivariate correlations; MLM</p>
<p>Phase 2: Qualitative Methods</p> <p>Question 4: How do home visitors experience their work with EHS families?</p>	<p>Data source: Semi-structured qualitative interviews ($N = 7$).</p> <p>Analyses: First and second cycle coding, thematic analysis</p>
<p>Phase 3: Mixed Methods</p> <p>Question 5: In what ways do the interview data help to explain the quantitative results?</p>	<p>Integrated analysis and interpretation of quantitative plus qualitative results</p>

Data Analysis Plan

Quantitative Data

All data were double entered into SPSS v. 22. The two resulting datasets were compared for accuracy using the *compare datasets* feature of SPSS. Data cleaning and screening procedures and preliminary analyses were performed in SPSS. Multivariate analyses were performed in either SPSS v. 22 or MPlus v. 7.1 (Muthen & Muthen, 2013).

Missing data analysis. Data were examined for patterns of missingness or non-response. For scale scores, missing values were handled using ipsative (person-level) mean imputation when at least 66% of items on the scale were available. As described by Schafer and Graham (2002), ipsative mean imputation involves averaging the available items rather than reporting a missing value for the entire scale. These authors note that this method may introduce bias under the assumption of missing completely at random, particularly when scale items are not highly correlated and/or are unequally correlated. The method is thought to be a reasonable choice when reliability is high ($\alpha > .70$) and when sample sizes do not allow for the use of more sophisticated methods. Once in MPlus, additional missing data were handled via either maximum likelihood estimation or multiple imputation. Multiple imputation uses all available data to estimate 10 separate potential data sets. These data sets are subsequently used in analyses to produce average maximum likelihood estimates for all parameters (Muthen & Muthen, 2013).

Univariate and bivariate analyses. Frequencies and percentages were computed for all dichotomous and categorical variables. Means, standard deviations, minimum and maximum values were computed for continuous variables. Depending on the level of measurement, *t*-tests, chi-square tests of association, one-way analyses of variance, and Pearson correlations were used to examine bivariate associations among key independent variables, dependent variables, and covariates.

Multivariate analyses. Multivariate analyses were conducted in either SPSS v. 22 or MPlus 7.1 (Muthen & Muthen, 2013). The data were first examined to determine whether the assumptions required to conduct multi-level modeling (MLM) analyses are met. Because MLM is an extension of multiple linear regression, the same assumptions

and limitations apply (Tabachnick & Fidell, 2007). One exception is that MLM handles violations of assumptions of independence. Of particular import in MLM are the assumptions that (a) level one residuals are normally distributed, (b) higher level residuals are multivariate normal, and (c) residuals at different levels are uncorrelated and have uniform variance.

Following the recommendation of Gelman and Hill (2003), multilevel models were built and tested incrementally in a sequence of steps leading to models of increasing complexity. First, a “null” model was run to obtain the intraclass correlation coefficients and to test for between-group differences on the dependent variable(s). In subsequent models, covariates and predictors were added individually to estimate coefficients for slopes and intercepts. Variables and covariates were selected for inclusion in each model based on theory and prior research. Finally, a series of subsequent models were constructed and tested in an attempt to find the most parsimonious model that achieved a balance between the number of variables and the amount of variance explained (de Vaus, 2002). Variables were removed from the final model if (a) theory or prior research indicated a weak or inconsistent association with the outcome of interest and (b) the variable appeared to explain minimal variance in the model. Model fit was assessed using Akaike information criteria (AIC) and Bayesian information criteria (BIC) following the addition or subtraction of individual variables. These fit indices assess incremental improvement in fit across models, with the smallest value representing the best fitting model (Byrne, 2012).

Qualitative Data

To characterize the positive and negative experiences of home visitors' work with EHS families, semi-structured qualitative interviews were conducted with seven EHS home visitors. The qualitative data collection and analysis followed a pragmatic realist approach that assumes the existence of regularities and patterns that underlie social life (Miles, Huberman, & Saldana, 2014). Analysis of the data was conducted concurrently with data collection. As recommended by Miles et al. (2014), this encouraged an iterative method in which thoughts about existing data inform the ongoing data collection process. Interviews were audio recorded and transcribed verbatim. Transcripts were then uploaded into Dedoose 6.1.18 (Sociocultural Research Consultants, 2015) for coding and further analysis.

Data analysis followed procedures outlined by Miles et al. (2014). Prior to analyzing the data, a provisional "start list" of first cycle codes was created based on theory, prior research, and results from the quantitative phase of this study. The initial list included codes such as "home visitors' personal characteristics," "occupational characteristics," and "organizational characteristics," that have been shown in prior research to contribute to occupational stress and resilience. First cycle codes were also created to capture home visitors' experiences engaging families. Codes were revised and developed as the interviews proceeded. First cycle codes were then applied systemically across the data set. Next, second cycle coding was used to group codes into categories and themes that appeared to intersect. Finally, the data were examined for the existence of patterns both within and between cases. Examining associations within the data is considered the hallmark of the qualitative process because it moves beyond mere

description to explanations of why and how processes occur (Engel & Schutt, 2009). The goal of this phase of analysis was to create a set of themes that would capture all of the salient information in the interviews (Padgett, 2008). In addition to a description of codes and themes, quotes from participants were extracted to illustrate key findings.

Several strategies were used to enhance the rigor and trustworthiness of the findings (Padgett, 2008). First, research memos were written throughout the coding process to document emerging and evolving thoughts about the data. Second, to reduce the impact of researcher bias, the primary coder met several times with a research assistant who independently reviewed four transcripts, two at a time. The meetings served to: (a) develop the initial code list, and (b) identify and discuss alternate perspectives on the data. Third, all participant contact sheets, transcripts, research memos, codes and themes were documented and preserved to create an audit trail for the purpose of enhancing openness and reproducibility. Finally, methodological triangulation was achieved through the use of both qualitative and quantitative data to study the same phenomena.

Integration of Quantitative and Qualitative Data

Consistent with the explanatory sequential design of this study, the qualitative data were used to help explain the quantitative results. The quantitative and qualitative data were linked at multiple points during the study. First, the data were connected for the purpose of selecting participants for interviews. Use of a two-stage maximal variation sampling strategy allowed for a preliminary exploration of differences between home visitors who scored in the lowest versus highest range on the secondary traumatic stress scale. The interview data were then used to further explore potential reasons behind these

differences. Second, the quantitative results were used to help create the interview guide. As discussed above, a preliminary “start list” of codes was developed using the key findings from the quantitative phase. The qualitative results were then analyzed for how well they supported the quantitative results. Exemplar quotes were extracted that helped explain the quantitative findings. Finally, meta-inferences were drawn at the end of the study as to whether the follow-up qualitative data provided a better understanding of the phenomena than the quantitative results alone (Creswell & Plano Clark, 2011).

CHAPTER 5

RESULTS

This chapter begins with a presentation of results from preliminary analyses, including data screening and cleaning, missing data, scale reliability, descriptive, and bivariate analyses. Next, results from the principal quantitative analyses are presented in order of research question. The chapter concludes with a presentation of results from the qualitative and mixed methods analyses.

Preliminary Analyses

This section details results from data cleaning and screening procedures. Next follows a description of how problematic data were handled, including outliers, skewness, multicollinearity, and missing data. Scale reliability statistics are presented along with a discussion of how problematic scales were handled. The section concludes with a presentation of results from descriptive and bivariate analyses.

Data Screening and Cleaning

Data screening and data cleaning were conducted at univariate and multivariate levels following the procedures outlined by Tabachnick and Fidell (2007) and de Vaus (2002). Data screening and cleaning and preliminary statistical analyses were performed using SPSS v. 22. Data were checked to ensure all values were within an appropriate range. Data were plotted and visually inspected for outliers. Cases deemed to be potentially problematic were closely examined and determined to be outliers if values were greater than three standard deviations above or below the mean. As recommended by Tabachnick and Fidell (2007), outliers were recoded to a value one unit higher than the next highest score. A total of three cases on three different variables (adult attachment

avoidance, secondary traumatic stress, and months in current position) were recoded using this procedure.

The data were examined for violations of assumptions of multivariate analysis and multi-level modelling. Tests of normality, linearity, and homogeneity of variance were conducted on all variables (Tabachnick & Fidell, 2007). Basic descriptive statistics and frequency distributions for each variable were used to check for normality, skewness, and kurtosis. Because only one participant was male, bivariate and multivariate analyses were conducted both with and without this participant's data and no meaningful impact was found. Thus, the male participant's data were retained in the sample. Only one variable exhibited skewness or kurtosis beyond recommendations made by Kline (skewness >3, kurtosis >10; 2005). The variable "months in current position" was recoded to "years in current position" to reduce the impact of skewness, which provided sufficient correction to the distribution. Continuous variables were grand-mean centered prior to analysis to reduce problems associated with multicollinearity (Bickel, 2007; Tabachnick & Fidell, 2007).

Missing Data

Overall, minimal data were missing (1.72%). Seventy-three variables had data missing for at least one case and 32 cases had data missing for at least one variable. Results from Little's Missing Completely at Random (MCAR) test suggested that data were missing completely at random, $\chi^2(4471) = 17.68 p = 1.00$. One case was missing more than half of the responses for the ProQOL measure (Stamm, 2010). This case was dropped from further analyses estimating ProQOL scales as the outcome.

Scale Reliability

Reliability tests were performed for all scales as appropriate. Psychometric properties for scale scores including means, standard deviations, possible and actual range, and Cronbach's alpha are presented in Table 4. The vast majority of scale scores demonstrated good internal consistency reliability, with *alphas* over .70 (de Vaus, 2002). However, the ProQOL burnout scale, satisfaction with benefits, self-other awareness, and the two adult attachment scales demonstrated lower internal consistency reliability. Because burnout and adult attachment were key variables in this study, scale items were closely inspected for problematic items. First, scale items were double checked for the possibility of potential translation problems. When no translation concerns surfaced, *alphas* were examined with single items deleted. Items that lowered a scale's internal consistency reliability were dropped according to procedures outlined by de Vaus (2002) and the revised scales were retained. The burnout and attachment anxiety scales were each revised, thus the scoring for these scales is not directly comparable with the scoring other studies using these same instruments. Scales with particularly problematic alphas were used with caution. These included satisfaction with benefits and self-other awareness.

Table 4

Internal Consistency Reliabilities, Means, and Standard Deviations for Measurement Instruments

Instrument (Possible scale range)	Number of Items	α	M	SD
ProQOL				
Compassion satisfaction (10-50)	10	.87	42.57	5.25
Secondary traumatic stress (10-50)	10	.78	19.16	5.11
Burnout (10-50)	10	.63	21.30	4.72
Burnout (revised; 7-35)	7	.78	16.22	4.56
Satisfaction with benefits (4-16)	4	.52	11.69	2.73
Job Withdrawal Scale (3-15)	3	.91	6.77	3.39
Job Characteristics Questionnaire				
Job control (6-30)	6	.71	21.17	3.63
Job demands (5-25)	5	.82	17.72	3.94
Coworker support (2-10)	2	.84	8.00	1.60
Supervisor support (3-15)	3	.89	12.12	2.48
Working Alliance Inventory (12-60)	12	.77	49.92	4.30
Supervision quality (4-20)	4	.91	15.30	4.37
CES-D (0-30)	10	.68	4.84	3.77
Perspective-taking (7-35)	7	.83	26.53	4.12
Personal distress (7-35)	7	.77	14.56	3.62
Self-other awareness (4-20)	4	.45	15.48	1.98
Attachment anxiety (6-42)	6	.66	17.56	6.43
Attachment anxiety (revised; 5-35)	5	.80	13.91	6.10
Attachment avoidance (6-42)	6	.66	16.08	6.21

Descriptive statistics

This section describes home visitor characteristics, caseload characteristics, and EHS family characteristics.

Home visitor characteristics. A total of 77 of 80 possible surveys from the 18 participating EHS program were completed for a response rate of 96.25%. Home visitors were from urban, suburban, and rural EHS programs across Maryland and Washington, D.C. The number of home visitor participants in each of the 18 EHS programs ranged from one to nine ($M = 4.28$, $SD = 1.87$). EHS home visitor characteristics are presented in Table 5. Participants' ages ranged from 22 to 71 ($M = 39.01$, $SD = 11.29$). Most participants were married and all but one were female. More than half (52%) were white and 44% identified themselves as Latina. In addition, two-thirds were married and nearly two thirds had children of their own. Fifty-nine percent had at least a bachelor's degree and 85% had been providing home visiting services for fewer than five years. The average number of years that home visitors had worked in their current position was 3.43 ($SD = 3.38$).

Caseload characteristics. At the time of the survey, home visitors had caseloads that ranged in size from 1 to 22 families ($M = 10.60$, $SD = 3.81$). Head Start Performance Standards state that each full-time home visitor must maintain an average caseload of 10 to 12 families, with a maximum of 12 families (ACF, 2015). The size of the caseload may vary, however, depending on the needs and circumstances of the children and families served, as families with more complex circumstances may require more time and attention. In this study, some home visitors ($n = 10$) worked in combination programs, also referred to as a mixed-model approach. In mixed-model programs, families receive

Table 5

Participant Characteristics (N = 77)

Characteristic	N	%
Gender		
Female	76	98.7
Race		
American Indian or Alaskan Native	2	2.6
Black or African American	19	24.7
White	40	51.9
Native Hawaiian or Pacific Islander	2	2.6
Biracial or Multi-racial	2	2.6
Other	10	13.0
Missing	2	2.6
Hispanic, Latino, or Spanish origin	34	44.2
Marital/relationship status		
Married or living with a partner	48	62.3
Single/never married/separated/widowed/divorced	29	37.7
Have children of their own?		
Yes	52	68.4
No	24	31.6
Missing	1	1.3
Educational attainment		
Vocational/technical program	1	1.3
Some college	15	19.5
Associate's degree	15	19.5
Bachelor's degree	38	49.4
Master's degree	8	10.4
Years of experience providing home visiting services		
Fewer than 5 years	65	84.4
5 or more years	12	15.6
Caseload characteristics		
> 12 families on caseload	10	13.0
≤ 12 families on caseload	67	87.0

center-based services as well as monthly home visits. Thus, home visitors working in combination programs are allowed to have more than 12 families on their caseloads. Head Start Performance Standards do not specify an upper limit for caseload size for home visitors working in combination programs. In addition, some home visitors served a small number of home-based families plus families receiving a combination of center-based and home-based service. It is worth noting that at the time of the survey, several programs were transitioning from a home-based to a mixed-model program, thus caseload sizes were not always indicative of whether a program was home-based or mixed model. Based on information provided by program directors, 21 home visitors (27.3%) were working in mixed-model programs, although only 10 of these 21 home visitors (13% of the total) carried more than 12 families on their caseload. One home visitor's caseload exceeded the recommended 12 families for the home-based option.

Home visitors' perceptions of family characteristics. Home visitors were asked to indicate the number of families on their current caseload who fit into particular risk categories. The vast majority of home visitors indicated that they were currently working with single parent families ($n = 64$, 84.2%). Approximately two-thirds had families on their caseloads who were experiencing problems related to immigration status ($n = 49$, 64.5%). In addition, two-thirds had families that were residing with another family or in transitional housing or a homeless shelter ($n = 51$, 67.1%). Home visitors were also working with families experiencing high psychological risk. A large majority endorsed working with parents who had depression or other mental health issues ($n = 63$, 83%). Approximately one-third indicated that they were working with families struggling with

substance abuse ($n = 27, 35\%$). Over one third indicated that they were working with families experiencing domestic violence ($n = 26, 34\%$).

Mother-reported family characteristics. Data from 102 EHS families enrolled in the Partners for Parenting Study were available for linking with a subset surveys from 27 home visitors from the five P4P programs. EHS mothers reported an average age of 30.77 years ($Min = 18.08, Max = 44.49, SD = 6.10$). Approximately five in six ($n = 85; 83\%$) mothers were married or with a partner. Just over half had a high school diploma or GED ($n = 53; 52\%$), and very few ($n = 3; 2.9\%$) were receiving some form of public assistance at the time of the baseline interview.

Bivariate Analyses

Bivariate correlation analyses were conducted to examine associations among home visitor individual, occupational, and organizational characteristics (see Appendix G for bivariate correlation table). All correlations were in the expected direction. Using Cohen's (1988) criteria (.10 = small, .30 = medium, and .50 = large), moderate correlations were found between several variables. For example, **perceptions of greater job demands** were associated with higher **caseload size** ($r = .32, p = .005$), less job control ($r = -.42, p < .001$), lower **coworker support** ($r = -.36, p = .001$), lower **supervisor support** ($r = -.39, p < .001$), and lower **supervision quality** ($r = -.35, p < .001$). **Satisfaction with job benefits** was associated with greater **job control** ($r = .44, p < .001$) and perceptions of greater **job security** ($r = .39, p < .001$). Higher ratings of **coworker support** were associated with higher ratings of **supervisor support** ($r = .39, p < .001$). A greater number of adverse **childhood experiences** was associated with more negative perceptions of **coworker support** ($r = -.36, p = .002$). Higher levels of

attachment anxiety were associated with lower perceptions of **job security** ($r = -.32, p = .005$), higher levels of **personal distress** ($r = .54, p < .001$) and higher levels of **adult attachment avoidance** ($r = .39, p = .001$). The two measures of **supervisor support/quality** were highly correlated ($r = .82, p < .001$). Due to concerns regarding multicollinearity, it was decided that they would not be used together in multivariate analyses. Hours per month of supervision was the only variable that was not associated with any other variable.

Bivariate correlations were also produced to examine associations between home visitor characteristics and the outcomes of interest: compassion satisfaction, secondary traumatic stress, and burnout (Table 6). All correlations were in the expected direction and the findings raised no concerns regarding multicollinearity. The findings revealed that greater compassion satisfaction was associated with several individual characteristics and occupational characteristics including **Latina ethnicity** ($r = .49, p < .001$), greater **material hardship** ($r = .24, p = .04$), fewer **depressive symptoms** ($r = -.38, p = .001$), positive **perceptions of supervisor support** ($r = .32, p = .005$), increased **job satisfaction** ($r = .47, p < .001$), and stronger ratings of the **working alliance** ($r = .58, p < .001$). Higher levels of secondary traumatic stress were associated with more **depressive symptoms** ($r = .36, p = .001$), **adult attachment anxiety** ($r = .33, p = .003$) and **avoidance** ($r = .40, p < .001$), perceptions of greater **job demands** ($r = .23, p = .05$), lower **coworker support** ($r = -.33, p = .003$), and lower feelings of **job security** ($r = -.26, p = .02$). Increased burnout was associated with a number of individual variables: non-Latina ethnicity ($r = -.27, p = .02$), poor **physical health** ($r = -.35, p = .002$), greater **depressive symptoms** ($r = .57, p < .001$), and greater **attachment anxiety** ($r = .27, p =$

.02). Burnout was also associated with many occupational variables, including **perceptions of greater job demands** ($r = .57, p < .001$), less **job control** ($r = -.32, p = .005$), less **coworker** ($r = -.24, p = .03$) and **supervisor support** ($r = -.33, p = .004$), lower **satisfaction with salary and benefits** ($r = -.34, p = .002$), less **job security** ($r = -.34, p = .003$), concerns about **job safety** ($r = .32, p = .005$), **perceptions that the employer is less concerned about the home visitor's safety** ($r = -.42, p < .001$), and less positive ratings of the **working alliance** ($r = -.37, p = .001$).

Some patterns emerged from the results. Only one variable, depressive symptoms, was associated with all three outcomes of interest. More variables were associated with burnout than with either compassion satisfaction or secondary traumatic stress. Most of the variables that were associated with burnout were occupational characteristics. Finally, several variables were found to be unassociated with any of the three outcomes of interest. These included home visitor age, marital status, years of education, adverse childhood experiences, spirituality, religiosity, self-other awareness, perspective taking, caseload size, supervision quality, and hours of supervision.

Correlations among the dependent variables were moderate to large. The strongest correlation was between secondary traumatic stress and burnout ($r = .57, p < .001$). Higher compassion satisfaction was associated with lower levels of both secondary traumatic stress ($r = -.30, p = .009$) and burnout ($r = -.54, p < .001$).

To better understand the impact of ethnicity, independent samples *t*-tests were conducted to compare scores for Latina ($n = 34$) versus non-Latina ($n = 43$) home visitors on all individual and occupational variables (Table 7). On average, Latina home visitors had lower levels of education ($t(63.71) = -1.97, p = .05$), fewer depressive symptoms

($t(75) = -1.99, p = .05$), less self-other awareness ($t(53.20) = -2.07, p = .04$), more positive perceptions of supervisor support ($t(74.10) = 1.96, p = .05$), greater quantity/hours of supervision per month ($t(49.19) = 2.12, p = .04$), greater job satisfaction ($t(2.29), p = .03$), and more positive global ratings of their working alliances with EHS families ($t(73.45) = 2.56, p = .01$).

Table 6

Bivariate Correlations between Individual and Occupational Characteristics and Key Outcome Variables (N = 74 – 77)

	Compassion Satisfaction	Secondary Traumatic Stress	Burnout
Individual characteristics			
Ethnicity (1 = Hispanic or Latina; 0 = Other)	.49***	.04	-.27*
Age	.19	-.09	-.18
Marital status (1 = Married/living with partner; 0 = Other)	.02	.03	-.07
Material hardship	.24*	.06	-.05
Years of education	-.05	-.15	.03
Physical health	.16	-.09	-.35**
Depressive symptoms	-.38***	.36***	.57***
Adverse childhood experiences	-.07	.22	.16
Attachment anxiety	-.07	.33**	.27*
Attachment avoidance	-.18	.40**	.17
Spirituality	.09	.14	.03
Religiosity	.11	.13	.04
Self-other awareness	.00	-.14	.08
Perspective taking	.19	-.09	-.02
Personal distress	-.10	.41***	.14
Occupational characteristics			
Caseload size	.13	.03	.08
Job control	.05	-.08	-.32**
Job demands	-.11	.23*	.57**
Coworker support	.17	-.33**	-.24*
Supervisor support	.32**	-.14	-.33**
Satisfaction with salary and benefits	.08	.05	-.34**
Job satisfaction	.47**	-.08	-.56**
Job security	.13	-.26*	-.34**
Concerns about personal safety	-.21	.03	.32**
Perception of employer's commitment to safety	.05	-.15	-.42***
Supervision quality	.15	-.01	-.11
Hours of supervision per month	.20	.12	-.14
Working alliance	.59***	-.17	-.37***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$ (2-tailed)

Table 7

Differences between Latina and Non-Latina Home Visitors on Key Study Variables

	Latina (<i>n</i> = 34)		Non-Latina (<i>n</i> = 43)		<i>t</i> -test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Individual characteristics					
Age	41.35	9.79	37.16	12.13	1.64
Material hardship	1.19	0.97	0.86	1.21	1.28
Years of education	5.23	1.05	5.67	0.87	-1.97*
Physical health	3.61	0.93	3.35	0.97	1.62
Depressive symptoms	3.94	3.54	5.64	3.88	-1.99*
Adverse childhood experiences	2.41	2.54	2.08	2.20	0.59
Attachment anxiety	14.30	6.34	13.60	5.90	0.49
Attachment avoidance	15.48	5.12	12.89	6.44	-0.30
Spirituality	3.32	0.68	3.09	.89	1.24
Religiosity	3.09	0.81	2.67	1.10	1.73
Self-other awareness	14.94	2.37	15.91	1.51	-2.07*
Perspective taking	26.33	3.93	26.65	4.26	-0.34
Personal distress	14.87	3.95	14.41	3.26	0.57
Occupational characteristics					
Caseload size	11.10	3.10	10.21	4.28	1.02
Years of experience providing home visiting services	4.17	1.19	3.94	1.26	0.83
Job control	20.98	4.20	21.36	3.14	-0.44
Job demands	17.40	3.71	17.93	4.05	-0.59
Coworker support	7.88	1.65	8.14	1.55	-0.70
Supervisor support	12.71	1.95	11.65	2.77	1.96*
Satisfaction with salary and benefits	12.23	2.74	11.24	2.64	1.59
Job satisfaction	5.09	0.73	4.67	0.82	2.29*
Job security	3.36	0.74	3.33	0.92	0.19
Concerns about personal safety	3.82	2.33	4.62	2.56	-1.40
Perception of employer's commitment to safety	6.26	2.98	5.79	2.97	0.70
Hours of supervision per month	2.99	2.47	1.95	1.39	2.12*
Working alliance	51.35	3.21	49.02	4.74	2.56**

Principal Analyses

This section presents results for each of the principal research questions in turn.

Research Question 1: *What are the rates of compassion satisfaction, secondary traumatic stress, and burnout in EHS home visitors?*

Descriptive statistics were used to analyze the rates of compassion satisfaction, secondary traumatic stress, and burnout in EHS home visitors. Rates of compassion satisfaction, secondary traumatic stress, and burnout among EHS home visitors were assessed using scores on the Professional Quality of Life scale (ProQOL Version 5; Stamm, 2010). As noted earlier, due to missing data, one participant's ProQOL data were dropped, leaving a sample of 76. Table 8 presents the relative rates of compassion satisfaction and secondary traumatic stress based on categorical cut scores provided by Stamm (2010). Frequency distributions showed that the majority of home visitors were categorized as high on compassion satisfaction ($n = 47$, 61.8% scored "high") and were categorized as low on secondary traumatic stress ($n = 63$, 82.9% scored "low"). No home visitor scored in the high range on secondary traumatic stress or in the low range on compassion satisfaction. Rates of burnout could not be assessed in this sample due to the poor internal consistency reliability of the burnout scale.

Table 8

EHS Home Visitors' Scores on the Compassion Satisfaction and Secondary Traumatic Stress Scales of the ProQOL

Cut Score	Compassion Satisfaction		Secondary Traumatic Stress	
	<i>n</i>	%	<i>n</i>	%
Low	0	0	63	82.9
Moderate	29	38.1	13	17.1
High	47	61.8	0	0

Research Question 2: *What are the relative effects of individual, occupational, and organizational factors on EHS home visitors' compassion satisfaction, secondary traumatic stress, and burnout?*

For Research Question 2, two separate sets of analyses were conducted. In the first set of analyses, a series of two-level multi-level models (MLM's) were specified using cross-sectional data from the sample of 76 home visitors who completed surveys. The relative effects of home visitor and occupational characteristics on the outcome variables were assessed after controlling for variance between the 18 EHS programs. In the second set of analyses, two-level models were specified, in which data from EHS families were linked with a subsample of home visitor survey data. The purpose of this set of analyses was to test the relative influence of EHS family cumulative risk on compassion satisfaction, secondary traumatic stress, and burnout. In this set of analyses, a set of dummy variables was used to control for EHS program-level effects.

Effects of home visitor and occupational characteristics. Across all models, the average number of EHS home visitors per EHS program was 4.10. Variability associated with differences between EHS programs on key variables was assessed by calculating their unconditional intraclass correlation coefficients (ICC's). ICC's were also produced for several key variables for which it is plausible that some degree of variance could be attributable to program-level differences. These included perceptions of benefits, jobs demands, job control, supervisor and coworker support, and supervision quality. ICC's for the outcome variables ranged from .003 to .277 (Table 9). For job withdrawal, the relatively large ICC of .277 indicated that 28% of the variability was attributable to differences between the EHS programs. For secondary traumatic stress, the

ICC was very small, indicating that virtually no variability occurred between EHS programs on this measure. For the independent variables, although a large amount of variability was associated with program-level differences, a larger percentage was still unexplained and thus may be accounted for by individual home visitor differences.

Table 9

Unconditional Intraclass Correlation Coefficients (ICC's) for Key Study Variables

Construct	ICC
Compassion satisfaction	0.127
Secondary traumatic stress	0.003
Burnout	0.095
Job withdrawal	0.277
Job benefits	0.243
Job control	0.377
Job demands	0.391
Coworker support	0.174
Supervisor support	0.115
Supervision quality	0.284

Next, a series of MLM's were constructed estimating fixed effects for the three dependent variables: compassion satisfaction, secondary traumatic stress, and burnout. Despite the low ICC for secondary traumatic stress, multi-level modeling was performed because it could yield more accurate and conservative parameter estimates than OLS regression due to the nested nature of the data (Bickel, 2007). The first two models for each outcome variable included variables and covariates that were selected based on theory and prior research. The first model included home visitor demographic and psychosocial variables and covariates. Home visitor ethnicity and caseload size were included in all models as covariates. In the second model, home visitors' self-reported

perceptions of occupational attributes were added. In the third model, exploratory variables were added. A series of intermediate models were tested between the third and final model in which variables were dropped one at a time if they had no association with the dependent variable. Results from intermediate models are not presented. Model fit was assessed incrementally, with reductions in AIC and BIC fit criteria indicating improved fit relative to earlier models. In addition, reductions in intraclass correlation coefficients across models further indicated that the addition of individual and occupational variables accounted for unexplained variance in the outcome at level two. Results for the first three models and the final model for compassion satisfaction, secondary traumatic stress, and burnout are presented below in Tables 10, 11, and 12, respectively.

Compassion satisfaction. Results suggested that the model including home visitor characteristics to predict compassion satisfaction was a better fit to the data than the initial baseline model. After controlling for program-level differences, Latina ethnicity was associated with greater compassion satisfaction ($B = 4.16, p \leq .001$) whereas greater depressive symptomatology was associated with less compassion satisfaction ($B = -0.41, p = .001$). In addition, significant positive effects were found for two exploratory variables: greater material hardship ($B = 1.02, p = .02$) and greater perspective-taking ($B = 0.23, p = .04$) were each associated with higher levels of compassion satisfaction. There were no significant effects found for any occupational attributes. In addition, after accounting for other variables, there were no significant effects found for education, adverse childhood experiences, and adult attachment avoidance.

Table 10

Unstandardized Fixed Effect Estimates and SE's for Models Predicting Compassion Satisfaction (N = 75)

Parameter	Model 1	Model 2	Model 3	Final Model
ICC	.006	.004	.006	.004
Individual characteristics				
Hispanic or Latina ethnicity	4.65 (1.08)***	4.99 (1.20)***	4.31(1.05)***	4.16 (1.0)***
Education	0.46 (.59)	0.57 (.64)	0.36 (.54)	
≥ 5 years of experience in home visiting	1.78 (1.41)	1.86 (1.48)	2.38 (1.33)†	1.94 (1.30)
Adverse childhood experiences	0.02 (.24)	0.14 (.26)	-0.10 (.24)	
Depressive symptoms	-0.43(.15)**	-0.39 (.15)**	-0.41 (.14)**	-0.41 (.13)***
Attachment anxiety	0.08 (.09)	0.08 (.10)	0.13 (0.09)	
Attachment avoidance	-0.13 (.09)†	-0.13 (.09)	-0.13 (.09)	-0.11 (.08)
Occupational characteristics				
Caseload size		0.17 (.14)	0.27 (0.14)†	0.15 (.13)
Hours of supervision per month		0.08 (.30)	-0.07 (.32)	
Perception of job demands		0.08 (.18)	-0.16 (.16)	
Perception of job control		0.16 (.18)	-0.01 (.15)	
Coworker support		0.57 (.40)	0.31(.35)	
Supervisor support		-0.01 (.14)	-0.05 (.14)	
Exploratory variables				
Material hardship			1.19 (.48)*	1.02 (.43)*
Perspective-taking			0.24 (.14) †	0.23 (.11)*
Information criteria				
AIC (SD)	447.91 (.26)	445.26 (.25)	448.08 (.44)	438.14 (.28)
Sample-size Adjusted BIC (SD)	439.57 (.26)	431.49 (.25)	433.07 (.44)	429.80 (.28)

† $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Secondary traumatic stress. For secondary traumatic stress, the final model revealed several significant findings for home visitor characteristics as well as occupational characteristics. In terms of sociodemographic attributes, five or more years of experience as a home visitor ($B = -2.83, p = .02$) predicted lower levels of secondary traumatic stress, whereas depressive symptoms ($B = 0.31, p = .01$) and adult attachment avoidance ($B = 0.29, p \leq .001$) predicted higher levels of secondary traumatic stress. Home visitors' perceptions of greater job demands ($B = 0.30, p = .01$) was the only significant occupational characteristic. A greater number of hours of supervision per month ($B = 0.53, p = .06$) also approached significance; however, this result should be interpreted with caution due to the unexpected direction of the association as well as the small sample size. One exploratory variable, greater personal distress ($B = .50, p \leq .001$), was also found to be associated with increased secondary traumatic stress. After controlling for other variables, ethnicity, education, and caseload size were unassociated with secondary traumatic stress.

Table 11

Unstandardized Fixed Effect Estimates and SE's for Models Predicting Secondary Traumatic Stress (N = 76)

Parameter	Model 1	Model 2	Model 3	Final Model
ICC	.006	.003	.016	.014
Individual characteristics				
Hispanic or Latina ethnicity	0.89 (1.03)	0.42 (1.06)	0.27 (.99)	.03 (.96)
Education	-0.96 (.53)†	-0.739(.53)	-0.77 (.50)	-0.78 (.49)
≥ 5 years of experience in home visiting	-1.96 (1.40)	-2.54 (1.34)†	-3.01 (1.23)*	-2.83 (1.23)*
Depressive symptoms	0.44 (.14)**	0.37 (.15)**	0.34 (.13)*	0.31 (.12)**
Adverse childhood experiences	-0.05 (.23)	-0.03 (.23)	-0.01 (.21)	
Attachment anxiety	0.07 (.09)	0.07 (.09)	-0.06 (.09)	
Attachment avoidance	0.33 (.08)***	0.31 (.09)***	0.31 (.08)***	0.29 (.07)***
Occupational characteristics				
Caseload size		-0.09 (.13)	-0.08 (.12)	-0.08 (.12)
Job demands		0.25 (.16)	0.32 (.14)*	0.30 (.12)**
Job control		0.13 (.15)	0.09 (.15)	
Coworker support		-0.42 (.36)	-0.02 (.35)	
Supervisor support		0.07 (.14)	-0.04 (.14)	
Hours of supervision per month		0.37 (.28)	0.48 (.27)†	0.47 (.25)†
Exploratory variables				
Personal distress			0.53 (.16)***	0.50 (.13)***
Information criteria				
AIC (SD)	450.27 (1.02)	454.81 (1.21)	445.97 (.51)	437.09 (.64)
Sample-size Adjusted BIC (SD)	442.06 (1.02)	441.66 (1.21)	432.00 (.51)	427.23 (.64)

† $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Note. Standard errors are in parentheses

Burnout. Results from the series of models predicting burnout indicated that being Latina was marginally associated with lower levels of burnout ($B = -1.35, p = .06$), whereas increased depressive symptoms were associated with higher levels of burnout ($B = .46, p \leq .001$). In addition, perceptions of greater job demands was associated with increased burnout ($B = 0.47, p \leq .001$). Finally, greater supervisor support ($B = .16, p = .07$), greater concerns about safety on the job ($B = .25, p = .08$), and having the perception that the employer was less committed to personal safety ($B = -.24, p = .09$) all approached significance in predicting burnout. In the final model, after controlling for other variables, caseload size, adult attachment avoidance, perceptions of job security, and job control were found to be unrelated to burnout.

Table 12

Unstandardized Fixed Effect Estimates and SE's for Models Predicting Burnout (N = 75)

Parameter	Model 1	Model 2	Model 3	Final Model
ICC	.007	.005	.001	.001
Individual characteristics				
Hispanic or Latina ethnicity	-1.28 (.92)	-1.86 (.81)*	-1.54 (.80)*	-1.35 (.71)†
Education	-0.15 (.48)	-0.29 (.39)	-0.33 (.38)	
Years in current position	0.09 (.14)	-.03 (.14)	-0.00 (.16)	
Depressive symptoms	0.67 (.13)***	.47 (.11)***	0.45 (.11)***	0.46 (.09)***
Attachment anxiety	0.02 (.08)	.06 (.08)	0.03 (.07)	
Attachment avoidance	0.11 (.08)	.04 (.07)	0.05 (.07)	.06 (.06)
Occupational characteristics				
Caseload size		-0.09 (.11)	-0.10 (.10)	-0.09 (.09)
Perception of job security		-.77 (.48)	-0.58 (0.54)	-0.65 (.42)
Job demands		.41 (.13)***	0.48 (.16)**	0.47 (.12)***
Job control		-0.23 (.12)*	-0.14 (.14)	-.12 (.11)
Coworker support		0.10 (.26)	0.08 (.25)	
Supervisor support		0.11 (.10)	0.16 (.10)	0.16 (.09)†
Hours of supervision per month		0.10 (.21)	0.01 (.38)	
Exploratory variables				
Concerns about personal safety			.25 (.15)†	0.25 (.15)†
Perception of employer's commitment to safety			-0.22 (.19)	-0.24 (.14)†
Information criteria				
AIC (SD)	426.22 (.86)	406.38 (.91)	403.35 (.36)	394.79 (.40)
Sample-size Adjusted BIC (SD)	418.71 (.86)	393.03 (.91)	388.33 (.36)	383.95 (.40)

† $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Note. Standard errors are in parentheses

Effects of EHS family cumulative risk. The second set of analyses focused on the 27 home visitors from the five EHS programs that were part of the Partners for Parenting (P4P) research study. To assess the relative effects of EHS family cumulative risk on the outcomes of interest, I followed a new approach for micro-macro multilevel analysis as outlined by Croon and van Veldhoven (2013), in which a dependent variable at level two (e.g., home visitor compassion satisfaction, secondary traumatic stress, burnout) is predicted by independent variables defined at level one (e.g., family cumulative risk). This approach overcomes many of the problems associated with more traditional approaches to this design (e.g., aggregating level one or level two data into group means), while also capitalizing on the sample size at level one.

Baseline data from 102 EHS families were linked to surveys from the 27 home visitors¹. The number of EHS families per home visitor ranged from 1 to 12. Prior to proceeding with further analyses chi-square tests of independence and *t*-tests were conducted to determine the extent to which home visitors in P4P programs differed from home visitors in non-P4P programs. The findings suggest that P4P programs were more likely to have Hispanic or Latino home visitors than non-P4P programs $\chi^2 (1, N = 77) = 28.02, p = .000$. The results of *t*-tests are presented in Table 13. The analyses showed only two differences; home visitors from P4P programs exhibited higher mean scores for compassion satisfaction ($t(73.74) = 3.43, p \leq .001$) and lower mean scores on the self-other awareness dimension of empathy ($t(44.14) = -2.42, p \leq .05$) than home visitors from non-P4P programs.

¹ Although there were 31 home visitors from Partners for Parenting programs, 4 home visitors who completed surveys had no families with baseline data at the time of this study.

Table 13

Differences between P4P and non-P4P Home Visitors on Key Study Variables

Construct (Possible scale range)	P4P (<i>n</i> = 31)		Non-P4P (<i>n</i> = 46)		<i>t</i> -test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Age	40.87	10.96	37.76	11.45	-1.20
Highest degree completed (1-7)	5.29	1.1	5.61	0.86	1.36
Years in current position	3.63	3.09	3.30	3.58	-0.40
Caseload size	10.60	2.10	10.61	4.65	0.02
Material hardships (0-4)	1.08	0.93	0.96	1.23	-0.48
Satisfaction with benefits (4-20)	11.89	2.58	11.54	2.81	-0.52
Job security (1-5)	3.23	0.77	3.41	0.88	0.91
Depressive symptoms (0-30)	4.27	3.71	5.31	3.86	1.18
Health (1-5)	3.53	0.82	3.41	1.05	-0.53
Adverse childhood experiences (0-10)	2.67	2.67	1.93	2.08	-1.34
Religion (1-4)	2.90	0.88	2.80	1.07	-0.42
Spirituality (1-4)	3.19	0.75	3.20	0.86	0.01
Attachment avoidance (6-42)	15.99	5.40	15.54	6.21	-0.32
Attachment anxiety (5-35)	14.68	6.57	13.41	5.73	-0.88
Perspective-taking (7-35)	25.77	3.94	27.00	4.17	1.30
Personal distress (7-35)	14.62	4.18	14.61	3.13	-0.02
Self-other awareness (4-20)	14.77	2.45	15.96	1.44	2.42*
Job demands (5-25)	16.99	3.40	18.17	4.16	1.31
Job control (6-30)	20.67	4.11	21.54	3.26	1.03
Coworker support (2-10)	7.97	1.76	8.07	1.48	0.26
Supervisor support (3-15)	11.97	2.17	12.22	2.69	0.43
Working alliance (12-60)	50.91	3.36	49.47	4.74	-1.56
Concerns about personal safety (1-10)	4.23	2.14	4.29	2.70	0.11
Hours of supervision per month	2.68	2.44	2.25	1.63	-0.85
Compassion satisfaction (10-50)	44.79	4.01	41.04	5.51	-3.43***
Burnout (7-35)	15.31	4.59	16.41	6.64	1.02
Secondary traumatic stress (10-50)	19.00	6.32	19.21	4.10	0.17
Job withdrawal (3-15)	2.34	1.31	2.20	1.00	-0.56

p* ≤ .05, *p* ≤ .01, ****p* ≤ .001

To determine the relative impact of EHS family risk on the three outcome variables, a series of two-level multi-level models were constructed estimating fixed

effects for the three outcome variables, compassion satisfaction, secondary traumatic stress, and burnout, using MPlus v. 7.1, with EHS families nested within home visitors. Two sets of analyses were conducted for each outcome. The first analysis included demographic and psychological risk as distinct variables (see Appendix E for details regarding construction of the cumulative risk indices). The second analysis included a combined cumulative risk variable. Because the purpose of these analyses was to test whether EHS family risk explained variability in the outcomes, covariates at the home visitor level were selected based on their inclusion in the best-fitting model in the larger sample, above. Because there were only five EHS programs included in this set of analyses, thus providing insufficient power for a three-level MLM, variability associated with program level differences was accounted for using a set of four dummy-coded variables. Model 1 included EHS family risk and the four dummy coded variables representing the five EHS programs. Model 2 introduced home visitor demographic, psychosocial, and occupational characteristics.

When introduced as distinct variables, EHS family demographic risk and maternal psychological risk demonstrated no significant association with compassion satisfaction, secondary traumatic stress, and burnout. Thus, in the interest of brevity and readability, only results from the analyses including the combined cumulative risk index are presented in Tables and in the text.

Compassion satisfaction. For compassion satisfaction, the intraclass correlations for psychological risk, demographic risk, and combined cumulative risk by home visitor were extremely low (all ICC's = $\leq .009$), thus a minimal amount of variability in EHS family psychological risk occurred between home visitors in this sample. For the model

estimating compassion satisfaction, as indicated in Table 14, Model 2 provided a slightly better fit to the data than the Model 1. In Model 2, EHS family cumulative risk was not associated with compassion satisfaction. However, higher home visitor depression scores ($B = -0.51, p = .007$) were associated with lower compassion satisfaction after controlling for combined cumulative risk of EHS families and other home visitor characteristics.

Table 14

Unstandardized Fixed Effect Estimates and SE's for Models Predicting Compassion Satisfaction from Home Visitor Characteristics and EHS Family Risk (Level 1 N = 102)

Parameter	Model 1	Model 2
EHS program		
Program 1	-2.44 (1.85)	0.26 (1.61)
Program 2	1.07 (2.08)	-2.36 (2.12)
Program 3	0.22 (2.12)	-1.54 (2.07)
Program 4	2.23 (2.40)	3.50 (2.11)†
Home visitor characteristics		
Ethnicity		3.38 (1.77) †
Depressive symptoms		-0.51 (0.19)**
Attachment avoidance		0.16 (0.13)
Caseload Size		-0.56 (0.35)
Years in current position		0.34 (0.26)
Material hardship		0.15 (0.72)
Perspective-taking		0.10 (0.19)
EHS family combined cumulative risk	9.40 (33.03)	3.93 (23.43)
Information criteria		
AIC	574.07	572.46
BIC	568.73	563.39

† $p = .10$, * $p \leq .05$, ** $p \leq .01$. *** $p \leq .001$

Secondary traumatic stress. For secondary traumatic stress, Model 2 demonstrated better fit to the data than Model 1 (Table 15). Higher maternal cumulative risk scores were associated with greater secondary traumatic stress ($B = 4.95, p = .05$). Adult attachment avoidance emerged as the only significant covariate in this model, with higher avoidance predicting increased secondary traumatic stress ($B = .46, p < .001$).

Table 15

Unstandardized Fixed Effect Estimates and SE's for Models Predicting Secondary Traumatic Stress from Home Visitor Characteristics and EHS Family Cumulative Risk (Level 1 N = 102)

Parameter	Model 1	Model 2
EHS program		
Program 1	-0.78 (2.78)	-2.99 (1.73)
Program 2	1.96 (3.13)	1.23 (2.1)
Program 3	0.25 (3.15)	-5.96 (3.77)
Program 4	3.29 (3.65)	-2.83 (3.46)
Home visitor characteristics		
Ethnicity		2.15 (1.56)
Education		-0.41 (0.63)
Depressive symptoms		0.35 (0.21) †
Attachment avoidance		0.47 (0.12)***
Caseload Size		0.44 (0.33)
≥ 5 years in home visiting		-1.61 (1.84)
Job demands		0.32 (0.19)†
Hours of supervision per month		0.82 (0.59)
Personal distress		0.27 (0.19)
EHS family combined cumulative risk	14.22 (15.26)	4.95 (2.51)*
Information criteria		
AIC	595.19	574.16
Sample Size Adjusted BIC	621.44	564.02

† $p = .10$, * $p \leq .05$, ** $p \leq .01$. *** $p \leq .001$

Burnout. For burnout, Model 2 demonstrated improved fit compared to Model 1 (Table 16). The results suggested that family cumulative risk did not predict burnout after controlling for other variables. More depressive symptoms ($B = .43; p = .008$), higher attachment avoidance ($B = .19, p = .04$), greater job demands ($B = 0.56; p < .001$), and home visitors' perceptions that their employers were less concerned about their safety ($B = -0.89; p < .001$) were associated with burnout. In addition, there was a significant effect of EHS program². Thus, working for some EHS programs is associated with increased risk for burnout after controlling for home visitors' individual and occupational characteristics.

² Compared to the reference group, p values varied from .001 - .576. These results are not presented in the interest of confidentiality.

Table 16

Unstandardized Fixed Effects Estimates and SE's for Models Predicting Burnout from Home Visitor Characteristics and EHS Family Cumulative Risk (Level 1 N = 102)

Parameter	Model 1	Model 2
EHS program		
Program 1	2.01 (2.45)	-3.79 (1.37)**
Program 2	-0.60 (2.77)	-1.28 (1.71)
Program 3	-2.20 (2.83)	-4.03 (1.48)**
Program 4	2.73 (3.19)	-7.05 (2.53)**
Home visitor characteristics		
Ethnicity		-1.12 (1.48)
Depressive symptoms		0.43 (0.16)**
Attachment avoidance		0.19 (0.10)*
Caseload Size		0.48 (0.25)†
Perceptions of job security		-0.56 (0.73)
Job demands		0.56 (0.15)***
Job control		0.01 (.18)
Concerns about personal safety		0.12 (.23)
Perception of employer's commitment to safety		-0.89 (.23)***
EHS family combined cumulative risk	-0.16 (20.17)	5.63 (5.10)
Information criteria		
AIC	589.52	563.17
Sample-size Adjusted BIC	584.19	533.03

† $p = .10$, * $p \leq .05$, ** $p \leq .01$. *** $p \leq .001$

Research Question 3: *What are the impacts of compassion satisfaction, secondary traumatic stress, and burnout on: (a) home visitor turnover and (b) family engagement?*

Home visitor turnover. Two analyses were used to examine the effects of compassion satisfaction, secondary traumatic stress, and burnout on job turnover. The

first set of analyses examined job withdrawal as a proximal indicator of turnover, as prior research has demonstrated that job withdrawal is a strong predictor of actual turnover (Lance, 1991; Mor Barak, 2001). The second analysis examined associations between compassion satisfaction, secondary traumatic stress, and burnout and actual six month turnover.

Job withdrawal. Table 17 presents bivariate correlations among the key variables for the first analysis. As shown, burnout ($r = .57, p < .001$), but not compassion satisfaction or secondary traumatic stress, was associated with job withdrawal.

Correlations between home visitor individual and occupational characteristics and job withdrawal are shown in Table 18. Poor physical health and increased depressive symptoms were the only individual characteristics associated with higher levels of job withdrawal. In contrast, numerous occupational characteristics were associated with greater job withdrawal including less job control, greater job demands, less supervisor support, less satisfaction with salary and benefits, lower job satisfaction, lower job security, and the perception that the employer was less committed to the worker’s safety.

Table 17

Bivariate Correlations among Compassion Satisfaction, Secondary Traumatic Stress, Burnout, and Job Withdrawal (N = 76-77)

	1	2	3	4
1. Compassion satisfaction	1.0			
2. Secondary traumatic stress	-.30**	1.0		
3. Burnout	-.54**	.57**	1.0	
4. Job withdrawal	-.19	.08	.57**	1.0

** $p < 0.01$ level (2-tailed)

Table 18

Bivariate Correlations between Home Visitor Individual and Occupational Characteristics and Job Withdrawal (N=77)

	Job Withdrawal
Individual characteristics	
Ethnicity (1 = Hispanic or Latina; 0 = Other)	-.19
Age	-.15
Marital status (1 = Married/living with partner; 0 = Other)	-.03
Material hardship	.00
Years of education	.19
Physical health	-.27*
Depressive symptoms	.29*
Adverse childhood experiences	.12
Attachment anxiety	-.09
Attachment avoidance	.04
Spirituality	.07
Religiosity	.09
Self-other awareness	-.03
Perspective taking	.08
Personal distress	-.17
Compassion satisfaction	-.19†
Secondary traumatic stress	.08
Burnout	.57**
Occupational characteristics	
Caseload size	.10
Job control	-.31**
Job demands	.44**
Coworker support	.06
Supervisor support	-.24*
Hours of supervision per month	-.08
Satisfaction with salary and benefits	-.51**
Job satisfaction	-.43**
Job security	-.28*
Concerns about personal safety	.11
Perception of employer's commitment to safety	-.50**

* $p \leq .05$, ** $p \leq .01$

To examine the relative effects of home visitor individual and occupational characteristics on job withdrawal, a series of two-level MLM's were specified using cross-sectional data from the entire sample of 77 home visitors who completed surveys, controlling for variability between the 18 EHS programs. The ICC for job withdrawal was .277, indicating that a moderate amount of variability was associated with organizational factors. The best fitting model suggested that higher levels of burnout ($B = .11, p \leq .001$) and dissatisfaction with benefits ($B = -.12, p = .004$) were the strongest predictors of job withdrawal. Job withdrawal was also associated with home visitors' perceptions that their employers were less concerned about their safety ($B = -.08, p = .02$). There was a marginal association between job withdrawal and associated greater coworker support ($B = .11, p = .09$). After accounting for other variables, the results revealed no significant influence of secondary traumatic stress, depressive symptoms, job demands, or job control on job withdrawal.

Six month turnover. In the second analysis, due to the small sample size, point-biserial correlations were used to explore associations among the three independent variables, compassion satisfaction, secondary traumatic stress, and burnout; several covariates that had been identified in previous studies to predict either intent to leave or turnover; and the binary dependent variable, turnover. Turnover data were available for all 31 home visitors working in programs participating in the Partners for Parenting (P4P) research study who completed the home visitor survey. Data were obtained from P4P research staff who were in regular contact with the EHS staff for the purposes of study recruitment and coordination. Turnover data were obtained for each home visitor six months after administration of the survey. One home visitor was excluded from these

analyses because at the time of the survey she carried only one home visiting case and was already in the process of transitioning into another position, resulting in a final sample size of 30 home visitors.

Seven out of 30 participants (23.3%) were no longer working as a home visitor six months after administration of the home visitor survey. Turnover rates across EHS programs ranged from zero to 40%. Bivariate correlation analyses revealed that only two home visitor characteristics were associated with six month turnover (Table 20). Adult attachment avoidance evidenced a moderate negative correlation with six month turnover such that home visitors with higher scores on attachment avoidance were less likely to leave their jobs at six months ($r = -.38, p = .04$). A negative correlation between compassion satisfaction and six month turnover approached significance, suggesting that higher compassion satisfaction may be associated with decreased turnover ($r = -.32, p = .09$). Neither secondary traumatic stress nor burnout were associated with six month turnover. Supervisor support was the only occupational characteristic associated with six month turnover (Table 21). Lower ratings of supervisory support were associated with increased turnover ($r = -.39, p = .03$). No association was found between job withdrawal at the time of the survey and six month turnover.

Table 19

Unstandardized Fixed Effect Estimates and SE's for Models of the Predictors of Job Withdrawal (Level 1 N = 76)

Parameter	Model 1	Model 2	Final Model
ICC	.132	.103	.096
Individual characteristics			
Hispanic or Latina ethnicity	-0.14 (.23)	.08 (.23)	
Education	0.08 (.10)	.14 (.09)	.14 (.09)
Depressive symptoms	-0.02 (.03)	-.01 (.03)	-0.01 (.03)
Compassion satisfaction	0.04 (.02)†	.01 (.02)	
Secondary traumatic stress	-0.07 (.02)**	-0.04 (.02)†	-0.03 (.02)
Burnout	0.20 (.03)***	0.13 (.04)***	0.11 (.03)***
Occupational characteristics			
Job demands		0.03 (.03)	0.03 (.03)
Job control		0.04 (.03)	0.04 (.03)
Coworker support		.11 (.07)	0.11 (.06)†
Supervisor support		-.01 (.02)	
Hours of supervision per month		-.01 (.06)	
Satisfaction with salary & benefits		-0.11 (.04)**	-0.12 (.04)**
Job security		-0.06 (.12)	
Perception of employers' commitment to safety		-0.08 (.04)*	-0.08 (.03)*
Information criteria`			
AIC (SD)	200.24 (.46)	199.45 (.64)	190.36 (1.09)
Sample-size Adjusted BIC (SD)	192.85 (.46)	185.49 (.63)	180.51 (1.09)

† $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Note. Standard errors are in parentheses

Table 20

Bivariate Correlations: Home Visitor Characteristics and Six Month Job Turnover (N = 30)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1											
2. Ethnicity	.41*	1										
3. Education	-.29	-.08	1									
4. CES-D	-.16	-.41*	.03	1								
5. Attachment anxiety	-.20	-.19	-.05	.01	1							
6. Attachment avoidance	-.02	.00	-.18	.34	.50**	1						
7. ACE's	.04	-.14	-.17	.36	.17	-.01	1					
8. Health	-.16	.14	.20	-.21	.15	-.19	-.40*	1				
9. Compassion satisfaction	.24	.61**	.21	-.61**	-.11	-.11	-.28	.28	1			
10. Secondary traumatic stress	.00	.15	-.33	.31	.19	.62**	.09	.06	-.20	1		
11. Burnout	-.23	-.31	-.13	.47**	.02	.37	.04	-.13	-.51**	.54**	1	
12. 6 month turnover	.00	-.12	-.02	.06	.07	-.38*	.23	-.19	-.32	-.08	-.01	1

* $p = .05$, ** $p = .01$ (2-tailed)

Table 21

Bivariate Correlations: Occupational Characteristics and Six Month Job Turnover (N = 30)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Caseload size	1												
2. Years in current position	-.20	1											
3. Years of home visiting experience	.02	.42*	1										
4. Concerns about safety	-.36	.08	-.30	1									
5. Employer's concerns about safety	-.07	-.28	-.28	-.30	1								
6. Benefits	.03	-.12	-.25	-.04	.42*	1							
7. Job demands	.26	-.06	.19	.04	-.41*	-.18	1						
8. Job control	-.07	-.05	-.32	.13	.13	.19	.15	1					
9. Supervisor support	-.11	.19	-.00	-.18	.21	.46*	-.25	.21	1				
10. Coworker support	-.05	.03	.01	-.13	-.16	-.07	-.19	-.22	.10	1			
11. Job satisfaction	-.22	-.02	.04	-.20	-.01	.24	-.12	.30	.35	.17	1		
12. Job withdrawal	.23	.07	.01	.11	-.62**	-.56**	.40*	-.07	-.35	.39*	-.16	1	
13. 6 month turnover	.08	.09	.09	.01	.04	-.22	-.06	-.34	-.39*	-.02	-.30	-.10	1

* $p = .05$, ** $p = .01$ (2-tailed)

Family engagement. The associations of compassion satisfaction, secondary traumatic stress, and burnout with family engagement were assessed using both quantitative and qualitative data. The section will focus on the results from the quantitative data. The quantitative analyses focused on one dimension of family engagement, the quality of the working alliance and helping relationship as reported by both the home visitors and the EHS mothers. Two indicators of family engagement (working alliance, helping relationship) were tested individually as distinct dependent variables.

EHS home visitors' global ratings of working alliance. Overall, home visitors' self-reported global ratings of their working alliance with all families were very positive (*Possible range = 12-60, Min = 36, Max = 59, M = 50.05, SD = 4.27, Skewness = -.35, Kurtosis = .57*). Bivariate correlation analyses indicated that several home visitor characteristics were associated with higher working alliance scores, including Latina ethnicity ($r = .27, p = .02$), greater material hardship ($r = .27, p = .02$), higher perspective taking ($r = .37, p = .001$), higher compassion satisfaction ($r = .59, p \leq .001$), and lower burnout ($r = -.37, p = .001$). Secondary traumatic stress was not associated with home visitors' global ratings of working alliance in bivariate analyses. Job satisfaction was the only occupational characteristic that was correlated with working alliance; greater job satisfaction was associated with higher ratings of working alliance ($r = .23, p = .05$).

Table 22

Bivariate Correlations between Individual, Occupational, and Organizational Characteristics and Home Visitors' Global Working Alliance Ratings (N = 77)

	Working Alliance
Individual characteristics	
Ethnicity (1 = Hispanic or Latina; 0 = Other)	.27*
Age	.10
Material hardship	.27*
Years of education	-.11
Physical health	.01
CES-D	-.14
ACE score	.03
Attachment anxiety	-.20
Attachment avoidance	-.18
Self-other awareness	.14
Perspective-taking	.37**
Personal distress	-.17
Compassion satisfaction	.59**
Secondary traumatic stress	-.17
Burnout	-.37**
Occupational characteristics	
Caseload size	.21
Years in current position	.02
Job control	.02
Job demands	.04
Coworker support	.12
Supervisor support	.20
Job satisfaction	.23*
Job withdrawal	-.12
Hours of supervision per month	.12

* $p \leq .05$, ** $p \leq .01$

In preparation for multivariate analyses, an unconditional intraclass correlation coefficient was calculated in MPlus. The resulting ICC of .021 suggested that approximately 2% of the variability in home visitors' global ratings of working alliance was explained by differences between EHS programs. Although the ICC was small, the decision was made to use a multi-level model for multivariate analyses in order to produce more conservative and reliable parameter estimates (Bickel, 2007).

A series of multi-level models were constructed in MPlus v. 7.1 to estimate the effects of home visitor compassion satisfaction, secondary traumatic stress, and burnout on EHS home-visitor-reported working alliance scores after controlling for home visitor individual and occupational characteristics and differences among EHS programs. Covariates were selected based on theory and prior research. Specifically, covariates included home visitor ethnicity, material hardship, perspective-taking, attachment style, caseload size, supervisor support, and job satisfaction. Models with predictors were assessed against the initial null model using AIC and BIC model fit criteria. Model 1 introduced the independent variables compassion satisfaction, secondary traumatic stress, and burnout as a set. A series of intermediate models that introduced covariates one at a time are not shown. The final model showed superior fit to the data compared to the baseline model as evidenced by lower estimates for each of the three comparative fit indices. The unconditional null model with no predictors, Model 1, and final model are presented in Table 23.

The results from the final model suggested that, after controlling for home visitor ethnicity, material hardship, caseload size, and perspective taking, greater compassion satisfaction ($B = .31, p = .001$) was associated with higher global ratings of working

alliance by home visitors. In addition, material hardship ($B = .68, p = .05$), caseload size ($B = .21, p = .03$), and greater perspective taking ($B = .28, p = .002$) also predicted home visitor ratings of working alliance. Ethnicity, secondary traumatic stress, and burnout showed no associations with home visitor-rated working alliance.

Table 23

Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor-Rated Working Alliance (N = 77)

Parameter	Null Model	Model 1	Final Model
Compassion satisfaction		.45 (.09)***	.31 (.10)***
Secondary traumatic stress		.04 (.10)	.05 (.09)
Burnout		-0.09 (.12)	-0.18 (.11)
Ethnicity			-0.06 (.86)
Material hardship			.68 (.34)*
Caseload size			.21 (.10)*
Perspective taking			.28 (.09)**
Information criteria			
AIC (SD)	447.08	420.28 (.60)	412.53 (.58)
Sample-size adjusted BIC (SD)	444.66	415.43 (.60)	404.44 (.58)

† $p = .10$, * $p \leq .05$, ** $p \leq .01$. *** $p \leq .001$

Using the subsample of 27 home visitor and 107 EHS families, a separate set of multi-level models were constructed to determine the relative impact of compassion satisfaction, secondary traumatic stress, and burnout on home visitor-rated working alliance after controlling for EHS family demographic and maternal psychological risk using MPlus v. 7.1 (see Appendix E for details on construction of cumulative risk indices). Covariates were selected based on theory and prior research. Program-level

differences were accounted for using a set of four dummy-coded variables. Model 1 included EHS family risk and the four dummy coded variables representing the five EHS programs. Model 2 introduced home visitor demographic, psychosocial, and occupational characteristics and EHS family risk.

The first set of analyses included EHS family demographic risk and maternal psychological risk as distinct variables. As shown in Table 24, the final model demonstrated improved fit compared to Model 1. In the final model, in contrast to the results presented above, compassion satisfaction ($B = .44, p < .001$) but not secondary traumatic stress or burnout, predicted home-visitor rated working alliance. In addition, Latina ethnicity ($B = 2.45, p = .03$), higher levels of EHS family demographic risk ($B = 6.27, p < .001$) and EHS maternal psychological risk ($B = 3.61, p < .001$), greater perspective-taking ($B = 0.22, p = .01$), and greater material hardship ($B = 1.24, p < .001$) were each associated with more positive ratings of the working alliance. There was also a significant effect of EHS program. Thus, working for some EHS programs was associated with variability in home visitors' ratings of the working alliance after controlling for home visitors' individual and occupational characteristics.

Table 24

Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor Ratings of the Working Alliance from Home Visitor Characteristics and EHS Family Demographic and Psychological Risk (Level 1 N = 100)

Parameter	Model 1	Final Model
EHS program		
Program 1	1.41 (1.95)	1.73 (0.55)**
Program 2	0.86 (2.29)	-0.32 (1.47)
Program 3	0.69 (2.30)	-2.46 (0.45)***
Program 4	2.93 (2.55)	-0.96 (1.40)
Home visitor characteristics		
Ethnicity		2.45 (1.10)*
Perspective-taking		0.22 (0.08)**
Material hardship		1.24 (0.15)***
Caseload Size		0.32 (0.17)†
Compassion satisfaction		0.44 (0.08)***
Secondary traumatic stress		-0.03 (0.12)
Burnout		-0.08 (0.11)
EHS family demographic risk	11.03 (35.58)	3.61 (0.10)***
EHS maternal psychological risk	-2.03 (12.62)	6.27 (1.06)***
Information criteria		
AIC	796.22 (0.00)	775.52 (0.00)
Sample-size Adjusted BIC	788.48 (0.00)	763.91 (0.00)

† $p = .10$, * $p \leq .05$, ** $p \leq .01$. *** $p \leq .001$

A similar pattern of results was found when EHS family demographic risk and maternal psychological risk were combined and entered as one EHS family cumulative risk index. As shown in Table 25, the final model demonstrated improved fit compared to Model 1. In the final model, compassion satisfaction ($B = .40$, $p < .001$), Latina ethnicity ($B = 2.14$, $p < .001$), greater perspective-taking ($B = 0.26$, $p = .001$), greater material

hardship ($B = 1.32, p = .001$), and higher levels of EHS family cumulative risk ($B = 5.02, p < .001$) were each associated with more positive ratings of the working alliance. Again there was also a significant effect of EHS program. There were no associations found between burnout, secondary traumatic stress, and global ratings of working alliance.

Table 25

Unstandardized Fixed Effects Estimates and SE's for Models Predicting Home Visitor Ratings of the Working Alliance from Home Visitor Characteristics and EHS Family Cumulative Risk (Level 1 $N = 100$)

Parameter	Model 1	Final Model
EHS program		
Program 1	1.29 (0.47)	1.69 (1.14)
Program 2	0.91 (2.31)	-0.53 (1.38)
Program 3	0.75 (2.24)	-2.49 (1.09)***
Program 4	2.60 (2.52)	-0.78 (1.38)
Home visitor characteristics		
Ethnicity		2.14 (0.56)***
Perspective-taking		0.26 (0.08)***
Material hardship		1.32 (0.39)***
Caseload Size		0.26 (0.14)†
Compassion satisfaction		0.40 (0.10)***
Secondary traumatic stress		0.00 (0.12)
Burnout		-0.10 (0.13)
EHS family cumulative risk	6.41 (27.73)	5.02 (0.37)***
Information criteria		
AIC	550.69 (0.00)	530.36 (0.00)
Sample-size Adjusted BIC	545.16 (0.00)	520.95 (0.00)

† $p = .10, *p \leq .05, **p \leq .01, ***p \leq .001$

EHS mothers' ratings of working alliance and helping relationship. In a separate set of analyses, home visitor survey data were linked with EHS mothers' ratings

of (a) working alliance and (b) helping relationship that were obtained from the Partners for Parenting Study ($N = 107$). It is important to note that these analyses were for exploratory purposes only. It was originally anticipated that most of the mother-reported working alliance and helping relationship data would be collected after the administration of the home visitor survey, which would have provided a clear determination of time order. EHS family data collection slowed soon after the home visitor survey was administered, however, due to a staff member preparing for maternity leave. As a result, much of the EHS mother-reported working alliance and helping relationship data were collected *before* home visitor-reported compassion satisfaction, secondary traumatic stress, and burnout. Thus, results based on these data cannot be used to make causal inferences regarding associations among home visitor compassion satisfaction, secondary traumatic stress, and burnout and mother-reported working alliance and helping relationship scores. Keeping in mind these limitations, two-level multi-level regression analyses were used to explore the association of home visitors' compassion satisfaction, secondary traumatic stress, and burnout with EHS maternal-reported (a) working alliance and (b) helping relationship. The two indicators of family engagement were tested individually as distinct dependent variables.

Scores on the Working Alliance Inventory (WAI) and Helping Relationship Inventory (HRI) were available for 107 EHS families, who were nested within 27 home visitors. On average, data were available for 3.96 families per home visitor ($Min = 1$, $Max = 11$). Descriptive statistics for the two outcome variables are presented in Table 26. Although the scores were normally distributed, the values overall were high/positive, indicating that most EHS mothers reported favorable impressions of the working alliance

and helping relationship with their home visitor. Scores on the WAI and HRI were highly correlated ($r = .89, p < .001$), reflecting a great degree of overlap, and possible redundancy. The ICC's for Working Alliance Inventory and Helping Relationship Inventory were both .003, suggesting that minimal variability in EHS mother-reported working alliance scores was associated with differences between home visitors. Despite this finding, to answer the research questions a series of MLM's were constructed estimating fixed effects for each dependent variable, working alliance and helping relationship. As described above, model fit was assessed using comparative fit indices Akaike information criteria (AIC) and Bayesian information criteria (BIC) following the addition or subtraction of individual variables. A preliminary model was first constructed that included five predictors: home visitor ID and four dummy coded variables representing the five EHS programs. Results from this model suggested that minimal variability in working alliance was explained by EHS program-level differences. Furthermore, a subsequent model that excluded the four dummy-coded variables proved a better fit to the data. Therefore, in the interest of power and parsimony, these four dummy coded variables were removed from subsequent analyses.

Table 26

Descriptive Statistics for EHS Mothers' Scores on the Working Alliance Inventory and the Helping Relationship Inventory (N = 107)

Instrument	Possible Range	Min	Max	Mean	SD	Skewness	Kurtosis
Working Alliance Inventory	12-60	32.00	60.00	52.41	5.53	-.80	1.11
Helping Relationship Inventory	15-75	43.00	75.00	68.15	6.9	-.79	0.11

As previously described, models were built and assessed incrementally. Model 1, the null model, included only the dependent variable of interest and served as a basis for comparison for subsequent models. Model 2 introduced compassion satisfaction, secondary traumatic stress, and burnout as level-two predictors. Model 3 introduced EHS cumulative maternal demographic and psychosocial risk (See Appendix E for information regarding how these variables were constructed). The data were not strong enough to support these analyses, however. In addition to the limitations mentioned above, the results suggested that the models were highly unstable. There were two primary indicators of instability. First, some variables evidenced extremely high or low standard errors. Second, the MPlus output reported zero degrees of freedom associated with the Chi-square test of Model fit, indicating that the models were saturated. Thus, the analyses were conducted but not interpreted.

Summary of Quantitative Results

A summary of results for analyses using the full sample of 77 home visitors is presented in Tables 27 and 28. Research Question 1 addressed the prevalence of compassion satisfaction, secondary traumatic stress, and burnout in EHS home visitors and found moderate to high levels of compassion satisfaction and moderate to low levels of secondary traumatic stress. Levels of burnout could not be assessed due to the poor internal consistency reliability of the scale. Research Question 2 addressed the relative effects of individual, occupational, and organizational factors on EHS home visitors' compassion satisfaction, secondary traumatic stress, and burnout. Whereas home visitor characteristics explained most of the variability in compassion satisfaction, both individual and occupational characteristics accounted for significant variability in

secondary traumatic stress and burnout. In addition, EHS family cumulative risk predicted secondary traumatic stress, but not compassion satisfaction or burnout. Finally, Research Question 3 examined the influence of compassion satisfaction, secondary traumatic stress, and burnout on home visitor turnover and family engagement and found that higher burnout was associated with greater job withdrawal, and that compassion satisfaction, secondary traumatic stress, and burnout were each associated with home visitor-rated working alliance.

Table 27

Summary of Quantitative Results in Full Sample: Individual Characteristics (N = 75-76)

	Compassion Satisfaction	Secondary Traumatic Stress	Burnout	Job Withdrawal	Working Alliance
Individual characteristics					
Latina ethnicity	++++	NS	-	D	NS
Education	D	NS	D	NS	
≥ 5 years of experience in home visiting	NS	--			
Years in current position			D		
Depressive symptoms	---	+++	++++	NS	
Adverse childhood experiences	D	D			
Attachment anxiety	D	D	D		
Attachment avoidance	NS	++++	NS		
Perspective-taking	++				+++
Personal distress		++++			
Material hardship	++				++
Compassion satisfaction				D	+++
Secondary traumatic stress				NS	NS
Burnout				++++	NS

Note: + or - ($p \leq .10$); ++ or -- ($p \leq .05$); +++ or --- ($p \leq .01$); ++++ or ---- ($p \leq .001$). NS = not significant. D = dropped from final model due to no association with DV. Shaded cells indicate that the variable was not included in any model.

Table 28

Summary of Quantitative Results in Full Sample: Occupational Characteristics (N = 75-76)

	Compassion Satisfaction	Secondary Traumatic Stress	Burnout	Job Withdrawal	Working Alliance
Occupational characteristics					
Caseload size	NS	NS	NS		++
Job demands	D	+++	++++	NS	
Job control	D	D	NS	NS	
Coworker support	D	D	D	+	
Supervisor support	D	D	+	D	
Job security			NS	D	
Satisfaction with benefits				---	
Hours of supervision per month	D	+	D	D	
Concerns about personal safety			+		
Perceptions of employer's commitment to safety			-	--	

Note: + or - ($p \leq .10$); ++ or -- ($p \leq .05$); +++ or --- ($p \leq .01$); ++++ or ---- ($p \leq .001$). NS = not significant. D = dropped from final model due to no association with DV. Shaded cells indicate that the variable was not included in any model.

Research Question 4. *How do home visitors experience their work with EHS families?*

The purpose of the qualitative phase of this study was to provide a deeper understanding of the quantitative findings. A systematic two-stage sampling procedure was used to ensure a balance of homogeneity and heterogeneity in the sample. Seven out of 10 home visitors who were invited (70%) agreed to participate in interviews. Three home visitors could not be reached after multiple attempts and were considered non-respondents.

Participant characteristics. Table 29 summarizes interview participants' characteristics. These data were extracted from the home visitor surveys. Participants in the qualitative phase were all women and represented a wide range of ages ($M = 37.43$, $SD = 13.75$). Four out of seven participants (57%) indicated that they were of Hispanic, Latino, or Spanish origin. Five home visitors (71%) indicated that they were married, and five (71%) indicated that they had children of their own. Participants had associate's degrees, bachelor's degrees, or master's degrees. At the time of the interviews, participants' caseloads ranged from 9 to 12 families. Interview participants' scores on compassion satisfaction scale ranged from 35 to 48 ($M = 43.29$, $SD = 5.47$) and on the secondary traumatic stress scale ranged from 12 to 31 ($M = 19.43$, $SD = 8.10$).

Table 29

Qualitative Interview Participant Characteristics (N = 7)

Characteristic	N	%
Female	7	100
Hispanic, Latino, or Spanish origin		
Yes	4	57.1
No	3	42.9
Marital/relationship status		
Married or living with a partner	5	71.4
Single/never married/separated/widowed/divorced	2	28.6
Have children of their own?		
Yes	5	71.4
No	2	28.6
Educational attainment		
Less than bachelor's degree	1	14.3
Bachelor's degree or higher	6	85.7
Years of experience providing home visiting services		
Less than 5 years	5	71.4
5 or more years	2	28.6

Interviews. Responses from interviewed participants offered a more nuanced view of home visitors' experiences in their work than the quantitative data. As described above in the Method section, codes were applied systematically to interviews and were then grouped into themes as a means of synthesizing and making meaning of the data. The analysis of each interview and across all interviews yielded four broad themes: Experiences with the Work; Meeting the Needs of Families with Severe Challenges; Home Visitor Well-being; and Family Engagement. All names have been changed to pseudonyms for the purpose of confidentiality.

Theme 1: Experiences with the work. The interviews revealed differences among home visitors in how they experienced the work. As a group, participants described a great degree of variability in terms of characteristics of the families they served. In addition, home visitors discussed variability in terms of job duties. Home visitors also described their initial role expectations and whether these expectations and understandings changed as a result of experience on the job. The following subthemes emerged regarding home visitors' experiences with the work: Variability in EHS Family Needs, Variability in Home Visitor Duties, and Role Expectations versus Reality.

Variability in EHS family needs. Home visitors described working with families with a diverse range of demographic and biopsychosocial characteristics and challenges that in turn led to varying service needs. The racial and ethnic composition of a home visitor's caseloads depended on the geographic location of the program as well as the home visitor's personal characteristics. For example, Spanish-speaking home visitors often served greater numbers of Spanish-speaking families and recent immigrants. This may have been due in part to the fact that some programs were located in areas with high

numbers of Hispanic or Latina families. Because most home visitors were responsible for recruiting their own families, they may have been motivated to approach families with whom they shared language or other characteristics, or with whom they had a prior history of success.

Home visitors indicated that most of the families on their caseloads were struggling to meet basic needs associated with living in poverty. Many families had inadequate food, clothing, diapers, and/or shelter. Several home visitors worked with families that were homeless, living in shelters, or currently facing eviction. Other home visitors described visiting families living in unclean, uncomfortable, or unsafe conditions. Examples included high crime areas, apartments with mold, bed bugs, or rodents, or homes with extreme temperatures due to the absence of heat or air conditioning. One home visitor, Maeve, shared, “Sometimes the temperature [in the house] was 105 degrees.” Respondents also indicated that most home-based families rely exclusively on public transportation.

In addition to challenges directly associated with living in poverty, home visitors described a range of psychosocial challenges facing the families they serve. Specific challenges mentioned by home visitors included parental depression, anxiety, bipolar disorder and other mental illnesses; stressors associated with recent immigration; limited or no English; child protective services involvement; low education; family violence; social isolation; substance abuse; teen childbearing; single parenthood; parents with many children; legal problems related to divorce or seeking asylum; HIV and other physical health problems; history of sexual abuse or other forms of trauma; and parental cognitive

disabilities. Home visitors also served families living above the poverty threshold, which was allowed if the child had a special need, such as a developmental disability.

The results revealed variability in caseload characteristics between home visitors. Some home visitors described caseloads filled with families who were mainly “just poor.” For these families, considerable time was spent helping families meet concrete needs. Other home visitors appeared to have higher numbers of families with very complex challenges, such as family violence, substance abuse, or mental illness. In addition, some home visitors served a high number of recent immigrants with limited English and limited access to social services due to their legal status. As will be discussed below, differences in the types of families on a home visitors’ caseload impacted the ways in which home visitors managed their time and resources.

Variability in home visitor duties. The interviews revealed variability in job duties between EHS programs. For example, EHS programs had different expectations for home visitors’ caseload sizes. Consistent with Head Start Performance Standards, the majority of EHS programs required their home visitors to carry caseloads of 12 families, yet one home visitor shared that her program intentionally limited caseload sizes to fewer than 12 families per home visitor. She was not aware of the reasoning behind this decision. Because home visitors may work with multiple children within a single family, in this sample one home visitor actually served 18 children as part of her caseload of 12 families.

All home visitors described their jobs as multifaceted (Table 30). Home visitors were required to plan, schedule, and implement weekly 90-minute home visits with families using a curriculum provided by their organization. They were also required to

plan and conduct group socializations with several families at a time. In addition to duties required of all home visitors, some participants described additional duties that they took on, because they perceived that it was expected of them, they had the skills or resources necessary to complete the tasks, or because they were emotionally invested in helping the families. Examples included delivering food or diapers to families, transporting families to food pantries and other social service agencies, and accompanying families to sessions with therapists and related service providers. Home visitors also indicated that they took frequent calls from families with questions or concerns between visits. When families did not speak English, home visitors frequently served as translators between parents and community-based agency staff. As described by Maeve, “There are times when the moms need us to go with them as translators to DHS or somewhere because the agency does not have any translators.” Home visitors also reported that they sometimes took families to community events on weekends. One home visitor provided supervised visitation for a family involved with child protective services. Another home visitor was asked to fill in as a center-based childcare worker as needed when someone was sick or on vacation.

Role expectations versus reality. Home visitors were asked, “When you first took the job, what did you think was expected of you?” The responses showed differences in home visitors’ early expectations. Some home visitors focused on concrete expectations and requirements such as coming to work on time, the number of required home visits and socializations they were expected to complete, and required documentation. Liz, for example, described what was expected of her as follows: “To follow the model, the home visiting model, to get to the home visits on time, to be ready for the home visits, prepare beforehand, get the forms filled out, have that activity ready.”

Others focused more broadly on the overall goals of the Early Head Start program. Within this subgroup, some home visitors emphasized family well-being and self-sufficiency, whereas others emphasized academic readiness of the children.

Table 30

Variety of Home Visitor Duties

Duties	Details
Planning and conducting home visits	Minimum of 90 minutes per week, plus planning time
Planning and conducting group socializations	Two times each month
Addressing families' concerns between visits	Responding to phone calls and text messages from families who have questions, concerns, or crises between visits
Case coordination	Seeking and referring families to community resources, following up on referrals, communicating or meeting with community partners and/or other service providers, and collecting assessment data from other providers
Documentation	Documentation, either on paper or electronically, of (a) all communication with families (phone calls, texts, notes, in-person), (b) all activities that occur during visits, (c) families' participation in socializations, (d) referrals and follow-up, (e) communications and meetings with community partners and related service providers, (f) periodic assessments
Professional development	Training, supervision
Administrative tasks	Staff meetings
Recruiting and intake of new families ^a	Knocking on doors, attending community events, spending time in local community agencies looking for families
Transportation ^a	Driving EHS families to and from group socializations, community resources (e.g. food pantries), appointments (e.g. dentist)
Special visits/deliveries ^a	Delivering food and diapers to families. Taking EHS families to fairs and community events on weekends or after traditional work hours.
Translating ^b	Translating forms and documents between English and Spanish. Also, making phone calls and accompanying non-English speakers to service providers.
Supervised visitation for child welfare-involved families ^b	Serving as responsible party to allow parents to visit with children.
Child care worker ^b	Filling in as substitute child care worker in EHS child care center when regular employees are sick or on vacation

^a These duties were performed by most, but not all home visitors. ^b These duties were performed by some home visitors.

Home visitors were also asked if their expectations had changed since starting the position. For some home visitors, the balance between family wellbeing and academic readiness was different than expected. Some home visitors evidenced a degree of role confusion, uncertainty, and even frustration associated with trying meet EHS program expectations and family needs. In the following example, Laurel described how the emphasis on academic readiness was not what she expected:

I thought it was going to be more of the family stuff. But then it's really a lot of school readiness with the children as opposed to family well-being and that kind of stuff...I enjoy working with the children and teaching them but then it's like, I can't teach the child if the family is facing eviction or I can't teach the child if the family doesn't have a job and doesn't know how they're going to feed their family.

The quote above also illustrates the finding that some home visitors seemed to view and describe their roles as a “teachers,” whereas others appeared to view and describe themselves as “social workers.” Differences in how home visitors conceptualized their role would likely have led to different emphases on tasks during visits, with some home visitors focusing more on child development and others on family wellbeing.

In summary, home visitors experienced their jobs differently depending on the types of families they served, specific job duties, and prior expectations regarding the nature of the work. The variability in each of these areas may help explain why some home visitors experienced their jobs are more or less stressful than others. This will be discussed in further detail below.

Theme 2: Meeting the needs of families with severe challenges. Although all EHS families were considered “high risk” due to low income or having a child with a disability, some families had additional challenges in areas such as mental health, substance abuse, and domestic violence that required additional skills and resources of home visitors. The interview data offered new understandings about the ways in which home visitors approached their work with these families. Sub-themes that emerged from this data included Linking Families with Needed Services; Flexible, Family-Centered Services; and Learning through Experience.

Linking families with needed services. The data revealed that certain families require more time and “hand-holding” to get them connected with the services they need. This seemed especially the case for mothers who were depressed or had other mental health challenges, parents with cognitive or developmental disabilities, or families that did not speak English. Enid described one such family:

They are basically not able to do some things, like make a simple phone call to the doctor. I need to sometimes write them notes. I told them to try and so I have them practice to become more self- sufficient.

Home visitors varied in the extent to which they were involved in linking families with needed services. For example, in the situation in which a mother needed mental health assistance, some home visitors described collaborating with a mental health consultant or community service provider. In contrast, others described a process whereby they would make a suggestion to the mother that she seek assistance, but then leave it to her to follow through, as the following statement from Laurel suggests:

We have a mental health consultant that works with us and she'll come to...at least one of our socials and if someone wants to talk to her, they, they know who she is, so if someone wants to talk to her they'll pull her aside and ask.

These differences may have been associated with differences in resource availability, or differences in the home visitors' worldview and understanding of the families' problems.

Flexible, family-centered services. As a group, respondents all demonstrated a great appreciation for family-centered services and the need to address more pressing family needs before turning to higher level needs, such as education. As described by Amy:

It's kind of like...the hierarchy of needs. Like if I go to a family's house, I always have a visit plan. I have my bag, I have the toys, I have the little activities the kids are going to do, I have any forms that moms are going to sign. But if I go there and their lights are off and they have no heat in their home, or no AC in their home then we have to get in the van and we have to leave and we have to go find a way for them to pay their utility bill.

Similarly, all home visitors acknowledged the importance of flexibility in scheduling, planning, and implementing visits, particularly when working with families with severe challenges. This often meant putting the lesson plan or activity aside to focus on more immediate needs. Laurel stated: "It's times when we don't hit everything because, like I said, I've walked into evictions and so of course I can't...I can try to read a book, but the family is not really focused on the learning aspect much when they're facing things like

that.” Flexibility was also required when families cancelled visits due to last minute appointments or changes in schedules. Supervisors seemed to support and encourage flexibility, yet flexibility presented a challenge when it contributed to scheduling unpredictability.

Learning through experience. Several participants expressed that their approach to working with high risk families changed as a result of experience on the job. As Enid explained:

I learned it through experience. The more I know different personalities of people, the more training that I took, they made sense. “Oh, this behavior is because of this.” I learned to be sensitive also to different aspects like cultural backgrounds and how to approach different personalities and be able to understand their needs. Not to judge them, but also to understand. It come natural after a while, more comfortable. In the beginning it was really hard when I started to work with families because I did not know how to ask a lot of questions. I have learned how to ask.

Even the most experienced home visitors acknowledged that they were still learning about how to best meet the needs of families. It seemed that home visitors were most successful when they drew from a combination of personal, program, and community resources to meet the needs of families with severe challenges.

Theme 3: Home visitor well-being. Home visitors discussed both positive and negative feelings about their work. The data revealed the following subthemes

concerning home visitor well-being: Compassion Satisfaction and Compassion Fatigue, Sources of Stress, and Promoting Well-being.

Compassion satisfaction and compassion fatigue. All participants described both positive and negative aspects of their work. Despite feeling frustrated at times, all participants indicated that they liked many aspects of their jobs. When asked what they like most about their jobs, home visitors focused primarily on the intrinsic rewards associated with working with vulnerable families. As stated by Beverly, “They're always grateful when I'm there and it feels good just to be working with them. I feel good.” Some most enjoyed the relational aspects of the job, such as spending time with the families and developing trust. For example, Laurel indicated that the thing she liked most was “relationship building with the parents and children.” Others focused more on the end results, such as seeing the children grow and develop and seeing the parents reach their goals. As stated by Maeve, “I like it because I can...I can help families and I can see when the families are progressing with the services that we provide to them.” When asked, “How important is your work to your feelings about yourself as a person?” responses were often very personal and demonstrated a high level of commitment to EHS families. Amy felt that her job was important, that she was making a difference, stating, “Sometimes you're the only voice for these kids who can't speak yet.” In addition, some participants emphasized that the job nurtured their own personal and professional growth and development. These home visitors enjoyed learning about how to work with different types of families and appreciated the intellectual challenges of the job.

In addition to showing evidence of compassion satisfaction, all participants acknowledged feeling at least some stress associated with the work, and the data revealed

symptoms of secondary traumatic stress and burnout in some home visitors. Consistent with the definition of burnout, some participants described feelings of emotional exhaustion, using words such as “tired” or “overwhelmed.” At times these feelings were in direct response to working with families in crisis, as the following statement from Enid illustrates: “Most of the time when there are crises, it feels very overwhelm[ing]...it make me a little bit tired. Not tired physically, mentally. Mentally made me feel tired because of all the struggling they're going through.” Some home visitors appeared more deeply affected by the traumatic experiences of those they help. At times they struggled to “leave work at work,” thinking or worrying about their EHS families during evenings and weekends. Amy stated, “I’m like more emotionally drained that anything, ‘cause some of those things, even though you try to forget about it, you do take it home with you sometimes, and it can be stressful.”

The interviews also showed that some home visitors sometimes experienced feelings of helplessness and hopelessness, as the following statement from Amy illustrates:

I can tell that she doesn’t like to tell me bad news anymore and she doesn’t like to disappoint me I guess ‘cause I know she wants to do a lot better. But it’s those families you don’t want to lose hope in, but it’s like, sometimes it never gets better, you know.

For some, it seemed that participants’ feelings about the work varied from day to day, whereas for others, the negative effects seemed more enduring and pervasive.

Sources of stress. The data were closely examined for the purpose of identifying potential sources of stress. When home visitors were asked what they liked least about

their jobs, the answers varied. In response to this question, Beverly stated, “There's really nothing...I like my job.” Four home visitors indicated that the amount of documentation required was the part they liked least. Two mentioned low pay. Yet another mentioned that she wished the program would pay a portion of her cell phone bill, which she said was necessary for her job. Enid indicated that she least liked working with families with a lot of mental health issues, noting, “They create a difficult environment for the kids.” When asked what would make their work easier, the list of suggestions included smaller caseloads, stronger connections with community providers and resources, money for supplies, office space, and more and better training on specific challenges such as working with families with cognitive disabilities. To explore these ideas further, the interviews were examined for evidence confirming or disconfirming the following types of influence on how home visitors experience stress: home visitor characteristics, occupational characteristics, and organizational characteristics.

Home visitor characteristics. The findings suggested that the ability to maintain personal and professional boundaries, the home visitor’s approach to the work with high risk families, and other personality characteristics may play a role in the development of compassion satisfaction, secondary traumatic stress, and burnout. Separating work from home life was problematic for many home visitors. A majority of the home visitors shared that they took paperwork home at night when they didn’t have time to finish it during the day. Some home visitors took calls from families after hours or on weekends. Similarly, some used time at home after hours or on weekends to scour the internet for resources for their families.

Maintaining personal boundaries seemed especially difficult for some home visitors who became intensely emotionally invested in the work. Some participants reported that they frequently worried about families after the work day is over. Beverly shared that she sometimes struggled with this, stating, “You think about some of this stuff...you think about that when you go home, [wondering] ‘Is she all right?’ or something like that. But I can't take it home with me.” One home visitor admitted to answering phone calls late at night and spending an entire day working with one family in crisis. Other home visitors were better able to establish clear boundaries. Liz stated:

I say to them, “You can call or text me but I’ll be honest, I might not answer. I might not text you back until the next day.” [If] I have a family call me at 6:00 a.m. I’m not going to answer. “You can call me, leave a voicemail. I’ll call you when I’m ready.”

Thus, home visitors varied in the extent to which they became emotionally involved with the families.

Home visitors also demonstrated differences in their approach to the work with high risk families, which may have led to differences in the level of detail they elicited from families about their personal lives. Some home visitors spent considerable time during home visits providing support to mothers experiencing severe challenges such as mental illness, domestic violence, or substance abuse. In contrast, other home visitors appeared to focus more on alleviating concrete needs and referring parents to other providers for more complex emotional needs. Thus, home visitors who knew more intimate details of families’ lives may have also become more emotionally invested in the family and their outcomes, leading to increased stress.

Although compassion was evident in all home visitors, empathy, which involved a deeper awareness and sensitivity to the experiences and feelings of others, was an ongoing challenge for many. Home visitors' emotions would at times override their knowledge and ability to adopt the perspective of the EHS parent, resulting in frustration.

As shared by Liz:

I try to empathize with her but sometimes I feel like it's just ... How much more can I? I already empathize a lot. I know what you're going through but it doesn't mean you can't at least try a little bit.

Reflective practice seemed to enhance emotional regulation and perspective-taking skills, especially for more anxious home visitors. This was shown in

Amy's comment:

I realized, okay. I need to be very patient. I need to just tell myself things happen. They cancel, they cancel. Don't beat yourself up. Don't take it personal. Don't feel like, "Oh, is it because they don't like you?" I was thinking all of that in the beginning.

Thus, variations in home visitors' intrapersonal and interpersonal skills may help explain variations in resiliency and stress. The data further suggested that some of these skills might be enhanced through training and supervision designed to increase reflective capacities while also encouraging home visitors to maintain personal and professional boundaries.

Occupational characteristics. Occupational characteristics including job demands, environmental hazards, and variability in supervision and training may also help explain differences in stress reactions. The interviews provided several examples of

instances when job demands appeared to outweigh home visitors' resources. As previously mentioned, home visitors cited caseload size, documentation, low pay, and lack of supplies as things they liked least and/or areas for improving their work experience. Documentation was particularly challenging for the home visitors. For example, when asked what she liked least about her job, Laurel stated:

Paperwork, because...there are things that we have to do like, keeping up on medical records and all that stuff that don't really tie in to school readiness and I understand that that's family wellbeing because that's good for them to go to the doctor, it's good for them to go to the dentist so all that's important, but it's a lot for us, when our caseload is so large and to have to deal with the family files as well as doing visits...I just think that it's a lot to do, it really is.

Several home visitors indicated that it was very difficult, or "nearly impossible" to complete required paperwork during the workday, and thus it was necessary to take it home. One home visitor expressed frustration over her suspicion that that no one ever uses the data (thus why collect it?).

Recruiting families was another major demand on home visitors. Most home visitors were responsible for keeping their caseloads full, and this often presented challenges. Amy stated:

There's been days when we spend the whole day recruiting. Just knocking door to door and people are very skeptical when someone knocks on their door. 'Cause they're like, "How much is this going to cost and what do I

need to do?” And, “Are you with child protective services?”...So we spend an awful lot of time recruiting.

One notable exception was a home visitor whose program had an extremely long wait list for home-based services.

Home visitors also raised concerns over environmental hazards related to the job, including the necessity of going into dangerous neighborhoods or arriving at a house where someone is obviously under the influence of drugs. Laurel described a specific situation that made her particularly uncomfortable: “I’ve been in a home and 5 or 6 other family members are there where this one may be drinking alcohol or this one may be smoking.” Home visitors also coped with the challenge of working in houses where there were high levels of smoke, mold, insects, or animal droppings. One home visitor coped with these challenges by wearing scrubs to work that she could quickly shed when she arrived home.

Supervisor and coworker support was highly valued among all home visitors. Home visitors appreciated having both formal and informal “drop-in” supervision. Laurel described receiving several forms of supervision:

We have supervision once a month but then we also...do group meetings and then, she has an open door policy so, you know, whenever something’s going on, if we’re not comfortable with a situation that we walk into in a home, anything like that we’re able to talk to her about that.

Yet the data suggested that participants varied in the ways in which they used supervision. Whereas some home visitors described their supervision as primarily administrative or supportive, others described their supervision as more focused on

reflection and problem solving. Amy described how she felt supported and understood because her supervisor had experience as a home visitor: “My supervisor definitely helps a lot...She’s done home visiting and kind of has a feel for these families and...she kind of know what they are going through.” Home visitors also supported each other by sharing resources and helping with recruitment. Janice described a collaborative environment, stating, “Somebody knocked the door and said, ‘Do you have this resource?’ We can help...each other.”

Training was also viewed as critical by all home visitors. Although some home visitors were content with the amount of training that they had received, three home visitors felt that they needed more training. Some participants felt ill-prepared at first to begin work with families, and described how most of their learning occurred on the job. Amy stated the need for training to be more realistic: “Eventually, I did have a training...that went over the curriculum itself...I can’t really say that helped very much ...that training was very unrealistic, it showed us videos of like the perfect family.” Liz expressed her lack of confidence, which she attributed to inadequate training: “Sometimes I think, I don’t want to do this anymore because I don’t have the proper training. I don’t feel confident really. If I had that confidence I don’t think I would think like that.” Thus, the data highlighted the importance of providing realistic orientation training aimed at teaching new home visitors core skills while also offering support and assurance. Home visitors also benefited from ongoing training that built on core skills and helped them address more specific EHS family challenges.

EHS family characteristics. EHS family characteristics also contributed to worker stress and well-being by demanding time, by challenging confidence and producing

anxiety, and by reducing the amount of control workers have over their schedules. Home visitors indicated that they struggled with families with drug use, domestic violence, or mental illness. These situations may have undermined the confidence of the home visitors, who may have felt like they were being asked to perform a job beyond their abilities. The data also showed that the behavior of some EHS families produced anxiety and tested home visitors' boundaries. Beverly provides an example this: "One [parent] has the mental problem...They'll call you all times of night and then say they'll call you after hours." In some instances, EHS families had needs beyond those that could be met by the home visitors' skills and abilities. The following excerpt from Enid illustrates the double-bind experienced when an EHS mother trusts the home visitor yet the home visitor is limited in how she can help:

I have a mom, she has many different things like mental issues, like bipolar, depression, anxiety. We talk about it all the time, about goals, and it seems like she's not moving forward. At this point, I have been working with her the longest...she's attached to me. When other home visitors come, no, she just want me...That's very challenging.

In addition, flexibility in scheduling caused stress and encroached on a home visitors' personal time. All home visitors experienced cancellations. Some EHS families worked in jobs where the schedule changed every day or every week. When multiple families cancelled, trying to reschedule each one was difficult, as described by Enid:

I have families, moms that work and their schedule changes every week, so I need to move them to a different schedule. I don't know what day I'm

going to see them next week, so that's more challeng[ing] because they need to tell me, and I've already scheduled the rest only to make her space.

Families who didn't speak English also took additional time. Janice spoke of a Spanish speaking mother who was turned away from a community agency. She described the amount of work involved with getting her families connected with services:

Probably the mom couldn't understand or she didn't receive the information. I don't know. It's not only [that you] give something. You have to follow. You have to call. You have to meet with these people....working with ...12 families...doing these things for every single case is not easy.

In the above example, the home visitor followed up with a personal meeting with the community agency, which resulted in the family being able to receive the service. Thus, considerable time and effort was often required to see that families received the resources and services they needed, and this time and effort was often in addition to the 90 minute weekly visit.

Organizational characteristics. The data revealed that organizational resources, organizational climate, and policy may also impact worker well-being. In terms of resources, home visitors found it very beneficial to have multidisciplinary support on site. Examples included mental health consultants, social workers, psychologists, nurses, and other experts who could provide information and support for distressed families. As stated by Maeve:

They offer different points of view and they can also visit the families with us...This is good because when the mom is very stressed and when

she is pregnant and crying...we need help and they, they help us - like the doctor of the center, the therapists, the social worker as well.

In addition, home visitors found it helpful when their programs had strong relationships with other community organizations. Yet the data showed great variability in the resources available to each home visitor. This resulted in some home visitors spending much more time than others searching for resources. Laurel stated, "It would be easier if our program had more partners, like the housing authority and that kind of thing. It would be easier so we could say, 'Hey, you can go here,' or 'This person can help you with this.'" In contrast, other home visitors worked for EHS programs that had very strong community linkages.

Home visitors varied in the extent to which they felt understood and appreciated by others in their organization. For example, some home visitors expressed frustration with feeling undervalued by upper management. As Amy explained: "The people higher up, most of them have never done home visits so they don't realize just how hard it is to meet with these families every week." This feeling seemed exacerbated when home visitors felt pressures associated with EHS policy. Some home visitors verbalized a fear of "getting in trouble" if they were too flexible in meeting family needs. This fear was expressed by Liz about a family that cut visits short: "I'll come early and then she'll cut the visit anyway and it'll be one hour. I'm like, 'I can't do an hour. I've got to have that 1 hour and 30 minutes. That's required.'" To balance program requirements and the need to be flexible for families, some home visitors scheduled visits during the evenings, setting aside their own needs for personal time.

Promoting well-being. Home visitors used a variety of active coping strategies to reduce stress and promote personal wellbeing. All home visitors drew on supports from supervisors and/or coworkers to cope with stress. Home visitors also described their efforts to “leave work at work.” As stated by Enid:

If they are not doing well, that part is really hard sometimes. I need to, sometimes after my work, I try to do other things to keep my brain, you know. Like planting, do scrap booking, ride my bike, to continue doing things and separate that part.

Several home visitors spoke of the importance of exercise and specifically mentioned practicing yoga or using a gym. Having meaningful relationships outside of work was also key. Participants enjoyed spending time with coworkers outside of work, noting the comfort in being with someone who “goes through the same thing every day.” Others drew support from spending time with friends, husbands, and/or children in recreational activities. Additional activities used to relieve stress include writing in a journal, listening to music, and using a “stress ball.” All home visitors seemed to recognize the importance of self-care in reducing job-related stress.

In summary, the deep personal satisfaction that home visitors gain from their work may buffer the effects of the more negative aspects of the job. It is worth noting that home visitors’ stress often stemmed from occupational (e.g., safety and environmental hazards) and organizational sources (e.g., feeling undervalued) over which they had little control. Similarly, home visitors’ stresses were reduced with the help of occupational and organizational resources such as mental health consultants and supervisors. These

findings highlight the value of providing an array of supports designed to enhance home visitor compassion satisfaction and reduce compassion fatigue.

Theme 4: Family engagement. Home visitors were asked, both directly and indirectly, to describe their experiences working with families who were difficult to engage. Several sub-themes emerged from these conversations, including: Essential Qualities of Home Visitors, EHS Family Barriers, and Strategies to Engage Families.

Essential qualities of home visitors. Home visitors were asked their opinions about the most important qualities of a home visitor. The most frequent responses included strong active listening skills, a nonjudgmental attitude, and respect of confidentiality. Other responses included compassion, empathy, flexibility, inquisitiveness, strong communication and social skills, a sense of humor, persistence, patience, and respect and/or understanding of different cultures.

The data offered several examples of these essential qualities in action. Liz described learning these skills through experience:

I've realized how important it is to listen. When a parent begins talking about their stresses or just little things that they want to share, I make it a point to put my pen down if I was writing notes and just listen, and really face the parent and repeat back what they said to make sure that I got it.

Speaking of why a sense of humor is important when working with high-risk families, Enid remarked:

Because you can make a connection with the family that way, talking about something they really like... Talking about your culture or making a joke. They like to laugh, too. I notice in some families with mental issues,

if that time when you go, maybe it's the time away. For the moment, they forget about all the trauma they have.

Enid made a direct connection between sense of humor as a relational quality and family engagement:

That way you can connect more with the family...they say, "Oh, yeah, she's fun. We want to be having her back." They're open more to you...Not to have that compassion, I don't think people would come back, or they say, "I don't want her this week. I'm getting tired of her."

Yet home visitors varied in terms of their attitudes towards families who cancel or don't show up for visits. They described experiencing a range of feelings including understanding, sadness, and frustration when families cancel visits and/or show other signs of low engagement. As stated by Maeve:

You feel sad because you want to help the families achieve all they set out to...but sometimes the situation of the families does not permit that they can do it because maybe they have a lot of problems and they need to first fix those problems.

The data suggested that although most home visitors tried to be understanding, a few lost patience with some of the more challenging families. Liz shared, "I get frustrated. I'm like, 'This program is going to help you.' Some just don't want to [participate]." This frustration may have had a negative impact on home visitors if they began to feel helpless or ineffective. Similarly, home visitors' loss of patience and increased frustration could undermine parent engagement if parents began to feel misunderstood or unsupported, or if they themselves began to feel like they were failing.

EHS family barriers. Participants acknowledged that some families are more difficult to engage than others, and all home visitors acknowledged that they had families on their caseloads that cancelled or did not show up for scheduled home visits. When asked why they thought this happened, several home visitors felt that it had to do with the families' expectations about the program. They believed that some families do not understand that the focus of the home-based EHS program is on the parent as the child's first teacher. As a result, parents perceived the home visitor as the child's teacher or babysitter who came to play with the child while the parent did other things. As described by Beverly:

They say, "Here come your teacher again." Some of them say, "Here come your babysitter." "No, I am here to get your child ready for school." I say, "No, we're not a baby sitter." That's what they think, because one time...she was getting ready to go to the store.

Not all home visitors experienced this and/or shared this perception. Two participants felt that families who self-referred were more personally motivated and thus more highly engaged than families who were referred from other agencies or providers. Some home visitors felt that low-engaged parents didn't value education for their children. Alternately, one home visitor, when describing one highly vulnerable family, noted that if the family cancelled then she knew that the family was experiencing a crisis.

The interview data suggested that another barrier may stem from EHS family concerns over safety and privacy. Home visitors' mention of "confidentiality" as an essential characteristic was telling. Many of the families served by these EHS programs were undocumented immigrants facing the threat of deportation. Other families had

concerns about child protective services involvement. By allowing outsiders into their home, families may have felt that they were inviting unnecessary scrutiny, as Amy suggested:

I have a lot of families who have had a lot of CPS cases...often times they're kind of scared to let you in their home 'cause they think that you're going to call. And it's hard to gain that trust when we are mandated reporters, and when I do see something wrong I have to call. The hard part is a little of time it ends of being a "somebody called on you." Well, I'm one of the only people they allowed in their home, and they won't let you come back because they know you called and often times the problems never resolve. So it's like a catch-22.

A few home visitors indicated that families who missed a certain number of visits (e.g., three) would be removed from the program, or put on a wait list. This underscores the need to develop effective strategies to engage families early, particularly families who are ambivalent about participating.

Strategies to engage families. Home visitors described a number of strategies they used to promote engagement in EHS home visits. For example, some home visitors encouraged a two-way dialogue by asking questions to solicit mothers' opinions and encourage critical thinking. Enid described this process:

I will explain what (the activity) is about. I bring the materials and say, "What do you think we're going to do today?" I make them think a little bit. If we have card boxes or something, I say, "What do you think we're going to do? What we can do with these items?" To make them think.

Some home visitors demonstrated how they promoted engagement by conveying respect and appreciation of families' unique perspectives. Liz described how she worked with families when she sensed that they disagreed with her:

I also like that with some parents, the majority, that I have this really good relationship with them where to me it doesn't feel awkward. We can talk. We know we can brainstorm together. We can even share when we're not agreeing on something. In the end we're not going to get upset at each other. It's just us saying, "Okay, we don't agree. Okay. Let's find a way for us to both agree." I like that.

Participants demonstrated the importance of putting the goals and needs of families first. They spoke of the importance of setting aside time during home visits to relieve stress, or to re-arrange the visit so that the parents can talk about their problems or concerns prior to beginning the plan for the home visit. Several participants emphasized the importance of developing a trusting relationship before approaching sensitive topics, such as drug abuse. They noted that invading a family's privacy or pushing them to discuss sensitive topics too soon can be detrimental to the helping relationship, and can diminish family engagement. As described by Enid:

You ask questions after you know well the family...Some will feel, "Oh, you are taking my space. I don't want that." You need to be really careful, otherwise...they don't allow you to come back any more.

Thus, the interview data suggested that family engagement was driven, at least in part, by home visitors' knowledge, skills, and experience.

Summary of Qualitative Results

In summary, Research Question 4 examined EHS home visitors' experiences with their work. The interview data showed variability in home visitors' duties and expectations about the work, as well as in EHS family needs. To meet the needs of families with the most severe needs, home visitors drew on their experience as well as on outside resources while using a flexible, family-centered approach to the work. The dual focus of EHS on family wellbeing and child academic readiness was a challenge, particularly when working with EHS families with the most severe needs.

Overall, home visitors showed high levels of compassion satisfaction, yet some home visitors felt overwhelmed or stressed by the demands of the job. The qualitative data were consistent with an ecological approach to understanding compassion satisfaction, secondary traumatic stress, and burnout: home visitor interviews provided rich examples of the high level of variability in EHS home visitor characteristics, occupational characteristics, and organizational characteristics that helped explain individual differences in how EHS home visitors experienced their work. The interviews also supported the quantitative finding that home visitors viewed themselves as having positive working alliances with the EHS families with whom they worked. The interviews revealed qualities such as patience, empathy, and humor that were deemed essential in promoting parent engagement. EHS home visitors shared their perceptions that certain families may be more engaged than others due to their initial expectations and/or fears. Nevertheless, home visitors offered a number of creative strategies that have helped them promote parent engagement in home visits. Finally, there were instances of overlapping themes. One key example concerned home visitors' flexibility, which was

viewed as an essential quality and yet was also a source of stress. Similarly, meeting the needs of families with severe challenges was a common thread that influenced home visitors' experiences with the work, home visitor well-being, and family engagement.

Research Question 5. *In what ways do the interview data help to explain the quantitative results?*

Key findings from the quantitative and qualitative phases of this study will be thoroughly integrated and interpreted in the Discussion section. The purpose of this section is to present results from additional analyses that linked quantitative and qualitative data more explicitly. Use of a two-stage maximal variation sampling strategy allowed for a preliminary exploration of differences between home visitors who scored in the lowest versus highest range on the secondary traumatic stress scale. Although these preliminary results are provocative, they should be interpreted with considerable caution due to the small sizes (i.e., three or four) in each group.

Of the seven home visitors interviewed, three scored in the top quartile for secondary traumatic stress (STS) and four scored in the bottom quartile. Those who scored in the higher range on STS also scored in the higher range on burnout. Of the higher STS group, two were Latina or Hispanic and one was not. Of the lower STS group, two were Latina or Hispanic and two were not. All home visitors in the higher STS group had bachelor's degrees. In the lower STS group, three had master's degrees and one had an associate's degree. It should be noted that these differences in education are not representative of the larger sample and are likely a function of the purposeful sampling strategy, in which more attention was given to EHS program and geographic diversity and less attention to educational diversity.

When the coded interview transcripts for higher STS and lower STS home visitors were compared, only a few differences emerged. First, each of the higher STS home visitors described a sense of being overwhelmed by “high demand” families. Higher STS home visitors described caseloads comprised of families with very difficult psychosocial challenges, in addition to being poor. Two higher STS home visitors detailed specific struggles with families with mental health concerns. The third also served families with mental health challenges, yet she seemed particularly overwhelmed by mothers with cognitive limitations.

The higher STS home visitors also appeared to be very emotionally involved with the families, more so than the lower STS home visitors. Two of the three higher STS home visitors struggled with maintaining personal and professional boundaries with families. The home visitors described taking the emotional aspects of the work home with them. For example, one higher STS home visitor, Amy, stated, “Sometimes families will call you 7 o’clock at night, 9 o’clock at night or 6 o’clock in the morning...and if they’re in crisis I will call back. And I will come back out there if I have to.” Home visitors in this group more often described feeling emotionally drained after a day at work. Although one home visitor in the higher STS group seemed better able to set clear boundaries, she also talked about the high degree of trauma in lives of some of her clients, noting that her families became very attached to her and told her “everything.”

In contrast, lower STS home visitors also served families with psychosocial risk factors, yet these home visitors more often focused their discussion on how they worked to meet families’ concrete needs, such as needs for education, food, and transportation. When lower STS home visitors spoke about mental health problems in families, they

tended to speak about it in a superficial, matter-of-fact way. For example, when one home visitor was asked if she served families with mental health problems, she answered, “Yeah, we have that,” but did not offer additional details. Other lower STS home visitors indicated that if they suspected problems in these areas, they would suggest the family speak with someone about it, but they would not engage in lengthy conversations around the issue themselves.

The two groups were also examined for potential differences in coping strategies. The results revealed no apparent differences, with home visitors in each group describing a wide variety of coping strategies. Similarly, there were few apparent differences in supervisory support between these small groups. According to the quantitative data, each of the home visitors interviewed reported receiving approximately one hour of supervision per month. It was difficult to determine the extent to which the quality of supervision varied, as all home visitors made positive evaluations of their supervision.

In summary, the qualitative data supported the quantitative finding that some home visitors experience their work as more stressful than others. Moreover, the linked data suggested that meaningful differences may exist in how home visitors interacted with their EHS families and that these differences may be associated with variability in levels of secondary traumatic stress. Although the qualitative data were too sparse to draw firm conclusions, they help provide a more nuanced understanding of the challenges facing some home visitors.

CHAPTER 6

DISCUSSION

The purpose of this mixed methods study was to develop an increased understanding of: (a) how the nature of the work in home visiting impacts the health and well-being of EHS home visitors; and (b) how the health and well-being of the home visitors impact both proximal and distal program outcomes. Specific research questions were designed to explore the influence of individual, occupational, and organizational factors on compassion satisfaction, secondary traumatic stress, and burnout. In addition, home visitor compassion satisfaction, secondary traumatic stress, and burnout were examined as predictors of (a) home visitor job turnover and (b) family engagement. This chapter will integrate and discuss the principal results from the quantitative and qualitative phases of the study. Next, study strengths and limitations will be discussed. The chapter will conclude with a discussion of implications for practice, policy, and future research.

Principal Findings

This section will discuss principal findings in the context of theory and prior research. Attention will also be given to how the qualitative results support or refute the quantitative findings.

Rates of Compassion Satisfaction, Secondary Traumatic Stress, and Burnout

To my knowledge, this study is the first to examine rates of compassion satisfaction and secondary traumatic stress in EHS home visitors. Overall, the quantitative data showed that home visitors in this sample experienced relatively moderate to high compassion satisfaction and low to moderate secondary traumatic stress

based on Stamm's (2010) norms. As a basis for comparison, the rates of compassion satisfaction and secondary traumatic stress in this sample were lower than those found in some samples of child protection workers (Conrad & Kellar Guenther, 2006) and therapists (Craig & Sprang, 2010), but similar to those found in a sample of employee assistance professionals (Jacobson, 2012).

There are multiple possible explanations for the relatively low rates of secondary traumatic stress in this sample. First, EHS home visitors may not experience the same high levels of secondary traumatic stress as are experienced by some other groups of helping professionals. The norms and recommended cut scores for the ProQOL instrument were based on data gathered from studies with a wide range of helping professionals including psychotherapists, health professionals, teachers, lawyers, humanitarian workers, social service employees, law enforcement officers, journalists, juries at trials, soldiers, and peace keepers (Stamm, 2010). Unlike some of these other professionals, it is not the role of EHS home visitors to probe directly for traumatic experiences in the lives of the families they serve. Thus, the same higher levels of secondary traumatic stress might not be expected. Nevertheless, both the qualitative and quantitative data from the current study suggested that home visitors were exposed to varying levels of EHS family risk and trauma, and that some home visitors were more deeply affected by this exposure than others. Finally, as has been previously suggested, high levels of compassion satisfaction may have buffered the effects of stressful or negative experiences and thus account for the relatively low levels of secondary traumatic stress (Stamm, 2010).

Unfortunately, the rate of burnout could not be assessed because the measure of burnout performed poorly in this sample of home visitors. The low internal consistency reliability coefficient for the burnout scale ($\alpha = .63$) suggested that some items may have been less relevant for this population than for others. The burnout scale has also shown similarly poor reliability ($\alpha < .70$) in samples of audiologists, child care workers, nursing assistants, and pediatric health care providers (Cieslak et al., 2013; Maris, 2013).

Predictors of Compassion Satisfaction, Secondary Traumatic Stress, and Burnout

Predictors of compassion satisfaction. The findings suggested that much of the variability in compassion satisfaction could be attributed to home visitors' individual characteristics. Results from multivariate analyses revealed that home visitors who were Latina and who reported more material hardships also reported greater compassion satisfaction. Prior research has shown that matching home visitors and families with similar demographic characteristics facilitates positive working alliances (Wasik, 1993). These data suggested that the same may be true for facilitating compassion satisfaction. For example, home visitors may gain more satisfaction from helping others with whom they share ethnic or socioeconomic characteristics. The current study also found a positive association between compassion satisfaction and greater perspective taking ability, which refers to the tendency to try to seek and understand the psychological point of view of others. Home visitors with greater perspective taking ability may be more appreciative of the complex challenges facing families and thus more understanding or patient when progress is slow. Perspective taking ability has been linked with enhanced worker well-being in prior research with medical residents (Shanfelt et al., 2005).

The finding of a negative association between depressive symptoms and compassion satisfaction is consistent with a large body of literature showing strong conceptual and empirical linkages between depression and occupational stress (Stamm, 2010). Unlike some previous studies (Figley, 2002; Kraus, 2005; Linley & Joseph, 2007; McKim & Smith-Adcock, 2014), this study showed no associations between compassion satisfaction and home visitors' years of experience, personal trauma history, workplace quality, perceptions of supervision, or greater job control. These disparate findings may be explained in part by low power in the current study or by differences between studies in how the constructs were conceptualized or measured. For example, researchers have conceptualized personal trauma history in a variety of ways. Whereas this study focused on adverse childhood experiences, other studies have defined trauma history more broadly. Finally, analyses using the subsample of 27 Partners for Parenting home visitors found that compassion satisfaction was not associated with the average levels of EHS family risk on home visitors' caseloads. It may be that home visitors experience satisfaction from working with all types of EHS families. It should be noted that all EHS families could be considered high risk due to socioeconomic disadvantage. Thus, the quantity and type of risk above and beyond poverty may have little additional influence on levels of compassion satisfaction.

Predictors of secondary traumatic stress. Both individual and occupational characteristics predicted secondary traumatic stress in this sample. At the individual level, fewer years of experience, more depressive symptoms, higher levels of attachment avoidance, and higher levels of personal distress were associated with higher levels of secondary traumatic stress. The finding regarding years of experience is consistent with

the literature and could be explained if symptoms associated with secondary traumatic stress prompted home visitors to leave their positions (Cunningham, 2003). If this were the case, secondary traumatic stress would be present in higher rates in less experienced home visitors. Alternately, more experienced home visitors may have developed effective strategies for coping with the stress. The association between adult attachment avoidance and secondary traumatic stress was consistent with one study (Tosone et al., 2010) but in contrast to others (Pardess, Mikulincer, Decker, & Shaver, 2014; Zerach, 2013). In prior research attachment avoidance has been associated with heightened emotional distress, deteriorated psychological well-being, and reduced support-seeking (Mikulincer & Shaver, 2007). Thus, the current findings might be explained if more avoidant home visitors with heightened emotional distress also failed to seek emotional support.

Higher levels of the personal distress component of empathy also predicted higher levels of secondary traumatic stress. The personal distress component of empathy refers to the tendency to experience distress and discomfort in response to distress in others (Davis, 1980). Home visitors with high levels of personal distress may have become overly emotionally invested and had difficulty maintaining personal boundaries with EHS families. As a result, they have been more likely to “take the work home,” and have difficulty separating their personal lives from their lives as helpers. This interpretation was supported by the qualitative data, which offered examples of situations in which home visitors with higher levels of secondary traumatic stress struggled to maintain personal and professional boundaries. These home visitors were emotionally involved with the families and described feeling emotionally drained as a consequence of the work. Relatedly, several home visitors mentioned that they came from backgrounds very

similar to those of the families they serve, and some participated in EHS as children or as parents. Although prior research has demonstrated that shared demographic characteristics can foster development of the working alliance (Hiatt, Sampson, & Baird, 1998), it may be particularly difficult for home visitors to regulate their own emotions and maintain a balanced perspective if their personal experiences are very similar to those of the families with whom they work. Helping professionals who share a common history or who live and work in the same communities as their clients may also be exposed to shared trauma. As described by Tosone, Nuttman-Schwartz, and Stephens (2012), shared trauma can lead to the blurring of professional boundaries, increased self-disclosure, and increased susceptibility to secondary traumatic stress.

In the full sample of 77 home visitors, only one occupational variable, greater perceived job demands, was positively associated with secondary traumatic stress after controlling for individual characteristics, caseload size, and hours of supervision. Hours of supervision demonstrated a marginal association with secondary traumatic stress in an unexpected direction such that more hours of supervision were associated with higher levels of secondary traumatic stress. This finding might be explained by stressed home visitors seeking more supervision. Alternately, the finding could be explained if supervision was focused primarily on administrative tasks and monitoring, which could lead to increased stress. The association could also be indirect, such as if EHS programs offered more hours of supervision to home visitors who worked with families with the most severe challenges. If this were the case, these home visitors were already at increased risk for secondary traumatic stress. Interestingly, evidence of a positive association between organizational support, including supervisor support, and higher

levels of secondary traumatic stress was also found in a study of sexual assault nurse examiners (Towsend & Campell, 2009). Although supervision is widely recommended as a means to prevent secondary traumatic stress (Mercier, 2013; McCann & Pearlman, 1990; Salston & Figley, 2004), empirical evidence regarding the effects of supervision on secondary traumatic stress is lacking. On average, home visitors in this sample received small quantities of supervision yet rated their supervision as very positive. It is possible that although home visitors enjoyed and appreciated supervision, the quantity that they received was insufficient to have a positive impact.

Finally, among the 27 Partners for Parenting (P4P) home visitors in the subsample, EHS family cumulative risk was shown to predict secondary traumatic stress. Although the results should be interpreted with caution due to the small and more homogeneous sample (i.e., more home visitors and mothers who were Latina than in the full sample), this is an important finding that is consistent with theory and prior research. Specifically, this finding supports the idea that secondary traumatic stress is the component of compassion fatigue most closely associated with secondary exposure to traumatic material (Stamm, 2010). Links between higher levels of secondary exposure to trauma and secondary traumatic stress have been found in other samples (Adams et al., 2008; Craig & Sprang, 2010; Cunningham, 2003; Kassam-Adams, 1995; Schauben & Frazier 1995; Sprang et al., 2007). This study provided the first empirical evidence with EHS home visitors that links exposure to family risk with worker well-being. Moreover, prior research has shown that quantitative results tend to underestimate the impact that work with traumatized clients has on service providers (Sabin-Farrell & Turpin, 2003). Thus, the interview data were essential in that they upheld this finding and offered new

insight into the ways in which home visitors are potentially affected by exposure to EHS family risk. It is likely that the relations among family risk, home visitor characteristics, and home visitor wellbeing are quite complex.

Predictors of burnout. In contrast to secondary traumatic stress, burnout describes emotional exhaustion associated with more general ongoing occupational stress. This study found that job demands played a key role in the development of burnout. The questions on the job demands scale pertained to having enough time to complete tasks, being overly busy, and having too many different types of tasks that are hard to combine. This finding of a link between job demands and burnout is consistent with prior research with home visitors (Gill et al., 2007; Lee et al., 2013) and other health and human services workers, more broadly defined (Thompson et al., 2014). The qualitative data also supported these findings. No associations were found between burnout and other occupational characteristics including caseload size, perceptions of job security, job control, coworker support, and quantity of supervision. Although collinearity was a not a problem in this data, it should be noted that shared variability among some of these constructs (i.e., caseload size and job demands) may have reduced the significance of individual predictors.

There were a few trends and inconsistencies in the data worth noting. In the full sample of 77 home visitors, greater satisfaction with supervision demonstrated a marginally positive association with burnout. This finding was in the unexpected direction and is inconsistent with results from a study of paraprofessional home visitors that showed an inverse association between satisfaction with supervision and home visitor burnout (Lee et al., 2013). One possible explanation could be that supervision

somehow contributed to home visitors' perceptions that the job was a poor match for their skills and abilities. In the full sample of 77 home visitors, there was a trend towards significance for both the home visitors' perception of safety and also the home visitors' perceptions of their employers' commitment to their safety to be associated with burnout. Moreover, in the subsample of 27 P4P home visitors, burnout was strongly associated with home visitors' perceptions that their employers were not committed to their personal safety. In the qualitative interviews several home visitors expressed concern for their personal safety during visits.

Finally, the analyses with the subsample of 27 P4P home visitors found no association between EHS cumulative family risk and burnout. This finding is consistent with the theoretical hypothesis that exposure to cumulative family risk should have a greater influence on secondary traumatic stress than on burnout (Stamm, 2010).

In summary, the current findings supported the hypothesis that EHS home visitors would demonstrate evidence of compassion satisfaction, secondary traumatic stress, and burnout. The findings also supported the hypothesis that that individual and occupational factors would be the strongest predictors of secondary traumatic stress, and that organizational and occupational factors would be the strongest predictors of burnout.

Compassion Satisfaction, Secondary Traumatic Stress, and Burnout as Predictors of Job Withdrawal and Six Month Turnover

The findings suggested that variability in job withdrawal could be attributed to both individual and occupational characteristics. Burnout, but not compassion satisfaction or secondary traumatic stress, predicted self-reported job withdrawal. These results are consistent with prior research that has shown burnout to be a consistent predictor of

intent-to leave and/or turnover (Dickinson & Perry, 2002; Kim & Stoner, 2008; Shim, 2010). Questions on the burnout scale pertained to feeling “worn out” or overwhelmed by the work. These feelings were also expressed by home visitors in the qualitative interviews.

Consistent with prior research, this study also found that dissatisfaction with salary and benefits and the perception that the employer is less committed to workers’ personal safety were associated with self-reported job withdrawal (Dickinson & Perry, 2002; Hopkins, Cohen-Callow, Kim, & Hwang, 2010, Kim, 2013; Kim & Stoner, 2008). Unexpectedly, greater perceived coworker support was marginally associated with greater self-reported job withdrawal. This finding is inconsistent with a body of literature that has linked social support with reduced risk for turnover (Mor Barak, Nissly, & Leven, 2001). The current finding may have reflected increased peer support-seeking behavior of struggling home visitors. Alternately, the disparate finding may be due to low power or to differences in samples or in the measures used to assess social support. Job demands, job control, job security, and supervisor support were not associated with job withdrawal in this sample.

Predictors of actual six month turnover were examined using longitudinal data from a subsample of 30 home visitors. At 23.3%, the six month turnover rate in this sample was substantially higher than the 10.2% one year turnover rate reported in recent national study of EHS home visitors (Vogel et al., 2015). This finding should be interpreted with extreme caution due to the small, homogeneous nature of the sample. In the current study, lower attachment avoidance and perceptions of low supervisor support were the only variables that demonstrated significant bivariate associations with

increased six month turnover. The finding regarding attachment avoidance is consistent with attachment theory and a growing body of research that has shown links between attachment security and individual behavior and functioning at work (Mikulincer & Shaver, 2007). The finding is inconsistent, however, with results from a study that revealed a positive association between insecure attachment and intent-to-leave in a more heterogeneous sample of adult workers (Richards & Schat, 2011). The finding regarding supervisor support is also consistent with existing literature which has shown both direct and indirect effects of perceived supervisor support on turnover intent (Maertz, Griffeth, Campbell, & Allen, 2007). Compassion satisfaction approached significance. More research will be needed to understand better the exact nature of these associations. In summary, the current findings partially supported the hypothesis that lower levels of compassion satisfaction and higher levels of secondary traumatic stress and burnout would be associated with greater job withdrawal and turnover.

Compassion Satisfaction, Secondary Traumatic Stress, Burnout, and Family Engagement

A final objective of this study was to examine associations among compassion satisfaction, secondary traumatic stress, burnout, and family engagement. The quantitative data focused on one dimension of family engagement, the perceived quality of the working alliance between the home visitors and EHS families as reported by both the home visitors and EHS families.

Home visitor ratings of the working alliance. The results from the multivariate analyses suggested that compassion satisfaction, but not secondary traumatic stress or burnout, was associated with home visitor-rated working alliance. These findings were

consistent with prior research that demonstrated an association between compassion satisfaction and therapeutic bond in therapists (Linley & Joseph, 2007). Because the contemporaneous nature of the current data prevented causal inferences, more research is needed to understand better whether strong working alliances promote compassion satisfaction, or whether compassion satisfaction engenders strong working alliances. It is possible that the association is bidirectional, with both positive and negative responses to the work influencing working alliance, and positive or negative feelings about the working alliance influencing perceptions of and responses to the work.

Material hardship, the perspective taking component of empathy, and caseload size were also associated with home visitor-rated working alliance. The finding that home visitors' material hardship was associated with working alliance even after controlling for compassion satisfaction supports the notion that home visitors may be more likely to develop stronger bonds with families with whom they share personal characteristics. The association between perspective taking and working alliance was expected, as it suggests that the tendency to understand the psychological point of view of EHS parents benefits the helping relationship. The finding is also consistent with prior research which has shown links between home visitor empathy and increased levels of parent engagement (Korfmacher, Kitzman, & Olds, 1998). The finding that larger caseloads were associated with more positive ratings of the working alliance was unexpected and should be interpreted with caution due to the relatively small sample size.

Finally, analyses with the subsample of 27 P4P home visitors found that higher levels of EHS family demographic risk and higher levels of EHS maternal psychological risk were each associated with more positive home visitor ratings of the working alliance.

Although findings from prior research that has examined associations between family risk and family engagement in home visiting have been mixed, consistent with the current study, one previous study found that increased family risk was associated with increased participation (Ammerman et al., 2006); another found that high risk families were no more likely to drop out than low risk families (Daro et al., 2003). The mechanisms underlying the associations between family risk and family engagement remain unclear. EHS mothers' ratings of the working alliance were assessed separately; however, the available data were not strong enough to support multivariate analyses.

Thus, consistent with prior research (e.g., Korfmacher et al., 2008), the qualitative data supported the notion that family engagement is likely driven by complex interactions among EHS family expectations, motivations, and fears, as well as home visitor skills and abilities. These results should be interpreted with caution because parent engagement was assessed using home visitor global ratings of the working alliance only. Thus, more research is needed to understand whether home visitors' compassion satisfaction, secondary traumatic stress, and burnout predict EHS maternal-reported (a) working alliance and (b) helping relationship scores. Keeping in mind these limitations, the current findings partially supported the hypothesis that higher levels of compassion satisfaction would be associated with stronger family engagement. The findings were inconsistent with the hypothesis that lower levels of secondary traumatic stress and burnout would be associated with higher levels of family engagement. The findings further suggested that higher levels of EHS family risk may be associated with higher home visitor ratings of the working alliance.

Strengths and Limitations

The purpose of this section is to review the strengths and limitations of the current study in terms of sampling, design, and methods.

Strengths

There are several notable strengths of the current study. This is one of only a few studies to examine the Early Head Start home visiting workforce, and the first to assess individual, occupational, and organizational influences on compassion satisfaction and secondary traumatic stress in this population. In addition, the current study was designed to maximize the validity of the findings through the use of a mixed methods design. By combining qualitative and quantitative data, the results provide a deeper understanding of factors that may contribute to and be affected by EHS home visitor well-being. As described in detail in the Method chapter, considerable effort was made to ensure that both the quantitative and qualitative data were collected in an ethical manor and in ways that reduced error and bias (Aday & Cornelius, 2006; Dillman, Smyth, & Christian, 2009; Miles, Huberman, & Saldana, 2014; Padgett, 2008). The sampling frame included the entire population of EHS home visitors in Maryland, thus increasing the generalizability of the results to home visitors working in programs that are large and small, urban and rural, and serving many different types of families. In addition, the inclusion of Spanish speaking participants in both the quantitative and qualitative phases increased generalizability of the findings while also giving voice to a previously understudied group.

The approach to quantitative data analyses was also a strength. The data analyses benefitted from the strengths of multi-level modelling methods, which accounted for the

nested/dependent nature of the data while also capitalizing on the larger sample size at level one. The analyses also used multilevel modeling to examine the proportion of variance associated with home visitor level, occupational level, and organizational level characteristics. Some analyses in this study used longitudinal data to establish time order and thus enhance the ability to make causal inferences. For example, home visitor survey data were collected after the majority of EHS family risk data were collected, and turnover data were collected six months after the survey. The use of multiple sources of data from EHS programs, EHS home visitors, and EHS families was another strength. For example, the use of EHS family risk data from the Partners for Parenting study reduced shared source variance and further enhanced rigor.

Limitations

As with all research, this study has limitations. The results should be interpreted with caution due to the small sample size. Power analyses for multi-level models are complex because consideration must be given to the sample size at each level (Gelman & Hill, 2007). For multiple regression analyses, it has been proposed that the number of participants should equal the number of predictors plus 50, or a minimum of 10 participants per predictor for equations using six or more predictors (VanVoorhis & Morgan, 2007). Bickel (2007) cites a common rule of thumb for multilevel analysis suggesting that at least 20 groups are required at level two. Simulation studies have demonstrated that power is further enhanced when there are more groups (level-two units) and fewer cases per group, rather than the other way around (Bickel, 2007; Tabachnick & Fidell, 2007). Based on this literature, for purposes of the current study, sample sizes of 102 families at level one and 27 home visitors at level two were expected

to yield adequate power to build a model with eight to 10 predictor variables. Although it was less clear whether the study would be adequately powered to detect effects for analyses involving 77 home visitors within 18 EHS programs, these analyses did converge. Nevertheless, the small sample size should be considered when interpreting insignificant findings or unexpected results. The sample size may have lacked sufficient power to detect all associations among variables. Relatedly, the sample size was not sufficient to test for all possible interactions. Finally, as is the case with all multi-level models, the results should be interpreted with caution because estimates were driven by larger programs and/or caseloads (Bickel, 2007).

Because home visitors in this sample may not accurately represent all EHS home visitors, the findings may not generalize to all EHS home visitors and programs. This may be particularly true for the analyses that involved linking EHS family data and turnover data. The EHS family data that were used in this study were from a subset of five programs that may differed in meaningful ways from the other 13 EHS programs in the study. For example, the five P4P programs had more Latina home visitors, and most likely more Latino families, than the other programs. This is an important consideration in light of the results that showed that Latina home visitors had lower education and self-other awareness, more hours of supervision, and higher ratings of supervisor support, job satisfaction, and working alliance than non-Latina home visitors. The home visitors in this subsample also had significantly higher scores on compassion satisfaction than home visitors in the larger sample. Thus, although the sample size was deemed sufficient for this exploratory study, future research on this topic should include larger and more diverse samples.

Many of the analyses relied on cross-sectional data, preventing the ability to make causal inferences or confirm the direction of the associations. In addition, although prior research has shown possible effects of gender on occupational stress (Langballe, Innstrand, Aasland, & Falkum, 2011), these effects could not be examined due to the overwhelming majority of female participants in this study.

The study also included potential sources of measurement error. The majority of data for this study were acquired through self-report questionnaires, thus the quality of the data may be compromised by social desirability and/or recall bias. In addition, the ProQOL burnout scale and the attachment anxiety scales were revised due to poor internal consistency reliability. Because items were dropped from these scales, the burnout and attachment anxiety scores from this sample are not comparable with scores from other studies that have included all items. Several additional scales in this study also demonstrated low internal consistency reliability in this sample (e.g., attachment avoidance, satisfaction with benefits, depressive symptoms, self-other awareness), thus the true rate of occurrence in the sample may be over- or underestimated. Finally, analyses involving data using the Working Alliance and Helping Relationship Inventories may have produced biased estimates due to the restricted range of scores on the measures. Overall, home visitors and EHS families reported relatively positive working relationships.

Several events influenced the quality and quantity of the EHS family engagement data. First, the original research proposal called for an examination of two dimensions of parent engagement: (a) participation and (b) working alliance. Participation was conceptualized as the proportion of home visits completed/planned. These data were

initially being collected as part of the P4P study; however, the larger study discontinued collecting this information in light of concerns about the burden it was placing on the home visitors. This challenge was addressed by including questions in the qualitative study that were designed to explore home visitors' perceptions about families who cancelled visits and their strategies to engage families with severe needs.

Second, it was originally anticipated that most of the mother-reported working alliance and helping relationship data would be collected after the administration of the home visitor survey, which would have provided a clear determination of time order. EHS family data collection slowed soon after the home visitor survey was administered, however, due to a staff member being on leave. As a result, the family engagement results reported in this dissertation were based on some data that were collected out of order. Specifically, some EHS mother-reported working alliance and helping relationship data were collected *before* home visitor-reported compassion satisfaction, secondary traumatic stress, and burnout. Thus, although these data could be used to make inferences regarding the effects of mother-reported working alliance and helping relationship on compassion satisfaction, secondary traumatic stress, and burnout, they are less helpful in determining whether home visitor compassion satisfaction, secondary traumatic stress, and burnout predict mother-reported working alliance and helping relationship scores.

Implications

This study increased understanding regarding the benefits and costs of caring associated with EHS home visiting. The findings regarding EHS home visitor wellbeing, home visitor turnover, and EHS family engagement are discussed below in terms of implications for practice, policy, and research.

Implications for Practice

Supporting home visitor well-being and resilience. The high levels of compassion satisfaction found in this sample are encouraging, particularly when paired with the results linking compassion satisfaction and home visitors' positive ratings of the working alliance. Although the rates of secondary traumatic stress in this sample were relatively low, moderate levels among some home visitors should raise concern, particularly in light of prior research linking secondary traumatic stress and burnout with worker physical and mental illness (Cordes & Dougherty, 1993; Burke et al., 1996; Miller, 2011).

Identifying individual, occupational, and organizational characteristics that contribute to home visitor wellbeing and stress provides a basis for developing strategies to support home visitor wellbeing and reduce job-related stress. Key strategies to promote compassion satisfaction and reduce secondary traumatic stress and burnout fall under two main types: person-directed or organization-directed. Examples of person-directed approaches include interventions, supervision, and training designed to enhance coping skills or social support. Examples of organization-directed interventions include making changes in work procedures, such as task restructuring and increases in worker job control. A recent systematic review of burnout interventions for health and mental health care workers concluded that programs that used a combination of both person-directed and organization-directed approaches showed the most positive outcomes (Awa, Plaumann, & Walter, 2010).

Empirical evidence regarding the effectiveness of interventions designed to prevent secondary traumatic stress is more limited. A recent systematic review identified

only two research studies of adequate quality, although both showed positive effects (Bercier, 2013). One intervention was designed for master's level psychotherapists. The other was a small pilot study of a collaborative reflective expressive arts-integrated workshop. Despite the paucity of research evidence, a number of person- and organization-centered strategies have been recommended.

Person-directed approaches. Recommended strategies targeting individuals include psychoeducation, cognitive behavioral strategies, reflective supervision, a variety of debriefing interventions, mindfulness techniques, and practicing good self-care (Bercier, 2013; Decker, Brown, Ong, & Stiney-Ziskind, 2015; NCTSN, 2011).

Psychoeducation refers to providing home visitors with information about the benefits and potential risks associated with the work. Cognitive behavioral strategies help reduce psychological distress by correcting erroneous perceptions and self-signals (Beck, 1979). Similarly, mindfulness techniques promote heightened, non-judgemental awareness of one's thoughts and feelings in the present moment. Interestingly, in addition to evidence linking mindfulness with higher rates of compassion satisfaction and lower rates of compassion fatigue (Decker et al., 2015), a recent study of all EHS home visitors in Pennsylvania found that mindfulness was also associated with stronger working alliances with parents (Whitaker, 2014). Because they are likely to impact both home visitor wellbeing and family engagement, training and supervision will be discussed in greater detail below.

Organization-directed approaches. EHS programs can promote wellbeing and reduce risk by providing a supportive organizational culture (Bercier, 2013). The findings of this study showed that, beyond caseload size, cumulative family risk represented a

unique dimension of caseload burden that was associated with higher levels of secondary traumatic stress. In light of this evidence, EHS programs should acknowledge that exposure to high levels of family risk, and possibly family trauma, is a potential risk of the job. In addition, research has shown that increasing awareness of compassion fatigue validates workers' feelings and may also mitigate risk (Figueiredo, Yetwin, Sherer, Radzik, & Iverson, 2014). EHS programs might also consider adopting a trauma-informed approach to serving families ("Creating Trauma-Informed Systems," n.d.). Trauma-informed care benefits staff and families by providing a framework for understanding the widespread impact of trauma on stress, coping, and resiliency. Trauma-informed approaches are broad, can be implemented in any setting, and do not require training or knowledge in specific trauma interventions. Program directors and supervisors can also try to balance caseloads by levels of family risk, or adjust caseload size when the burden due to family risk is too great. Other recommended practices include consistent reflective supervision, workplace self-care groups, enhancing the physical safety of staff, and ongoing assessment of home visitor risk and resiliency (National Child Traumatic Stress Network, 2011). Home visitors who experience secondary traumatic stress may also benefit from a referral to an Employee Assistance Program or outside agency, or a change in job assignment.

The current data also showed a potential imbalance between home visitors' job demands and the resources that were available to meet those demands. For example, the qualitative data suggested that time, training, and money for supplies were valuable resources that were in short supply for some home visitors. Shifting or centralizing some

tasks, such as recruiting or locating resources, may increase efficiency and lift burden from home visitors.

Finally, the associations found between home visitors' perceptions that employers were not committed to their safety and both (a) burnout and (b) job withdrawal highlighted the need for EHS programs to attend to issues of home visitor safety. Many EHS families live in unsafe neighborhoods or conditions (ACF, 2006). Home visitors may feel more supported if program directors and supervisors introduce safety as a regular topic of conversation. EHS programs should also implement policies and safety protocols that guide decisions when staff feel unsafe (Jones Harden, 2010). Cell phones may also help home visitors feel safe and connected.

Training and supervision to support home visitor wellbeing, parent engagement, and staff retention. The findings suggest that training and supervision designed to support home visitors' intrapersonal and interpersonal skills are likely to serve the dual purpose of enhancing both worker wellbeing and family engagement. Moreover, high quality training and supervision promote competence and confidence in home visitors, which in turn promote staff retention (Larson & Hewitt, 2005).

In EHS, increased attention is being paid to the importance of relationship-based competencies for staff who work with families (Head Start Resource Center, n.d.). In support of this trend, the current study showed that individual differences in intra- and interpersonal skills were indicators of key outcomes. Specifically, perspective taking was associated with compassion satisfaction. Self-reported attachment insecurity and personal distress were associated with secondary traumatic stress. Beyond core competencies, experts in the field of home visiting have recommended that home visitors be trained in a

set of core *capacities* that drive effective helping relationships (Korfmacher & Hilado, 2008). Whereas core competencies focus on knowledge, skills, and actions, core capacities emphasize the idea that “how you are is as important as what you do” (Korfmacher, 2012). Suggested core capacities include (a) the ability to respect clients despite their attitudes, behaviors, or circumstances; (b) the ability to empathize with clients experiencing diverse challenges; and (c) reflective capacity that allows for deeper understanding of the person-in-situation while simultaneously differentiating self from other (self understanding, self control; Korfmacher & Hilado, 2008). Others have suggested that training for home visitors should focus on building a secure base in which home visitors feel safe and supported in their learning environments, which will, in turn, promote the sharing and processing of new experiences (Wechsler, 2015).

The current findings suggested that there is much to learn about the quantity, quality, and function of supervision in EHS home visiting programs. In this study, satisfaction with supervision and quantity of supervision were shown to have less of an impact than was expected based on the existing literature. Although low power may have been a problem in this study, it may also be that the quantity of supervision received by home visitors in this study was low, perhaps too low to make a meaningful difference in either home visitor wellbeing or family engagement. Nevertheless, it should be noted that the data collected for this study may not reflect the true quantity of informal “drop in” supervision that was described by home visitors in the qualitative interviews.

In terms of supervision quality, Early Head Start recommends consistent, supportive supervision that is relationship-based, reflective, collaborative, and safe (Early Head Start National Resource Center, n.d.). The current study did not allow for a close

examination supervision quality, such as specific supervisory approaches or strategies. Yet the qualitative interviews suggested variation in both supervision strategy and foci. For example, whereas some home visitors described the role of their supervisor as being an educator or resource for support, others described more of a reflective process. Reflective practice and reflective supervision are now considered essential features of relationship-based work, and are highly recommended for use in home visiting programs (Weatherston, Weigand, & Weigand, 2010; West & Jones Harden, 2015). Reflective supervision promotes greater understanding of the complexity of relationships and allows for an exploration of the workers' thoughts and feelings related to their experiences with the families with whom they work (Heller & Gilkerson, 2009; Shahmoon Shanok, Gilkerson, Eggbeer, & Fenichel, 1995). High quality supervision may be especially important for paraprofessional or less experienced home visitors who lack training in how to conceptualize the dynamic nature of working relationship in terms of processes such as transference and countertransference (Korfmacher, Kitzman, & Olds, 1998). As a result, these home visitors may struggle with personal boundaries or may run the risk of over-identifying with their EHS families. Future research should endeavor to disentangle complex relationships that may exist among home visitor characteristics, EHS family characteristics, and supervision strategies.

Recruitment and retention of EHS home visitors. There was considerable variability in job satisfaction and home visitor wellbeing in this sample. In addition, over one third of the participants in this sample indicated that their current position was not the perfect job for them. Taken together with the high turnover rate (23%), these data suggested that home visitors had initial expectations for the job that were not met or that

their knowledge, attitudes, and skills were not a good match for the position. These findings suggest the need for a thoughtful and thorough recruitment process that will attract candidates that are a good fit with the position and its unique demands. Thus, increased attention should be given to providing realistic expectations, a supportive organizational climate, and finding candidates that are a good “match” with what the position demands.

Scholars in the field of home visiting have recommended that programs focus on hiring for “fit” by seeking candidates who are strong in essential qualities, such as openness and empathy, in lieu of more specific skills, which can be taught (Daro, McCurdy, & Nelson, 2005). In addition, Larson and Hewitt (2005) emphasized the importance of giving candidates ample information during the hiring process so that they have realistic expectations and can make an informed decision about if and how they are a good fit with the job. They highly recommended the use of “realistic job previews” to provide honest and accurate information about positive and negative job characteristics in the hiring process. Realistic job previews can take the form of a video, scrapbook, or meeting with or shadowing of current home visitors. Home visitors may also benefit from the use of realistic orientation programs, which provide new hires with opportunities and strategies to identify and learn to manage job stressors early in their tenure on the job. Finally, the qualitative data suggested that some home visitors felt unsupported or undervalued by their EHS programs, emphasizing the importance of using effective recognition and motivation strategies as means to promote retention of competent staff (Larson & Hewitt, 2005).

Meeting the needs of high risk families in EHS. Consistent with prior research, both the quantitative and qualitative data from this study showed that home visitors worked with families experiencing variable levels of demographic and psychological risk (ACF, 2006; Vogel et al., 2011). Thus, home visitors must have attitudes, knowledge, and skills that foster effective helping relationships with families with varying levels and types of need. These findings are concordant with previous studies showing the importance of flexibility in scheduling and conducting visits with high risk families (Mor Barak, Spielberger, & Gitlow, 2014). Moreover, the qualitative data supported the benefits of using a multidisciplinary team approach to working with high risk families in home visiting programs. The qualitative interviews indicated that home visitors greatly appreciated the advice and support that they received from mental health consultants, social workers, and other professionals as they attempted to help families negotiate complex psychosocial problems. Along these lines, several home visiting models have tried implementing “enhanced” models designed specifically to meet the needs of high risk families. Examples include training home visitors in motivational interviewing (Galanter & Baker, 2013) or adding supplemental services or interventions, such as interpersonal or cognitive behavioral therapy (Gray & Price, 2014), or other family-centered interventions (Buffering Toxic Stress Consortium Principal Investigators, Meyer, & Fortunato, 2013).

The current data also underscored the importance of considering the home visitors’ effects on programs outcomes, as EHS program effects may be attenuated if home visitors are unable to engage and meet the needs of high risk families. Whereas EHS home visitors are not expected to serve as psychotherapists, they are expected to

develop warm, supportive relationships with parents experiencing a range of complex psychosocial challenges in areas such as mental illness, substance abuse, and domestic violence. The data from this and other studies suggests that home visitors are uncertain about their role in addressing these issues (Tandon et al., 2008). In addition, researchers have proposed that home visitors tend to focus on needs and issues with which they have the most familiarity or comfort (Korfmacher et al., 1999; Tandon et al., 2008). Thus, home visitors may be more likely to focus on tangible needs such as clothing, food, and shelter and less likely to focus on families' more complex needs. Failure to recognize and address psychosocial challenges may reduce program effectiveness (Tandon et al., 2008). Thus, programs should have a clear plan for how to augment existing services or to refer families experiencing extreme psychosocial adversity.

Implications for EHS Policy

Findings from this study have implications for policy in the areas of program implementation and workforce development and support. First, the findings highlight the need for EHS to have clear and thorough policies regarding their home-based model, including performance standards that explicitly address high-quality home visiting in EHS programs. The findings also underscore the importance of flexibility in providing home-based services to high risk families, yet they point to possible tension between serving immediate family needs and EHS program requirements. For example, the qualitative data revealed that families who frequently cancel visits are often expelled from programs, yet these may have been the very families that would most benefit from services. Other researchers have proposed that home visiting programs should scale service quantity to match family needs (Ammerman et al., 2006). For example, low risk

families may benefit from fewer visits and particularly high risk families may benefit from increased flexibility. The Healthy Families home visiting program allows the frequency of visits to vary based on families' needs and progress over time ("Healthy Families America", July 2013).

EHS policy can also support workforce development in a numbers of ways. The need to address concerns about low wage and compensation among human services workers has been well documented (Larson & Hewitt, 2005). To retain a competent workforce, EHS programs must offer salary and benefits to EHS home visitors that are commensurate with workers' skills and experience and that take into consideration the risks associated with the work. Programs might also provide competency-based wage incentives or reward years of experience with opportunities for advancement. Additional policy initiatives could be aimed at reducing home visitor burden associated with working unpredictable or odd hours, including evenings or weekends. Home visitors could also be discouraged from using their own funds to pay for supplies. Finally, EHS policy can set clear standards regarding the quantity and quality of home visitor training and supervision. The time and expense associated with training and supervision are substantial challenges. Thus, cost-effective policy initiatives can be designed to increase the availability and accessibility to these important resources on a large scale.

Implications for Research

The findings from this study highlight the need for future research in several areas. First, more research with larger samples is needed to confirm these results. In addition, the field would benefit from longitudinal studies of factors predicting job turnover over longer durations of time. Similarly, future studies should address some of

the limitations of this data by using alternate measurement instruments that do not rely on self-report data and that have better reliability and validity.

Increased attention to the association between EHS family characteristics (e.g., nature and quantity of risk factors) and workforce strengths and needs may further enhance the positive effects of EHS. EHS recently earned the distinction of an evidence-based early childhood home visiting service delivery model based on criteria established by the Department of Health and Human Services (Avellar, et al., 2015). EHS demonstrated favorable outcomes in several domains that were sustained at least 12 months after program enrollment, including child development and school readiness, positive parenting practices, and linkages and referrals, to name a few (Avellar et al., 2015). Yet EHS also showed no effects in several domains, and unfavorable effects on some measures of family economic self-sufficiency. Most of the studies on which these findings were based did not take into account the variability associated with home visitor effects and other implementation factors, thus the true impact of EHS on outcomes may be over-or under-estimated.

A future research agenda should also include the examination of complex associations among home visitor, compassion satisfaction, job turnover, and parent engagement. For example, Wagner et al. (2003) proposed a mediated path whereby high levels of family engagement promote feelings of efficacy and satisfaction in home visitors, which then reduce the likelihood of turnover. The exact nature and direction of these associations is uncertain. The reason for a lack of association between job withdrawal and turnover in this study is also unclear and warrants further investigation. Albeit preliminary and in need of replication, the evidence concerning the influence of

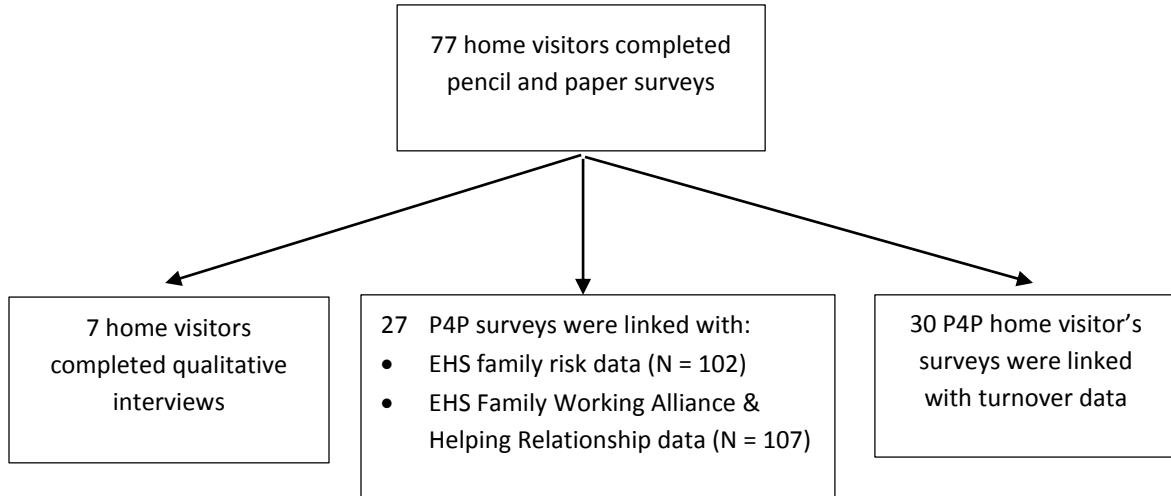
EHS family cumulative risk both on home visitor wellbeing and home visitor working alliance is provocative. Future studies should evaluate the ways in which programs recruit EHS families and how recruitment strategies impact caseload variability within and between EHS programs. Finally, as previously mentioned, more research is needed examining the quality, function, and effectiveness of supervision for EHS home visitors.

Conclusion

As the largest federally-funded program designed to promote optimal development in low-income infants and toddlers, EHS has tremendous potential to make large-scale population-based impacts in the lives of vulnerable families and children. EHS home visitors serve as the essential link between program goals and service outcomes. Thus, strong consideration should be given to ways in which to recruit, support, and retain a competent workforce. The overarching goal of this study was to learn more about the strengths and needs of EHS home visitors, and how these strengths and needs impact home visitors' abilities to engage and serve highly vulnerable families effectively. The findings from this study have increased understanding regarding the unique challenges facing the EHS home visitors and their feelings about their work. The data revealed that this is a strong, capable, and creative workforce that deserves recognition for an important and highly complex job. At the same time, additional supports and shifts in thinking may be needed to address the most complex EHS family needs and thus help EHS realize its full potential.

Appendix A

Flow Chart of Study Enrollment



Appendix B

Benefits and Costs of Caring Study

Program Information Sheet

2014/2015

Program Name:

Person Interviewed:

Date Completed:

Name of Person Completing the Form:

PROGRAM & STAFF CHARACTERISTICS

1. **Confirm:** Does your organization have a **home-based EHS** program? Yes _____ No _____
2. How many home visitors does your EHS program employ? Full-time _____ Part-time _____
3. How many families are currently enrolled in your **home-based EHS** program? _____
4. How does your program recruit families/what are the main sources of referrals?

FAMILY CHARACTERISTICS

1. What percentage of families enrolled in your home-based EHS program speak...
 - a. English? _____
 - b. Spanish? _____
 - c. Other languages? Specify:
2. Does your program provide services in languages other than English? _____
Please describe:

3. Programs face many challenges in serving high need or high risk families. We would like to know more about the needs of the families you serve and how many of them have high need or are at high risk. Please provide your best estimate of the percentage of families who fit each of the following categories.

Of the home-based EHS families served by your program, what percentage are...

a. Teen mothers (under age 20)	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more
b. Single-parent families (primary caregiver of the child is not married to or living with a partner)	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more
c. Families in which the primary caregiver is not employed or in school	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more
d. Families who reside with one or more families, live in transitional housing or a homeless shelter	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more
e. Families with mental problems	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more
f. Considering each of these five areas, what percentage of families enrolled in your Early Head Start program have more than three of these characteristics?	<input type="checkbox"/> NONE <input type="checkbox"/> ≤ 10 percent <input type="checkbox"/> 11 to 25 percent <input type="checkbox"/> 26-50 percent <input type="checkbox"/> 51 to 75 percent <input type="checkbox"/> 76 percent or more

What percentage are:

a. Families with substance abuse problems...

- NONE
- ≤ 10 percent
- 11 to 25 percent
- 26-50 percent
- 51 to 75 percent
- 67 percent or more

b. Families with domestic violence or intimate partner violence...

- NONE
- ≤ 10 percent
- 11 to 25 percent
- 26-50 percent
- 51 to 75 percent
- 67 percent or more

c. Families with challenges related to immigration status...

- NONE
- ≤ 10 percent
- 11 to 25 percent
- 26-50 percent
- 51 to 75 percent
- 67 percent or more

d. Families with low or no social support...

- NONE
- ≤ 10 percent
- 11 to 25 percent
- 26-50 percent
- 51 to 75 percent
- 67 percent or more

Appendix C

RESEARCH CONSENT FORM

Protocol Title: The Benefits and Costs of Caring: A Mixed Methods Study of Early Head Start Home Visitors

Study No.: HP-00061217

Principal Investigator: Lisa Berlin, PhD

Sponsor: Office of Planning, Research and Evaluation, Administration for Children and Families, U. S. Department of Health and Human Services

You have been asked to take part in a research study about being an Early Head Start home visitor. Your participation in this study is voluntary. Your Early Head Start program will have no way of knowing if you participate. You can ask questions at any time.

PURPOSE OF STUDY

We are interested in learning about your work as an Early Head Start home visitor. The purpose of this study is to understand how your work as a home visitor affects your well-being, and how your well-being affects your work. The study will aim to enroll 84 participants.

PROCEDURES

If you agree to participate and sign this consent form, you will participate in a survey. The survey contains questions about you, your health and well-being, and your experiences as an Early Head Start home visitor. Please take the time to review this consent form carefully before you decide to participate. You may return the survey any time within the next 30 days. The survey will take approximately 40 minutes to complete. Then, in a couple of months, we may ask you to participate in an interview. We will also contact you in 6 to 9 months to ask if you are still working as an Early Head Start home visitor.

WHAT ARE MY RESPONSIBILITIES IF I TAKE PART IN THIS RESEARCH?

If you take part in this research, you will participate in one survey. You may also be asked to participate in an interview. You will receive a follow-up phone call and/or e-mail in 6 to 9 months.

POTENTIAL RISKS/DISCOMFORTS:

The potential risks if you participate are minimal. There are no physical risks to you being involved in this research. You might feel uncomfortable answering some of the survey questions, however. For example, there are some questions about your emotions and relationships with others. You will be asked questions about your personal history that may be uncomfortable for you. You may choose not to answer these questions. You

are free to skip any questions that you do not wish to answer. If you wish to speak with a professional about your reactions to this survey, a list of resources has been provided with this consent form.

There is also a risk of your confidential information being disclosed. We will minimize this risk. Your survey will not be identifiable by name; your consent form will be kept separate from your survey. All files will be secured only where authorized project staff can access it. We will not share any of your information with anyone outside of this project unless required by law.

POTENTIAL BENEFITS

There are no direct benefits to you of participating in this study. However, the information you provide may help Early Head Start programs support the well-being of their staff.

ALTERNATIVES TO PARTICIPATION

Your alternative is not to take part in this study. If you choose to not take part there will be no negative effects.

COSTS TO PARTICIPANTS

It will not cost you anything to take part in this study.

PAYMENT TO PARTICIPANTS

You will be given a \$25 gift card for your participation in this survey. The gift card will be given to you in person or will be mailed or e-mailed to you within two weeks after you complete the survey. If you are selected and you decide to participate in an interview, you will be given another \$25 gift card.

CONFIDENTIALITY AND ACCESS TO RECORDS

The information that you provide on the survey will be kept confidential. Confidentiality of information will be maintained to the fullest extent permitted by law. Efforts will be made to limit your personal information to people who have a need to review this information. Your survey will not be identified by your name, only with a number. Your information will be stored securely where only authorized project staff can access it. The data from the study may be published. However, you will not be identified by name. Your answers will be grouped with the answers of the others in a way that would make it impossible for anyone to know your individual response to any question. Audio tapes from interviews will be destroyed at the end of the study. Your personal information will not be given out unless required by law. However, we cannot promise complete secrecy. Organizations that may review your information include the IRB, the study sponsor, and other representatives of this organization.

RIGHT TO WITHDRAW

Your participation in this study is voluntary. You do not have to take part in this research. You are free to withdraw your consent at anytime. There are no adverse consequences (physical, social, economic, legal, or psychological) when a participant decides to withdraw from this research. Refusal to take part or to stop taking part in the study will

involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to stop taking part, or if you have questions, concerns, or complaints related to the research or would like to report a research-related injury, please contact the investigator, Lisa Berlin, at 410-706-6392. If you are a participant from FSI/Sheppard Pratt and have questions regarding your rights as a research participant, you may contact Dr. Faith Dickerson of the Sheppard Pratt IRB at 410-938-3000.

CAN I BE REMOVED FROM THE RESEARCH?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. A possible reason for removal is the person in charge deciding that the research study is no longer in your best interest. The sponsor can also end the research study early.

UNIVERSITY STATEMENT CONCERNING RESEARCH RISKS

The University is committed to providing participants in its research all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the research project. This research has been reviewed and approved by the Institutional Review Board (IRB). Please call the Institutional Review Board (IRB) if you have questions about your rights as a research participant.

The research described in this consent form has been classified as minimal risk by the IRB of the University of Maryland, Baltimore (UMB). The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and persons who do not conduct research projects. The IRB's decision that the research is minimal risk does not mean that the research is risk-free. You are assuming risks of injury as a result of research participation, as discussed in the consent form.

If you are harmed as a result of the negligence of a researcher, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this research study as a result of researcher negligence, you can contact members of the IRB or the staff of the Human Research Protections Office (HRPO) to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a research participant. The contact information for the IRB and HRPO is:

University of Maryland School of Medicine
Human Research Protections Office
BioPark I: 800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

Note that for home visitors at Family Services, Inc., an affiliate of Sheppard and Enoch Pratt Foundation, the Sheppard Pratt IRB contact information is:

Faith Dickerson, Ph.D.
Sheppard Pratt IRB
6501 North Charles Street

Baltimore, MD 21204
410-938-4359

Signing this consent form indicates that you have read this consent form (or have had it read to you), that your questions have been answered to your satisfaction, and that you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.

If you agree to participate in this study, please sign your name below.

Participant's Signature

Investigator or Designee Obtaining Consent
Signature

Date: _____

Date: _____

Follow-up contact information (address, e-mail, phone):

NAME: _____

ADDRESS: _____

PHONE: _____

EMAIL: _____

Appendix D

EHS HOME VISITOR SURVEY

You are invited to participate in a survey about your experiences as an Early Head Start home visitor.

Your feedback counts.

This survey will take about 40 minutes to complete. The survey includes questions about your experiences working in Early Head Start. We will also ask some questions about your overall health and well-being.

Your participation is voluntary and confidential.

Your participation in this survey is voluntary. Your answers to the questions will be kept confidential. Your name will not appear in the results and the results will only be presented in aggregate (as a group).

You are free to withdraw your participation in this survey at any time. Or, if you feel uncomfortable with a question, you can skip it. All participants in this survey will receive \$25 gift card for their time.

If you have any questions about this survey or would like additional information, please contact Allison West at 410-241-3767 or awest@ssw.umaryland.edu.

Thank you!

A. BASIC QUESTIONS ABOUT YOURSELF

1. What is your age? _____
2. What is your gender (CHECK ONE)? FEMALE _____ MALE _____
3. What is your race?
 - American Indian or Alaskan Native
 - Black or African American
 - White
 - Asian
 - Native Hawaiian or Pacific Islander
 - Biracial or Multi-racial
 - Other
4. Are you of Hispanic, Latino, or Spanish origin?
 - Yes
 - No
5. What is your current living situation/relationship status?
 - Married
 - Single/never married
 - Separated, divorced, or widowed
 - Living with a partner, not married
6. Do you have children of your own (CHECK ONE)? YES _____ NO _____
7. Was there a time in the past 12 months when

		YES	NO
a.	You received benefits from the Food Stamp Program or the Supplemental Nutrition Assistance Program (SNAP)?	<input type="checkbox"/>	<input type="checkbox"/>
b.	You did not have enough money to provide adequate shelter or housing for you and your family?	<input type="checkbox"/>	<input type="checkbox"/>
c.	You did not pay the full amount of the gas, oil, or electricity bills?	<input type="checkbox"/>	<input type="checkbox"/>
d.	You did not have enough money to pay for health care and/or medicines that you or your family needed?	<input type="checkbox"/>	<input type="checkbox"/>

B. EDUCATION AND EXPERIENCE

1. What is the highest level/degree you completed in school?
 - Some High School, no degree [SKIP TO 3]
 - High School/GED [SKIP TO 3]
 - Vocational/technical training program
 - Some college, no degree
 - Associate's degree
 - Bachelor's degree
 - Master's degree (e.g., MA, MS, MSW)

2. Field of study: CHECK ALL THAT APPLY. (Responses not limited to highest degree completed.)
 - Child development
 - Early childhood education
 - Education
 - Psychology
 - Social work/Social welfare
 - Nursing
 - Other (specify) _____

3. How many total years of experience do you have providing home visiting services?
 - None
 - Less than 1 year
 - 1-2 years
 - 3-5 years
 - 5-10 years
 - More than 10 years

4. Do you have prior experience working with high risk families in any of the following capacities?
CHECK ALL THAT APPLY.
 - No prior experience
 - Child care
 - Health
 - Social services
 - Education
 - Other (specify) _____

C. CURRENT POSITION

1. For approximately how many **months** have you been working at your current job as a home visitor?
MONTHS: _____

2. How many hours do you work in a typical week as a home visitor?
HOURS: _____

3. How many hours each week do you spend in direct contact with EHS families (face to face, on the phone, or by text or e-mail)?
HOURS: _____

4. In what language(s) are you fluent enough to provide home visiting services? CHECK ALL THAT APPLY.

- English
- Spanish
- Other (specify): _____

5. How many families are currently on your home visiting caseload? _____

6. Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. I am satisfied with the salary I receive from my agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I am satisfied with the non-salary or fringe benefits I receive through my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I am satisfied with the physical work environment of this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I have the opportunity for advancement in this agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I feel that my job is secure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How often do you think about resigning from your current job?

Never Constantly

1 2 3 4 5

9. How likely is it that you will resign within the next six months?

Very Unlikely Very Likely

1 2 3 4 5

10. All things considered, how desirable would it be for you to resign from your current job?

Very undesirable Very desirable

1 2 3 4 5

11. We would like to know more about the needs of the families you serve and how many of them have high need or are at high risk. In thinking about the families you work with at EHS, please indicate the number of families who fit each of the following categories:

Characteristics	Number of families on your caseload (write in the number):
a. Teen mother (under age 20)	
b. Single parent family (primary caregiver of the child is not married to or living with a partner)	
c. Family in which the primary caregiver is not employed or in school	
d. Family resides with one or more families, lives in transitional housing, or a homeless shelter	
e. Low or no social support	
f. Challenges related to immigration status	
g. Depression or other mental health issue	
h. Substance abuse	
i. Domestic violence	

D. HOW YOUR WORK HAS BEEN GOING

Please indicate how often each of the following is true of your work in Early Head Start.

How often at work:	Never	Rarely	Sometimes	Usually	Always
1. Are you very busy trying to get everything done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you learn new things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your work demand a high level of skill or expertise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you have to come up with your own ideas, or figure out on your own what needs to be done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you have a choice in deciding how you do your tasks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you have a choice in deciding what tasks you do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you have a say in decisions about your work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you have a say in how your workplace is arranged or how things are organized?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does your job provide you with a variety of things that interest you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do people at work demand different things from you that you think are hard to combine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you have too many demands made on you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you control the amount of time you spend on tasks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you have enough time to get everything done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Do you have a lot of interruption?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you get help and support from your coworkers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Are your coworkers willing to listen to your work-related problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Do you get the information you need from your supervisor or supervisors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Do you get help and support from your immediate supervisor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Is your immediate supervisor willing to listen to your work-related problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E. HOW YOU ARE DOING IN YOUR WORK WITH FAMILIES

Below are statements that describe ways in which you might think or feel about the parents you work with. For each statement, please choose the response that describes how often you think or feel that way. For example, if the statement describes the way you *always* think or feel, check the “Always” box. Your first or immediate thoughts are the ones we would like to see.

	Never	Rarely	Sometimes	Usually	Always
1. I am confident in my ability to help the parents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The parents and I both feel confident about the usefulness of our activities during home visits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I believe parents like me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I have doubts about what I should be trying to accomplish with parents on my home visits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Parents and I agree about the steps to be taken to improve their situation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Parents and I are working on mutually agreed upon goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I appreciate the parents I work with as people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Parents and I agree on what is important for them to work on.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Parents and I have built mutual trust.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Parents and I have different ideas about what their real problems are.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Parents and I have developed a good understanding between us of the kind of changes that would be good for them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Parents believe that the way we are working towards their goals is correct.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. WORK RELATED EXPERIENCES

When you help people you have direct contact with their lives. As you may have found, your compassion for those people you help can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a helper. Consider each of the following questions **about you and your current work situation**. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Very Often</u>
1. I am happy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am preoccupied with more than one person I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I get satisfaction from being able to help people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel connected to others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I jump or am startled by unexpected sounds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel invigorated after working with those I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I find it difficult to separate my personal life from my life as a helper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I think I might have been affected by the traumatic stress of those I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I feel trapped by my job as a helper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Because of my helping, I have felt "on edge" about various things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I like my work as a helper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I feel depressed because of the traumatic experiences of the people I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel as though I am experiencing the trauma of someone I have helped.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I have beliefs that sustain me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am pleased with how I am able to keep up with helping techniques and protocols.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I am the person I always wanted to be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. My work makes me feel satisfied.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Very Often</u>
19. I feel worn out because of my work as a helper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I have happy thoughts and feelings about those I help and how I could help them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I feel overwhelmed because my casework seems endless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I believe I can make a difference through my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I am proud of what I can do to help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. As a result of my helping, I have intrusive, frightening thoughts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I feel "bogged down" by the system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I have thoughts that I am a "success" as a helper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I can't recall important parts of my work with trauma victims.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I am a very caring person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I am happy that I chose to do this work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G. WORKPLACE SAFETY

1. How concerned are you about your personal safety while on home visits? Please circle one.

Not Worried										Very Worried
1	2	3	4	5	6	7	8	9	10	

2. How would you rate your employer's commitment to your personal safety while on home visits?

Not Committed										Very Committed
1	2	3	4	5	6	7	8	9	10	

H. SUPERVISION

1. Do you have one-on-one supervision meetings with your supervisor? *Supervision meetings are meetings in which your supervisor provides you feedback or guidance on your caseload.*
 - Yes
 - No [SKIP TO 3]

2. How many times each month do you have one-on-one supervision meetings? _____

3. Do you have group supervision meetings with your supervisor?
 - Yes
 - No [SKIP TO 5]

4. On average, how many times per month do you have group supervision meetings? _____

5. Do your supervisors or mentors ever go with you on visits to observe you or view video recordings of your home visits as part of supervision?
 - No [SKIP TO SECTION I]
 - Views video recordings only
 - Observes in person only
 - Views video recordings and observes in person

6. About how many of your home visits have they viewed in the past 12 months, either in person or by watching video recordings?

Approximate number: _____

I. RATING OF SUPERVISION

For this question, we would like you to think about what occurs day-to-day at your work place. Read the following statements and consider how true they are for you and your EHS program. Please rank the following statements on a scale with 1 being the lowest and 5 being the highest:

	Lowest (Not at all true)				Highest (Very true)
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
a. My supervisor leads by example, not just by words.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. When something is not going right for me, my supervisor helps me think it through and develop an approach for solving it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I feel safe sharing my thoughts and feelings with my supervisor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. My supervisor involves staff in making decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following sets of questions ask about thoughts, feelings, and experiences related to your health and well-being. Remember that all responses are anonymous.

J. WELL-BEING

Instructions: For each statement, please choose which best describes how often you have been feeling in the past week.

		Rarely or None of the Time	Some or a Little of the Time (1-2 days)	Occasionally (3-4 days)	Most of the Time (5-7 days)
1.	I felt depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	I felt that everything I did was an effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	My sleep was restless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I was happy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	I felt lonely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	People were unfriendly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	I enjoyed life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	I felt sad.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	I felt that people disliked me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	I could not get going.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

K. HEALTH

Would you say your health in general is (CIRCLE ONE):

Poor Fair Good Very Good Excellent

L. SPIRITUALITY

		Not at all	Slightly	Moderately	Very
1.	To what extent do you consider yourself a spiritual person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	To what extent do you consider yourself a religious person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

M. YOUR RELATIONSHIPS

Respond to the following questions by selecting the choice that most closely reflects your feelings or beliefs.

	Never	Rarely	Sometimes	Usually	Always
1. I find it difficult to see things from the "other guy's" point of view.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. In emergency situations, I feel apprehensive and ill-at ease.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I try to look at everybody's side of a disagreement before I make a decision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel helpless when I am in the middle of a very emotional situation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I try to understand my friends better by imagining how things look from their perspective.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. When I see someone get hurt, I tend to remain calm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I can tell the difference between someone else's feelings and my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Being in a tense emotional situation scares me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I am usually pretty effective in dealing with emergencies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe that there are two sides to every question and try to look at them both.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I tend to lose control during emergencies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I can tell the difference between my friend's feelings and my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. When I see someone who badly needs help in an emergency, I go to pieces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I am aware of what other people think of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can explain to others how I am feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N. YOUR CHILDHOOD EXPERIENCES

These questions are about things you might have experienced while you were growing up, that is, during your first 18 years of life. As you look down the list, **COUNT** the number of events that you experienced, and enter a total number at the bottom. *You do not need to indicate which of the things you have experienced.*

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often or very often**...
Swear at you, insult you, put you down or humiliate you? **Or**
Act in a way that made you afraid that you might be physically hurt?
2. Did a parent or other adult in the household often or very often...
Push, grab, slap, or throw something at you? **Or**
Ever hit you so hard that you had marks or were injured?
3. Did an adult or person at least 5 years older than you...
Touch or fondle you or have you touch their body in a sexual way? **Or**
Attempt or actually have oral, anal, or vaginal intercourse with you?
4. Did you often or very often feel that...
No one in your family loved you or thought you were important or special? **Or**
Your family didn't look out for each other, feel close to each other, or support each other?
5. Did you often or very often feel that...
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? **Or**
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
6. Were your parents **ever** separated or divorced?
7. Was your mother or step mother:
Often or very often pushed, grabbed, slapped, or had something thrown at her? **Or**
Sometimes, often or very often kicked, bitten, hit with a fist, or hit with something hard? **Or**
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
10. Did a household member go to prison?

Please write the total number of events that you experienced here: _____

O. CLOSE RELATIONSHIPS

The following statements concern how you generally feel in close relationships (e.g., with romantic partners, close friends, or family members). Respond to each statement by indicating how much you agree or disagree with it by circling **ONE** number.

	Disagree Strongly		Neutral/Mixed			Agree Strongly	
1. It helps to turn to close others in times of need.	1	2	3	4	5	6	7
2. I need a lot of reassurance that close relationship partners really care about me.	1	2	3	4	5	6	7
3. I want to get close to others, but I keep pulling back.	1	2	3	4	5	6	7
4. I find that my close relationship partner(s) don't want to get as close as I would like.	1	2	3	4	5	6	7
5. I turn to close relationship partners for many things, including comfort and reassurance.	1	2	3	4	5	6	7
6. My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
7. I try to avoid getting too close to others.	1	2	3	4	5	6	7
8. I do not often worry about being abandoned.	1	2	3	4	5	6	7
9. I usually discuss my problems and concerns with close others.	1	2	3	4	5	6	7
10. I get frustrated if my relationship partners are not available when I need them.	1	2	3	4	5	6	7
11. I am nervous when another person gets too close to me.	1	2	3	4	5	6	7
12. I worry that others won't care about me as much as I care about them.	1	2	3	4	5	6	7

13. Next, please check the box next to the description that best describes how you feel in close relationships. The terms “close” and “intimate” refer to psychological or emotional closeness, not necessarily sexual intimacy.

_____ I am somewhat uncomfortable being close to others. I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, close relationship partners want to be more intimate than I feel comfortable.

_____ I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me.

_____ I find that others are reluctant to get as close as I would like. I often worry that close relationship partners don't really love me or won't want to stay with me. I want to get very close to my partners, and this sometimes scares people away.

O. SATISFACTION

1. How satisfied are you with your work in Early Head Start? (CIRCLE)

1	2	3	4	5	6
Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied

2. Would you say that your job in Head Start is the perfect job for you? ____ Yes ____ No

3. Please describe the most difficult or challenging aspects of your work as an EHS home visitor.

4. Please describe the most rewarding aspects of your job as an EHS home visitor.

5. What do you do to manage work-related stress?

Appendix E
Cumulative Risk Indices

Table D1

EHS Family Cumulative Demographic Risk Variable Constructs and Frequencies

Construct	Instrument	Risk Criteria	<i>n</i> (%) High Risk in Sample
Maternal education	Single item	0=Higher than HS or GED; 1=drop-out/no HS or GED	49 (48)
Marital status	Single item	0=Married or with partner; 1=single, separated, divorced or widowed	17 (16.7)
Teen mom at birth of first child	Single item	0=No; 1=mom <20 at birth of focus child	8 (7.8)
Public assistance/TANF receipt	Single item	0=No; 1=yes	3 (2.9)
Social cohesion	4 Likert-type items adapted from the Project on Human Development in Chicago Neighborhoods (PHDCN; Sampson, 2012 & McMillan and Chavis, 1986) assessing real or perceived neighborhood social cohesion and trust	Scored at or above 75 th percentile	24 (24.2)
Socioeconomic strain	7 Likert-type items reflecting financial hardship in past year	Scored at or above 75 th percentile	36 (35.3)
Number of children in home	Single item	Scored at or above 75 th percentile	32.4 (67.6)

Table D2

Maternal Cumulative Psychological Risk Variable Constructs and Frequencies

Construct	Instrument	Risk Criteria	<i>n</i> (%) High Risk in Sample
Maternal depression	Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977); 20 Likert-type items	Score in clinical range (≥ 16)	25 (35.0)
Maternal Anxiety	Generalized Anxiety Disorders Screener (GAD; Spitzer et al., 2006); 7 Likert-type items	Scored in moderate to severe range	9 (8.8)
Maternal childhood trauma	Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1994); 28 Likert-type items;	Experienced one form of early child abuse or neglect	46 (45.5)
Adult attachment insecurity	Experiences in Close Relationship Questionnaire (ECR; Brennan, Clark, & Shaver, 1998); 36 Likert-type items from anxiety and avoidance subscales, summed	Scored in 75 th percentile in sample	24 (23.5)
Parenting stress	Parenting Stress Index – Short Form (PSI - SF; Abidin, 1990); 36 Likert-type items	Scored in clinical range (≥ 90)	4 (3.9)
Intimate partner violence	Hurts, Insults, Threatens, and Screams (HITS; Sherin, Sinacore, Li, Zitter, & Shakil, 1998) 6 dichotomous items (did or did not experience)	Endorsed any one question	24 (23.5)

Table D3

EHS Family Cumulative Demographic Risk Frequencies

Number of Risk Factors	<i>n</i>	%
0	17	16.7
1	31	30.4
2	30	29.4
3	18	17.6
4	5	4.9
5	1	1.0
Total	102	100.0

Table D4

Maternal Cumulative Psychological Risk Frequencies

Number of Risk Factors	<i>n</i>	%
0	40	39.2
1	19	18.6
2	15	14.7
3	9	8.8
4	11	10.8
5	6	5.9
6	2	2.0
Total	102	100.0

Table D5

Demographic and Psychological Combined Cumulative Risk Frequencies

	<i>n</i>	%
0	6	5.9
1	17	16.7
2	23	22.5
3	18	17.6
4	21	20.6
5	9	8.8
6	4	3.9
7	2	2.0
8	1	1.0
9	1	1.0
10	6	5.9
Total	102	100.0

Table D6

Descriptive Statistics for Cumulative Risk Indexes

	Min	Max	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Maternal demographic risk	0	5	1.67	1.15	.37	-.35
Maternal psychological risk	0	6	1.59	1.73	.84	-.44
Maternal combined demographic and psychological cumulative risk	0	9	3.25	2.23	.51	-.39

Appendix F

Benefits and Costs of Caring Semi-Structured Interview Guide

Introduction and Ongoing Consent

After greeting the participant and finding a comfortable place to sit, interviewer will read the following.

[TURN RECORDER ON – Confirm on audio recorder approval for recording]

First, thank you for taking the time to participate in this interview. As you know, earlier this winter we invited all home-based staff to participate in a survey. We are now asking a small number of home visitors to participate in interviews. There are no right or wrong answers, and I am talking to you because I want to learn from your experiences as a home visitor.

I want to remind you that your participation is entirely voluntary. You may withdraw from the study at any time, and there will be no negative consequences. Also, everything you say in this interview will be kept confidential, unless you share information that is reportable under Maryland law, such as about child abuse.

Do you have any questions about the study?

Do you agree to participate?

Thank you. Let's get started.

Conceptualization and Expectations:

I'd like to begin by asking you a few questions about your job as an Early Head Start Home Visitor

1. Tell me about how you came to be an Early Head Start home visitor.
2. When you first took the job, what did you think was expected of you?
3. How about now – what do you think is expected of you?
4. What do you enjoy most and least about your job?
5. What are the most important qualities for a home visitor to have?

Experiences with Families:

Now I'd like to ask you a few questions about your experiences working with families.

6. Tell me a little about the families you work with.
7. Without using names, please tell me about **one** of the more challenging families that you have worked with.
8. Without using names, tell me about one time in your work with a family that was especially satisfying.
9. Some families are more interested and involved in home visits than others. Why do you think that is?
10. Tell me about your experiences working with families who cancel or don't show up for visits.
11. What do you do to try to get families interested?

Coping:

My next few questions are about your thoughts and feelings about your work.

12. How do you typically feel after a home visit?
13. Can you tell me what the stresses are for you in your job as a home visitor?
14. What are the specific things you do to help yourself with the stress of the work?
15. Who or what has been your greatest source of support for handling stressful parts of home visiting?
16. Is there something you would like to see changed to make your work easier? Less stressful?

Meaning making:

I only have a few more questions.

17. How important is your work to your feelings about yourself as a person?
18. What have you learned about yourself as a result of this job?

19. Has your job as a home visitor changed you in any way?

20. Optional, if not previously discussed: Which parts of the work give you a sense of gratification?

Closing

Those are all of the questions I have. Is there anything else you think I should know about your experience as a home visitor? Is there anything you would want people to know about the work you do as a home visitor?

Would it be okay if I give you a call after I look over my notes if I have any questions?

Thank the participant.

[TURN OFF RECORDER]

Appendix G
Bivariate Correlations among Individual and Occupational Characteristics (N=74 -77)

	1	2	3	4	5	6	7	8	9
1. Age	1								
2. Latina/Hispanic	.19	1							
3. Married or living with partner	.10	.26*	1						
4. Education	-.12	-.23*	-.00	1					
5. Material hardship	-.00	.15	-.07	-.06	1				
6. CES-D	-.15	-.22	-.08	.08	.03	1			
7. Attachment anxiety	-.17	-.16	-.02	-.00	-.19	.10	1		
8. Attachment avoidance	.00	-.04	-.23	.05	.12	.06	.27*	1	
9. ACE's	.01	.07	-.16	-.22	.18	.29*	.29*	.15	1
10. Spirituality	.14	.14	.02	.05	.05	.08	-.09	.07	-.12
11. Religiosity	.10	.20	.10	.07	-.07	.06	-.14	-.05	-.10
12. Health	.01	.13	.07	.11	-.23*	-.37**	.03	-.05	-.17
13. Perspective-taking	-.03	-.04	.18	.13	.10	.05	-.16	-.26*	.04
14. Personal distress	.10	.07	-.09	-.04	-.10	.25*	.26*	.12	.19
15. Self-other awareness	-.07	-.24*	.05	.05	-.14	-.02	.09	-.42**	-.15
16. Caseload size	.10	.12	-.07	-.22*	-.17	.03	-.04	-.04	.09
17. Years in current position	-.05	-.08	-.15	-.07	.05	.01	-.08	.12	-.09
18. ≥5 years in home visiting	.43**	-.02	.11	.01	.03	-.11	-.20	-.01	-.09
19. Satisfaction with benefits	-.01	.18	.16	-.03	-.03	-.20	-.14	.08	-.08
20. Job security	.07	.02	.06	.00	-.11	-.22	-.09	-.17	-.28*
21. Job demands	.17	-.07	.02	-.08	.02	.26*	-.12	.04	.10
22. Job control	-.13	-.14	-.07	.04	-.07	.08	-.04	.02	.05
23. Coworker support	-.17	-.08	.13	.16	-.05	-.26*	-.20	-.16	-.36**
24. Supervisor support	-.05	.21	.10	.14	.14	-.18	-.11	-.10	-.14
25. Hours of supervision/month	.16	.25*	-.09	-.12	.24*	-.19	-.12	.09	-.10
26. Concern about personal safety	-.21	-.16	-.29*	.12	.04	.21	.14	.03	-.09
27. Employer's concern about safety	.04	.08	.08	-.01	-.02	-.11	-.09	-.12	.11

* $p \leq .05$, ** $p \leq .01$ (2-tailed)

	10	11	12	13	14	15	16	17	18
1. Age									
2. Latina/Hispanic									
3. Married or living with partner									
4. Education									
5. Material hardship									
6. CES-D									
7. Attachment anxiety									
8. Attachment avoidance									
9. ACE's									
10. Spirituality	1								
11. Religiosity	.76**	1							
12. Health	-.05	.01	1						
13. Perspective-taking	.24*	.11	-.03	1					
14. Personal distress	.01	.01	-.03	-.41**	1				
15. Self-other awareness	.01	.05	.04	.39**	-.16	1			
16. Caseload size	.22	.11	.04	.08	-.10	-.01	1		
17. Years in current position	-.03	-.11	-.05	-.08	.09	-.14	.22	1	
18. ≥5 years in home visiting	-.06	-.08	.02	-.14	-.05	-.18	-.04	.16	1
19. Satisfaction with benefits	-.13	-.17	.26*	-.05	.13	-.07	-.16	.07	-.02
20. Job security	-.20	-.21	.33**	.03	-.23*	.20	-.02	.01	.10
21. Job demands	.12	.14	-.26*	.27*	-.10	.21	.32**	.01	.03
22. Job control	.03	-.01	.07	.11	.25*	.15	-.06	-.02	-.26*
23. Coworker support	.11	.10	.13	.16	-.30**	.12	-.11	.20	.04
24. Supervisor support	.13	.13	.10	.00	.14	.01	.01	.19	-.02
25. Hours of supervision/month	.09	.04	.21	-.08	-.07	-.24*	.10	.18	.07
26. Concern about personal safety	-.01	.00	-.22	-.20	.21	.05	-.00	.05	-.16
27. Employer's concern about safety	.14	.12	.11	.18	.13	.11	-.11	-.10	-.06

* $p \leq .05$, ** $p \leq .01$ (2-tailed)

	19	20	21	22	23	24	25	26	27
1. Age									
2. Latina/Hispanic									
3. Married or living with partner									
4. Education									
5. Material hardship									
6. CES-D									
7. Attachment anxiety									
8. Attachment avoidance									
9. ACE's									
10. Spirituality									
11. Religiosity									
12. Health									
13. Perspective-taking									
14. Personal distress									
15. Self-other awareness									
16. Caseload size									
17. Years in current position									
18. ≥5 years in home visiting									
19. Satisfaction with benefits	1								
20. Job security	.39**	1							
21. Job demands	-.34**	-.14	1						
22. Job control	.14	-.04	.03	1					
23. Coworker support	.10	.09	-.36**	-.08	1				
24. Supervisor support	.16	-.01	-.39**	.16	.39**	1			
25. Hours of supervision/month	.18	.21	-.00	.12	-.04	.17	1		
26. Concern about personal safety	-.16	-.22	.08	.04	-.10	-.14	-.10	1	
27. Employer's concern about safety	.44**	.21	-.39**	.16	.12	.40**	-.09	-.24*	1

* $p \leq .05$, ** $p \leq .01$ (2-tailed)

References

- Abdel-Khalek, A. M. (2007). Assessment of intrinsic religiosity with a single-item measure in a sample of Arab Muslims. *Journal of Muslim Mental Health, 2*, 211 – 215.
- Acker, G.M. (2003). Role conflict and ambiguity: Do they predict burnout among mental health service providers? *Social Work in Mental Health, 1*(3), 63-80.
- Acker, G. M. (1999). The impact of clients' mental illness on social workers' job satisfaction and burnout. *Health and Social Work, 24*(2), 112-119.
- Ackerly, G. D., Burnell, J., Holder, D. C., & Kurdek, L. A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice, 19*(6), 624-631.
- Aday, L. & Cornelius, L. J. (2006). *Designing and conducting health surveys: A comprehensive guide* (3rd Ed.). San Francisco, CA: Jossey-Bass.
- Administration for Children and Families (2015). *Head Start performance standards*. Washington, D.C. Retrieved from <http://eclkc.ohs.acf.hhs.gov/hslc/standards/hspss/45-cfr-chapter-xiii/45-cfr-chap-xiii-eng.pdf>
- Administration for Children and Families (2006). *Findings from the survey of Early Head Start programs: Communities, programs, and families*. Washington, D.C.
- Adams, R. E., Boscarino, J. A. & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry, 76*(1), 103-108.
- Aikens, N., Bandel, E., Akers, L., Lyskawa, J., & Jerald, J. (2014). *Family voices: Piloting a new qualitative measure of family engagement for Head Start and early Head Start Families and Staff* (OPRE Report 2014-28). Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior, 79*(2), 549-562.
- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress, 23*(3), 244-263.
- Ammerman, R. T., Stevens, J., Putnam, F. W., Altaye, M., Hulsmann, J. E., Lehmkuhl, H. D... & Van Ginkel, J. B. (2006). Predictors of early engagement in home visitation. *Journal of Family Violence, 21*(2), 105-115.
- Andresen, E. M., Carter, W. B., Malmgren, J. A., Patrick, D. L. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American Journal of Preventive Medicine, 10*, 77-84.
- Annie E. Casey Foundation (2013). *Kids count data book*. Retrieved from <http://www.aecf.org/~media/Pubs/Initiatives/KIDS%20COUNT/123/2013KIDSCOUNTDataBook/2013KIDSCOUNTDataBookr.pdf>
- Avellar, S., Paulsell, D., Sama-Miller, E., Del Grosso, P., Akers, L., and Kleinman, R. (2014). *Home visiting evidence of effectiveness review: Executive summary* (OPRE Report No 2014—59). Retrieved from http://homvee.acf.hhs.gov/HomVEE_Executive_Summary_2014-59.pdf
- Azar, S. T. (2000). Preventing burnout in professionals and paraprofessionals who work in child abuse and neglect cases: A cognitive behavioral approach to supervision. *JCLP/In Session: Psychotherapy in Practice, 56*(5), 643–663.
- Azzi-Lessing, L. (2011). Home visitation programs: Critical issues and future directions. *Early Childhood Research Quarterly, 26*(4), 387-398.
doi:<http://dx.doi.org/10.1016/j.ecresq.2011.03.005>

- Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, *19*(2), 181-188.
doi:10.1080/09515070600811899
- Bakker, A., & Schaufeli, W. (2000). Burnout contagion process among teachers. *Journal of Applied Social Psychology*, *56*, 2289-2308.
- Beck, A. T. (1979). *Cognitive therapy and emotional disorders*. New York, NY: Penguin Books.
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing*, *25*(1), 1-10. doi:10.1016/j.apnu.2010.05.005
- Bell, H. (2003). Strengths and secondary trauma in family violence work. *Social Work*, *48*(4), 513-522.
- Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. *Psychological Bulletin*, *114*, 413-434.
- Bennink, M., Croon, M. A., & Vermunt, J. K. (2013). Micro-macro multilevel analysis for discrete data: A latent variable approach and application on personal network data. *Sociological Methods & Research*, *42*(4), 431-457. doi:10.1177/0049124113500479
- Bhavnagri, N. P. & Krolikowski, S. (2000). Home-community visits during an era of reform (1870-1920). *Early Childhood Research and Practice*, *2*(1). Retrieved from <http://ecrp.uiuc.edu/v2n1/bhavnagri.html>
- Bickel, R. (2007). *Multilevel analysis for applied research: It's just regression!* New York, NY: Guilford.
- Black, P. (1993). Personal history of psychological trauma in the early life of social work and business students. *Journal of Social Work Education*, *29*(2), 171-180.

- Boey, K. W. (1999). Cross-validation of a short form of the CES-D in Chinese elderly. *International Journal of Geriatric Psychiatry, 14*(8), 608-617.
- Booth, A., Munsell, E., & Doyle, O. (2014). Maternal engagement in a home visiting intervention: What lies beneath psychological resources?. *Journal of Community Psychology, 42*(1), 29-46.
- Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: a study of secondary trauma among New York City social workers. *International Journal of Emergency Mental Health, 6*(2), 57-66.
- Boyas, J. & Wind, L. H. (2010). Employment-based social capital, job stress, and employee burnout: A public child welfare employee structural model. *Children and Youth Services Review, 32*, 380-388. doi: 10.1016/j.chilyouth.2009.10.009
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.
- Bride, B., Radey, M., & Figley, C. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*(3), 155-163. doi:10.1007/s10615-007-0091-7
- Bride, B. E., Hatcher, S. S., & Humble, M. N. (2009). Trauma training, trauma practices, and secondary traumatic stress among substance abuse counselors. *Traumatology, 15*(2), 96-105. doi:10.1177/1534765609336362
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development, 45*(1), 1-5. Retrieved from <http://www.jstor.org/stable/1127743>

- Brofenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, July, 513-531.
- Brofenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of child development* (Vol. 6, pp. 187-249). Greenwich, CT: JAI Press.
- Brofenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education* (2nd ed., Vol 3). Oxford: Elsevier. (Reprinted from *Readings on the development of children*, (2nd ed.), pp. 37-43, by M. Gauvain & M. Cole, Eds, 1993, New York, NY: Freeman)
- Brooks Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, 7(2), 55-71.
- Brookes, S. J., Summers, J., Thornburg, K. R., Ispa, J. M., & Lane, V. J. (2006). Building successful home visitor-mother relationships and reaching program goals in two Early Head Start programs: A qualitative look at contributing factors. *Early Childhood Research Quarterly*, 21(1), 25-45.
- Buchbinder, S. B., & Duggan, A. K. (1997). *Home visitor job satisfaction and turnover*. In C. Liberton, K. Kutash, & R. Friedman (Eds.), 10th Annual Research Conference Proceedings, a system of care for children's mental health (pp. 283-290). Tampa: University of South Florida. Retrieved September 16, 2008, from <http://www.fmhi.usf.edu/institute/pubs/pdf/cfs/rtc/10thproceedings/10thproctoc.html>.

- Buffering Toxic Stress Consortium Principal Investigators, Meyer, & Fortunato (2013). Parenting interventions in Early Head Start: The Buffering Toxic Stress Consortium. *Zero to Three, 34*, 73-86.
- Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress, and Coping, 9*(3), 261-275.
- Busseri, M. A., & Tyler, J. D. (2003). Interchangeability of the working alliance inventory and working alliance inventory, short form. *Psychological Assessment, 15*(2), 193-197.
doi:10.1037/1040-3590.15.2.193
- Burchinal, M. R., Cryer, D., Clifford, M., & Howes, C. (2002). Caregiver training and classroom quality in child care centers. *Applied Developmental Science, 6*(1), 2-11.
- Burrell, L., McFarlane, E., Tandon, D., Fuddy, L., Duggan, A., & Leaf, P. (2009). Home visitor relationship security: Association with perceptions of work, satisfaction, and turnover. *Journal of Human Behavior in the Social Environment, 19*(5), 592-610.
- Chamberlain, L. (2008). Ten lessons learned in Alaska: Home visitation and intimate partner violence. *Journal of Emotional Abuse, 8*(1-2), 205-216.
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services, 11*(1), 75-86.
doi:10.1037/a0033798
- Cimiotti, J. P., Aiken, L. H., Sloane, D. M., & Wu, E. S. (2002). Nurse staffing, burnout, and health care-associated infection. *American Journal of Infection Control, 40*(6), 486-490.

- Cluxton-Keller, F., Burrell, L., Crowne, S. S., McFarlane, E., Tandon, S. D., Leaf, P. J., & Duggan, A. K. (2014). Maternal relationship insecurity and depressive symptoms as moderators of home visiting impacts on child outcomes. *Journal of Child and Family Studies, 23*(8), 1430-1443.
- Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing & Health Sciences, 12*, 235–243. doi: 10.1111/j.1442-2018.2010.00526.x
- Collins, S., & Long, A. (2003). Working with the psychological effects of trauma: consequences for mental health-care workers - a literature review. *Journal of Psychiatric and Mental Health Nursing, 10*, 417–424. doi: 10.1046/j.1365-2850.2003.00620.x
- Colvard, J., & Schmit, S. (2012). *Expanding access to Early Head Start: State initiatives for infants & toddlers at risk*. Washington, D.C.: Center for Law and Social Policy and Zero to Three.
- Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect, 30*, 1071-1080.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review, 18*, 621–656.
- Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, & Coping, 23*(3), 319-339.
- Creating Trauma Informed Systems (n.d.). Retrieved from the National Child Traumatic Stress Network web page: <http://www.nctsnet.org/resources/topics/creating-trauma-informed-systems>

- Creswell, J. W. & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd Ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., Plano Clark, V. L., Gutman, M., & Hanson, W. (2003). Advanced mixed methods research designs. In Tashakkori & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social & Behavioral Research* (pp. 209-240). Thousand Oaks, CA: Sage.
- Croon, M. A., & van Veldhoven, J. P. M. (2007). Predicting group-level outcome variables from variables measured at the individual level: A latent variable multilevel model. *Psychological Methods, 12*(1), 45-57. doi: 10.1037/1082-989x.12.1.45
- Cunningham, M. (2003). Impact of trauma work on social work clinicians: Empirical findings. *Social Work, 48*(4), 451-459.
- Daro, D., McCurdy, K., Falconnier, L., & Stojanovic, D. (2003). Sustaining new parents in home visitation services: Key participant and program factors. *Child Abuse & Neglect, 27*(10), 1101-1125. doi:10.1016/j.chiabu.2003.09.007
- Daro, D., McCurdy, K., & Nelson, C. (2005). *Engagement and retention in voluntary parent support programs* (Issue Brief). Retrieved from Chapin Hall Center for Children website: [http://www.chapinhall.org/sites/default/files/publications/ChapinHallDocument\(2\).pdf](http://www.chapinhall.org/sites/default/files/publications/ChapinHallDocument(2).pdf)
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*, 113-126.
- Decker, J. T., Brown, J. L. C., Ong, J., & Stiney-Ziskind, C. A. (2015). Mindfulness, compassion fatigue, and compassion satisfaction among social work interns. *Social Work Christianity, 42*(1), 28-42.

- Sociocultural Research Consultants (2015). Dedoose (Version 6.1.18) [Web application].
Accessed from www.dedoose.com.
- deVaus, D. (2002). *Analyzing social science data: 50 key problems in data analysis*. London: Sage.
- Dickinson, N. & Comstock, A. (2009). Getting and keeping the best people. In C.C. Potter & C.R. Brittain (Eds.), *Child welfare supervision* (pp. 220-261). New York, NY: Oxford Press.
- Dickinson, N. S. & Painter, J. S. (2009). Predictors of turnover for child welfare workers. *Child Welfare, 88*(5), 187-208.
- Dickinson, N., S. & Perry, R. E. (2002). Factors influencing the retention of specially educated public child welfare workers. *Evaluation Research in Child Welfare, 15*(3/4), 89-103.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd Ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Drake, B., & Yadama, G. N. (1996). A structural equation model of burnout and job exit among child protective services workers. *Social Work Research, 20*(3), 179–187.
- Ducharme, L. J., Knudsen, H. K., & Roman, P. M. (2007). Emotional exhaustion and turnover intention in human service occupations: The protective role of coworker support. *Sociological Spectrum, 28*(1), 81-104.
- Duggan, A., Caldera, D., Rodriguez, K., Burrell, L., Rohde, C., & Crowne, S. S. (2007). Impact of a statewide home visiting program to prevent child abuse. *Child Abuse & Neglect, 31*(8), 801-827.

Early Head Start National Resource Center. (n.d.). *The home-based supervisor's manual for the head start home-based program option*. Washington, D.C.: Zero to Three. Retrieved from: <http://www.prekkid.org/userfiles/file/Supervisors%20Manual.pdf>

Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28-67). Oxford: Oxford University Press

Ellett, A. J. (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*(1), 78-88. doi:<http://dx.doi.org/10.1016/j.childyouth.2008.07.002>

Engel, R. J., & Schutt, R. K. (2009). *The practice of research in social work* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Felitti, V.J., & Anda, R.F. (2010). The relationship of adverse childhood experiences to adult health, wellbeing social function and healthcare. In R. Lanius, E. Vermetten, & C. Pain (Eds.), *The hidden epidemic: The impact of early life trauma on health and disease*. Cambridge University Press; 2010.

Fetzer Institute. (2033). *Multidimensional measurement of religiousness and spirituality for use in health research: A report of a national working group*. Kalamazoo, MI: Author.

Figley, C. R. (2002a). Compassion fatigue: Psychotherapists' chronic lack of self-care. *JCLP: In Session: Psychotherapy in Practice, 58*(11), 1433-1441.

Figley, C. (2002b). *Treating compassion fatigue*. New York, NY: Routledge.

- Figueiredo, S., Yetwin, A., Sherer, S., Radzik, M., & Iverson, E. (2014). A cross-disciplinary comparison of perceptions of compassion fatigue and satisfaction among service providers of highly traumatized children and adolescents. *Traumatology, 20*(4), 286.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology, 50*(3), 571-579.
- Galanter, R., & Baker, E. (2013). Engaging families using motivational interviewing strategies and principles [Webinar]. Presented at the 17th Annual Virtual Birth to Three Institute. Retrieved from: <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/ehsnrc/comp/family-engagement/EngagingFamilies.html>
- Galea, M. (2014). Assessing the incremental validity of spirituality in predicting nurses' burnout. *Archive for the Psychology of Religion, 36*, 118-136. doi: 10.1163/15736121-12341276
- Galek, K., Flannely, K. J., Greene, P. B., & Kudler, T. (2011). Burnout, secondary traumatic stress, and social support. *Pastoral Psychology, 60*, 633 – 649.
- Gentry, J., E., Baranowsky, A.B., & Dunning, K. (2002). ARP: The Accelerated Recovery Program (ARP) for compassion fatigue. In C.R. Figley (Ed.), *Treating compassion fatigue* (pp. 123-137). New York, NY: Brunner-Rutledge.
- Gerdes, K. E., Geiger, J. M., Lietz, C. A., Wagaman, M. A., & Segal, E. A. (2012). Examination of known-groups validity for the Empathy Assessment Index (EAI): Differences in EAI scores between social service providers and service recipients. *Journal of the Society for Social Work and Research, 3*(2), 94 – 112.
- Germain, C. B. (1973). An ecological perspective in casework practice. *Social Casework, 54*, 323–330.

- Gibbs, J. A. (2001). Maintaining front-line workers in child protection: A case for refocusing supervision. *Child Abuse Review, 10*, 323–335.
- Gill, S., Greenberg, M. T., Moon, C., & Margraf, P. (2007). Home visitor competence, burnout, support, and client engagement. *Journal of Human Behavior in the Social Environment, 15*(1), 23-44. doi:http://dx.doi.org/10.1300/J137v15n01_02
- Glass, D. C., & McKnight, J. D. (1996). Perceived control, depressive symptomatology, and professional burnout: A review of the evidence. *Psychology and Health, 11*, 157-165.
- Glass, D. C., McKnight, J. D., & Valdismardottir, H. (1993). Depression, burnout and perceptions of control in hospital nurses. *Journal of Consulting and Clinical Psychology, 61*, 147-155.
- Gleichgerrcht, E. & Decety, J. (2013). Empathy in clinical practice: How individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. *PLOS ONE, 8*(4), 1-12.
- Gomby, D.S. (2007). The promise and limitations of home visiting: Implementing effective programs. *Child Abuse and Neglect, 31*, 793-799.
- Gray, L. A., & Price, S. K. (2014). Partnering for mental health promotion: Implementing evidence based mental health services within a maternal and child home health visiting program. *Clinical Social Work Journal, 42*(1), 70-80.
- Greene, J. (2007). *Mixed methods in social inquiry*. San Francisco, CA: John Wiley & Sons, Inc.
- Greene, R. A. (1991). The ecological perspective: An eclectic theoretical framework for social work practice. In R. A. Greene & P. H. Ephross (Eds.), *Human Behavior Theory and Social Work Practice* (pp. 261-295). New York: Aldine de Gruyer.

- Hamama, L. (2012). Burnout in social workers treating children as related to demographic characteristics, work environment, and social support. *Social Work Research, 36*(2), 113-25.
- Head Start Resource Center. (2011). *The Head Start parent, family, and community engagement framework*. Washington, D.C.: U.S. Department of Health and Human Services. Administration for Children and Families. Office of Head Start. Retrieved from: <http://eclkc.ohs.acf.hhs.gov/hslc/standards/im/2011/pfce-framework.pdf>
- Healthy Families America (July, 2013). In *Home visiting evidence of effectiveness*. Retrieved from <http://homvee.acf.hhs.gov/Model/1/Healthy-Families-America--HFA--sup---sup-/10/>
- Hebbeler, K. M., & Gerlach Downie, S. G. (2002). Inside the black box of home visiting: A qualitative analysis of why intended outcomes were not achieved. *Early Childhood Research Quarterly, 17*(1), 28-51. doi:<http://dx.doi.org/10.1016/S0885-2006%2802%2900128-X>
- Heller, S. S., & Gilkerson, L. (2009). *A practical guide to reflective supervision*. Washington, D.C.: Zero to Three.
- Hobfoll, S. E., & Shirom, A. (1993). Stress and burnout in the workplace: Conservation of resources. *Handbook of Organizational Behavior, 1*, 993.
- Holbrook, Terry. (1983). Going among them: The evolution of the home visit. *Journal of Sociology and Social Welfare, 10*(1), 112-135.
- Holland, J. M., & Neimeyer, R. A. (2005). Reducing the risk of burnout in end-of-life care settings: The role of daily spiritual experiences and training. *Palliative and Supportive Care, 3*, 173-181. doi: 10.10170S1478951505050297

- Home Visiting Research Network. (2013). *National home visiting research agenda*. Retrieved from the Home Visiting Research Network website:
http://hvrn.org/uploads/3/2/1/0/3210553/home_visiting_research_agenda_2013_10_29_final.pdf.
- Hopkins, K. M., Cohen-Callow, A., Kim, H. J., & Hwang, J. (2010). Beyond intent to leave: Using multiple outcome measures for assessing turnover in child welfare. *Children and Youth Services Review, 32*(10), 1380-1387.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology, 36*(2), 223-233. doi:10.1037/0022-0167.36.2.223
- Horvath, A. O., & L. S. Greenberg (1994). *The working alliance: Theory, research and practice*. New York, NY: John Wiley & Sons.
- Hudek-Knežević, J., Kalebić Maglica, B., & Krapić, N. (2011). Personality, organizational stress, and attitudes toward work as prospective predictors of professional burnout in hospital nurses. *Croatian Medical Journal, 52*(4), 538-549.
- Hutchison, E. D. (2011). Setting the stage: A multidimensional approach. In E.D. Hutchison (Ed.), *Dimensions of human behavior* (4th ed., pp.3-33). Thousand Oaks, CA: Sage Publications.
- Ivankova, N., & Stick, S. (2007). Students' persistence in Distributed Doctoral Program in Educational Leadership in Higher Education: A mixed methods study. *Research in Higher Education, 48*(1), 93-135.

- Jacobson, J. M. (2012). Risk of compassion fatigue and burnout and potential for compassion satisfaction among employee assistance professionals: Protecting the workforce. *Traumatology, 18*(3), 64-72. doi: 10.1177/1534765611431833
- Jacobson, J. M., Rothschild, A., Mizra, F., & Shapiro, M. (2012). Risk for burnout and compassion fatigue and potential for compassion satisfaction among clergy: Implications for social work and religious organizations. *Journal of Social Service Research, 00*, 1-14. doi: 10.1080/01488376.2012.744627
- Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validation study. *Journal of Traumatic Stress, 15*, 423–432. doi: 10.1023/A:1020193526843
- Jones Harden, B. (2010). Beyond reflective supervision: Organizational supports for staff well-being. In S. Heller & L. Gilkerson (Eds.), *A practical guide to reflective supervision* (pp.135 - 145). Washington, DC: Zero to Three.
- Jones Harden, B., Chazan-Cohen, R., Raikes, H., & Vogel, C. (2012). Early Head Start home visitation: The role of implementation in bolstering program benefits. *Journal of Community Psychology, 40*, 4, 438-455. DOI: 10.1002/jcop.20525
- Jones Harden, B., Denmark, N., & Saul, D. (2010). Understanding the needs of staff in Head Start programs: The characteristics, perceptions, and experiences of home visitors. *Children and Youth Services Review, 32*, 371-379.
- Kahn, J., & Moore, K. (2010). *What works for home visiting programs: Lessons from experimental evaluations and interventions* (Publication #2010). Retrieved from Child Trends website: <http://www.childtrends.org/wp-content/uploads/2005/07/2010-17WWHomeVisit.pdf>

- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology, 3*, 322-355.
- Kassam-Adams, N. (1995). *The risks of treating sexual trauma: Stress and secondary trauma in psychotherapists*. The Sidran Press.
- Kaur, D., Sambasivan, M., & Kumar, N. (2013). Effect of spiritual intelligence, emotional intelligence, psychological ownership and burnout on caring behavior of nurses: A cross sectional study. *Journal of Clinical Nursing, 22*, 3192-3202. doi: 10.1111/jocn.12386
- Kim, H. (2013). *Meta-analysis of turnover intention among child welfare workers*. (Unpublished doctoral dissertation). University of Houston, Houston, Texas.
- Kim, H., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. *Administration in Social Work, 32*(3), 5-25.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: Guilford.
- Knitzer, J., & Perry, D. F. (2009). Poverty and infant and toddler development. In C.H. Zeanah, Jr. (Ed.), *Handbook of infant mental health* (pp. 135-152). New York, NY: Guilford Press.
- Knudsen, H. K., Ducharme, L. J., & Roman, P. M. (2008). Clinical supervision, emotional exhaustion, and turnover intention: A study of substance abuse treatment counselors in the Clinical Trials Network of the National Institute on Drug Abuse. *Journal of Substance Abuse Treatment, 35*(4), 387-395.

- Koeske, G., & Koeske, R. D. (1993). A preliminary test of a stress-strain-outcome model for reconceptualization of the burnout phenomenon. *Journal of Social Service Research, 17*(3-4), 107-135.
- Korfmacher, J. (2012). *Defining the competent home visitor*. Presented at the National Summit on Quality in Home Visiting Programs, Washington, D.C. Presentation slides retrieved from <http://www.homevisitingssummit.org/>
- Korfmacher, J., Green, B., Spellmann, M., & Thornburg, K.R. (2007). The helping relationship and program participation in early childhood home visiting. *Infant Mental Health Journal, 28*, 450-480.
- Korfmacher, J., Green, B., Staerkel, F., Peterson, C., Cook, C., Roggman, L., Faldowski, R., Schiffman, R. (2008). Parent Involvement in Early Childhood Home Visiting. *Child and Youth Care Forum, 37*, 171-196.
- Korfmacher, J., & Hilado, A. (2008). *Creating a workforce in early childhood mental health: Defining the competent specialist*. (Issue Brief). Retrieved from Herr Research Center for Children and Social Policy at Erikson Institute: http://www.erikson.edu/wp-content/uploads/hrcbrief_ecmh.pdf
- Korfmacher, J., Kitzman, H., & Olds, D. (1998). Intervention processes as predictors of outcomes in a preventive home-visitation program. *Journal of Community Psychology, 26*(1), 49-64. doi:10.1002/(SICI)1520-6629(199801)26:1<49::AID-JCOP5>3.0.CO;2-X
- Kraus, V. I. (2005). Relationship between self-care and compassion satisfaction, compassion fatigue, and burnout among mental health professionals working with adolescent sex offenders. *Counseling & Clinical Psychology Journal, 2*(2).

- Krysiak, J., Lecroy, C. W., & Ashford, J. B. (2008). Participants' perceptions of health families: A home visitation program to prevent child abuse and neglect. *Children and Youth Services Review, 30*, 45-61.
- Kulkarni, S., Bell, H., Hartman, J. L., & Herman-Smith, R. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress, and burnout in domestic violence service providers. *Journal of the Society for Social Work & Research, 4*(2), 114-130. doi:10.5243/jsswr.2013.8
- Lane, V. (2011). The emotional labor of Early Head Start home visiting. *Zero to Three, 32*(1), 30-36.
- Langballe, E. M., Innstrand, S. T., Aasland, O. G., & Falkum, E. (2011). The predictive value of individual factors, work-related factors, and work-home interaction on burnout in female and male physicians: a longitudinal study. *Stress and Health, 27*(1), 73-87.
- Larson, S. A., & Hewitt, A. S. (2005). *Staff recruitment, retention, and training strategies for community human services organizations*. Baltimore, MD: Paul H. Brookes.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- LeCroy, C., & Whitaker, K. (2005). Improving the quality of home visitation: An exploratory study of difficult situations. *Child Abuse & Neglect, 29*(9), 1003-1013. doi:10.1016/j.chiabu.2005.04.003
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of three dimensions of job burnout. *Journal of Applied Psychology, 81*(2), 123-133.
- Lee, J., Lim, N., Yang, E., & Lee, S. (2011). Antecedents and consequences of three dimensions of burnout in psychotherapists: A meta-analysis. *Professional Psychology: Research and Practice, 42*(3), 252-258. doi: 10.1037/a0023319

- Lee, E., Esaki, N., Kim, J., Greene, R., Kirkland, K., & Mitchell-Herzfeld, S. (2013). Organizational climate and burnout among home visitors: Testing mediating effects of empowerment. *Children and Youth Services Review, 35*(4), 594-602.
doi:10.1016/j.chilyouth.2013.01.011
- Lewandowski, C. A. (1998). Retention outcomes of a public child welfare long-term training program. *Professional Development: The International Journal of Continuing Social Work Education, 1*(2), 38-46.
- Li, A., Early, S. F., Mahrer, N. E., Klaristenfeld, J. L., & Gold, J. I. (2014). *Group cohesion and organizational commitment: Protective factors for nurse residents' job satisfaction, compassion fatigue, compassion satisfaction, and burnout*. United States: W.B. Saunders.
doi:10.1016/j.profnurs.2013.04.004
- Li, A., Early, S. F., Mahrer, N. E., Klaristenfeld, J. L., Gold, J. I., Rossi, A., et al. (2012). *Group cohesion and organizational commitment: Protective factors for nurse residents' job satisfaction, compassion fatigue, compassion satisfaction, and burnout*
doi:10.1016/j.profnurs.2013.04.004
- Linley, P. A. & Joseph, S. (2007). Therapy work and therapists' positive and negative well-being. *Journal of Social and Clinical Psychology, 26*(3), 385-403. doi:
10.1521/jscp.2007.26.3.385
- Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health, 11*(3), 255-265. doi:10.1080/09638230020023642
- Lyons-Ruth, K., & Melnick, S. (2004). Dose-response effect of mother-infant clinical home visiting on aggressive behavior problems in kindergarten. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*(6), 699-707.

- MacRitchie, V., & Leibowitz, S. (2010). Secondary traumatic stress, level of exposure, empathy and social support in trauma workers. *South African Journal of Psychology*, 40(2), 149-158.
- Maertz, C. P., Griffith, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, 28, 1059 – 1075.
- Manz, P. (2012). Home-based Head Start and family involvement: An exploratory study of the associations among home visiting frequency and family involvement dimensions. *Early Childhood Education Journal*, 40(4), 231-238.
- Maris, M. A. (2013). *Examination of the impact of race-related stress and culture-specific coping on burnout and compassion fatigue in black nursing assistants* (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI Number: 3575423).
- Marshall, C. & Rossman, G. B. (2011). *Designing qualitative research* (5th Ed.). Thousand Oaks, CA: Sage.
- Martin, U., & Schinke, S. P. (1998). Organizational and individual factors influencing job satisfaction and burnout of mental health workers. *Social Work in Health Care*, 28(2), 51-62. doi:10.1300/J010v28n02_04
- Maslach, C. (2001). What have we learned about burnout and health? *Psychology & Health*, 16(5), 607-611. doi:10.1080/08870440108405530
- Maslach, C. & Leiter, M. P. (1997). *The truth about burnout*. San Francisco, CA: Jossey-Bass.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498-512.

- Maslach, C., Schaufli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- Maunder, R. G., Lancee, W. J., Balderson, K. E., Bennett, J. P., Borgundvaag, B., Evans, S., ... Wasylenki, D. A. (2006). Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerging Infectious Diseases*, 12(12), 1924-1932.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3(1), 131-149.
- McCurdy, K., & Daro, D. (2001). Parent involvement in family support programs: An integrated theory. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 50(2), 113-121.
- McKim, L., & Smith-Adcock, S. (2014). Trauma counsellors' quality of life. *International Journal for the Advancement of Counselling*, 36(1), 58.
- McFarlane, E., Burrell, L., Fuddy, L., Tandon, D., Derauf, D. C., & Leaf, P. (2010). Association of home visitors' and mothers' attachment style with family engagement. *Journal of Community Psychology*, 38(5), 541-556.
- Melamed, S., Kushnir, T., & Shirom, A. (1992). Burnout and risk factors for cardiovascular diseases. *Behavioral Medicine*, 18(2), 53-60. doi:10.1080/08964289.1992.9935172
- Mena, K. C., & Bailey, J. D. (2007). The effects of the supervisory working alliance on worker outcomes. *Journal of Social Service Research*, 34(1), 55-65.
doi:10.1300/J079v34n01_05

- Mikulincer, M. & Shaver, P.R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford.
- Miles, M. B., Huberman, A. M., & Saldana, J. S. (2014). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: Sage.
- Miller, J. F. (2011). Burnout and its impact on good work in nursing. *Journal of Radiology Nursing*, 30(4), 146-149. doi:<http://dx.doi.org/10.1016/j.jradnu.2011.07.004>
- Mor Barak, M. E., Levin, A., Nissly, J. A., & Lane, C. J. (2006). Why do they leave? Modeling child welfare workers' turnover intentions. *Children and Youth Services Review*, 28(5), 548-577.
- Mor Barak, M. E., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and metaanalysis. *Social Service Review*, 75(4), 625-661.
- Mor Barak, A., Spielberger, J., & Gitlow, E. (2014). The challenge of relationships and fidelity: Home visitors' perspectives. *Children and Youth Services Review*, 42, 50-58.
- Muthén, L.K., & Muthén, B.O. (2012). *Mplus Version 7* [Software]. Los Angeles, CA: Author.
- National Association of Social Workers. (2008). *Code of Ethics of the National Association of Social Workers*. Retrieved from <http://www.socialworkers.org/pubs/code/code.asp>
- National Center on Parent, Child, and Community Engagement (n.d.). *Head Start and Early Head Start relationship-based competencies*. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. Retrieved from <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/family/foundations/ohs-rbc.pdf>

- National Child Traumatic Stress Network, Secondary Traumatic Stress Committee. (2011). *Secondary traumatic stress: A fact sheet for child-serving professionals*. Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress.
- Nelson-Gardell, D. (2003). Childhood abuse history, secondary traumatic stress, and child welfare workers. *Child Welfare*, 82(1), 5.
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practice in Mental Health*, 6(2), 57-68.
- Nievar, M. A., Van Egeren, L. A., & Pollard, S. (2010). A meta-analysis of home visiting programs: Moderators of improvements in maternal behavior. *Infant Mental Health Journal*, 31(5), 499-520.
- Office of Planning, Research, and Evaluation (2006). *Findings from the survey of Early Head Start programs: Communities, programs, and families*. Retrieved from <http://www.acf.hhs.gov/programs/opre/resource/findings-from-the-survey-of-early-head-start-programs-communities-programs>
- Padgett, D. K. (2008). *Qualitative methods in social work research* (2nd Ed.). Thousand Oaks, CA: Sage.
- Pardess, E., Mikulincer, M., Dekel, R., & Shaver, P. R. (2013). Dispositional attachment orientations, contextual variations in attachment security, and compassion fatigue among volunteers working with traumatized individuals. *Journal of Personality*. Advance online publication. doi: 10.1111/jopy.12060

- Paris, R., & Dubus, N. (2005). Staying connected while nurturing an infant: A challenge of new motherhood. *Family Relations*, 54(1), 72-83.
- Parlakian, R. & Seibel, N. L. (2001). *Being in charge: Reflective leadership in infant/family programs*. Washington, D. C.: Zero to Three.
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26(6), 558-565. doi:10.1037/0735-7028.26.6.558
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York, NY: W.W. Norton & Co.
- Peterson, C. A., Zhang, D., Roggman, L., Green, B., Chazan Cohen, R., Atwater, J. B., McKelvey, L., & Korfmacher, J. (n.d.). *Family participation and involvement in Early Head Start home visiting services: Relations with longitudinal outcomes. Executive Summary*. Retrieved from:
http://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2013/earlyheadstartevaluationexecutivesummarypdf.pdf
- Pines, A. M. (2004). Adult attachment styles and their relationship to burnout: a preliminary, cross-cultural investigation. *Work & Stress: An International Journal of Work, Health, & Organizations*, 18(1), 66-80.
- Pines, A. M., & Aronson, E. (1988). *Career burnout: Causes and cures*. New York, NY: Free Press.
- Prevalence of Individual Adverse Childhood Experiences (2014). Retrieved July 9, 2014 from <http://www.cdc.gov/violenceprevention/acestudy/prevalence.html>

- Office of Head Start. (2014). *Program information report* [Data file]. Retrieved from <https://hses.ohs.acf.hhs.gov/jssso/SSOLogin?appurl=http%3A%2F%2Fhsesas21.smdi.com%2Fpir%2Fhome&appid=Head+Start+Enterprise+System+-+PIR+FOIA#hsesas21.smdi.com#80>
- Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior, 77*(2), 168-185.
doi:<http://dx.doi.org/10.1016/j.jvb.2010.04.006>
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Raikes, H., Green, B. L., Atwater, J., Kisker, E., Constantine, J., & Rachel Chazan-Cohen. (2006). Involvement in early head start home visiting services: Demographic predictors and relations to child and parent outcomes. *Early Childhood Research Quarterly, 21*(1), 2-24. doi:[10.1016/j.ecresq.2006.01.006](https://doi.org/10.1016/j.ecresq.2006.01.006)
- Ratliff, N. (1988). Stress and burnout in the helping professions. *Social Casework, 69*(3), 147-154.
- Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255-267.
- Rogman, L. A., Cook, G. A., Peterson, C. A., & Raikes, H. H. (2008). Who drops out of early head start home visiting programs? *Early Education and Development, 19*(4), 574-599.
doi:[10.1080/10409280701681870](https://doi.org/10.1080/10409280701681870)

- Roggman, L. A., Boyce, L. K., Cook, G. A., & Jump, V. K. (2001). Inside home visits: A collaborative look at process and quality. *Early Childhood Research Quarterly, 16*(1), 53-71. doi:<http://dx.doi.org/10.1016/S0885-2006%2801%2900085-0>
- Rotabi, K. S. (2007). Ecological theory origin from natural to social science or vice versa? A brief conceptual history for social work. *Advances in Social Work, 8*(1), 113-129.
- Rupert, P. A., & Morgan, D. J. (2005). Work setting and burnout among professional psychologists. *Professional Psychology: Research and Practice, 36*(5), 544-550. doi:10.1037/0735-7028.36.5.544
- Ryff, C., Almeida, D., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C....Williams, D. (2011). National Survey of Midlife Development in the United States (MIDUS II), 2004-2006. Ann Arbor, MI: Inter-university Consortium for Political and Social Research; 2011. Based on: Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: implications for the mental health of health workers?. *Clinical psychology review, 23*(3), 449-480.
- Saleebey, D. (1996). The strengths perspective in social work practice: Extensions and cautions. *Social Work, 41*(3), 296-305. doi:10.1093/sw/41.3.296
- Santos, R. G. (2005). Development and validation of a revised short version of the Working Alliance Inventory. Unpublished doctoral dissertation. Winnipeg, Manitoba: University of Manitoba. Retrieved from: <https://health.utah.gov/ohv/Documents/WAI-Working%20Alliance%20Inventory%20HV%20Final.pdf>.

- Scanlan, J. N., Meredith, P., & Poulsen, A. A. (2013). Enhancing retention of occupational therapists working in mental health: Relationships between wellbeing at work and turnover intention. *Australian Occupational Therapy Journal*, 60(6), 395-403.
- Schafer, J. L. & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2) 147-177. DOI: 10.1037//1082-989X.7.2.147
- Schauben, L., & Frazier, P. A. (1995). Vicarious trauma. *Psychology of Women Quarterly*, 19(1), 49.
- Schaufeli, W., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. CRC Press.
- Schmidt, S., & Ewen, D. (2012). *Supporting our youngest children: Early Head Start programs in 2010* (Brief No. 11). Washington, D.C.: Center for Law and Social Policy. Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/EHS-Trend-Analysis-Final.pdf>
- Shahmoon Shanok, R., Gilkerson, L., Eggbeer, L., & Fenichel, E. (1995). *Reflective supervision: A relationship for learning*. Washington, DC: Zero to Three.
- Shanfelt, T. D., West, C., Zhao, X., Novotny, P., Kolars, J., Haberman, T., & Sloan, J. (2005). Relationship between increased personal well-being and enhanced empathy among internal medicine residents. *Journal of General Internal Medicine*, 20(7), 559-564.
- Sheen, K., Slade, P., & Spiby, H. (2013). An integrative review of the impact of indirect trauma exposure in health professionals and potential issues of salience for midwives. *Journal of Advanced Nursing*, 70(4), 729-743.
- Shim, M. (2010). Factors influencing child welfare employee's turnover: Focusing on organizational culture and climate. *Children and Youth Services Review*, 32(6), 847-856.

- Shirom, A. (1989). *Burnout in work organizations*. Oxford, England: John Wiley & Sons.
- Shirom, A. (2003). Job-related burnout: A review. In J.C Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology*, (pp. 245-264). Washington, DC: American Psychological Association.
- Shirom, A., & Melamed, S. (2006). A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*, *13*(2), 176-200. doi:10.1037/1072-5245.13.2.176
- Shonkoff, J. (2010). Building a new biodevelopmental framework to guide the future of early childhood policy. *Child Development*, *81*, 357-367.
- Showalter, S. E. (2010). Compassion fatigue: What is it? Why does it matter? Recognizing the symptoms, acknowledging the impact, developing the tools to prevent compassion fatigue, and strengthen the professional already suffering from the effects. *American Journal of Hospice & Palliative Medicine*, *27*(4), 239-242.
doi:10.1177/1049909109354096
- Sierua, S., Brand, T., & Jungmann, T. (2012). Parental involvement in home visiting; Interpersonal predictors and correlates. *Infant Mental Health Journal*, *33*(5), 489-495.
- Spieker, S., Nelson, D., DeKlyen, M., & Staerkel, F. (2005). Enhancing early attachments in the context of early head start: Can programs emphasizing family support improve rates of secure infant-mother attachments in low-income families? *Enhancing early attachments: Theory, research, intervention, and policy* (pp. 250-275). New York, NY, US: Guilford Press.
- Spieker, S.J., Solchany, J., McKenna, M., DeKlyen, M., & Barnard, K.E. (2000). The story of mothers who are difficult to engage in prevention programs. In J.D. Osofsky & H.E.

- Fitzgerlad (Eds.), *WAIMH Handbook of Infant Mental Health* (pp. 173-209). New York, NY: John Wiley & Sons, Inc.
- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare, 90*(6), 149.
- Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss & Trauma, 12*(3), 259-280. doi:10.1080/15325020701238093
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior, 76*, 487-506. doi:10.1016/j.jvb.2010.01.003
- Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. In C.R. Figley (Ed.), *Treating compassion fatigue* (pp.107-122). New York, NY: Brunner Routledge.
- Stamm, B.H. (2010). *The concise ProQOL manual*. Pocatello, ID: ProQOL.org. Retrieved from http://www.proqol/uploads/ProQOL_Concise_2ndEd_12-2010.pdf.
- Stamm, B.H. & Figley, C.R. (2009, November). *Advances in the Theory of Compassion Satisfaction and Fatigue and its Measurement with the ProQOL 5*. Presented at the International Society for Traumatic Stress Studies, Atlanta, GA.
- Strolin-Goltzman, J., Auerbach, C., McGowan, B. G., & McCarthy, M. L. (2008). The relationship between organizational characteristics and workforce turnover among rural, urban, and suburban public child welfare systems. *Administration in Social Work, 32*(1), 77-91.

- Sweet, M. A., & Appelbaum, M. L. (2004). Is home visiting an effective strategy? A meta-analytic review of home visiting programs for families with young children. *Child Development, 75*(5), 1435-1456.
- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th Ed.). Boston, MA: Pearson.
- Tandon, S. D., Mercer, C. D., Saylor, E. L., & Duggan, A. K. (2008). Paraprofessional home visitors' perspectives on addressing poor mental health, substance abuse, and domestic violence: A qualitative study. *Early Childhood Research Quarterly, 23*(3), 419-428. doi:10.1016/j.ecresq.2008.02.002
- Tandon, S. D., Parillo, K., Mercer, C., Keefer, M., & Duggan, A. K. (2008). Engagement in paraprofessional home visitation: Families' reasons for enrollment and program response to identified reasons. *Women's Health Issues, 18*(2), 118-129.
- Teddlie, C. & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(1), 77 – 100. doi: 10.1177/2345678906292430
- Thompson, I. A., Amatea, E. S., & Thompson, E. S. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling, 36*(1), 58.
- Toker, S. & Biron, M. (2012). Job burnout and depression: Unravelling their temporal relationship and considering the role of physical activity. *Journal of Applied Psychology, 93*(3), 699-710.
- Tosone, C., Bettman, J. E., Minami, T., & Jaspersen, R. A. (2010). New York City social workers after 9/11: Their attachment, resiliency, and compassion fatigue. *International Journal of Emergency Mental Health, 12*(2), 103-116.

- Tosone, C., Nuttman-Schwartz, O., & Stephens, T. (2012). Sharded trauma: When professional is personal. *Clinical Social Work, 40*, 231-239.
- Townsend, S. M., & Campbell, R. (2009). Organizational correlates of secondary traumatic stress and burnout among sexual assault nurse examiners. *Journal of Forensic Nursing, 5*, 97-106.
- Turnover. (n.d.). In Merriam-Webster's online dictionary. Retrieved from <http://www.merriam-webster.com/dictionary/turnover>
- Um, M. Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators, and job satisfaction: A stress-strain-outcome model and empirical test. *Social Work Research, 22*(2), 100–115.
- Underwood, L. G. (2011). The Daily Spiritual Experiences Scale: Overview and results. *Religions, 2*(1), 29-50.
- VanVoorhis, C.R. & Morgan, B. L. Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology, 3*(2), 43-50.
- Villardaga, R., Luoma, J. B., Hayes, S. C., Pistorello, J., Levin, M. E., Hildebrandt, M. J., ... Bond, F. (2011). Burnout among the addiction counseling workforce: The differential roles of mindfulness and values-based processes and work-site factors. *Journal of Substance Abuse Treatment, 40*(4), 323-335. doi:10.1016/j.jsat.2010.11.015
- Vittoria, E. M. (2011). *The relationship between burnout and the work environment for paraprofessionals* (Doctoral dissertation). Retrieved from ProQuest. (UMI Number 3501782).
- Vogel, C. A., Boller, K., Xue, Y., Blair, R., Aikens, N., Burwisk, A.,... Stein, J. (2011). *Learning as we go: A first snapshot of Early Head Start programs, staff, families, and children* (OPRE Report No. 2011-7). Washington, D.C.: Office of Planning, Research,

- and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Vogel, C. A., Caronongan, P., Thomas, J., Bandel, E., Xue, Y., Henke, J., Aikens, N., Boller, K., & Murphy, L. (2015). *Toddlers in Early Head Start: A portrait of 2-year-olds, their families, and the programs serving them* (OPRE Report #2015-10). Washington, D.C.: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Wagaman, M. A., & Geiger, J. M. (2012, November). *The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers*. Paper presented at the Annual Meeting of the Council on Social Work Education, Washington, D.C.
- Wagner, S. L., Forer, B., Cepeda, I. L., Goelman, H., Maggi, S., D'Angiulli, A.,... Grunau, R. (2013). Perceived stress and Canadian early childcare educators. *Child & Youth Care Forum, 42*(1), 53-70. doi:10.1007/s10566-012-9187-5
- Wagner, M., Spiker, D., Linn, M. I., Gerlach Downie, S., & Hernandez, F. (2003). Dimensions of parental engagement in home visiting programs: Exploratory study. *Topics in Early Childhood Special Education, 23*(4), 171-187.
- Wakefield, A. (1996). Nurses responses to death and dying: A need for relentless self-care. *International Journal of Palliative Nursing, 6*(5), 245-250.
- Walker, C. (2014). *Early Head Start participants, programs, families and staff in 2013* (Fact Sheet). Retrieved from the center for Law and Social Policy at <http://www.clasp.org/resources-and-publications/publication-1/EHSpreschool-PIR-2013-Fact-Sheet.pdf>

- Wasik, B. H. (1993). Staffing issues for home visiting programs. *The Future of Children*, 3(3), 140-157.
- Wasik, B., Bryant, D. M. & Lyons, C. M. (1990). *Home visiting: Procedures for helping families*. Newbury Park, CA: Sage.
- Weatherston, D., Weigand, R. F., & Weigand, B. (2010). Reflective supervision: Supporting reflection as a cornerstone for competency. *Zero to Three*, 31(2), 22-30.
- Wechsler, N. (2015). Developing the home visiting workforce. In L. Roggman & N. Cardia (Eds.) *Home visitation programs: Preventing violence and promoting healthy early child development* (pp. 63-84). Springer International Publishing.
- Wei, M. R., Mallinckrodt, D. W., & Vogel, D. L. (2007). The experiences in close relationship scale (ECR)-short form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88(2), 187-204. doi:10.1080/00223890701268041
- Weinfeld, N. S., Sroufe, A., Egeland, B., & Carlson, E. (2008). Individual differences in infant-caregiver attachment: Conceptual and empirical aspects of security. In J. Cassidy & P. Shaver (Eds.), *The handbook of attachment: Theory, research, and clinical applications* (pp. 78-101). New York, NY: Guilford Press.
- West, A. (2015). Associations among adult attachment style, burnout, and compassion fatigue in health and human service workers: A systematic review. *Journal of Human Behavior in the Social Environment*, 25(6), 571-590.
- West, A., Berlin, L., & Jones Harden, B. (2013). [Partners for Parenting Early Head Start home visitor survey]. Unpublished raw data.
- West, A. & Jones Harden, B. (2015, January). Mindful moments: Using reflective practice and reflective supervision to enhance infant and early childhood home visitation. *Maternal, Infant, and Early Childhood Home Visiting Technical Assistance Coordinating Center E-Newsletter*. Retrieved

from <http://campaign.r20.constantcontact.com/render?ca=ae34d8eb-dafb-4992-b539-ef009d36a947&c=7d556780-75e0-11e3-bc76-d4ae527b77f8&ch=7dd34a10-75e0-11e3-bd2f-d4ae527b77f8>

- Whippen, D. A., & Canellos, G. P. (1991). Burnout syndrome in the practice of oncology: Results of a random survey of 1,000 oncologists. *Journal of Clinical Oncology*, 9(10), 1916-1920.
- Whitaker, R. C. (January, 2014). *Mindfulness and workplace functioning among home visitors in Head Start*. Paper presented at the National Summit on Quality in Home Visiting Programs in Washington, DC.
- Whitaker, R. C., Becker, B. D., Herman, A. N., & Gooze, R. A. (2013). The physical and mental health of Head Start staff: The Pennsylvania Head Start Staff Wellness Survey, 2012. *Preventing Chronic Disease: Public Health Research, Practice, and Policy*, 10(31), 130-171.
- Whitaker, R.C., Dearth-Wesly, T., & Gooze, R. (2015). Workplace stress and the quality of teacher-children relationships in Head Start. *Early Childhood Research Quarterly*, 30, 57-69.
- Zerach, G. (2013). Compassion fatigue and compassion satisfaction among residential child care workers: The role of personality resources. *Residential Treatment for Children & Youth*, 30, 72-91.