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An Exploration of the Relationship between Child Welfare Workers' Ambivalent Sexism and Beliefs about Father Involvement

by

Katrina Brewsaugh

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Social Work School of Social Work College of Behavioral and Community Sciences University of South Florida

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DEDICATION

To my father: who showed me that men are nurturing, loving, empathetic, and caring. Your love and support has given me the confidence to achieve my full potential.

ACKNOWLEDGEMENTS

This work could not have been accomplished without the support and guidance of so many people. Firstly, I want to thank the many child welfare workers who graciously participated in the study. Your work is demanding, difficult, and vital and the gift of your time is truly appreciated. Next, I want to thank the members of my committee for their time and expertise over the last three years. To my chair, Dr. Alison Salloum, thank you for helping me stay on track and for your encouragement, especially when it looked like this entire process would fall apart. To Dr. Anne Strozier: for getting me through the proposal process and staying on my committee in your retirement. To Dr. David Kondrat: for the wonderful conversation both related, and unrelated, to my dissertation. To Dr. Joseph Vandello: for your knowledge and feedback. I also want to thank Dr. Katherine Masyn for her consultation on the analysis. I truly would not be here were it not for your generosity. Thank you to my mentor, Dr. Fotena Zirps, for mandating I apply to a doctoral program and for your support since the very beginning. To my parents, thank you for always expecting the best of me (and only sometimes wondering aloud where such a nerdy child came from). Finally, to my wonderful husband, Owen. You have been the most supportive partner through the last six years of excitement, anxiety, and frustration. You've let me cry, made me laugh, and listened patiently to my rants. Thank you for always being there.

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ABSTRACT

Research over the last few decades has consistently found that fathers are not routinely included in the provision of child welfare services. The current study examined whether ambivalent sexism on the part of child welfare workers was related to their beliefs about involving fathers. Ambivalent sexism theory posits that gender stereotypes include subjectively positive beliefs in addition to hostile beliefs that both serve to perpetuate patriarchal systems. Participants (N = 490) were currently front-line child welfare workers in the United States who completed an online survey assessing ambivalent sexism and beliefs about father involvement in child welfare cases. Ambivalent sexism was assessed using the Ambivalent Sexism Inventory and the Ambivalence Toward Men Inventory. The Dakota Father Friendly Assessment was modified to assess beliefs about father involvement in child welfare. Latent class analysis was used to empirically derive four sexism profiles. Results indicated that participants with profiles suggesting less sexist beliefs had more positive attitudes about father involvement and had a lower preference for working solely with mothers. Sexism profile was not related to participants' stated father involvement behaviors such as conducting home visits when fathers are present, including fathers in case planning discussions, and recruiting fathers or paternal relatives as placement options. Implications for social work and child welfare practice include developing training that increases knowledge of fathers' importance and increases workers' comfort in providing services to men.

CHAPTER ONE:

INTRODUCTION

For several decades, child welfare researchers and advocates have found that fathers are often ignored or excluded by child welfare workers. Yet, little investigation has been done to determine why this practice occurs. This study will investigate the relationship between child welfare workers' endorsement of sexism and their beliefs about appropriate roles of fathers.

The traditional family in post-industrialization Western culture is one in which the father works outside the home as breadwinner and the mother stays home to care for the children and perform domestic tasks (Franck, 2001). Our culture's notions of nurturing and parenting are nearly synonymous with that of mothering (Daniel & Taylor, 1999; Silverstein, 1996). Daniel and Taylor (1999) assert that there is generally a universally accepted concept of 'mother' while the role of 'father' is not so clearly structured. Indeed, parenting expectations of fathers are sometimes so low that a father who shows any interest in a meaningful relationship with his children is viewed as an exceptional parent. Fathers are more likely than mothers to be praised by others for their investment in parenting, even fathers with low levels of involvement (Deutsch & Saxon, 1998).

Traditional concepts of family have shifted over the last half-century as the proportion of women in paid employment has expanded. As the number of families in which both parents work (either by choice or economic necessity) has grown, societal norms have increasingly promoted the involved father, one who plays an integral role in the lives of his children (Brown, Callahan, Strega, Walmsley, & Dominelli, 2009). More fathers are becoming the primary

caretakers for children as rates of stay-at-home and single parent fathers have been on the rise since the 1990s (Brescoll & Uhlmann, 2005; Fischer & Anderson, 2012; Kramer & Kramer, 2016; Shapiro & Krysik, 2010). Prevalence of research on fathers has increased since the 1990s as well. More articles reporting research about fathers were published from 2004 through 2008 than from 1961 to 1987, though such articles accounted for only 24% of the publications (Shapiro & Krysik, 2010). Research on fathers has found that father engagement reduces externalizing behaviors in boys and internalizing behaviors in girls (Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). Compared to their peers from intact families, adolescents whose father is absent are more likely to engage in sexual activity at a younger age, have lower self-esteem, and lower academic achievement (East, Jackson, & O'Brien, 2006). Finally, there is some evidence that the effects of father engagement are stronger for children from non-intact families (Flouri & Buchanan, 2003).

A maternal service focus also ignores the potential assets and risks that fathers may bring to children's care. Involving fathers in child welfare services can reduce children's time in foster care, increase children's reunification with a parent or other relative, and protect against future maltreatment (Burrus, Green, Worcel, Finigan, & Furrer, 2012; Coakley, 2013; Malm, Zielewski, & Chen, 2008; Malm & Zielewski, 2009; Wingrove, Beal, & Weisz, 2016). Not engaging fathers, particularly if they are left out of assessments, can also increase the risk of child maltreatment or death. Reviews of child abuse fatalities have found that biological fathers and unrelated father-figures (e.g., mother's paramour) can increase children's risk of death due to child abuse (Douglas, 2017; Klevens & Leeb, 2010; Radhakrishna, Bou-Saada, Hunter, Catellier, & Kotch, 2001), though others have found their risk to be similar to that of mothers (Dixon,

2011; Douglas, 2017). The conflicting findings from the above studies imply that fathers, like mothers, are not a monolithic group comprised solely of risks – or benefits – to children.

Despite the growing interest in and recognition of fathers, child welfare services continue to operate with a maternal focus. The federal Child and Family Services Reviews (CFSR) found that in most states, child welfare services are delivered solely to mothers (National Child Welfare Resource Center for Family-Centered Practice, 2002). In many cases, even when fathers are known to the system, they often have little to no contact with their child's case worker (Brown et al., 2009; O'Donnell, 2001). The maternal focus in child welfare has led to what some have called a *de facto* discrimination against fathers (Jaffe, 1983; Lazar, Sagi, & Fraser, 1991). Even when the perpetrators of child maltreatment are fathers, services frequently remain focused on mothers, denying fathers similar chances at rehabilitation while blaming women for the actions of men (Alaggia, Gadalla, Shlonsky, Jenney, & Daciuk, 2015; Skramstad & Skivenes, 2015).

Several authors have speculated as to the reasons why fathers are not engaged by child welfare workers. Systematic reviews of child welfare research and texts have found that fathers are often absent or portrayed negatively (Clapton, 2009) and that the terms *parents* or *families* are used in research when in reality no fathers were included (Risley-Curtiss & Heffernan, 2003; Strega et al., 2008). Issues such as race, class, and gender may influence workers' attitudes towards fathers on their cases. Families involved in child welfare are disproportionately poor and non-white while child welfare workers, particularly front line staff, are predominately female, white, and middle class, (Brown et al., 2009; O'Hagan, 1997). Scourfield (2001) suggested that the discourses social workers use to describe men are often negative or completely neutral. Unfortunately, much of the research in this area has focused on providing evidence of a maternal bias (Bellamy, 2009; Clapton, 2009; Lazar et al., 1991; Shapiro & Krysik, 2010; Strega

et al., 2008) or offering suppositions as to why such a bias exists (Brown et al., 2009; Franck, 2001; O'Hagan, 1997; Risley-Curtiss & Heffernan, 2003). The reasons why child welfare workers marginalize men have received little rigorous study. The proposed research investigates whether there is a relationship between child welfare workers' sexism and their attitudes towards the role of fathers.

Theoretical Framework

The proposed study will be guided by Ambivalent sexism theory (AST). Glick and Fiske (1996) theorize that sexism is a prejudice uniquely characterized by ambivalence rather than antipathy. Gender stereotypes are not uniformly negative or positive. Ambivalent sexism theory posits that paternalism, gender differentiation, and heterosexual relations produce a situation in which the dominant group (men) are dependent upon the subordinate group (women; Glick et al., 2004), creating in both genders hostile and benevolent attitudes towards the other (Lee, Fiske, & Glick, 2010).

When directed towards women, hostile sexism (HS) legitimizes men's dominance by viewing women as inferior while benevolent sexism (BS) idealizes the traditional female role (Glick, Diebold, Bailey-Werner, & Zhu, 1997). When directed towards men, hostility toward men (HM) reflects women's resentment of male dominance while benevolence toward men (BM) reflects maternalism (Lee et al., 2010). Similar to the way in which paternalism uses women's assumed "weaknesses" to justify men's roles as providers and protectors, maternalism justifies women's role as caregiver and nurturer due to men's assumed incompetence in domestic life (e.g., men cannot cook, clean, or care for babies) (Glick & Fiske, 1999; Lee et al., 2010). Benevolent sexism should not be viewed as any less sexist than hostile sexism. Benevolent sexism serves to maintain the status quo by emphasizing women's positive traits as being aligned

with their subordinate role and allowing women to criticize men without directly challenging male dominance (Lee et al., 2010).

Unlike many theories of sexism, AST incorporates sexism towards men as well as women. As such, it has two related standardized tools to measure sexism: the Ambivalent Sexism Inventory (ASI) and the Ambivalence toward Men Inventory (AMI). Created by Glick and Fiske (1996, 1999), the ASI measures ambivalence towards women while the AMI measures ambivalence towards men. Each scale contains subscales measuring hostile and benevolent sexism (referred to as HS and BS on the ASI and HM and BM on the AMI). Studies have found a consistent partial correlation between hostile and benevolent sexism (Glick et al., 2004, 1997, Glick & Fiske, 1996, 1999) suggesting that the two concepts work in concert to enforce gendered social norms. A large-scale, nation survey in New Zealand found that most people endorse HS and BS at similar levels, again reflecting an internalized ambivalence in attitudes towards women (Sibley & Becker, 2012). However, using latent class analysis to determine typologies of sexism, Sibley and Becker (2012) found two small groups of people for whom HS and BS were uncorrelated. These typologies reflected individuals who, rather than being ambivalent, were either singularly hostile or benevolent in their attitudes toward women. The proposed study will use a similar method to expound on previous work by using both the ASI and AMI to identify typologies of sexism inclusive of both genders.

Sexism and Gendered Parent Roles

Two studies (Gaunt, 2013a, 2013b) using the same participant data explored the relationship between ambivalent sexism and attitudes towards gendered parenting roles. A convenience sample of 311 Israeli adults completed the ASI and AMI and responded to vignettes portraying the primary breadwinner or child caregiver as either the mother or father. BM was

related to negative evaluations of the primary caregiving father while HM was related to positive evaluations (Gaunt, 2013a). This is consistent with the theoretical basis of HM representing resentment of patriarchal power. Benevolent sexism (BS) was related to positive perceptions of primary caregiving mothers (Gaunt, 2013a). In the second study, Gaunt (2013b) found that individuals who endorsed egalitarian views of gender (low scores on BS and HS) were found to evaluate *non*-traditional parents more positively than traditional parents while the opposite was found for individuals endorsing traditional views of gender. A third study of college students found that those that endorsed BS were more likely to also endorse that women have the primary responsibility for childcare (Ogletree, 2014).

As the number of mothers in paid employment has grown since the 1970s, a large body of research investigating perceptions of working parents has emerged. The majority of this research has focused on employed mothers, though a growing number of researchers have investigated employed and stay-at-home fathers. Earlier studies found non-traditional parents were repeatedly evaluated less favorably than traditional parents (Brescoll & Uhlmann, 2005; Etaugh & Folger, 1998; Rosenwasser, Gonzales, & Adams, 1985). More recent studies have found a greater acceptance of non-traditional parents as evaluations have become less negative or, in some cases, positive when compared with traditional parents (Coleman & Franiuk, 2011; Gaunt, 2013b). When examined chronologically, these studies appear to show a trend towards more egalitarian ideals of parenting. However, most of the studies use undergraduate students as participants, which may not generalize to the broader society.

The few studies that have examined parenting roles using parenting couples as participants have found that gendered parenting expectations remain salient. For many of these couples it was seen as normal and appropriate for mothers to perform the majority of child care

tasks and for fathers to provide child care at mothers' discretion (Pedersen, 2012; Walzer, 1996). Comments from co-workers, friends, and family may pressure couples into enacting traditional gender roles in order to avoid criticism (Deutsch & Saxon, 1998). Gender roles have a tendency to become more traditional and differentiated in couples after the birth of their first child, regardless of prior egalitarian views of parenting (Liss, Schiffrin, Mackintosh, Miles-McLean, & Erchull, 2013; Walzer, 1996). Even when both parents work, women continue to perform more of the child and home care tasks (Liss et al., 2013; Poeschl, 2008).

Purpose of the Study

The specific purpose of the study is to determine if there is a relationship between child welfare workers' sexism and their beliefs about the appropriate role for fathers. The goal of the study is to develop an understanding of the factors that have led to the historical and continuing maternal focus in child welfare services. Sexism on the part of child welfare workers has been theorized by others to be one possible factor (Brown et al., 2009; Jaffe, 1983; O'Hagan, 1997; Risley-Curtiss & Heffernan, 2003) and the study represents an effort to determine if this theory has merit. This study would be the first to apply AST to child welfare practitioners. Ambivalent sexism theory provides one possible model by which child welfare workers view the mothers and fathers with whom they work. Workers may view fathers as a threat to children's safety or as a resource that can help stabilize the family. Traditional gender roles view women as more nurturing and better able to care for children than men. Workers may engage primarily with women based on these benevolent sexist beliefs and avoid men based on hostile sexist beliefs. The connection between ambivalent sexism and beliefs about parent roles has only recently been explored (Gaunt, 2013a); this study will also further our understanding of the connections between sexism and parent roles.

Research Questions and Hypotheses

The proposed study examines three research questions. Each question, along with corresponding hypotheses, are below and can be found in Appendix A.

Research Question 1: To what degree do child welfare workers (CCWs) endorse ambivalent sexism?

Hypothesis 1.1: CWWs will more strongly endorse HM than BM.

Hypothesis 1.2: CWWs will more strongly endorse BS than HS.

Hypothesis 1.3: CWWs will be more ambivalent towards men than women.

Research Question 2: To what degree do CWWs reflect a preference for interacting with mothers when providing services?

Hypothesis 2.1: CWWs score on the Staff Bias scale will be significantly lower than Staff Attitudes scale score, reflecting stronger preference for mothers over fathers.

Research Question 3: What is the relationship between CWWs sexism profile (i.e., latent class) and favorable attitudes towards father involvement in child welfare services?

Hypothesis 3.1: Strong endorsement of BS will be negatively correlated with favorable attitudes towards father involvement.

Hypothesis 3.2: Strong endorsement of ambivalence towards men will be negatively correlated with favorable attitudes towards father involvement.

Hypothesis 3.3: Non-sexists (low on all AMI/ASI subscales) will be positively correlated with favorable attitudes towards father involvement.

Study Implications

Until the field has a better understanding of the root causes behind workers' marginalization of fathers, effective interventions cannot be developed to rectify the problem. The results of this study have implications for social work and child welfare education and training. This study also extends previous research in several areas. Previous research on AST has primarily used college students, with some national or convenience samples of adults. This study is the first to examine ambivalent sexism specifically in child welfare workers. It also extends the work of Gaunt (2013a, 2013b) by investigating the relationship between ambivalent sexism and gendered expectations of parenting. Finally, the study is the first to use both the ASI and the AMI to develop more holistic typologies of sexism that incorporate attitudes toward both genders.

Definitions of Key Terms

To aid in ease of readability, the key terms are listed below along with their associated abbreviations and definitions.

- Ambivalent sexism theory (AST): Developed by Peter Glick and Susan Fiske (1997), this theory posits that sexism is comprised of both hostile and benevolent (qualitatively positive) beliefs that work in conjunction to maintain gender roles.
- Ambivalent Sexism Inventory (ASI): Developed by Glick and Fiske (1996) the ASI specifically measures ambivalence towards women. It contains two subscales, one each for benevolent and hostile sexism.
- Benevolent sexism (BS): Subscale of the ASI assessing benevolent sexism towards women. BS idealizes the traditional female role, emphasizing women's positive traits as being aligned with their subordinate role (Lee et al., 2010).

- Hostile sexism (HS): Subscale of the ASI assessing hostile sexism towards women. HS legitimizes men's dominance by viewing women as inferior and seeking to gain control over men (Glick et al., 1997).
- Ambivalence toward Men Inventory (AMI): Developed by Glick and Fiske (1999) the AMI specifically measures ambivalence towards men. It contains two subscales, one each for benevolent and hostile sexism.
- Benevolence toward men (BM): Subscale of the AMI assessing benevolent sexism towards men. BM reflects an admiration for men's dominant status and justifies men as deserving of women's care within the home (Glick et al., 1997).
- Hostility toward men (HM): Subscale of the AMI assessing hostile sexism towards men.

 HM reflects a resentment of men's social dominance while criticizing their abilities within the female-oriented domestic sphere (Glick et al., 1997).
- Dakota Father Friendly Assessment-Child Welfare (DFFA-CW): A modification of the Dakota Father Friendly Assessment (DFFA) originally developed for use in early childhood education programs (White, Brotherson, Galovan, Holmes, & Kampmann, 2011). Originally designed to assess the level of father-friendliness of an organization, the modified instrument used in this study assess the level of father-friendliness of individual respondents. The DFFA-CW modified and used three of the original instrument's five subscales.
- Staff Attitudes (Attitudes): Subscale of the DFFA-CW that assesses a child welfare worker's attitudes about father involvement in services.
- Staff Behaviors (Behavior): Subscale of the DFFA-CW that assesses a child welfare worker's self-reported engagement in actions that involve fathers in services.

- Staff Bias (Bias): Subscale of the DFFA-CW that assesses a child welfare worker's level of preference for or tendency to favor working with mothers over fathers.
- Child welfare workers (CCWs): Individuals who work with families involved with the child welfare agency. In the context of this study, the term refers to individuals whose work meets the study definition of a child welfare worker.

CHAPTER TWO:

LITERATURE REVIEW

The literature review is organized into three major areas of focus: 1) the differential treatment of mothers and fathers within the child welfare system, 2) the connection between gender stereotypes and role expectations of mothers and fathers, and 3) the applicability of Ambivalent sexism theory to understanding the issue of maternal focus in child welfare. However, a brief examination of the historical link between child welfare and social work is needed before delving into the review's major topics.

The concern for the protection and welfare of children was one of the central themes at the birth of the social work profession (Perry & Ellett, 2008; Stoesz, 2002). Indeed, it could be argued that child welfare's roots in social work are so deep that for most of its existence child welfare was viewed as a specialization of social work (Perry & Ellett, 2008; Scannapieco, Hegar, & Connell-Carrick, 2012). Social workers were key advocates leading to the passage of landmark child welfare legislation in the United States, including Aid to Dependent Children, child labor laws, the 1974 Child Abuse Prevention and Treatment Act, and the creation of the Children's Bureau (Schorr, 2000; Stoesz, 2002). The first four heads of the Children's Bureau were social workers (Scannapieco et al., 2012).

For nearly one hundred years, federal funding has flowed to states through the Children's Bureau to assist child welfare workers in obtaining social work degrees (Scannapieco et al., 2012). In the 1950s and 1960s, the majority of MSWs were employed by either public or private child welfare agencies (Perry & Ellett, 2008). A combination of political and workforce issues

from the 1980s onward led fewer social workers to choose child welfare practice (Scannapieco et al., 2012). Referred to as deprofessionalization (Perry & Ellett, 2008), child welfare workers are now more likely to hold a degree in a field other than social work. While exact proportions vary, around one-third of public child welfare workers have either a BSW or MSW (Barth, Lloyd, Christ, Chapman, & Dickinson, 2008; Dolan, Smith, Casanueva, & Ringe, 2011; Scannapieco et al., 2012). Only 13% of licensed social workers are employed in either public or private child welfare settings (Whitaker, Weismiller, & Clark, 2006a). The proportion of degreed social workers, regardless of licensure status, in child welfare now hovers just over 10% (Perry & Ellett, 2008; Whitaker et al., 2006a).

Despite the growing deprofessionalization, child welfare remains strongly tied to and influenced by its social work roots. Degreed social workers comprise the largest single group within child welfare, with the other two-thirds being divided amongst a varied number of fields (Dolan et al., 2011; Scannapieco et al., 2012). Educational funding from the Children's Bureau is limited to BSW and MSW degrees (Scannapieco et al., 2012). In addition, child welfare frequently employs social work research and methods. The case worker model used in child welfare is rooted in the social casework model at the heart of social work. This legacy can be found today in how media, the general public, and sometimes even researchers often refer to those who work in child welfare as 'social workers' regardless of educational background.

Given the historical and continuing connection between social work and child welfare, the literature in this review pulls from both mediums as appropriate. Not all social workers are child welfare workers or vice versa. However, the two populations overlap frequently in the literature such that limiting to only one runs the risk of leaving out pertinent information. The conflation of child welfare workers with social workers in the literature is such that articles use

the terms interchangeably (Brown et al., 2009; Jaffe, 1983; Wolins, 1983), focus specifically on social work education in their practice implications (Brown et al., 2009; Risley-Curtiss & Heffernan, 2003; Walmsley, Strega, Brown, Dominelli, & Callahan, 2009), or describe the population as 'social workers' without ever specifying a social work degree as an eligibility requirement (Lazar et al., 1991). For these reasons, the literature that follows includes research focused on social work involving children and families or on child welfare specifically.

Child Welfare and Fathers

Over the past few decades there has been a growing concern that child welfare workers have a tendency to ignore fathers – and men more generally – when working with families involved with child protection systems (Baum, 2016; Scourfield & Coffey, 2002). This tendency to favor mothers has been documented in the United States as well as in Western Europe and Canada. In the first seventeen states reviewed as part of the Child and Family Services Review (CFSR) it was found most states provided services solely to mothers (National Child Welfare Resource Center for Family-Centered Practice, 2002). A study of 132 known fathers with children involved in kinship care found that 68% had no contact with their case worker in the 12month study period (O'Donnell, 2001). When workers in Norway and England were asked what steps they would take after reviewing a short case vignette, only one-third stated they would speak with the non-resident father and one-fifth stated they would speak to the step-father that was living in the home (Skramstad & Skivenes, 2015). A review of cases referred to child welfare due to domestic violence found that only one-third of perpetrating fathers were contacted by workers, case records contained little information about fathers, and perpetrating fathers rarely received treatment to correct their behavior (Alaggia et al., 2015). Several other studies have found similar trends of little to no contact with fathers by case workers (Brown et al., 2009;

Franck, 2001; Lazar et al., 1991; Strega et al., 2008) leading to a maternal bias on the part of child welfare services and practitioners.

Maternal bias in child welfare has existed despite changing societal norms regarding the role expectations of fathers (Brown et al., 2009). The number of stay-at-home fathers increased from 4% of fathers living with their children in 1989 to 7% in 2012, with more of these fathers indicating caring for their family as their primary reason for staying at home (Parker & Livingston, 2016). In 2015, 16% of U.S. single parent households were headed by fathers, one-third of whom were never married to the mother of their children (US Census Bureau, 2016). Though most mothers involved in the child welfare system are unmarried, data from the National Survey of Child and Adolescent Well-Being (NSCAW) showed that 52% of children had some adult male caretaker in the home with 32% living with their biological father (Bellamy, 2009). A British census found that although 75% of child abuse referrals were for single mothers, 60% of the mothers had live-in male partners (O'Hagan, 1997). Thus, there is evidence that men are present in the lives of children involved in child welfare services even if those men are not being engaged in the process.

Fathers of children involved in child welfare services consistently reported their interactions with child welfare workers as challenging, though at times positive. Multiple qualitative studies of fathers' experiences with child welfare workers have found themes related to fathers feeling ignored or not listened to by workers or changes in behavior not being believed (Zanoni, Warburton, Bussey, & McMaugh, 2014); feeling that workers were uncaring and prejudiced against them (Coady, Hoy, & Cameron, 2013); viewing the system and services as biased against fathers (Icard, Fagan, Lee, & Rutledge, 2014); and having their ability to parent continually questioned (Dominelli, Strega, Walmsley, Callahan, & Brown, 2011). The fathers

interviewed in these studies uniformly expressed a desire to be a good parent and felt emotional distress when contact with their children was denied. A common theme was viewing the involvement of child welfare as a 'wake-up call' motivating a desire to change – and to receive help to make such changes. While some fathers did report positive and supportive interactions with workers, this experience was not uniform.

Importance of Involving Fathers

Research on child development and attachment has found that paternal involvement is important and beneficial. Sarkadi, Kristiansson, Oberklaid, and Bremberg (2008) conducted a review of longitudinal studies of father engagement and found enough evidence to support the claim that father engagement results in positive affects for children's social, emotional, academic, and behavioral outcomes. The review included 24 papers that used data from 16 longitudinal studies involving approximately 22,300 children from newborn to young adults (Sarkadi et al., 2008). In particular, father engagement was found to reduce externalizing behaviors in boys and internalizing behaviors in girls (Sarkadi et al., 2008). Compared to their peers from intact families, adolescents whose father is absent are more likely to engage in sexual activity at a younger age, have lower self-esteem, and have lower academic achievement (East et al., 2006). There is some evidence that the effects of father engagement are stronger for children from non-intact families (Flouri & Buchanan, 2003).

A small body of research has examined the relationship between child welfare case outcomes and father involvement. Observations of dependency review hearings found that when fathers attended hearings the hearings were longer, were more likely to discuss visitation, and included more thorough discussion of the child's situation, permanency, and child's views (Wingrove et al., 2016). Analysis of data from the Family Treatment Drug Court national

evaluation found that cases in which a father was identified were 1.6 times more likely to be reunified than cases with no father identified (Burrus et al., 2012). Children in father identified cases also spent more days placed with a parent, though these cases did not differ from nonfather identified cases in time to permanency. A review of 60 foster care files found that when fathers were in compliance with their case plan goals, children's time in foster care decreased by half and children were more likely to be placed with a relative or parent (Coakley, 2013). Malm and Zielewski (2009) found that nonresidential father support increased the odds of discharge to reunification, usually with the mother. The likelihood of reunification was three times greater in cases where fathers provided both financial and non-financial support compared to cases where fathers provided no support. Unlike Burrus et al. (2012), Malm, Zielweski, and Chen (2008) found no significant difference in reunification rates between contacted and non-contacted fathers. They also found that father involved cases that were reunified had lower rates of subsequent maltreatment two years later (12.2% vs. 32% for non-involved cases). Paternal involvement was found to be a significant predictor of competence for African-American children in informal kinship care (Washington et al., 2014). Contact with fathers can reduce externalizing behaviors of children placed in out-of-home care (Leon, Jhe Bai, & Fuller, 2016). Taken together, these studies highlight that father involvement may be important to achieving child welfare outcomes related to timely exit, permanency with family, and safety.

Not engaging fathers in child welfare services can also be detrimental to children's safety and well-being. Analyses of various administrative or other secondary data have arrived at conflicting conclusions regarding the differential risk that mothers, biological fathers, and non-related father figures have on child safety. Data from the Longitudinal Study of Child Abuse and Neglect (LONGSCAN) in North Carolina found that the risk of a child maltreatment report was

2.6 times greater for children residing with a non-biological male than for children living with both biological parents (Radhakrishna et al., 2001). An analysis of the second wave of NSCAW found that children with male primary caregivers were 1.7 times more likely to have experienced physical abuse than children with female primary caregivers (Ayer, Woldetsadik, Malsberger, Burgette, & Kohl, 2016). Depression in male primary caregivers at wave 1 of the NSCAW-II also predicted children's internalizing and externalizing problems three years later, suggesting the need for fathers to be screened for and receive psychological services (Ayer, Kohl, Malsberger, & Burgette, 2016).

Many families come to the attention of child welfare due to the presence of domestic violence, usually perpetrated by a man living in the home (Alaggia et al., 2015; Pennell, Rikard, & Sanders-Rice, 2014). In such cases, workers may be fearful of approaching the men and therefore avoid including them in assessments and services (Brown et al., 2009; O'Hagan, 1997; Pennell et al., 2014). While this response by workers is understandable, not engaging such men means denying them a chance to learn from and change their behavior, thereby ensuring they remain a risk to children. Several programs have been created to specifically target fathers with a history of domestic violence (Labarre, Bourassa, Holden, Turcotte, & Letourneau, 2016; Pennell et al., 2014; Stover, 2015). While outcome studies of these programs are still preliminary, they suggest that these fathers' risks to their children could be reduced or eliminated.

Data regarding whether fathers or mothers pose a greater risk for child maltreatment death have been inconsistent. A review of 600 child maltreatment deaths in 16 states found that biological fathers were responsible for most of the fatalities of children under five years of age (26%) followed by mothers (19%), and father substitutes (18.5%) (Klevens & Leeb, 2010). A

comparison of fatal and non-fatal child abuse cases in Florida from 2003 through 2008 showed a very different pattern (Dixon, 2011). In his analysis, Dixon (2011) found that mothers were the most frequent perpetrators in both fatal (41%) and non-fatal (61%) of cases. Biological fathers were perpetrators in 31% of fatal and 30% non-fatal cases while male paramours accounted for less than 10% of either fatal or non-fatal perpetrators. Several studies using national or state-level data have found that the majority of children who died from maltreatment lived with both parents in the home followed by children living solely with mothers (Douglas, 2017). A review of child maltreatment deaths in the U.S. from 2011-2015 found that 40% of deaths were committed by mothers, 17% by fathers, and 22% by both parents (Douglas, 2017). The diversity in findings from the above studies implies that fathers, like mothers, are not a monolithic group comprised solely of risks – or benefits – to children. Some fathers of children involved in child welfare services fit the stereotype of being uninterested, uninvolved, and unsafe, but some *do not*. Ultimately, child welfare workers must engage and assess *all* parents in order to keep children safe from further harm.

Possible Explanations for Maternal Bias

Many reasons have been posited as to why child welfare workers do not engage with fathers as much as with mothers. Unfortunately, the reasons why child welfare workers ignore men have received little rigorous study and theories mentioned in this section remain speculative. One theory is that the way in which fathers are portrayed in social work texts, literature, and research may influence the development of a gender bias in practitioners. Much of the literature about fathers ignores their emotional needs and focuses on intervening with men defined as deviant (Baum, 2016). Wolins (1983) cited the lack of attention given to fathers in child welfare literature and evaluations as a means of perpetuating child welfare's maternal focus. Clapton

(2009) reviewed case studies in several prominent social work texts and training guides used in Britain and found that fathers were most often portrayed as either absent, useless, or 'bad men.' Shaprio and Krysik (2010) found that father-related variables were included in 24% of family-focused articles in six journals with high social work citation ratings from 2004 to 2008; fathers themselves were involved as research participants in only 12.5% of articles. Gender-neutral terms such as *parents* or *families* are often used throughout publications even though no fathers were involved in the research (Risley-Curtiss & Heffernan, 2003; Strega et al., 2008). Thus social work literature may serve to perpetuate traditional gender roles which place childrearing within the domain and responsibility of women.

Families involved in the system are disproportionately poor and non-white while child welfare workers, particularly front line staff, are predominately white and middle class (Brown et al., 2009). Unlike a middle class father who may be praised for choosing to be a stay-at-home dad (Deutsch & Saxon, 1998), the poor father who stays home to look after his children is simply viewed as unemployed. Racial and class stereotypes that portray poor men of color as dangerous may lead workers to view such men as threats to children's safety (Brown et al., 2009). These notions may be reinforced by the disproportional treatment of these men in the criminal justice system and may be particularly salient for adolescent and young adult fathers. The fact that men are often the perpetrators of violence against women and children combined with racial and class stereotypes may result in workers feeling fearful, hostile, and distrustful of men (O'Hagan, 1997).

Engagement of fathers may differ based on the attitudes and characteristics of child welfare workers. One small study (n = 27) found that workers who had positive relationships with their own fathers expressed more comfort in working with fathers on their cases (Coakley,

Kelley, & Bartlett, 2014). Students in social work programs have been reported to have higher rates of paternal rejection than in the general public (Veneziano, 2009) which may influence their attitudes and behaviors towards fathers of child welfare involved children. A multi-state survey of child welfare workers found significant effects for respondents' race and years in the field on their views about father involvement (Arroyo & Peek, 2015). Compared to White workers, Black workers were more likely to view non-custodial fathers as wanting to be involved while Hispanic workers held comparatively less positive views of fathers' ability to parent. Workers with longer tenures were more likely to agree that fathers want to be involved and have positive impacts on children's well-being but they were also more likely to agree that non-custodial fathers were troublesome to work with.

Finally, societal norms related to appropriate gender roles may influence how child welfare workers view their work with fathers. The traditional family in Western culture is one in which the father works outside the home as breadwinner and the mother stays home to care for the children and perform domestic tasks (Franck, 2001). Our culture's notions of nurturing and parenting are nearly synonymous with that of mothering (Daniel & Taylor, 1999; Silverstein, 1996). Daniel and Taylor (1999) assert that there is generally a universally accepted concept of 'mother' while the role of 'father' is not so clearly structured. Workers may focus services on mothers due to a belief that women are more responsible for childcare than men. A review of NCANDS data found that the probability of a child being removed due to physical abuse was higher for mother perpetrators than father perpetrators (Crawford & Bradley, 2016). The authors posit that this may be due to workers' attributing a father's physical abuse as discipline that unintentionally went too far while a mother's physical abuse is viewed as intentional. As

discussed further in the next section, women who violate societal expectations related to nurturing and violence are frequently sanctioned.

Gender Stereotypes and Roles

Early research in the area of gender and social psychology debated whether stereotypes and social roles were distinct concepts. Stereotypes have been defined as the "attributes that an individual ascribes to a social group" (Eagly & Mladinic, 1989, p. 544), such as personality traits or physical characteristics. Because stereotypes consisted of adjectives they were seen as descriptive. Social roles are the behavioral expectations of people in a given social category (Stoppard & Kalin, 1978), for instance the elderly, priests, or teachers. Thus, social roles were seen as being prescriptive in nature. Because characteristics are not behaviors, some researchers at the time argued that the concepts were distinct. However, others noted that for gender, stereotypes and social roles overlap significantly such that gender roles include not just behaviors but also personality characteristics (Prentice & Carranza, 2002; Stoppard & Kalin, 1978). For instance, the traditional gender role of women as primary caregivers for children overlaps with stereotypes that women are nurturing and interested in children. In their study, Stoppard and Kalin (1978) found support for the overlap in gender stereotypes and sex roles. Their analysis found few significant differences in participants' evaluations of gender stereotyped personality characteristics and sex-role behaviors. Archer (1980, 1984) criticized Stoppard and Kalin's (1978) conclusions citing a lack of conceptual validity in the questionnaires used to differentiate sex-role and gender stereotypes. Yet, he went on to acknowledge that in "everyday usage, sex-stereotypic traits are often requirements...for a particular sex role" (Archer, 1980, p. 51), thus supporting Stoppard and Kalin's (1978, 1981) argument that the two concepts are intertwined in Western culture.

More recent literature has come to acknowledge the prescriptive nature of gender stereotypes and the consequent overlap with gender roles. Researchers have also come to recognize that gender stereotypes contain both socially desirable and undesirable traits. Prentice and Carranza (2002), for example, found that socially desirable and undesirable traits were differentially assigned to men and women, supporting their four-category framework of gender stereotypes (see Table 1). They found that while some traits are either prescribed or proscribed for each gender, there were a number of traits that are allowable, although less desirable, for each gender. The researchers referred to these as relaxed prescriptions. For example, interest in children is a socially desirable trait in general, but it is more desirable in women than in men – though men are allowed to have an interest in children. The findings indicate that there is some 'wiggle-room' in American gender stereotypes that allow one gender to have a trait that is more desirable in the other gender without facing censure. Interestingly, women's list of relaxed prescriptions was longer than men's suggesting that it is more allowable for a woman to exhibit stereotypic masculine traits than vice versa (Prentice & Carranza, 2002).

Gendered Stereotypes of Parents

Being a parent is a social role that is based on gendered expectations. After all, women are mothers and men are fathers. Gender stereotypes influence the expectations society has of the behaviors, attitudes, and functions that are to be enacted by mothers and fathers. Parenthood became nearly synonymous with motherhood as the Industrial Revolution and the Victorian values of the late 19th and early 20th centuries changed family dynamics (Silverstein, 1996). By the beginning of the American Baby Boom after World War II, parenting literature in both academia and society was almost exclusively maternally focused with fathers relegated to the role of economic provider. Traditional psychoanalytic theory viewed a woman's acceptance of

her role as wife and mother as evidence of her successful adoption of the female sexual identity (Zaslow & Pedersen, 1981). In contrast, psychoanalytic theory had very little to say about men's reactions to becoming fathers and did not view fatherhood as being significant in men's psychosexual development. The widespread acceptance of Bowlby's maternal attachment theory further fed the popular culture belief that fathers were irrelevant to the care of young children (Silverstein, 1996).

McIntire, Nass, and Battistone's (1974) examination of male parenting expectations coincided with the early years of the women's liberation movement. In their study, the authors asked unmarried male undergraduate students to complete a survey regarding their beliefs and expectations about their role in parenting an infant or young child. Unmarried female students were asked to imagine they were a typical undergraduate male and then to complete the same form accordingly. When compared, every instance of significant difference between genders was in the direction of women attributing less interest and involvement to men than the men expressed. The authors summarize the point that women consistently incorrectly ascribe to men a desire for traditional sex roles and gender stereotypes (McIntire et al., 1974). Unfortunately, a search of the literature did not find any recent evidence investigating the same phenomenon so it is unknown if similar misperceptions exist today.

More recent research has found that both male and female college students anticipate a future in which both partners are employed and equally share in domestic tasks (Deutsch, Kokot, & Binder, 2007; Ogletree, 2014). However, men and women also anticipated that a traditional gender arrangement, where the father works full-time while the mother has primary childcare responsibilities, was more likely than a non-traditional arrangement (Ogletree, 2014). College

students who held traditional assumptions about childcare and about gender were more likely to anticipate traditional gender arrangements (Deutsch et al., 2007; Ogletree, 2014).

As the number of mothers in paid employment has grown since the 1970s, a large body of research investigating perceptions of working parents has emerged. The majority of this research has focused on employed mothers, though a growing number of researchers have investigated employed and stay-at-home fathers. Rosenwasser and colleagues (1985) had undergraduate students evaluate vignettes of stay-at-home parents who earned some money from freelance writing. Stay-at-home parents were evaluated more positively when they made more money and if they were female; stay-at-home fathers making the least amount of money were given the least positive ratings (Rosenwasser et al., 1985). A later study had undergraduate students evaluate the professional competence and nurturance of mothers or fathers who either worked full-time or reduced hours after the birth of a child (Etaugh & Folger, 1998). Both mothers and fathers who worked full-time were perceived as less nurturant than parents with reduced hours but full-time employed mothers were rated as least nurturant. Participants perceived fathers employed full-time as more professionally competent than fathers with reduced hours while perceptions of mothers' professional competence was unaffected by employment status (Etaugh & Folger, 1998). Brescoll and Uhlmann (2005) asked participants to evaluate short vignettes of mothers and fathers who either worked or remained at home. In all three of the studies presented, stay-at-home fathers were the least liked and least respected of any parentemployment combination. Attitudes towards working mothers were mediated by women's reason for working. She was viewed more positively if she was described working out of financial necessity rather than for personal fulfillment. Working fathers were evaluated positively regardless of the reason given for seeking employment (Brescoll & Uhlmann, 2005).

Research has consistently found that there is no significant relationship between a person's gender and her/his evaluation of traditional/non-traditional parents (Brescoll & Uhlmann, 2005; Coleman & Franiuk, 2011; Gaunt, 2013b; Veneziano, 2009). These findings reflect an overall pattern found in the literature in which parents that violate gender norms related to employment are evaluated less positively than traditional parents.

There are some indications that acceptance of nontraditional parents may be increasing. Very recent literature has found that individuals' gender ideology may mediate their evaluation of nontraditional parents (Gaunt, 2013b). Individuals who endorsed egalitarian views of gender were found to evaluate *non*-traditional parents more positively than traditional parents while the opposite was found for individuals endorsing traditional views of gender (Gaunt, 2013b). In another study, ratings of femininity and masculinity of homemaker men and homemaker women did not differ significantly (March, Dick, & Bark, 2016). Attitudes about parents who take parental leave after the birth of child may also be improving. Coleman and Franiuk (2011) found evaluations of both mothers and fathers who took a 12-week leave after childbirth were more positive than parents who either took no leave or ceased working. This is in stark contrast to findings from a survey prior to passage of the Family Medical Leave Act in which 41% of employers did not think it was appropriate for fathers to take any form of parental leave (Silverstein, 1996). In contrast to the findings of Etaugh and Folger (1998), Coleman and Franiuk (2011) also found that parents taking leave were rated as equally competent to parents who did not take leave and as equally warm as parents who ceased work. However, recent public opinion polling still finds support for traditional gender roles: 51% think a child is better off with a stay-at-home mother while only 8% agree that children are better off with a stay-athome father (Parker & Livingston, 2016).

Fewer studies were found assessing perceptions of parents unrelated to employment status. A large (N = 873) community based survey asked participants to describe the negative or positive attributes of single mothers or single fathers who had never been married (Haire & McGeorge, 2012; Maier & McGeorge, 2014). Responses to both questions highlighted the overlap of gender and role for parents. For instance, respondents were concerned that fathers would find it difficult to be nurturing while stating mothers would have this trait naturally (Haire & McGeorge, 2012). Single fathers were also seen as likely to have great difficulty with daughters' needs during puberty; similar concerns were not mentioned for single mothers with sons. Negative attributes of single fathers were situational (e.g., difficulty finding child care or dating) while negative attributes of single mothers were related to her personhood (e.g., neglectful, promiscuous, irresponsible). Positive attributes of single mothers were similarly intrinsic (Maier & McGeorge, 2014). Participants wrote that single mothers are able to put the needs of their children first while also balancing the demands of work and family, providing children with a model of how to work hard. Participants noted that single fathers would be able to provide financially as well as ensure discipline. An overall theme was that single fatherhood is a choice while single motherhood is not (Maier & McGeorge, 2014). While participants commented that single fathers are good role models and have to take on the role of two parents, these positive traits were not mentioned for single mothers. Similarly, the single fathers were not praised for balancing work and family demands. The authors noted that the positive and negative attributes of participants overall appeared to be based on the parent's gender as opposed to their status as a single parent (Haire & McGeorge, 2012; Maier & McGeorge, 2014).

In another study, undergraduates anticipated that non-custodial parents would have more negative self-beliefs than custodial parents regardless of the target parent's gender (King, 2008).

Custody decisions made by family court personnel after reading vignettes did not differ significantly based on whether the target was the mother or father; only parental competence judgments predicted custody decisions (Brems, Carssow, Shook, Sturgill, & Cannava, 1995). A small sample of social work undergraduate students' (N = 96) perceptions of parental roles were congruent with traditional gender norms (Veneziano, 2009). Students associated the mother role with traditional expectations of providing nurturance and daily child care while fathers were primarily associated with being providers and protectors. Though nurturance and emotional support were indicated for both mothers and fathers, this was associated more strongly with mothers than with fathers (84% vs. 23%). In a vein similar to that of Prentice and Carranza (2002), a convenience sample of parenting adults found that while parental alienation behaviors (i.e., behaviors used by one parent to damage a child's relationship with the other parent) were overall rated as unacceptable, such behaviors were rated as more acceptable for mothers than for fathers (Harman, Biringen, Ratajack, Outland, & Kraus, 2016). Harman and colleagues (2016) suspect this gender difference in acceptability of parental alienation behaviors may stem from societal beliefs that mothers know what is best for their children.

While findings from more recent studies appear to show a growing acceptance of nontraditional parents, some researchers have pointed to shifting standards in trait judgments to explain these findings (Biernat, Manis, & Nelson, 1991; Bridges, Etaugh, & Barnes-Farrell, 2002; Coleman & Franiuk, 2011). The shifting standards model posits that different standards are used to judge men and women performing the same role (Coleman & Franiuk, 2011). For example, undergraduate students rated women as more financially successful than men even though they also rated the women as earning significantly less money than men (Biernat et al., 1991). In other words, shifting standards applies a different normal distribution to men and

women and the anchors of subjective judgment scales are altered by participants to match these different expectations (Bridges et al., 2002). Being six feet tall is quite above average for a woman but only slightly above average for a man (Centers for Disease Control, 2012). In a similar way, what is considered average nurturance for a woman may be rated as above average for a man resulting in either non-significant or counter-stereotypical findings.

The participant pool for the majority of studies of parent perceptions are undergraduate college students, specifically those enrolled in psychology classes. This presents a major limitation when attempting to assess overall cultural stereotypes of parents as the participants are not reflective of the general population. However, they may provide a glimpse of what attitudes may be in the future as the participants graduate, start families, and hold positions of power. As demonstrated, attitudes towards the gender roles of parents have incrementally moved towards more egalitarian ideals. Of course, as the next section discusses, idealism may be trumped by reality when individuals actually become parents.

Expression of Gendered Roles in Parenting Couples

There is some evidence that gender roles in couples become more differentiated and traditional after the birth of the first child (Liss et al., 2013; Walzer, 1996). Even when both parents work, women continue to perform more of the child and home care tasks (Liss et al., 2013; Poeschl, 2008). Despite recent increases in fathers' time spent on domestic tasks, young women anticipate that marriage and parenthood will lead to inequities in child care, housework, and employment (Fetterolf & Eagly, 2011). An exception to this pattern may be the unique case of families with stay-at-home fathers and breadwinning mothers. In these families, fathers express more egalitarian gender attitudes than families with employed fathers (Fischer &

Anderson, 2012), particularly if the fathers chose to be full-time caregivers as opposed to being unemployed (Kramer & Kramer, 2016).

Much of the research on the ways in which parents enact gender roles has been qualitative in nature. Two studies (Pedersen, 2012; Walzer, 1996) specifically investigated parenting couples' gendered definitions of parenting and responsibilities. Though published 16 years apart there was considerable overlap in the findings. Common in both studies was the attitude expressed by mothers that 'mothering' is an emotional state of being requiring constant mental vigilance. 'Good' mothers think about their children almost constantly, worry about their children, and maintain the mental 'to-do-lists' necessary to ensure children's needs are met and the household taken care of. The mothers in both studies did not see this 'mental work' (Walzer, 1996) as an unequal division of childcare. Even after listing off the mental work they performed that their husbands did not, the mothers still endorsed the statement that childcare was shared equally by both parents. The division of 'mental work' may be shifting as a recent time study found no differences between mothers and fathers in dual-earner marriages in the number of family-related thoughts throughout the day (Offer, 2014). However, mothers reported more negative affect associated with family-related thoughts than fathers, supporting Walzer's (1996) suggestion that worrying is part of being a good mother.

In contrast to mothers who defined good parenting and good mothering differently, fathers saw relatively little difference between good parenting and good fathering (Pedersen, 2012). When discussing what it means to be a father, men in both studies spontaneously spoke of fathering in relation to mothering (Pedersen, 2012; Walzer, 1996). Fathers viewed their role as helpers to mothers. In many instances, fathers expressed that a good father is willing to help

and support his wife with childcare, often citing their willingness to change diapers as evidence of equal distribution of labor.

Maternal gatekeeping behaviors were described by parents in both the Pedersen (2012) and Walzer (1996) studies. Maternal gatekeeping refers to the beliefs and behaviors mothers use to control the manner in which fathers engage in parenting (McBride et al., 2005; Pedersen, 2012). Mothers' behaviors have been found to facilitate or limit fathers' involvement in childcare (Fagan & Barnett, 2003). The exact reasons for maternal gatekeeping are unknown. Some have theorized that women who subscribe to a traditional gender ideology in which the mother has primary responsibility for childcare may actively limit fathers' involvement so it does not threaten the power they have in the domestic sphere (Fagan & Barnett, 2003; McBride et al., 2005). Mothers' evaluation of fathers' competence in childcare may also influence whether they limit or facilitate fathers' involvement (Fagan & Barnett, 2003). However, the amount of influence mothers have in facilitating or limiting fathers' relationships with children has not been clearly established. While Fagan and Barnett (2003) and McBride et al. (2005) each found evidence that mothers mediate father involvement, Bulanda (2004) found gender ideology of the father but not the mother was significantly associated with father involvement. A recurring caveat to research on father involvement are the sometimes low correlations between mothers' and fathers' assessments with fathers usually reporting higher levels of involvement than mothers (Adamsons & Pasley, 2016). For example, when mothers value father involvement at a level higher than the fathers themselves, mothers are more likely to report the fathers as being less involved suggesting disappointment with unmet expectations (Adamsons & Pasley, 2016).

Employment may further impact the expression of gender roles in parents. A small-scale quantitative study found that mothers experienced significantly higher levels of guilt related to

work interfering with family than fathers (Borelli, Nelson, River, Birken, & Moss-Racusin, 2016). Fathers interviewed by Pedersen (2012) felt that the hours they were required to spend at work logically meant that they had less time for childcare. They prioritized their role as an economic provider and did not believe that work diminished their influence with their children. Employed mothers in both studies expressed feelings of guilt and stress (Pedersen, 2012; Walzer, 1996). Mothers worried that employment would negatively impact the quality of the mother-child relationship. They felt that work did not reduce the obligations they had at home or for childcare. As Pedersen (2012) aptly stated, employment shortened fathers' at-home to-do list while it lengthened the list for mothers.

The differing emotional reactions of mothers and fathers to employment may be related to society's harsher criticism of working mothers reviewed earlier (Brescoll & Uhlmann, 2005; Bridges et al., 2002; Etaugh & Folger, 1998). Interviews with parenting couples found a double standard of praise and criticism for parents' involvement at work and at home (Deutsch & Saxon, 1998). The mothers received significantly more criticism than fathers from others for being too invested at work or too little at home. Fathers were significantly more likely to be praised for their investment in parenting, even fathers who had low levels of involvement. Mothers were more likely to be praised for successfully balancing work and family – for 'doing it all.' Deutsch and Saxon (1998) conclude that the patterns of praise and criticism reflect double standards in the gender roles of mothers and fathers. It also reflects the concept of shifting standards in judgments of parents who enact nontraditional roles (Bridges et al., 2002; Coleman & Franiuk, 2011). Mothers reported receiving very little praise for their investment in parenting while fathers, even those who share equally in childcare, were rarely praised for successfully balancing

work and family. Deutsch and Saxon (1998) note that this double standard may pressure couples into enacting traditional gender roles in order to avoid criticism.

More recent research has focused specifically on the parenting attitudes and behaviors of parents from lower socioeconomic backgrounds that are more reflective of the child welfare service population. The themes from these studies are very similar to those found in research with middle- and upper-class parents. Expectant fathers in Detroit expressed a strong desire to "be there" for their children by providing emotional support, guidance, and discipline in addition to financial support (Dayton et al., 2016). Fathers participating in a parent education class after child welfare system involvement also mentioned the importance of being able to financially provide for their children and expressed feelings of powerlessness when not able to do so (Montgomery, Chaviano, Rayburn, & McWey, 2016). Fathers' involvement and positive coparenting behaviors in unmarried, cohabitating arrangements increase mothers' ratings of relationship quality such that they are not significantly lower than those of mothers who are married (McClain & Brown, 2016). Fairness in the perceived distribution of both housework and childcare for working-class dual-earning couples was related to slower increases in relationship conflict up to 1-year postpartum (Newkirk, Perry-Jenkins, & Sayer, 2016). Relationship conflict for couples who reported the division of work as equitable was similar to couples whose division was rated as "slightly unfair to mothers" suggesting that conflict increases when the increased expectations for mothers go beyond what is considered fair (Newkirk et al., 2016).

Ambivalent Sexism Theory

Glick and Fiske (1996) theorize that sexism is a prejudice uniquely characterized by ambivalence rather than antipathy. Gender stereotypes are not uniformly negative or positive.

Ambivalent sexism theory (AST) posits that paternalism, gender differentiation, and heterosexual relations produce a situation in which the dominant group (men) are dependent upon the subordinate group (women; Glick et al., 2004), creating in both genders hostile and benevolent attitudes towards the other (Lee et al., 2010).

When directed towards women, hostile sexism (HS) legitimizes men's dominance by viewing women as inferior while benevolent sexism (BS) idealizes the traditional female role (Glick et al., 1997). When directed towards men, hostility toward men (HM) reflects women's resentment of male dominance while benevolence toward men (BM) reflects maternalism (Lee et al., 2010). Benevolent sexism should not be viewed as any less sexist than hostile sexism. It serves to maintain the status quo by emphasizing women's positive traits as being aligned with their subordinate role and allowing women to criticize men without directly challenging male dominance (Lee et al., 2010).

How can individuals hold conflicting gender attitudes and not experience cognitive dissonance? Glick et al. (1997) theorized that men develop systems by which to quickly categorize women into two subgroups (good vs. bad) guiding men's "appropriate" response. Their research supported this view, finding that ambivalent sexist men spontaneously categorized women into polarizing subgroups. Disliked women were evaluated with more hostility while liked women were evaluated more benevolently. Though the same effect has not been studied with regard to women's categorization of men, it is not a leap of logic to assume a similar process may be at work. Additionally, BS attitudes and behaviors are frequently not perceived as being sexist (Barreto & Ellemers, 2005; Becker, Glick, Ilic, & Bohner, 2011) and may even be interpreted as pro-female (Rudman & Fetterolf, 2014). It may be easier to endorse both benevolent and hostile sexism if the former is not perceived as a form of sexism.

Society's view of the sexes has undergone significant change since the women's movement of the 1960s. Women have gained greater equality and opportunity. Indeed, there is some evidence that despite women's lingering inequality, women are evaluated by both genders more favorably than men (Glick et al., 2004). However, gender attitudes that were formed by civilization millennia ago are still very salient. Women are regarded as both angelic, pure, and the givers of life on one hand and weak, manipulative, and the bringers of sin on the other. Men face a similar dichotomy, viewed as providers, protectors, aggressors, powerful, and domineering all at once. Society may be more accepting of the childless career woman and the stay-at-home dad but it still clings to these ancient notions of what it is to be male or female.

Ambivalent sexism theory is an appropriate theory for exploring why those in the field of child welfare often say they want fathers more involved while at the same time engaging in behaviors that marginalize or ignore fathers altogether. Workers' ambivalence may stem from viewing fathers both as a threat to children's safety (hostile sexism) and a resource to ensure children's well-being, particularly economically (benevolent sexism). Within AST, women are given power and competence within the domestic sphere. The stereotypes described by BS communicate that women *are* and *should be* more warm than men (Ramos, Barreto, Ellemers, Moya, & Ferreira, 2016; emphasis added). Workers may therefore view childrening as a female activity and thus engage primarily with mothers.

Using AST to explain why fathers are marginalized in child welfare has its limitations. Gender is only one construct by which fathers in the child welfare system are judged. Since minorities and the poor are disproportionally represented in child welfare populations, issues of race and class may also influence workers' attitudes towards men (Brown et al., 2009), concepts which are outside of the realm of AST. The theory does not take into account the realities of

child welfare work. Workers are often juggling many priorities with very strict timelines. Thus, ignoring fathers may have more to do with the demands placed on workers rather than on a conscious decision to avoid fathers.

Society's notions of motherhood and fatherhood are deeply intertwined with its notions of gender roles. Ambivalent sexism theory provides one possible model to understand how child welfare workers view the mothers and fathers with whom they work. Workers may view fathers as a threat to children's safety or as a resource that can help stabilize the family. Traditional gender roles view women as more nurturing and better able to care for children than men. Workers may engage primarily with women based on these benevolent sexist beliefs. Ambivalent sexism theory cannot account for all variables that may influence workers' attitudes. However, it is a theory that is race and class neutral and applicable to all fathers in the child welfare system. This study would be the first to apply AST to child welfare practitioners.

Research Questions, Hypotheses, and Rationales

The proposed study examines three research questions. Each question, along with corresponding hypotheses and rationales, are discussed below. Appendix A also lists the research questions and hypotheses for ease of reference.

Research Question 1: To what degree do child welfare workers (CCWs) endorse ambivalent sexism?

Hypothesis 1.1: CWWs will more strongly endorse HM than BM.

Rationale 1.1: In qualitative research, CWWs most often expressed attitudes towards men that were hostile as opposed to benevolent. Of the six types of discourses workers used to describe men in Scourfield's (2001) ethnographic study, five were negative. Fathers asserting their right to custody were viewed with suspicion, held to higher standards than mothers, and

viewed as more difficult to work with than mothers (O'Donnell, Johnson Jr., D'Aunno, & Thornton, 2005). Interviews with fathers in the child welfare system appeared to support the assertion that CWWs are wary of fathers and view them more as a risk rather than an asset to children (Dominelli et al., 2011; Strega, Brown, Callahan, Dominelli, & Walmsley, 2009).

Hypothesis 1.2: CWWs will more strongly endorse BS than HS.

Rationale 1.2: CWWs are situated within the wider cultural beliefs about gender, including the belief that women are inherently nurturing, caring, and designed for childrearing. CWWs regularly encounter women who have in some way failed at motherhood to the extent that state intervention is required. Though this may create conflicting feelings towards individual mothers (loves her children/continues to abuse drugs) it does not reflect true ambivalence towards women. Rather, it reflects traditional beliefs that women not only are but ought to be nurturing and natural caregivers. Thus, CWWs may be expected to strongly endorse BS. HS is often expressed towards women who do not conform to traditional expectations, such as feminists or career women (Glick et al., 1997). The CW workforce is mostly female (Whitaker et al., 2006a). Workers may be more aware of the sexism still present in our culture, particularly those with a social work education. Thus, CWWs may be unlikely to agree with the HS items as they do not match their own experiences or beliefs.

Hypothesis 1.3: CWWs will be more ambivalent towards men than women.

Rationale 1.3: In their focus groups with CWWs, O'Donnell et al. (2005) found that the discussion reflected workers' ambivalence about fathers. If a participant spoke positively about a father the group conversation would support fathers' involvement. However, if a participant spoke negatively about a father the group conversation would shift to expression of globally negative views of fathers. This polarization did not occur when discussing mothers. Instead,

they appeared able to situate the variations in mothers to the individuals' circumstances. A similar pattern was found in a more recent study (Ewart-Boyle, Manktelow, & McColgan, 2015) where fathers were described either good or bad with little in-between. Items on the AMI reflect both the dangerousness of men and their incompetence in domestic affairs, views expressed by CWWs in the qualitative research.

Research Question 2: To what degree do CWWs reflect a preference for interacting with mothers when providing services?

Hypothesis 2.1: CWWs scores on the Staff Bias scale will be significantly lower than Staff Attitudes scale scores, reflecting stronger preference for mothers over fathers.

Rationale 2.1: Several authors have performed content analysis of texts used in social work, child welfare, and family therapy education (Carlson et al., 2006; Clapton, 2009; Walmsley et al., 2009). In each study, the authors found that the texts most often portrayed parents enacting traditional gender roles. Veneziano (2009) investigated BSW students' beliefs about the roles of mothers and fathers. The top three roles associated with each gender conformed to traditional gender roles. Only 23% of students associated fathers with providers of love, nurturance, and emotional support whereas 84% associated this activity with mothers. Students associated fathers with providing and protecting (77% and 57%) and mothers with daily childcare and moral education (47% and 40%). Fathers on most CW cases are non-custodial and may never have lived with the child. CWW efforts often center around identification and location of a father primarily to encourage the payment of child support. Thus, CWWs may tend to more strongly endorse a preference for working with mothers.

Research Question 3: What is the relationship between CWWs sexism profile (i.e., latent class) and favorable attitudes towards father involvement in child welfare services?

Hypothesis 3.1: Strong endorsement of BS will be negatively correlated with favorable attitudes towards father involvement.

Rationale 3.1: BS has been shown to be related to positive perceptions of stay-at-home mothers (Gaunt, 2013a). Thus, those who strongly endorse BS may view mothers as best suited for parenting and a stronger endorsement of traditional gender roles.

Hypothesis 3.2: Strong endorsement of ambivalence towards men will be negatively correlated with favorable attitudes towards father involvement.

Rationale 3.2: Strong endorsement of ambivalence towards men may indicate agreement with the belief that men are not naturally suited for child care. However, there has been little research connecting AST to parenting roles. Gaunt (2013a) did examine this link and found a curious relationship between HM/BM and ratings of career and caregiving fathers. BM was related to negative evaluations of the stay-at-home father while HM was related to positive evaluations. This is in line with the theoretical basis of HM representing resentment of patriarchal power. Neither HM nor BM was related to evaluations of a career father possibly due to its normative nature. Ogletree (2014) found a positive relationship between BS and agreement with traditional gender beliefs about childcare.

Hypothesis 3.3: Non-sexists (low on all AMI/ASI subscales) will be positively correlated with favorable attitudes towards father involvement.

Rationale 3.3: Non-sexists may have a more egalitarian gender ideology. College students with an egalitarian gender ideology were found to express more positive perceptions of non-traditional parenting roles and negative perceptions of traditional parenting roles (Gaunt, 2013b). Therefore, non-sexists may be more likely to reject the role of father as unimportant to child care and endorse his involvement in the case.

CHAPTER THREE:

METHODOLOGY

The purpose of the study was to examine the relationship between child welfare workers' ambivalent sexism and their reported behavior and attitudes about father engagement. The study was correlational in nature and conducted with survey instruments. Participants were a convenience sample of child welfare workers. This section outlines the study's participants, measures, procedures, and data analysis plan.

Participants

The study participants were child welfare workers, defined as persons whose work involves providing: 1) case management or other direct care to families being investigated due to allegations of child abuse or neglect (CA/N), 2) in-home services to prevent placement of a child due to allegations of CA/N, 3) reunification or support services after a child's placement in substitute care, and/or 4) services to support adoption or permanent guardianship of children whose parents' rights have been terminated. Persons who directly supervise individuals providing any of the above services were also included in the study's definition of child welfare worker. Participants were eligible if they met the study's definition of a child welfare worker, were age 18 or older, and currently worked in the United States; participants were excluded if they did not meet all of these criteria.

A total of 673 survey responses were collected (see section Online Sampling for recruitment and sampling methods). A total of 183 responses were excluded from the final sample due to not meeting the study's eligibility criteria (n = 88), dropping-out prior to reaching

the measure randomization point (n = 28), not completing any of the measures after reaching the randomization point (n = 9), responding to the survey twice (n = 1), and having too many missing items on the sexism measures (n = 57). The final sample was 490, representing 73% of the total responses.

Descriptive characteristics of respondents, both retained and removed due to non-completion, are in Table 2. The majority of respondents were female (84%) and White (74%), in line with previous research on the gender and racial makeup of child welfare workers nationally (Barth et al., 2008; Whitaker, 2012). The mean age was 39 years (SD = 11.29) with a range of 21 to 70+ years. One-third of respondents were not parents themselves. Of those that were parents, most had two children and the youngest child for most was 0 - 5 years old. A quarter of parents had only adult children. Most respondents worked at a public agency and performed what would be considered traditional foster care case management (providing supervision to children placed in out-of-home care). Most respondents were relatively new to child welfare work (38% \leq 3 years). Around two-thirds of respondents had a bachelor's degree. Similar to previous research (Barth et al., 2008), social work degrees accounted for the single largest share of respondents (38%), though the majority of respondents had degrees in other fields.

The retained and removed cases were compared to determine if the two groups differed with regard to the demographics displayed in Table 2, with the exception of state which was not tested. The type of child welfare work performed item was the only demographic item that required a response as it was used to determine if respondents met the study's definition of a child welfare worker. Of the 94 cases that dropped out after being screened in as eligible, 23 (24.5%) did not complete any of the remaining demographic items. Differences in age were tested with an ANOVA while the remaining variables were tested via chi-square. As

respondents were able to select all applicable items for type of child welfare work performed, each of the six types of work coded as binary variables and were tested individually. Results were significant for four types of child welfare work performed: investigations (χ^2 (1) = 10.36, p = .001), foster care case management (χ^2 (1) = 5.83, p = .016), post-reunification services (χ^2 (1) = 4.33, p = .038), and in-home prevention services (χ^2 (1) = 3.96, p = .047). However, after a Bonferroni correction was performed to account for the 16 total tests, only investigations type of child welfare work performed remained significant.

Measures

All variables for the study were obtained from the measures described in this section.

The variables in this study were: gender, parental status, age, post-secondary degree and major,

ASI and AMI scores, and Dakota Father Friendly Assessment-Child Welfare (DFFA-CW)

scores.

Background Information Questionnaire

Participants were asked to complete a background information questionnaire in order to collect demographic data such as gender, race, age, parental status, education, years of experience in child welfare, and geographic location (Appendix C). Questions regarding parental status included whether the respondent is a parent and, if so, the age of the youngest child. Parental status was included as there is some evidence that individuals' gender roles become more traditional after the birth of the first child (Liss et al., 2013). Thus, parental status was an independent variable for analysis. Geographic location was measured at the state level.

Sexism Measures

Two measures were used to assess endorsement of hostile and benevolent sexism: the Ambivalent Sexism Inventory, which assesses sexism towards women, and the Ambivalence toward Men Inventory. The measures can be found in Appendices D and E, respectively.

The Ambivalent Sexism Inventory (ASI). Glick and Fiske's (1996) Ambivalent Sexism Inventory (ASI) is intended to measure two distinct constructs associated with Ambivalent sexism theory (AST): hostile sexism (HS) and benevolent sexism (BS). The ASI consists of 22 statements (11 each for HS and BS) in which respondents rate their agreement with each statement on a six-point Likert-type scale. Six of the items are reverse coded to reduce acquiescence bias. Scores on the BS and HS scales are averaged and higher scores reflect higher endorsement of sexist beliefs.

The two concepts measured by the ASI are each theorized to have three dimensions (paternalism, gender differentiation, and heterosexual relations) that produce a situation in which the dominant group (men) are dependent upon the subordinate group (women; Glick et al., 2004), creating in both genders hostile and benevolent attitudes towards the other (Lee et al., 2010). Hostile sexism is the "traditional" conceptualization of sexism as one of antipathy towards women (Glick & Fiske, 1996). Women are viewed as innately less competent and weaker than men, justifying men's dominance. Benevolent sexism reflects beliefs about women that appear positive but in reality serve to reinforce women's status as subordinate to men and reflect women's dyadic power. Women's weaknesses and their role as mothers make them worthy of men's protection and support (protective paternalism) and imbues them with traits that men lack such as nurturance and compassion (complementary gender differentiation). The role

of women as romantic partners creates a desire for heterosexual intimacy and psychological closeness.

Multiple studies have found support for the assumption that HS and BS are related but different constructs giving the ASI construct validity (Conn, Hanges, Sipe, & Salvaggio, 1999; Glick et al., 2004; Glick & Fiske, 1996; Masser & Abrams, 1999). Benevolent Sexism was found to be multidimensional supporting Glick and Fiske's (1996) idea that there are three underlying sources of ambivalence. Glick and Fiske (1996) did not find empirical support for the multidimensional nature of HS; it was strongly unidimensional. They attribute this not to a flaw in the theory behind AST but rather to the three dimensions of hostile sexism being very closely related to one another. While BS is multidimensional, it is reported as a single factor as the sub-factors do not have enough items to yield acceptable reliability. Reliability coefficients are reported separately for the HS and BS scales rather than for the full ASI. Reliability in the current sample was good for both the BS ($\alpha = .80$) and the HS ($\alpha = .82$) scales.

The Ambivalence Toward Men Inventory (AMI). Glick and Fiske's (1999)

Ambivalence toward Men Inventory (AMI) is intended to measure two distinct constructs associated with AST as it relates to men: hostility toward men (HM) and benevolence toward men (BM). The AMI consists of 20 statements (ten each for HM and BM) in which respondents rate their agreement with each statement on a six-point Likert-type scale. Unlike the ASI, none of the items are reverse coded. Scores on the AMI are calculated using the same method as with the ASI; the BM and HM scales are averaged and higher scores reflect higher endorsement of sexist beliefs.

The two concepts measured by the AMI are each theorized to have the same three dimensions as in the ASI (paternalism, gender differentiation, and heterosexual relations; Lee et

al., 2010) though the dimensions differ slightly to reflect the reactions of women to being subordinated by men. Hostility toward men reflects women's resentment of men's power, dominance, and aggression (Lee et al., 2010), concepts traditional to stereotypes of men. Hostility toward men allows women to criticize men without directly challenging male authority. Benevolence toward men reflects the belief that it is proper for men to have power and acknowledges women's dependence on men. As with BS, BM appears positive on the surface but maintains the status quo of male dominance in all areas except the domestic sphere – which is the sole domain of power for women. Men's weaknesses in homemaking and child care make them worthy of women's nurturance and care (maternalism). Women admire men's strength, power, and ability to protect and provide, justifying women's lower status (complementary gender differentiation). Finally, similar to men, women desire romantic relationships with men (heterosexual intimacy). As with the ASI, the AMI concepts of HM and BM have been found to be related but distinct (Glick et al., 2004; Glick & Fiske, 1999). Confirmatory factor analysis supported the full model in which HM and BM are multidimensional, each comprised of three sub-factors. As with the BS scale of the ASI, HM and BM are each calculated as a single scale, rather than three scales, due to each sub-factor having too few items to yield high reliability. Reliability coefficients are reported separately for the HM and BM scales rather than for the full AMI. Reliability in the current sample was good for both the BM ($\alpha = .87$) and the HM ($\alpha = .87$) scales.

Dakota Father Friendly Assessment-Child Welfare

The Dakota Father Friendly Assessment (DFFA) was developed in response to the need for an empirically validated measure to assess father friendliness in early childhood settings (White et al., 2011). The initial DFFA consisted of 55 items developed after extensive review of

the literature, existing fathering instruments, and review and approval by local Head Start directors and members of the state Head Start Association Boards. The measure was developed to capture "staff perceptions' about father involvement" (White et al., 2011, p. 28) as opposed to actual levels of fathers' involvement. Four subscales were designed to capture staff attitudes and behaviors in addition to the level of organizational support staff receive for father involvement. Respondents indicate their agreement with items on a 5-point Likert scale which are coded so that higher scores reflect more favorable responses.

The DFFA was administered during "all staff" training sessions to directors, staff, and teachers at 20 Head Start sites in North and South Dakota. Administrators of the site estimated a total of 1020 participants; 609 usable surveys were in the final dataset. Demographics of the Head Start participants were similar to the general demographics of child welfare workers. Participants were mostly female (97%) and white (91%) with an average age of 39 years (White et al., 2011).

Psychometric Properties of the DFFA. An exploratory principal factor analysis was used to determine the factor structure of the DFFA (White et al., 2011). The analysis was constrained to four factors – an attitude and behavior factor for the organization and staff. Items on the two organizational factors were well differentiated, supporting the presence of two factors: Organizational Attitudes (OA) and Organizational Behaviors (OB). Initial analysis of the two staff factors indicated the possible presence of a third factor, which was confirmed in a follow-up analysis, supporting the presence of three factors: Staff Attitudes (SA), Staff Behaviors (SBeh), and Staff Bias (SBias). While a bias is a form of attitude, White et al. (2011) found that the items on this factor reflect a person's "tendency to favor one condition over another, regardless of – or in the absence of – contrary evidence" (p. 31). Items that cross-loaded

or had factor loadings less than .40 were removed. The final instrument consisted of 34 items on five factors with eigenvalues ranging from 7.09 to 1.45 and accounted for nearly half (48%) of the variance (White et al., 2011).

Reliability for the final 34-item measure was .87 and alpha coefficients for the five factors were .87 for OA, .81 for OB, .79 for SA, .80 for SBeh, and .71 for SBias (White et al., 2011). Interscale correlations revealed that the five factors were strongly correlated ranging from -.15 to .59 (p < .01). With the exception of Staff Bias, the factors were positively correlated.

Procedures for Creation of DFFA-CW. Only three of the five DFFA factors were used in the study: Staff Attitudes, Staff Behaviors, and Staff Bias. The Organizational Attitudes and Organizational Behaviors scales were not relevant to the study's research questions. Because the DFFA was created for Head Start programs (White et al., 2011), items needed to be modified to fit a child welfare context. Items were modified using the author's ten years of experience in child welfare to adapt the Dakota Father Friendly Assessment (White et al., 2011) explicitly for Child Welfare (DFFA-CW). Table 3 contains the original DFFA items and the final draft of the DFFA-CW items. Many DFFA items reflect Head Start practices that do not exist in child welfare or are otherwise specific to an educational setting (e.g., partnership agreements, program projects, school functions, IEP or IFSP process, orientation). Items were modified to reference a child welfare practice that could be considered analogous, such as case/treatment plans, program services, case functions, and intake process. Two additional items were added to the DFFA-CW: items 8 and 9 are both modification of the same DFFA item, as are items 20 and 21. Six items (5, 12, 13, 15, 18, and 20) were not modified. The DFFA's first author was consulted to ensure

that modifications captured the intent of the original items (J. White Sr., personal communication, September 19, 2014).

Expert review panel. The final draft of the modified items was reviewed by a panel of experts consisting of child welfare workers and supervisors. The author contacted three people from her professional network who had access to child welfare workers in order to recruit panel experts. Two were from private non-profit agencies and one was from a public agency. Each person worked within a different child welfare agency and was considered a 'gatekeeper' because they either had authority to provide the researcher access to agency staff or were the person who led the agency's internal review process. Two gatekeepers received permission from their agency to permit the researcher access to staff; the third agency declined to permit access. These gatekeepers were asked to select individuals from within their agency that met the study's eligibility criteria and would be willing to be contacted by the author for more information regarding study participation. The gatekeepers forwarded contact information for 14 possible participants; each was emailed information regarding the study's purpose, time required, and informed consent.

A total of 11 experts, in two separate focus groups, reviewed the proposed DFFA-CW items to ensure the items were understood and interpreted as intended. One focus group took place in-person (n = 8) and the second was held via online video conference using the Microsoft Lync application (n = 3). Panel experts met the study's definition a child welfare worker with the additional requirement of having worked in the field for a minimum of three years. Experts were located in Maryland (n = 8), Illinois (n = 2), and Florida (n = 1). Demographics of panel experts are presented in Table 4. Panel experts were mostly female and currently working in a public child welfare agency. Years of experience in child welfare ranged from three to 30.

Participants from the public agency had greater years of experience than those from the private agency, with a mean of 14 and three years, respectively.

Panel experts were emailed the draft DFFA-CW to review one week prior to their scheduled focus group. During the focus groups, the researcher explained the overall purpose of the study, explained the specific purpose of the review panel, and reviewed the informed consent. Experts were asked not to share or discuss the study's purpose or what was said during the focus group with their colleagues in order to prevent bias when the final survey was disseminated.

Participants were asked: 1) Were there any questions that were confusing? In other words, you were unsure what the question was asking you? 2) Can you please restate the item in your own words? 3) Are there any changes that you would make to this survey and why? and 4) Any other feedback about the survey? Participants were asked specifically to comment on three items (1, 7, and 19) that were the most challenging to revise to fit a child welfare context only if the three items were not mentioned by participants themselves. A research assistant took notes during the focus groups. Audio recordings were also made; however, the recording for the inperson focus group was inaudible due to poor room acoustics and a loud heating system. When the group discussion appeared to have arrived at a suggested edit or rewording, the research assistant would read out loud the "final" suggested wording for participants' confirmation.

Results of expert review panel. Panel experts did not have comments or suggestions for nine of the 21 DFFA-CW items reviewed. Overall, experts from the public agency made comments on more items than those from the private agency. Both groups were first posed the open-ended question *Were there any questions that were confusing?* The public agency group immediately responded with comments, including spontaneously mentioning items 7 and 19 as

needing clarification. In contrast, the private agency experts responded to this question by stating they did not find any items confusing or hard to understand. The private agency experts only made comments on the three items specifically raised by the researcher, even though they were given multiple prompts to raise items on their own. A total of five items (numbers 1, 7, 8, 14, and 19) were revised based on the comments from panel experts. Table 3 provides the original DFFA wording, the DFFA-CW draft wording, the DFFA-CW final wording, and a summary of the panel experts' comments for each item. Reliability in the current sample for the DFFA-CW was good to excellent for the three subscales: Staff Attitudes ($\alpha = .89$); Staff Behaviors ($\alpha = .90$); and Staff Bias ($\alpha = .82$). The final DFFA-CW is located in Appendix F.

Procedures

Online Surveying

Data were collected using the online survey platform Qualtrics which enabled the survey to reach a large and geographically diverse sample without the logistical and financial challenges associated with traditional pen-and-paper methods. An early study on email use among social workers found that approximately 75% of a random sample of 384 social workers used email regularly in their work (Finn, 2006). A more recent study of email use by social workers or child welfare workers was not found. However, given the exponential growth in internet usage, it is highly likely that nearly all child welfare workers have access to email, at least at work.

Along with the growth of internet use there has been a corresponding increase in the use of online surveys in research. Shin, Johnson, and Rao (2012) reviewed the literature on differences in response rates between paper and online surveys. In general, online surveys have a lower unit response rate but a higher item completion rate suggesting a trade-off between having fewer respondents but a decrease in missing or skipped items. Online response rates are

often higher than paper response rates for college and professional populations (Shin et al., 2012).

A number of recent studies have used online survey platforms for the ASI (Bermúdez, Sharp, & Taniguchi, 2015; Christopher & Wojda, 2008; Osborne & Davies, 2012), AMI (Hart, Glick, & Dinero, 2013; Russo, Rutto, & Mosso, 2014), or both (Glick & Whitehead, 2010).

Recruitment methods varied, including direct email to students (Bermúdez et al., 2015), use of an online recruitment service (Christopher & Wojda, 2008; Glick & Whitehead, 2010; Hart et al., 2013), or through invitations posted to online discussion boards (Osborne & Davies, 2012). In each of the studies, reliabilities for the various measures were consistent with those reported in research using traditional paper questionnaires. In none of the studies did the researchers raise concerns that online completion had a significant effect on the studies' findings.

Participant Recruitment

Non-probability sampling methods were used as a generalizable sample of child welfare workers could not be obtained since the total population cannot be defined. As such, the sample was not an inclusive representation of child welfare workers. Two methods were used to recruit participants. One method was to reach out directly to administrators in public and private child welfare agencies seeking permission to distribute the survey invitation email to their staff. The second was to directly email individuals who may have met the study's eligibility criteria through obtaining publically available email lists.

Child welfare administrators. Names and contact information of administrators within public and private child welfare agencies were obtained through several methods including searches of agencies' websites, direct professional relationship with the researcher, and querying professional contacts for information on administrators they may know. These contacts acted as

gatekeepers because they could either grant the researcher permission directly to distribute the survey to their employees or they were able to direct the researcher to the appropriate person within the agency to contact. Administrators were initially contacted via email stating the purpose of the research, time required of staff, and assurances of human subjects protection (see invitation in Appendix B). Responses of administrators to the request varied. Some either did not reply at all or immediately declined. Others directed the researcher to the agency's IRB forms and process while others replied promptly and agreed to participate. Administrators, or their designees, that agreed to participate were then sent the survey invitation in a ready-to-forward format to send to their staff on the researcher's behalf (see Appendix B). Administrators were also requested to provide the researcher with the estimated number of staff the invitation would be sent to in order to estimate response rates. The researcher contacted individuals at ten private agencies and 17 public agencies. Seven private and 11 public agencies agreed to send the survey invitation to their workers.

Direct email. Potential participants' email addresses were obtained via two methods. First, some state governments post email addresses for all government employees online. Disclaimers on the use of these emails were reviewed and those that had prohibitions on using the information to contact employees in bulk were excluded. Also excluded were states whose email lists were not able to be limited to employees within the appropriate child welfare department. Because mass emails tend to be blocked by most spam filters, invitations were sent to no more than 200 staff, in batches of 50, within any one agency. Emails were sent in this manner to staff within six state agencies. Two states' email systems appeared to block the invitations as none of the emails sent to those addresses were opened. Participants recruited through direct email were sent the same invitation as the one administrators could forward. A

follow-up email was sent to those who had not responded at two weeks and three weeks after the initial email.

Second, a sample of 1250 males within the Child/Family Welfare specialty practice section of the National Association of Social Workers (NASW) were directly sent emailed invitations. Because men comprise less than 20% of child welfare workforce (Whitaker, Weismiller, & Clark, 2006b), an intentional oversampling of males was done in an attempt to ensure enough male respondents to use gender as variable in hypothesis testing. Approval was obtained by the NASW's IRB and the purchase of the e-blast was financed by the researcher. Emails were sent directly through InFocus Marketing, a third-party contractor with NASW, on behalf of the researcher. No email addresses were given to the researcher. Because each email blast incurred a separate fee, no reminder emails were sent to individuals recruited through the NASW mailing.

Participation incentives. On the survey's thank you screen, participants were offered the opportunity provide their email address in order to receive the study's results and/or enter a lottery for one of four \$100 gift cards. Two male and two female participants were randomly selected. Lottery winners were offered the option of receiving either a VISA gift card or a transfer to their PayPal account.

Survey completion procedures. After clicking on the link in the invitation for the survey, participants first viewed a statement of informed consent. Participants provided consent by selecting either an "I consent to participate" or an "I decline to participate" statement at the end of the informed consent page. Participants were taken to the survey only after selecting "I consent." Eligibility of participants was established through the use of screening questions at the beginning of the survey. Participants screened as ineligible were redirected away from the

survey to an end screen thanking them for their time and consideration. Participants whose answers to the screening questions indicated they meet the eligibility criteria were able to proceed with the survey.

Upon being screened in as eligible, participants completed: 1) a set of background questions, 2) the ASI, 3) the AMI, and 4) the DFFA-CW. The order in which participants completed the ASI/AMI and DFFA-CW was randomized. The order of the measures has the potential to "prime" participants and create bias in responses. For example, completing the AMI may call forth traditional stereotypes of men which could bias a participant to more strongly state a preference for working with mothers.

Ethical Considerations

A minor amount of deception was used in recruitment, consent, and other messages in order to obfuscate the study's focus on sexism. Informing participants that the study was investigating sexism in any way could have resulted in a social desirability bias in respondents. Materials were carefully worded so that participants are given enough information to consent but not so much that they could interpret the 'correct' way to respond to the measures. The use of deception was approved by the University of South Florida's IRB. All respondents were shown a debrief screen after completing all survey items and were given the opportunity to withdraw consent at that time. Respondents who indicated on the debrief screen a desire to withdraw consent were asked to confirm their selection before all of their responses were erased. Only two respondents opted to withdraw their consent and their responses were erased by the survey software.

While completion of anonymous surveys is viewed as providing consent, this study strengthened human subject protections by requiring participants to actively select either consent

or decline. Viewers often skim web content, with a recent analysis estimating that people read only 18% of what is written on a webpage (Nielsen, 2008). It is likely that participants may not have fully read the informed consent document. Requiring participants' active agreement by checking either consent or decline provided a stronger implication of informed consent than merely instructing participants to "click next" at the end of the consent statement.

No identifying data was collected of participants in the process of completing the survey. Respondents' IP addresses (the unique numerical code assigned to each network) was collected solely for the purpose of assisting in identifying duplicate responses. IP addresses are very difficult to trace back to any specific individual. All computers on one network, such as in one agency or residence, share the same IP address making it impossible to link back to a specific individual on that network. Email addresses obtained to distribute survey invitations were deleted from the Qualtrics account after data were downloaded. Participants that elected to receive the study's results or enter the lottery were directed to a separate web page that was not linked to their response data where they entered their email address and gender (if entering the lottery). This set up ensured that identifying information for the incentives could not be connected back to any individual's responses.

Data Analysis Procedures

Screening for Duplicate Responses

Multiple responses from the same individual were possible since the survey link in invitations forwarded by a child welfare administrator could be accessed multiple times. Though duplicate responses were anticipated to be rare, data were screened for possible duplicates. Key demographic criteria were reviewed and cases with identical or nearly identical values were compared. Demographic criteria used were age, gender, years in child welfare, degree and

major, state, and IP address. Responses to the survey measures were compared for cases that appeared to have nearly identical demographic characteristics to determine degree of similarity. If both the measure responses and demographic criteria appeared to be nearly identical, only the response that was completed first was retained in the dataset. The screening process revealed only two cases that appeared to be duplicate responses completed by the same person, leading to the deletion of one case. IP address information was deleted from the data after the screening process.

Missing Data

Initial data preparation was completed using SPSS 23 (IBM Corp., 2015). A missing values analysis was performed to determine the amount of data missing from each of the ASI and AMI subscales. Overall, there were 440 complete cases. The amount of missing data per item for each scale ranged from 2.6% - 7.1% for BS, 2.6% - 7.1% for HS, 8% - 10.4% for BM, and 8% - 10.2% for HM. At the case level, 9% were missing up to 11 of the 11 items on the BS scale, 10% were missing up to 10 of the 11 items on the HS scale, 13% were missing up to 10 of the 10 items on the HM scale.

Review of missing data patterns revealed that the number of missing items increased as respondents progressed through the survey, suggesting the possibility that survey fatigue or interruptions during survey taking contributed to missingness. The six most common missing patterns, each reflecting 1% or more cases, align with the page-breaks of the survey (Table 5). An additional eight cases were missing data for at least one page in a uniquely individual pattern, each missing between six and 37 items. However, the remaining 50 cases with missing data were missing only one to three items total and never more than two items per each subscale. These cases had completed all sections of each scale with limited amounts of missing data which

could be attributed to a variety of factors other than survey fatigue (e.g., accidentally skipped, prefer not to answer, lack of understanding the item). Retaining these 50 cases with the 440 complete cases reduced the amount of missing data to less than 1% per item. The assumption of missing at random could tentatively be supported.

Values for the missing items were imputed using an Expectation Maximization (EM) procedure in SPSS 23 (IBM Corp., 2015). Multiple studies have found the use of imputation for missing data to be superior to older ad hoc methods such as complete case analysis, listwise or pairwise deletion, mean substitution, and regression-based single imputation (Graham, 2012; Penn, 2007; Roth, Switzer, & Switzer, 1999; Saunders et al., 2006). The primary advantage of EM over older methods is that information from cases with non-missing data are used to impute values for the missing items while retaining information on standard errors in variances (Graham, 2012; Saunders et al., 2006). Essentially, the algorithm uses the data that are available to make a best estimate of what the missing data would be had the respondent answered that item. Imputation for this study was done at the item level rather than the scale level. This improves the accuracy by preserving and using data from the items that the respondent did complete in addition to the imputed items when computing subscale scored in a multiple item scale (Roth et al., 1999). All 42 items from the ASI and AMI were used in the EM procedure to impute values for the 60 missing items. Results for both the estimated means and estimated standard deviations for each item were essentially the same pre and post EM.

After missing values procedures were completed for the ASI and AMI, a missing values analysis was completed on the DFFA-CW subscales. Overall, there were 457 complete cases. Of the 33 cases that were missing some items one case was missing values for the entire DFFA-CW, three cases were missing all values for the Behaviors subscale, and one case was missing

six out of the seven values for the Attitudes subscale. Due to the high coverage for the DFFA-CW and the ability of latent class analysis to handle missing data in distal outcomes, no imputation was used on the DFFA-CW scales. All 490 cases (457 complete plus the 33 cases missing some DFFA-CW items) were retained.

Preliminary Analyses

Descriptive statistics were examined for the study variables and Pearson bivariate correlations were conducted for all subscales of the ASI, AMI, and DFFA-CW. An ANOVA was used to determine if order of measure completion impacted item responses. Results of an ANOVA found no significant difference in ASI or AMI subscale scores or the Staff Attitudes or Staff Behavior DFFA-CW subscale scores based on the order in which respondents completed the measures (BS: F = .067, p = .795; HS: F = 3.076, p = .080; BM: F = .611, p = .435; HM: F = .679, p = .410; Attitudes: F = .311, p = .578; Behavior: F = 3.120, p = .078). Scores on the DFFA-CW Staff Bias scale appeared to be marginally influenced by the order measures were completed (F = 4.137, p = .043). However, when adjusting the needed p-value to account for the six tests using a Bonferroni correction, the association was not significant.

Review of the descriptive statistics for gender and degree major led to the following data recoding. Only one respondent indicated they did not identify as either male or female; this case's response to the gender item was recoded to missing. The survey allowed for ten options for major of college degree with an eleventh write-in option for other. Only social work had more than 20% of respondents. Thirteen percent (n = 63) of respondents chose to write-in their specific major. Both write-in and selected majors were qualitatively reviewed and collapsed into five categories to create more robust cell sizes for hypothesis testing: social work, psychology, behavioral health, other humanities, and other. Table 6 details which selected and write-in

responses were placed into each of the five degree major categories. Some respondents listed multiple majors in their write-in response. These were prioritized in the following manner: 1) if any of the majors were in social work, the responses were placed in the social work category; then 2) if psychology was one of the majors listed, it was placed in the psychology category; then 3) all remaining write-ins had multiple majors that were qualitatively from the same final category and were thus placed in the appropriate category. All preliminary data analyses and transformations were done using SPSS 23 (IBM Corp., 2015).

Ambivalent Sexism Typology

Sibley and Becker (2012) were the first to use latent class analysis (LCA) to identify typologies of sexists using a shortened version of the ASI. To the author's knowledge, the current study is the first to use LCA on the full ASI as well as with the AMI. Most existing research with the ASI/AMI uses the partial correlations of the subscales or median splits to investigate the relationship between ambivalent sexism and the dependent variable of interest. However, Sibley and Becker (2012) argue that these methods obfuscate distinct subtypes of people that vary in their endorsement of each subscale. These methods also hide a small but distinct group of people for whom hostile and benevolent sexism are not correlated. Using data from a large-scale population survey in New Zealand, Sibley and Becker (2012) identified six typologies of sexists using LCA: non-sexists; mild, moderate, and strongly ambivalent sexists; hostile sexists; and benevolent sexists (see Figure 1). Weak but significant differences between the sexism typologies in responses to measures of relationship satisfaction and ideological attitudes supported their hypothesis that the six types represented distinct groups of people. The present study expounded on previous work by using both the ASI and AMI to identify typologies of sexism inclusive of both genders.

Overview of Latent Class Analysis. The study used latent class analysis (LCA) to identify how many typologies of sexists were needed to characterize the heterogeneity of respondents based on differences in response patterns on the ASI and AMI. Latent class analysis is a technique under the umbrella of latent variable models that includes factor analysis, latent profile analysis (LPA), and latent trait analysis (Collins & Lanza, 2010; McCutcheon, 1987). LCA is similar to factor analysis in that both use observed variables as indicators of an unobserved construct (Collins & Lanza, 2010). Factor analysis is a variable-oriented approach in which correlations among variables are used to determine a structure that is assumed to be consistent for all individuals. Latent class analysis, on the other hand, is considered a person-oriented approach in which individual characteristics are used to identify subtypes (i.e., classes) of individuals (Collins & Lanza, 2010). LCA provides the estimated probability that each observation is in each class post analysis.

The first step in LCA is class enumeration. Enumeration is an iterative process that begins by fitting an unconditional 1-class model (k) then testing successive models with k+1 classes. This process continues until models fail to converge and/or various fit indices indicate over extraction. Models are then evaluated using a combination of absolute and relative fit indices, classification quality metrics, and qualitative interpretability of the classes to determine which model has optimal fit and is most useful for understanding the heterogeneity of within the population.

Assessing model fit. As with most latent variable models, determining utility requires balancing the quantitative fit statistics with ensuring the classes are interpretable and qualitatively relevant. The various goodness of fit statistics fall into two categories (Masyn, 2013). The first is a measure of absolute fit comparing the consistency of the observed data with

the model values. Absolute fit is evaluated using the likelihood-ratio chi-squared goodness of fit test (X^2_{LR}). The second category are measures of relative fit where two different models' representations of the data are compared. Several measures of relative fit are commonly evaluated including Consistent Akaike's Information Criterion (CAIC), Bayesian Information Criterion (BIC), Approximate Weight of Evidence (AWE), adjusted Lo-Mendell-Ruben likelihood-ratio test (LMR-LRT), Bayes Factor ($\hat{B}F$), approximate correct model probability (cmP), and the bootstrap likelihood ratio test (BLRT). Researchers often use a combination of fit statistics as no single measure has been established as the best practice standard (Masyn, 2013; Tein, Coxe, & Cham, 2013).

The X^2_{LR} tests how well the model estimated response patterns match the observed response patterns (Collins & Lanza, 2010). Model fit is supported when there is failure to reject the null hypothesis. When X^2_{LR} equals zero and the p-value equals one, the model perfectly fits the observed data (Masyn, 2013). The X^2_{LR} , like chi-square tests in general, can be sensitive to sample size, leading to an incorrect rejection of a model with negligible misfit when sample sizes are large. However, the X^2_{LR} can still be used in LCA as a means of evaluating "close enough" fit (Masyn, 2013).

The LMR-LRT and the BLRT are considered inferential relative fit measures that test the improvement in fit between a *k* and a *k*+1 class models. A significant *p*-value for both tests indicates the *k*-class model has a better relative fit than the *k*+1 class model (Masyn, 2013). A limitation of both the LMR-LRT and the BLRT is that they can only compare two nested models at a time. The information-heuristic measures of relative fit do not have this limitation and allow for a comparison across multiple models. However, unlike inferential measures, information-heuristic only provide descriptive comparisons of classes; they do not provide a measure of how

much better one model is to another. The three information-heuristic measures commonly used are the BIC, the CAIC, and the AWE. Each measure attempts to balance the overall fit, as measured by the maximum log likelihood, versus the complexity of the model by applying some form of penalty (Masyn, 2013). The penalty terms take into account sample size and number of estimated parameters in slightly different ways for each of the measures. The model with the lowest value is the "best" model, relatively speaking. Elbow or scree plots can be used to the find the point at which adding more classes brings diminishing returns in the event that the values do not "bottom out" or reach a minimum value prior to reaching a maximum number of classes.

The final two measures, $\hat{B}F$ and cmP, are still descriptive measures of relative fit but they do provide an estimate of how much better one model is relative to one or more other models (Masyn, 2013). The $\hat{B}F$ used in LCA is an approximate Bayes Factor. It provides a ratio comparing the probability that Model A is correct versus the probability that Model B is correct. Typically, a k-class model is compared to a k+1-class model. The larger the ratio, the greater the support for Model A. The relative best model using the $\hat{B}F$ is the one with a $\hat{B}F > 3$ when comparing a k versus a k+1 class model. The cmP provides a relative comparison of a specific model to the entire set of models being considered (Masyn, 2013). The cmP assumes that the true model is one of the models in the set, thus the "best" model is the one with the highest probability. Masyn (2013) suggests considering any models with a cmP greater than 0.1.

Classification quality diagnostics. A precise latent class model is one in which members in a class have a high degree of homogeneity in their responses on the class indicators and the various classes are well separated and differentiated (Masyn, 2013). Classification quality is particularly important in applied LCA when class assignment will be used in later analyses.

While classification quality diagnostics are important for evaluating the substantive utility of a model, they should not be used to evaluate model fit or consistency. It is possible for a model to have good absolute and relative fit and be qualitatively uninterpretable, or vice versa.

The four classification quality diagnostics used in this study were relative entropy, average posterior class probability (AvePP), odds of correct classification (OCC), and modal class assignment proportion (mcaP). Each of these uses the posterior class probabilities as a key indicator of classification quality. Posterior class probabilities use the maximum likelihood estimates and individuals' response patterns to provide the probability that each individual is in each of the latent classes (Masyn, 2013). The class with the highest posterior probability is referred to as the individual's modal assignment.

Relative entropy, E_K , measures the overall precision of the posterior class probabilities across all the latent classes in the model. When $E_K = 0$ the assignment is no better than random guessing while $E_K = 1$ means individuals' assignments are perfect (Masyn, 2013). However, even when E_K is close to 1, there can still remain a high degree of classification error. This is why relative entropy should not be, and was not intended to be, used to asses model fit. An E_K that is very low can be an indicator of over-extraction of classes and therefore that the class separation may be too low to have utility.

The remaining classification quality diagnostics provide an indication of the quality of class assignment for each latent class. The AvePP evaluates the uncertainty of classification for each latent class by averaging the maximum posterior probability for all individuals modally assigned to each class. Similar to E_K , AvePP = 1 when all individuals in the class have a posterior probability of 1; an AvePP > 0.7 is considered the minimum needed to indicate adequate classification quality (Nagin, 2005). The OCC uses the AvePP and the posterior

probabilities to calculate the odds that an individual is correctly classified to a specific class. An OCC = 1 is no better than chance. Nagin (2005) suggests a minimum value of OCC > 5 for all classes as an indication of classification quality. Finally, the mcaP is simply the proportion of individuals modally assigned to each class. If the modal assignments were perfect, then mcaP would equal the model-estimated class proportions. The discrepancy between the two can be evaluated by comparing the 90% confidence interval for the corresponding model-estimated proportion (Masyn, 2013).

Qualitative interpretation. The final step in class enumeration is to qualitatively review each class's characteristics to assign meaning, similar to interpreting factors in a factor analysis. Class homogeneity and class separation can help in identifying what traits best represent and distinguish each class. Class homogeneity refers to the amount of similarity among individuals within a class with respect to their endorsement of a particular response category on the observed variables (Masyn, 2013). Using a binary variable example, a class with an item endorsement probability of 0.90 means that 90% of individuals within that class endorsed that item; such an item could be said to be a typical characteristic of that class. An item with a mid-range probability of endorsement, say 0.45, would not be considered an item that could characterize a class.

Class separation refers to how dissimilar individuals are with respect to item endorsement across difference classes (Masyn, 2013). For example, if the probability of endorsement for two classes are 0.80 and 0.75 on an item, then this particular item does not differentiate the classes. However, if the item probabilities were 0.80 and 0.15, then the classes are well separated on this item and can be said to distinguish one from the other. Class separation is best evaluated through the use of odds ratios of the item probabilities with ORs > 5 and < 0.2 indicate high separation.

Finally, class proportions can be useful in assigning meaning, depending upon the context (Masyn, 2013). For instance, if 55% of a population-based sample are in Class A, then this class could be considered "typical" or "common" while Class B with only 10% of the sample could be identified as "rare" or "unusual."

Class enumeration in LPA. LPA is a variant of latent class analysis used when the observed variables are continuous. Much of the procedures for class enumeration in LPA are the same or similar in LPA, but there are some key differences. In LPA, the joint distribution of the continuous observed variables stems from the mixing of those variables' distributions across the latent classes (Masyn, 2013). LPA does not impose any assumptions about the joint distribution in the overall population. Rather it is assumed that the population is comprised of K number of latent classes each with their own specific distributions. Two aspects of LPA make it particularly unique from LCA: 1) LPA does not require conditional independence of the observed variables, and 2) the means, variances, and covariances can be constrained or allowed to vary within-class. This adds both flexibility and complexity to the class enumeration process.

Because the variances and covariances within the latent classes can vary, and the "true" structure of the latent classes is unknown prior to model building, the LPA model-building process requires examining models for each of the four possible variance/covariance structures (Σ_k) of the indicator variables (Masyn, 2013). First, the least restrictive structure is class-varying unrestricted Σ_k . In this structure, each class can have its own variances/covariances and within-class correlations among the indicator variables. This specification typically extracts the fewest number of classes and can fail to converge. Second, class-invariant unrestricted Σ_k restrains the variances/covariances to be equal across the classes but the indicator variables remain allowed to covary. Third, class-varying diagonal Σ_k allows the variances to be different within-class but the

covariances are fixed at zero and conditional independence is imposed on the indicator variables. Finally, the most restrictive structure is class-invariant diagonal Σ_k and requires the most number of classes to produce the best fitting model. Under this structure, conditional independence is imposed (i.e., covariances are fixed at zero) and variances equal across the latent classes. This model provides a solution that is similar to using *K-means* clustering as the only the means are allowed to differ across the classes (Masyn, 2013).

Class enumeration in LPA begins by fitting models with increasing number of classes for each of the four Σ_k structures. The various measures of fit and classification quality are reviewed to determine the best-fitting model within each structure. This process is repeated with the four candidate models (one from each structure) to arrive at the final model selection.

All of the relative fit measures described above for LCA are used to assess the relative fit in LPA. However, there are currently no standard measures of absolute fit for LPA (Masyn, 2013). Current fit indices for other models with continuous indicators, like factor analysis, only assess model consistency related to the mean and the variance/covariance structure. Such measures are not appropriate as LPA uses higher-order moments (e.g., skewness and kurtosis) to extract the latent classes. It is possible to use a one-class LPA model with a class-invariant unrestricted Σ_k structure as a benchmark with which to compare all other models. Such a model exactly fits the mean and variances/covariances of the data but the higher-order moments are set to zero (Masyn, 2013). Any models that are informed by the high-order moments must perform better, as measured by the log-likelihood, than the fully-saturated benchmark model.

Posterior probabilities are obtained for individuals in LPA and thus the same classification quality diagnostics used in LCA are applicable. In addition, the class-specific

means, variances, covariances, and univariate skewness and kurtosis of the indicator variables are used to interpret and assign meaning to the classes.

Assigning cases to classes for hypothesis testing. Frequently, researchers want to test the relationship of latent classes to a distal outcome. One method for testing such relationships is to include the distal outcome as a covariate in the class enumeration process, referred to as the one-step approach (Vermunt, 2010). A limitation of the one-step approach is that the inclusion of covariates can change the meaning of the classes in the latent class model or result in additional classes due to the inclusion of new information (Lanza, Tan, & Bray, 2013). A second critique of the one-step approach is that it does not fit with the standard logic of researchers (Bakk & Vermunt, 2016; Vermunt, 2010). Most researchers prefer to include covariates, whether predictor or distal, after first specifying a latent class model. An inclusive approach prevents overall hypothesis testing of the relationship between classes and outcomes because the outcome is included in the class development, creating a form of circularity (Bakk & Vermunt, 2016; Lanza et al., 2013).

The most common method of analyzing distal outcomes in latent class analysis is the three-step classify-analyze approach. In this approach, a latent class model is first built using the observed variables; in the second step individuals are assigned to a class with class assignment being treated as observed and ignoring classification error; and these class assignments are used as a variable when investigating relationships with external variables in the third step (Vermunt, 2010). However, several authors have found that a significant limitation of this approach is that results of the outcome analysis may be biased due to uncertainty in the latent class assignment (Bakk, Tekle, & Vermunt, 2013; Bolck, Croon, & Hagenaars, 2004; Bray, Lanza, & Tan, 2015; Lanza et al., 2013). In LCA, the latent class is treated as a variable that is 100% missing but can

be "imputed" through analysis of observed variables (Bray et al., 2015). As in missing data analysis, this imputation is not perfect. Individuals' membership in a class is predicted based on the posterior probability given their pattern of responses to the observed variables (Bakk et al., 2013). In modal class assignment, individuals are assigned to class with the largest posterior probability of membership. This can lead to misclassification. For example, persons with the same response pattern to the observed variables may have posterior probabilities of 0.75 of being in Class 1 and 0.25 of being in Class 2. Under modal assignment, all of them are assigned to Class 1 but 25% will actually belong to Class 2 and thus will be misclassified. Though other methods are available for assigning individuals to a single class (i.e., pseudo-class draws), modal assignment has the smallest number of classification errors (Bakk et al., 2013). The impact of misclassification is the tendency for negative biases to occur, leading to an underestimation of the relationship between the distal outcome and latent classes (Lanza et al., 2013).

Modifications to the three-step approach have been developed in an effort to reduce or remove the misclassification bias. The Bolck-Croon-Hagenaars (BCH) approach corrects for the bias by using the inverse of the classification errors to weight the classes (Bolck et al., 2004). The weights are based on a frequency table and thus applied at the individual level. An advantage of the BCH approach is that the use of robust standard errors allows for the assumption of equal error variances in the distribution of the distal outcome (Bakk & Vermunt, 2016). One problem with the BCH is that weights can be negative if entropy is low and the sample size small (Bakk et al., 2013).

Vermunt (2010) proposed using ML to correct for bias when estimating class-specific means and variance of a distal outcome. The ML approach requires that the class-specific distribution of the distal outcome be specified by the researcher, usually defined as a normal

distribution for a continuous outcome (Bakk & Vermunt, 2016). The variance of the outcome can be modeled as either equal or unequal. The ML correction has been found to be more efficient than the BCH approach (Bakk et al., 2013; Vermunt, 2010).

Bakk and Vermunt (2016) compared the BCH and ML approaches under violations of normality (specifically bimodality) and heteroskedasticity assumptions. The ML approach with unequal variances and the BCH approach both obtained unbiased estimates under varying degrees of heteroskedasticity while the ML approach with equal variances was highly biased. However, the BCH approach outperformed both ML approaches when entropy was low and sample sizes were small. Only the BCH approach was unbiased under the three bimodality conditions tested. Bakk and Vermunt (2016) conclude that the BCH approach is quite robust and should be the recommended method for continuous distal outcomes. A similar result was found by Asparouhov and Muthén (2015) when comparing BCH to the ML.

Latent Profile Analysis Procedures. Mplus 7.4 (Muthén & Muthén, 2016) was used to perform the LPA. Total scores for each ASI/AMI subscale (BS, HS, BM, and HM) were entered as the observed variables of the latent classes, rather than using the 42 individual items in an LCA, similar to parceling in confirmatory factor analysis for higher-order factors. This was done because an LCA using 42 observed variables, while possible, would be highly difficult to interpret. In addition, the measures were designed for subscale scores to be used in hypothesis testing.

Table 7 provides the model fit indices for each Σ_k structure. Bolded cells indicate the "best" fitting model for each index. The benchmark model is italicized. Typically, the various fit indices will point to two to four adjacent models for final consideration. As can be seen in Table 7, this pattern did not emerge with respect to this study's data. Some fit indices never

"bottomed out." The range of classes indicated by various indices were also spread out rather than adjacent. Of additional concern was the lack of convergence and log likelihood (LL) replication that occurred in models beyond four classes. A low proportion of final starts converging on the best LL is a sign of low confidence in the model (Masyn, 2013). Another point of concern was the lack of LL replication for the LMR-LRT. Mplus provides the LL of the k-1 model in addition to the p-value for the LMR-LRT. To ensure that the proper models are being compared, the LL for the k-1 model produced by the LMR-LRT should match the LL obtained when originally fitting that model otherwise the results obtained will be incorrect.

Inspection of several scatterplots for the models revealed that the high positive skew of the indicator variables was possibly preventing convergence. Figure 1 provides an example of the scatterplots from one model. Under this model, scores on the BM scale were the key driver of the latent classes. While there is no population-level assumption of normality in LPA, such extreme skewness can be problematic. One way to analytically handle skewness in mixture modeling is to discretize the continuous variables so that extreme values have less impact on the analysis.

Latent Class Analysis Procedures. Descriptive statistics for the BS, HS, BM, and HM scores revealed that the majority of scores (> 90%) fell below 3.00 out of a maximum possible score of 5.00. To retain the maximum amount of variability, the scores were discretized into three ordinal categories: 0 - 0.99; 1.00 - 1.99; and 2.00 - 5.00. Class enumeration was performed using the steps described above for LCA. A sensitivity analysis was completed using four ordinal categories (0 - 0.99; 1.00 - 1.99; 2.00 - 2.99; and 3.00 - 5.00) to determine if information was lost by discretizing the continuous scores.

Hypothesis Testing

Due to the number of tests planned, the Benjamini-Hochberg procedure was used to reduce the chance of a significant result being produced by chance. The complete list of research questions and associated hypotheses can be found in Appendix A.

Hypothesis 1.1 (CWWs will more strongly endorse HM than BM). Hypothesis 1.2 (CWWs will more strongly endorse BS than HS), and Hypothesis 2.1 (CWWs score on the Staff Bias scale will be significantly lower than Staff Attitudes scale score) were each tested using a one-sample dependent t-test.

Hypothesis 1.3 (CWWs will be more ambivalent towards men than women) was tested using the results of the LCA. Descriptive frequencies were used to determine the proportion of respondents classified as having typologies reflecting ambivalence towards men, women, or both.

Hypotheses 3.1 - 3.3 were tested using the ML modified three-step approach with DFFA-CW scales as the distal outcome. A Wald test was used to determine the overall significance for each DFFA-CW scale with post-hoc tests used to determine which classes were significantly different.

CHAPTER FOUR:

RESULTS

This chapter will provide the results of the tests for the research questions and hypotheses listed in Appendix A. Hypotheses 1.1, 1.2, and 2.1 are presented in the first section. Hypothesis 1.3 is presented at the conclusion of the section "Final Model Selection." Hypotheses 3.1-3.3 are presented in the "Distal Outcome Testing" section.

Descriptive Statistics

The means and standard deviations for the ASI, AMI, and DFFA-CW measures are displayed in Table 8 for the total sample and by gender. Mean scores for the total sample on the sexism measures were quite low, with no subscale having a mean above 1.70 on a scale with a possible range of zero to five. These scores are lower than has been reported in other research involving primarily university students (e.g., de Oliveira Laux, Ksenofontov, & Becker, 2015; Hayes & Swim, 2013; Rudman & Fetterolf, 2014; Sibley & Becker, 2012). All four sexism measures were positively skewed and had significant non-normal distributions (Shapiro-Wilk test p < .001). Conversely, scores on the DFFA-CW scales were significantly negatively skewed (Shapiro-Wilk test p < .001). Means on the DFFA-CW were somewhat higher than those in a sample of Head Start teachers (White et al., 2011).

Bivariate correlations are displayed in Table 9. The four sexism measures (i.e., BS, HS, BM, and HM) were positively correlated with each other. The correlation was high for BS with HM and for BM with HM. The remaining pairs were moderately correlated. This relationship was expected given both the assumptions of Ambivalent sexism theory and results from previous

research (e.g., de Oliveira Laux et al., 2015; Glick et al., 2004; Glick & Fiske, 1996, 1999; Sibley & Becker, 2012). The three DFFA-CW subscales (e.g., Attitudes, Behavior, and Bias) were also positively correlated though not as strongly. Bias was only weakly correlated with both Attitudes and Behavior while there was a moderate correlation between Attitudes and Behavior. Interestingly, the ASI/AMI and DFFA-CW were negatively correlated for all subscales. Correlations were quite weak between the sexism measures and the DFFA-CW Attitudes and Behavior scales, indicating that as endorsement of sexism increases participants endorsed more negative attitudes towards fathers and fewer father engagement behaviors. Correlations between the DFFA-CW Bias scale and the sexism measures were slightly stronger, though still moderately weak. In general, as sexism increases, respondents indicated a slightly greater preference for mothers.

As shown in Table 8, the total sample had a mean HM score higher than the mean BM score, a BS score higher than the mean HS score, and a mean Bias score lower than the mean Attitudes score. These same patterns were found for females. However, for males, the mean HM score was lower than the mean BM score. To test hypotheses 1.1, 1.2, and 2.1, three new variables were computed reflecting the difference in the scores being tested: subtracting BM from HM for hypothesis 1.1; subtracting HS from BS for hypothesis 1.2; and subtracting Attitudes from Bias for hypothesis 2.1. The means, standard deviations, and one-sample t-test results are in Table 10. Results suggest support for the three hypotheses. Child welfare workers' scores for HM were significantly higher than for BM supporting hypothesis 1.1 that workers are more likely to endorse hostility rather than benevolence towards men. Scores for BS were significantly higher than for HS supporting hypothesis 1.2 that workers are more likely to endorse benevolence rather than hostility towards women. Finally, scores for Bias were

significantly lower than for Attitudes supporting hypothesis 2.1 that workers more strongly endorse interacting with mothers than fathers. When examined by gender, all three hypotheses are support for females while only hypotheses 1.2 and 2.1 are supported for males. Hypothesis 1.1 was not supported for males as their mean score on HM was actually lower than for BM, though this difference was not significant.

Latent Class Analysis

Scores for the sexism measures were discretized into both three and four category variables (Table 11). This section provides the results of the LCA class enumeration, selection of the final model, testing of covariate effects, and concludes with a qualitative description of the classes to address hypotheses 1.3 and 3.1-3.3.

Class Enumeration

Class enumeration proceeded first using the three category of the ordinal sexism variables. Table 12 provides measures of relative and absolute fit for models with one to six classes. Bolded cells indicate the "best" fitting model for each index. A 3-class solution was indicated by the LR chi-square, BIC, CIAC, AWE, $\hat{B}F$, and cm \hat{P} . The BLRT also indicated a 3-class over a 4-class solution (p=0.667). The p-value for the LMR-LRT was similar for both the 3- and 4-class solutions. The proportion of final starts converging at the best LL was adequate up through the 4-class solution. Taken as a whole, results indicated either 3- or 4-classes were needed to fit the data. Classification diagnostics and item probabilities for both the 3- and 4-class models were reviewed to aid in final model selection.

Tables 13 and 14 present the classification diagnostics for the 3-class and 4-class models, respectively. Entropy was slightly better for the 4-class than the 3-class model (0.835 versus 0.821). Both models had good classification diagnostics with the mcaP within the 90%

confidence interval of the estimated proportions, AvePP above 0.7, and OCC well over 5.0. The AvePP's were slightly higher in the 3-class model than the 4-class model while the converse was true of the OCC's. Thus, the classification diagnostics suggested that both models were comparable in terms of quality of class assignment.

Item probabilities for both models are given in Tables 15 and 16 and displayed visually in Figure 2. Classes in the 3-class model differ primarily in their level of endorsement of the sexism variables. The classes are rank-ordered such that Class 1 has the lowest scores, Class 3 the highest scores, and Class 2 is in between. The overall pattern is one where endorsement of the sexism variables is relatively equal within each class, reflecting ambivalence towards both genders.

The 4-class model has two classes that have item probabilities very similar to those in the 3-class model and two classes that appeared to result from a division of the third class. The item probabilities are essentially the same in the higher two classes in the 3- and 4-class models. The key difference between the two models is that the lowest scoring class in the 3-class model (Class 1) is divided into two classes in the 4-class model (Classes 1 and 2). In the 4-class model, Classes 1 and 2 have the same probability of item endorsement for BM (100% probability of a score less than 1.0) but are differentiated on item probabilities for the remaining measures. Class 1 has the greater probability of scores below 2.0 while Class 2 has a slightly higher probability of scores above 2.0. Thus, Class 1 has low scores overall while Class 2 has low scores on BM and moderate scores for BS, HS, and HM. Class 2's low BM score also clearly distinguishes it from Class 3, which similarly has moderate overall scores that are slightly higher than in Class 2. Finally, Class 4 has the highest scores overall.

A sensitivity analysis was completed using 4-category variables to examine the possible impact of the loss of information when the sexism variables were discretized. Most of the classes in the 3-category models were differentiated by having scores above 2.0 on the four measures. Therefore, the sensitivity analysis was completed by splitting the highest ordinal category into two categories: 2.0-2.999 and 3.0-5.0 and repeating the class enumeration process. Results using the 4-category variables again indicated either a 3- or 4-class solution. Classes in both models were rank ordered such that scores on the sexism measures increased in each successive class, similar to the 3-class model using 3-category variables. Models were again differentiated primarily by having sexism scores above 2.0, suggesting that the use of 3-category variables did not result in a loss of important information.

Final Model Selection

As explained in Chapter 3, the selection of a model requires balancing fit, interpretability, and utility. The relative fit indices suggest that the number of classes needed to adequately explain the heterogeneity of the sample is at least three but no more than four. As displayed in Figure 2, both models are also easily interpretable based on the pattern of the class-specific item probabilities. What stands out when comparing the two models is the presence of a class in the 4-class model that is uniquely univalent in sexism towards men (Class 2). This class is "hidden" in the 3-class model and adds valuable information in terms of understanding the underlying sample heterogeneity. Thus, the 4-class model was selected as the final model.

Class 1 (37%) was labeled as *Non-Sexists* due this class having the highest probability of scores below 1.0 for each sexism measure. *Non-Sexists* also have the lowest scores overall relative to the other three classes. Class 2 (11%) has a low level of ambivalence towards women, no benevolence towards men, and low hostility towards men. This class was labeled as *Low*

HM/No BM to reflect the unique aspect of this class's univalent low-level hostility towards men. Class 3 (32%) was characterized as Low Ambivalence. This class had the highest item probabilities for scores in the 1.0-1.99 range, with the exception of BS which had a 52% probability of being 2.0 or greater. The Low Ambivalence class, for the most part, has similar low levels of both benevolence and hostility towards both genders. Finally, Class 4 (21%) has the highest probability that scores for each measure were 2.0 or greater. This class was thus characterized by Moderate Ambivalence.

The meaning and distribution of the latent classes showed no support for hypothesis 1.3 (CWWs will be more ambivalent towards men than women). Nearly half (48%) of respondents were in classes that are univalent rather than ambivalent towards men, while all classes had some level of ambivalence towards women.

Testing for Covariate Effects

Prior to testing the effects of and latent class membership on attitudes towards father engagement after controlling for demographic characteristics (hypotheses 3.1 – 3.3), the measurement invariance of the covariates needed to be assessed. The meaning of the latent classes must be the same regardless of subpopulation membership. If the effects of covariates in a latent class model are misspecified, the model can experience significant changes in fit and meaning when they are later added as antecedents or predictors (Masyn, in press; Nylund-Gibson & Masyn, 2016). Since it is not possible for applied researchers to know the true effects of covariates when first enumerating the latent class model, a step-wise procedure has been proposed. The procedure is an adaptation of the multiple-indicators-multiple-causes (MIMIC) model used in structural equation modeling and the measurement of differential item functioning (DIF) used in item response theory (Masyn, in press; Nylund-Gibson & Masyn, 2016).

First, an omnibus test for measurement invariance was conducted for each demographic covariate: gender, agency type, age, supervisor, race, parental status, major, and education level. For each covariate, a null model with no-DIF (i.e., with measurement invariance) was compared to an alternative model with all-DIF (i.e., the covariate has nonuniform direct effects on the latent class variable and each of the observed indicators) using a likelihood ratio test. The null, no-DIF model was not rejected for agency type, age, supervisor, race, parental status, major, and education level. The omnibus test for gender rejected the null model (LRTS = 81.90, df = 19, p < .001) indicating that gender may be a source of measurement non-invariance for at least one of the sexism indicators in at least one of the four classes.

Second, each sexism indicator was tested for DIF to determine which functioned differently based on respondent gender. A series of eight (two for each sexism indicator) no-DIF and all-DIF models were compared. In the no-DIF models, gender was included as a predictor of class membership but with no direct effect on the sexism item. The all-DIF model included class-varying direct effects of gender to the sexism indicator in addition to gender predicting class membership. Similar to the first step, the no-DIF and all-DIF models were compared using a likelihood ratio test. Results suggested the presence of DIF for two of the four sexism indicators: BS (LRTS = 37.21, df = 4, p < .001) and HM (LRTS = 13.54, df = 4, p = .008). Thus, gender has a direct effect on BS and HM as they functioned differently for males and females.

The next step was to determine whether the effect of gender on BS and HM was nonuniform or uniform. Nonuniform DIF (all-DIF) would mean that the way in which males and females differed with regard to BS and HM varied depending on their class membership and would thus have an indirect effect on class membership through its class-varying direct effect on the sexism indicator. Under a uniform DIF model, the differences in male and female responses

to BS and HM would be the same within each class; class membership would only indirectly depend on gender insofar as males and females have different responses to BS and HM. As in the previous steps, the uniform and nonuniform DIF models are compared through a likelihood ratio test. Results suggested that the uniform DIF model performed significantly better than the no-DIF model but not significantly worse than the nonuniform DIF model (Table 17). Thus, the differences in BS and HM values for males and females were the same within each of the latent classes.

A final omnibus test was completed to determine if there was an association between gender and latent class membership after accounting for the measurement noninvariance found in the previous steps. A model with the regression of class on gender fixed at zero was compared to a model with the regression of class on gender freely estimated; both models included the uniform DIF for BS and HM and the no-DIF for HS and BM found in the previous steps.

Results of the likelihood ratio test indicated that the model with the regression fixed at zero did not perform worse than the model with the regression freely estimated (LRTS = 7.212, df = 9, p = .62) indicating there was not enough evidence to suggest that gender has an effect on class membership.

Results from the MIMIC stepwise tests for DIF suggested that the final latent class model was a 4-class model that included uniform differential functioning of BS and HM for males and females. Table 18 provides the item probabilities by gender within each class and are shown graphically in Figure 3. Within each class, females have a higher probability of having higher item scores for BS and HM. For example, among *Non-Sexists* the probability that the BS score is less than 1.0 is 62% for males and 20% for females while for HS the probability is the same for both genders (69%). In other words, women tended to have higher scores on BS and HM

then men within the same class. The same item probabilities are graphed in Figure 4 by each ordinal response category. This model was used as the final "step 1" model for testing distal outcomes.

Distal Outcome Testing

When testing the effect of latent class membership on a distal outcome, the latent class model is regressed on the distal outcome so that the error in classification is retained. The highly negative skew of the DFFA-CW Attitudes and Behavior scales presented the problem that their inclusion could result in a change in the meaning of the latent classes and were thus discretized. Visual examination of the histograms for Attitudes showed that almost all respondents scored between 4.0 and 5.0 with the highest frequency of responses being 5.0 (48%). Thus, Attitudes was recoded into a binary variable of either 5.0 or less than 5.0. Similar examination of the histogram for Behavior showed two spikes for 5.0 and 4.0. Behavior was discretized into a three category ordinal variable: 0 - 4.0 (33%), 4.01 - 4.99 (41%), and 5.0 (26%). While the Bias scale was also negatively skewed, the histogram showed the skew was not as extreme as the other two scales; Bias was kept as a continuous variable. Each outcome was tested separately as Mplus cannot test for outcomes at different measurement levels. The final model from the MIMIC procedure was used as the step 1 model for the 3-step distal outcome testing. Demographic characteristics were included as covariates in the step 1 model to avoid class switching and control for their significance on the outcome. The ML approach was used to retain the error in class assignment in step 2. Finally, step 3 used each DFFA-CW scale separately to test hypotheses 3.3 (strong endorsement of BS will be negatively correlated with favorable attitudes towards father involvement), 3.4 (strong endorsement of ambivalence towards men will be negatively correlated with favorable attitudes towards father involvement), and 3.5 (non-sexists – low on all AMI/ASI subscales – will be positively correlated with favorable attitudes towards father involvement).

There was no significant relationship between latent class and Behavior (Wald = 9.53, df = 6, p = 0.15) indicating no differences in stated level of interaction with fathers based on sexism profile. Thus, hypotheses 3.1-3.3 were not supported with regard to the DFFA-CW Behavior scale.

There was a significant overall relationship between latent class and Attitudes (Wald = 8.64, df = 3, p = 0.03). Post-hoc tests found that *Non-Sexists* were significantly more likely to report positive attitudes towards father engagement than Low Ambivalence (p = 0.01) and Moderate Ambivalence (p = 0.01) classes. There were no significant differences in Attitudes between Non-Sexists and Low HM/No BM nor between Low HM/No BM, Low Ambivalence, and *Moderate Ambivalence.* Figure 5 shows the probability of having a score of 5.0 on the Attitudes scale for each latent class. *Non-Sexists* have the highest probability at 69% while *Moderate* Ambivalence has the lowest probability at 34%. Non-Sexists are 3.6 times and 4.4 times more likely to endorse positive attitudes towards father involvement than Low Ambivalence and Moderate Ambivalence, respectively. Results suggest some support for hypotheses 3.1-3.3 with regard to Attitudes. Non-Sexists had the lowest endorsement of BS and were significantly more likely to strongly endorse favorable attitudes towards father involvement than Low Ambivalence and Moderate Ambivalence, which each had higher endorsement of BS. However, there were no significant differences between the remaining classes despite each having increasing values for BS. While *Moderate Ambivalence* had the greatest amount of ambivalence towards men and the lowest endorsement of favorable attitudes towards father involvement, there was no significant difference between this class and the Low HM/No BM and Low Ambivalence classes.

There was a significant overall relationship between latent class and Bias (Wald = 80.87, df = 3, p < 0.001). Table 19 provides the mean and standard deviation for Bias for each class. Post-hoc tests found that the mean for Bias was significantly different between each of the classes, with the exception of the difference between *Non-Sexists* and *Low HM/No BM* classes (Table 20 and Figure 6). Effect sizes ranged from medium to high with the largest effect for *Non-Sexists* compared to *Moderate Ambivalence*. Results for the Bias scale suggest support for hypotheses 3.1-3.3. Overall, a stated preference for working with mothers increased as ambivalence increased. *Low Ambivalence* and *Moderate Ambivalence* have increasing levels of ambivalence towards men and an increasing preference towards working with mothers. The most ambivalent class, *Moderate Ambivalence*, has the lowest scores on the Bias scale, indicating the strongest bias towards mothers. *Non-Sexists*, with the lowest scores on all sexism measures, had the highest scores on the Bias scale, indicating the least bias towards preferring mothers over fathers. Finally, the preference for working with mothers generally increased as endorsement of BS increased.

CHAPTER FIVE:

DISCUSSION

Despite decades of research indicating that fathers are not fully engaged by child welfare services, little research has been conducted to determine why such a disparity exists (Bellamy, 2009; Brown et al., 2009; Clapton, 2009; Jaffe, 1983; O'Hagan, 1997; Strega et al., 2008). This study investigated one possible explanation for the maternal focus of child welfare: sexism on the part of child welfare workers.

This chapter will review the findings presented in Chapter 4 and discuss their implications. The chapter begins with a summary of the hypotheses tested. Then, the relationship of class membership to beliefs about father involvement is discussed. Next, the study's findings to existing theory and research will be considered. Finally, the study's limitations and directions for future research will be presented followed by implications for child welfare practice.

Summary of Research Questions and Hypotheses Tested

Research question 1 asked to what degree child welfare workers (CWWs) endorse the aspects of ambivalent sexism. Results supported two of the three hypotheses. Overall, participants had significantly higher levels of hostility than benevolence towards men (hypothesis 1.1) and higher levels of benevolence than hostility toward women (hypothesis 1.2). However, the hypothesis that CWWs would have stronger ambivalence towards men as compared to women (hypothesis 1.3) was not supported. Nearly half of participants were in the two classes which had some ambivalence towards women but were univalent in hostility towards

men. The remaining two classes had relatively equal levels of ambivalence towards both genders.

Research question 2 asked to what degree CWWs reflect a preference for interacting with mothers when providing services. The associated hypothesis (2.1) was supported. Overall scores on the DFFA-CW Bias scale, which captures a preference for working with mothers, were significantly higher than those on the Attitudes scale, which measures positive attitudes about father involvement.

Finally, research question 3 considered the relationship between CWWs sexism profiles (i.e., the latent classes) and favorable attitudes towards father involvement. It was hypothesized that classes with stronger endorsement of benevolence towards women (hypothesis 3.1) and stronger overall ambivalence towards men (hypothesis 3.2) would have lower scores on the three DFFA-CW scales, reflecting less favorable attitudes towards father involvement. Hypothesis 3.3 theorized that the class with low scores on the sexism measures (i.e., non-sexists) would have the most favorable attitudes towards father involvement. Partial support was found for the three hypothesis. While there was no significant relationship between sexism profiles and father engagement behaviors (DFFA-CW Behavior scale), results showed some significant relationships between sexism profile and the Attitudes and Bias scales. In general, the two classes at the extreme ends (*Non-Sexist* and *Moderate Ambivalence*) had significantly different Attitude scores. Bias scores increased as the levels of BS and ambivalence towards men increased, indicating an increasing preference towards working with mothers.

Latent Class Membership and Beliefs About Father Involvement

Latent class analysis identified four meaningful and qualitatively distinct classes based on respondents' scores on the four sexism measures. The *Non-Sexist* (37%) and the *Low HM/No*

BM (11%) classes were both univalent in their endorsement of benevolence towards men but expressed some ambivalence towards women. The Low Ambivalence (32%) and Moderate Ambivalence (21%) classes had relatively equal within-class ambivalence towards both men and women. The four classes can be ordered qualitatively on a spectrum representing egalitarianism (Non-Sexist) on one end and traditional gender roles on the other (Moderate Ambivalence) with the other two classes in between. Gender was not a predictor of latent class membership. However, women tended to endorse BS and HM at higher levels than men.

Both male and female CWWs had more benevolence than hostility towards women and while only females had more hostility than benevolence towards men. This is not surprising given that, for women, BS and HM together reflect positive in-group beliefs and negative outgroup beliefs. The majority of the sample identified as female and the differential item functioning of BS and HM reflect this in-group/out-group pattern for women. There was no support for the hypothesis that CWWs would be more ambivalent towards men than women. Indeed, the opposite was true as all classes had ambivalence towards women while two classes were univalent towards men. While Sibley and Becker (2012) found that women were significantly more likely to be in the univalent benevolent sexist class than men, 93% of the women were in classes that reflected ambivalence sexism toward women. Thus, while women generally have higher BS than HS scores, individual women tend to endorse both to a similar degree. Women's higher endorsement of HM versus BM is theorized to be indicative of their resentment of men's hostility toward women (Glick et al., 2004). The men CWWs encounter have often been aggressive or violent towards women and children. The lack of ambivalence towards men may be a function of CWWs' experiences with mostly violent men leading to greater resentment – and hostility – than benevolence.

Responses to the DFFA-CW indicate that workers generally have favorable attitudes about father involvement and attempt to include fathers in case work while also having a moderate bias towards working with mothers. As hypothesized, workers with the highest levels of ambivalent sexism (Moderate Ambivalence) endorsed more negative attitudes about father involvement and indicated a greater preference for working with mothers. This relationship makes sense as high ambivalence has been associated with endorsement of traditional gender roles where women are caretakers and men are protectors and providers (Gaunt, 2013a; Glick et al., 1997; Glick & Fiske, 1997). The Bias scale of the DFFA-CW taps into these traditional ideas of women through statements that view mothers as naturally capable of providing child care and more committed to their children's well-being. It also reflects HM by viewing fathers as needing training in how to care for children and BM by viewing fathers mostly through their role as providers. Similarly, the Attitudes scale reflects the idea that fathers are equally important to the care of children as mothers. Because ambivalence towards women gives women power and control within the domestic sphere, it is not surprising that workers with more traditional sexism beliefs would have more negative attitudes about father involvement.

There are several possible reasons for the lack of a significant relationship between sexism class and the Behavior scale of the DFFA-CW. First, the majority of child welfare policies and regulations are either gender neutral (e.g., 'parents') or may specify that both parents be included in case activities. Many of the activities in the Behavior scale, such as a caseworker visiting fathers, including fathers in case planning, and looking for paternal relatives as placement options are included in the onsite case reviews as part of the federal Child and Family Services Reviews (Administration for Children & Families, 2016). Thus, workers may engage in these behaviors because they are required to do so as part of their employment. A

second possible reason may be the tendency for respondents to over-estimate behaviors on measures of self-report; workers may believe that they routinely work to engage all fathers on their caseload. Third, engaging fathers has recently become considered a "best practice" within the field of child welfare. Respondents may know this and may have either over-estimated their behavior or may have responded in a socially desirable manner. Finally, it could be that workers are able to set aside some of their biases and attempt to involve fathers in services. What remains unknown is the quality of the behaviors workers use in an attempt to better engage fathers.

Existing Theory and Research

The current study appears to be the second study to have used LCA with the ASI (the first being Sibley & Becker, 2012) and the first to use LCA with the AMI. The results of the current study have some similarities with those of Sibley and Becker's (2012). As in their study, the classes in the current study could be rank-ordered in terms of the overall level of ambivalence. The current study also found classes in which sexism was univalent rather than ambivalent. However, the current study had several key differences. First, Sibley and Becker (2012) found six classes of sexists using the ASI while the current study found only four classes. Second, the means in the current study for the ASI were noticeably lower than those in their study. Means for the BS and HS in their study were 4.28 and 3.57, respectively (Sibley & Becker, 2012, p. 593) whereas the means in the current study were 1.7 for BS and 1.47 for HS. Means for BM and HM were similarly low. The lower means in the current study may have contributed to the finding of fewer classes. Third, while the current study did find two classes that were univalent, they were univalent on the same measure, HM. Sibley and Becker had two univalent classes, one each for BS and HS. Finally, the current study had a higher estimated

proportion of respondents in the *Non-Sexist* class, 37% compared to their 13% (Sibley & Becker, 2012, p. 594).

The differences between the current and previous study may be due to different populations and measures. The population in the previous study was a sample of the general population in New Zealand (Sibley & Becker, 2012). The population of the current study was not only from a different county, the U.S., but was also limited to persons from within a specific profession, child welfare workers. It could be that there are differing levels of ambivalent sexism between New Zealanders and Americans and/or CWWs and the general public. Sibley and Becker used only half of the ASI items (five each for BS and HS) and used a 7-point Likert scale versus the original 6-point, either of which could explain some portion of the differences in the studies' findings. Perhaps the biggest difference was not only the use of the full ASI in the current study but also of the AMI as observed variables in the LCA.

Despite these differences, the current study supports the conclusion of Sibley and Becker (2012) that within a larger population there are distinct groups with differing profiles of ambivalent sexism. These profiles are likely rank-ordered in some fashion and contain groups who are distinguished primarily by their lack of ambivalence through univalent endorsement of at least one of the AST scales.

The current study extends the methodological practice on the testing of covariate effects in LCA by using a MIMIC procedure to test for DIF as proposed by Nylund-Gibson and Masyn (Masyn, in press; Nylund-Gibson & Masyn, 2016). Both authors have previously proposed such a process and presented examples using either simulated or real data. However, in both examples the data used only binary indicators for latent class membership. The current study extended their work through the use of ordinal indicators consisting of three categories.

The current study extends the work of Gaunt (2013a) in studying the relationship between ambivalent sexism and attitudes towards fathers. In her research involving adult Jewish Israelis, Gaunt found that respondents with higher levels of HM had positive reactions to the primary caregiving fathers while those with higher levels of BM had negative reactions. This relationship is based on the theory that HM reflects a resentment of male dominance while BM reflects support for male dominance (Gaunt, 2013a). In the current study, the two classes with the lowest levels of BM – *Non-Sexist* and *Low HM/No BM* – had the most favorable attitudes towards father involvement. However, these classes also had the lowest levels of HM. The *Low Ambivalence* and *Moderate Ambivalence* classes had higher levels of HM but also higher levels of BM which may have tempered their attitudes towards father involvement. These contradictory findings may be due to the very different analytic methods used by Guant (2013a). Whereas the current study analyzed the joint relationship of BM and HM to views of father involvement using LCA, Gaunt examined the relationship of BM and HM separately using partial correlations.

Finally, the current study examined empirically the previously theorized relationship between sexism and the maternal bias within child welfare practice. Researchers and theorists over several decades have pointed to Western gender norms as one of the causes behind the maternal bias in social work at large and child welfare specifically (Brown et al., 2009; Jaffe, 1983; Maxwell, Scourfield, Featherstone, Holland, & Tolman, 2012; O'Hagan, 1997; Risley-Curtiss & Heffernan, 2003; Scourfield, 2003). Ambivalent sexism theory reflects these traditional gender norms and the current study found evidence that those with the greatest levels of ambivalence were the least receptive to working with fathers. This relationship was strongest for the Bias scale of the DFFA-CW which reflects a preference for working with mothers.

Several researchers have found that CWWs view mothers as easier to work with than fathers, in part due to men's lack of child care skills (Arroyo & Peek, 2015; Franck, 2001; Lazar et al., 1991; O'Donnell et al., 2005). Similarly, the Attitudes scale reflects the belief that fathers are important to children and should thus be included in services. As discussed by several authors, child welfare often views fathers as irrelevant and therefore not the primary target for services (Brown et al., 2009; Clapton, 2009; O'Donnell et al., 2005; Scourfield, 2001). The current study found quantitative support for this concept that has previously been shown qualitatively; the classes with the most ambivalence also had the lowest Attitude scores indicating that such workers may view fathers as less important in working with families involved in child welfare services

Limitations

The current study has several limitations in the areas of sampling, analysis, and measurement. First, the sample represents only a small fraction of the United States' child welfare workforce. Estimates of the child welfare workforce range from a low of about 270,000 (Bureau of Labor Statistics, 2012) to a high of approximately 870,000 (Annie E. Casey Foundation, 2003). While the current sample is demographically similar to estimates of the national workforce (Barth et al., 2008; Whitaker, 2012; Whitaker et al., 2006b), the impact of non-response bias is unknown. Workers from the state of Maine were over represented, comprising one-quarter of the sample, while states with much larger child welfare workforces had only a few respondents (i.e., California and New York) or were not represented at all (i.e., Texas). However, states from all regions of the country were represented. Hence, the findings cannot be generalized to the national child welfare workforce but are able to provide insight into the possible relationship between sexism and maternal bias.

The lack of an effect for gender on either latent class membership or attitudes towards father involvement may be due to the small proportion of men in the study. Recruitment efforts specifically attempted to increase the amount of men in the sample by separating the lottery pools by gender and emailing survey invitations only to males in the child and family practice section of NASW. Despite these efforts, only 16% of the sample was male, though this is in line with the estimated proportion of men in the child welfare workforce (Barth et al., 2008; Whitaker et al., 2006b). Finding an effect for gender may require over-sampling men in proportion to their actual representation in the workforce.

Discretizing the AST variables may have led to a loss of important information in the LCA. In general, discretizing continuous variables risks a loss of variability and lower statistical power. The decision to discretize the sexism scores was made only after it became apparent that the extreme skew of the scales, especially the BM scale, was preventing convergence. The distribution of each variable was examined to determine the most logical cut points for the ordinal variables. Finally, the sensitivity analysis indicated that any loss of information was unlikely to have changed the results as the classes were similar in both scenarios.

Finally, measures of sexism have a tendency to become outdated as societal norms about gender roles change over time and blatant sexism is censored (Conn et al., 1999; Masser & Abrams, 1999). The ASI and AMI are 20 years old. While the concepts underlying AST may still be relevant, the measures themselves may no longer capture implicit, subtle beliefs about gender. Indeed, the outdated – and easily identifiable as sexist – sentiments of the sexism scales available in the 1990s was one of the factors that drove Glick and Fiske to develop the ASI (Glick & Fiske, 2011). The respondents in the current study had means on the ASI and AMI much lower than those found in existing research. It could be that child welfare workers are

actually less sexist than the general population. It could also be that they are simply better at identifying statements as sexist and responding in a socially desirable manner.

Future Research

Future researchers using the ASI and AMI, regardless of the population sampled, should consider using LCA or LPA in their analysis. The results of the current study and of Sibley and Becker (2012) suggest that distinct profiles of ambivalent sexism exist and these profiles may have unique relationships to distal outcomes of interest that are hidden when using typical methods such as regression or partial correlations. Given the limited scope of the study's population, replication with other samples is needed before findings can be generalized. Future studies could attempt to more systematically sample the national child welfare workforce or may sample more deeply from within a specific jurisdiction in order to confirm the LCA results.

The design of the current study does not make it possible to connect sexism profiles to actual caseworker practice with fathers. While the DFFA-CW attempted to do this, self-report measures of behavior are not considered highly reliable. Future research should gather data on actual practice with fathers from case files to determine how sexism relates to worker behavior. Such reviews could examine the types, quantity, and quality of contacts workers have with fathers. Future research may also expand to include examining how workers' sexism influences their engagement and interactions with foster fathers. As noted by Heslop (2016) foster fathers face many of the same stereotypes and exclusions as the biological fathers of children in child welfare.

Future research should expand the DFFA-CW to include all five of the original DFFA subscales. The current study did not modify nor include scales related to organizational behaviors and organizational attitudes as they were not relevant to the research questions.

However, they may be relevant to future research investigating the role of agency support on workers' engagement with fathers. Inclusion of all five DFFA scales would also make it possible to conduct a confirmatory factor analysis to determine if the factor structure of the DFFA-CW is indeed the same.

Finally, sexism is just one possible predictor of CWWs' engagement of fathers. Others have suggested additional factors such as race, class, agency support, workload, and workers' relationships with their own fathers as possible reasons for the maternal focus of child welfare (Arroyo & Peek, 2015; Brown et al., 2009; Coakley et al., 2014; Deutsch & Saxon, 1998; Veneziano, 2009). Future research should examine these and other factors that may influence the willingness and ability of child welfare workers to successfully engage fathers. In particular, future research should examine the intersectionality of race, class, and gender in how and whether a workforce that is mostly white, middle-class, and female engages with fathers who are predominately low-income, people of color.

Implications for Practice

The current study's findings have implications within the specific field of child welfare as well as the field of social work more broadly. Practitioners who work with families, whether or not that work takes place within child welfare specifically, should understand and be cognizant of the influence of beliefs about gender on the families, organizations, and communities they serve and on their own practice. Social work education about gender issues has frequently been a proxy for women's issues – men are essentially 'genderless' (McPhail, 2008). As has been noted by others, the social work curriculum needs to include content related to men's issues such as understanding various forms of masculinity, how to effectively engage with and work with men, and how societal views of men present barriers to their full

participation in domestic life (Baum, 2016; Futris, Schramm, & Duncan, 2016; McPhail, 2008; O'Hagan, 1997; Walmsley et al., 2009).

Practitioners should be given opportunities to reflect on their own beliefs about the roles and responsibilities of women and men in providing child care and how those beliefs may impact their work with mothers and fathers. All individuals bring to their work their own beliefs and biases based on their culture and the larger macro systems in which they operate. As stated by the Council on Social Work Education, social workers should have a level of self-awareness that enables them to recognize, acknowledge, and limit the influences of bias in their work with clients (Council on Social Work Education, 2012). Those who work in child welfare should be trained on how to identify and work through biases they may have that prevent their ability to appropriately engage fathers in child welfare services.

Conclusion

This study sought to better understand the role of sexism on the lack of child welfare practice with fathers. The current findings suggest that child welfare workers' sexism may influence their desire to engage fathers in services, though further research is needed to determine how sexism may affect workers' behavior and practice with fathers. Both fathers and mothers can present risks or assets to children. Shifting child welfare practice away from its traditional maternal focus will improve outcomes for children not just by better assessing the possible risks but by also recognizing the benefits of father involvement.

TABLES AND FIGURES

Table 1
Four-category framework proposed by Prentice and Carranza (2002)

	More desirable for a man/	Less desirable for a man/
	woman than for people in	woman than for people in
Trait valence	general	general
Socially desirable	Gender-intensified prescriptions	Gender-relaxed prescriptions
Socially undesirable	Gender-relaxed proscriptions	Gender-intensified proscriptions

Table 2

Descriptive characteristics of participants

Chti-ti	Retained		Removed	
Characteristic	Mean	SD	Mean	SD
Age	39	±11.29	39	±11.19
	N	%	N	%
Gender				
Female	410	84.0%	61	89.7%
Male	77	15.8%	6	8.8%
Neither of these describe me	1	0.2%	1	1.1%
Race/Ethnicity				
Asian	3	0.6%	1	1.4%
Black/African-American	74	15.1%	9	13.0%
Hispanic	20	4.1%	4	5.8%
Native American/Alaska Native	12	2.4%	0	0%
White/Caucasian	361	73.7%	53	76.8%
Multi-Racial	13	2.7%	1	1.4%
Other	7	1.4%	1	1.4%
Number of Children				
None/not a parent	159	33.1%	26	38.8%
1 child	87	18.1%	11	16.4%
2 children	130	27.1%	9	13.4%
3 children	62	12.9%	16	23.9%
4 children	28	5.8%	3	4.5%
5 or more children	14	2.9%	2	3.0%
Age of Youngest Child ^a				
0-5 years	109	33.4%	12	28.6%
6-10 years	65	19.9%	5	11.9%
11 – 13 years	28	8.6%	7	16.7%
14 – 17 years	42	12.9%	3	7.1%
18 years or older	82	25.2%	15	35.7%

Table 2 (Continued)

Characteristic	Retained		Removed	
Characteristic	N	%	N	%
State				
Alaska	25	5.9%	8	12.7%
California	2	0.5%	0	0%
Colorado	22	5.2%	3	4.8%
Connecticut	4	0.9%	0	0%
Delaware	37	8.7%	2	3.2%
Florida	21	4.9%	4	6.3%
Illinois	58	13.6%	9	14.3%
Indiana	10	2.4%	1	1.6%
Maine	100	23.5%	13	20.6%
Maryland	15	3.5%	2	3.2%
Massachusetts	1	0.2%	0	0%
Michigan	8	1.9%	5	7.9%
Nebraska	5	1.2%	2	3.2%
New York	1	0.2%	1	1.6%
Ohio	60	14.1%	4	6.3%
Oklahoma	1	0.2%	0	0%
Pennsylvania	36	8.5%	3	4.8%
Rhode Island	16	3.8%	3	4.8%
Texas	0	0%	2	3.2%
Vermont	1	0.2%	0	0%
Virginia	1	0.2%	0	0%
Washington	1	0.2%	0	0%
Wisconsin	0	0%	1	1.6%
Workplace Type				
Public	377	76.9%	47	67.1%
Private	113	23.1%	23	32.9%
Currently a Supervisor				
Yes	97	19.8%	13	15.3%
No	393	80.2%	72	84.7%
Type of Child Welfare Work Performed ^b				
Investigations**	266	54.3%	34	36.2%
Foster care case management*	305	62.2%	46	48.9%
Post-reunification services*	245	50.0%	36	38.3%
Adoption	194	39.6%	30	31.9%
Teens (e.g. independent living)	194	39.6%	31	33.0%
In-home prevention services*	166	33.9%	22	23.4%

Table 2 (Continued)

	Ret	tained	Ren	noved
Characteristic	N	%	N	%
Years of Experience in Child Welfare				
Less than 1 year	60	12.3%	11	15.5%
1-3 years	123	25.2%	19	26.8%
4 – 7 years	66	13.5%	10	14.1%
8 – 10 years	64	13.1%	8	11.3%
11 – 15 years	62	12.7%	10	14.1%
15 – 20 years	63	12.9%	5	8.5%
21 or more years	51	10.4%	7	9.9%
Highest Level of Education				
High School/GED	7	1.4%	2	3.0%
Associate	4	0.8%	1	1.5%
Bachelor	302	61.8%	45	67.2%
Master	162	33.1%	16	23.9%
Post-graduate professional	10	2.0%	2	3.0%
Doctoral	4	0.8%	1	1.5%
Major/Field of Study ^c				
Social Work	180	37.7%	17	27%
Psychology	96	20.1%	15	23.8%
Behavioral Health	79	16.6%	11	17.5%
Humanities	107	22.4%	18	28.6%
Other	11	2.3%	2	3.2%

^aOnly shown to respondents who indicated being a parent. ^bRespondents were able to select multiple items to reflect their scope of work. ^cOnly shown to respondents who had a Bachelor's degree or higher. *Difference between Retained and Deleted cases significant p < .05 without correction. **Difference between Retained and Deleted cases remained significant after Bonferroni correction (p < .003).

Table 3

DFFA-CW Items and Summary of Panel Experts' Comments

Item #	DFFA Original Wording	DFFA-CW Draft Wording	DFFA-CW Final Wording	Rationale for final wording
1 ^a	Our program's mission statement should include services to fathers/father figures	My agency's mission statement should include services to fathers/father figures.	My agency's mission statement applies to both mothers and fathers.	There was consensus from experts that mission statements are generally broad and use inclusive wording. Public agencies in particular use 'parents' or 'families'. However, there was also agreement that the question's concept is important and gets at the value agencies place on serving fathers.
2	Fathers should be involved in the orientation and enrollment process	Fathers should be involved in the intake and assessment process.	Fathers should be involved in the intake and assessment process.	Experts did not offer comments on this item.
3	It is important that fathers attend school functions	It is important that fathers attend case functions.	It is important that fathers attend case functions.	One person in the public agency group mentioned having some examples would be helpful. Opted not to change as the wording appeared to be understood by most participants.
4	It is important to have program activities for the whole family	It is important to have services for the whole family.	It is important to have services for the whole family.	Experts did not offer comments on this item.
5	Fathers bring unique strengths to parenting that meet a child's growth and development needs	Fathers bring unique strengths to parenting that meet a child's growth and development needs.	Fathers bring unique strengths to parenting that meet a child's growth and development needs.	Experts did not offer comments on this item.

Table 3 (Continued)

Item	DFFA Original	DFFA-CW Draft	DFFA-CW	Detienals for final wonding
#	Wording	Wording	Final Wording	Rationale for final wording
6	Fathers not living in the home should also be sent announcements of program activities	Fathers not living in the home should also receive announcements related to their child's case.	Fathers not living in the home should also receive announcements related to their child's case.	One person in the public agency group mentioned that having some examples would be helpful. Opted not to change as the wording appeared to be understood by most participants.
7ª	I encourage mothers to support fathers, even if involvement isn't desired (abuse cases omitted)	I encourage mothers to support fathers, even if involvement isn't desired (domestic violence cases omitted).	I encourage mothers to allow fathers to be involved in the child's life, even if she doesn't desire his involvement (domestic violence cases omitted).	Both groups had issues with the word 'support' and questioned what was meant by 'involvement'. Needed to clarify 'involvement' related to the father and child and clarify that 'support' related to mother not inhibiting father's relationship with child. In both groups, some comments expressed a preference for deferring to what the mother wants and not challenging her decisions regarding the father's involvement. Final wording reflects workers' actions to reduce maternal gatekeeping despite mother's objections.

Table 3 (Continued)

Item	DFFA Original	DFFA-CW	DFFA-CW Final	Detianals for final wording
#	Wording	Draft Wording	Wording	Rationale for final wording
8ª	I actively recruit fathers for assistance with program services	I actively recruit non-residential fathers as a placement option for their child in out-of- home care.	I actively recruit fathers who do not live with the mother as placement options for a child in out-of-home care.	The private agency experts had no comments on this item. The public agency experts expressed confusion with the term 'non-residential' as all parents are non-residential if a child is in out-of-home placement. Another expert interpreted the phrase to mean non-custodial. This group thought that the item should be reworded to make it clear that the item relates to fathers not living in the home at time of removal. The final wording provides this clarity.
9	I actively recruit fathers for assistance with program services	I actively recruit paternal family members as placement options for a child in out-of- home care.	I actively recruit paternal family members as placement options for a child in out-of- home care.	Experts did not offer comments on this item.
10	I make an effort to have fathers sign family partnership agreements	I make an effort to have fathers sign case- related documents (e.g., consent forms, safety plans, case plans, etc.).	I make an effort to have fathers sign case- related documents (e.g., consent forms, safety plans, case plans, etc.).	Experts did not offer comments on this item.

Table 3 (Continued)

Item	DFFA Original	DFFA-CW	DFFA-CW	D-4:1- f f1:
#	Wording	Draft Wording	Final Wording	Rationale for final wording
11	I make an effort to have fathers take part in the IEP or IFSP process	I make an effort to have fathers take part in the case/treatment planning process.	I make an effort to have fathers take part in the case/treatment planning process.	The public agency experts felt this item may be too similar in concept to item 14 regarding father's needs and desires in case plans. Opted to leave item unchanged as this feeling was expressed only after a discussion regarding item 14 led to a rewording that would make it too similar to this one.
12	I try to schedule home visits when both parents are available	I try to schedule home visits when both parents are available.	I try to schedule home visits when both parents are available.	Three public agency experts discussed this item. One wasn't sure what was meant by home visit ("Is TDM or court a home visit?"). Another noted that most of the time the parents aren't living together so it wouldn't be an issue. Opted to not change as none of the remaining public agency nor any of the private agency experts expressed similar confusion. During this item's discussion it appeared that the three who were confused ultimately interpreted as scheduling if the parents live together.
13	The message I give to fathers is that their role is critical to their child's development	The message I give to fathers is that their role is critical to their child's development.	The message I give to fathers is that their role is critical to their child's development.	Experts did not offer comments on this item.

Table 3 (Continued)

Item	DFFA Original	DFFA-CW	DFFA-CW	D. (1. 1. C. C. 1. 1.
#	Wording	Draft Wording	Final Wording	Rationale for final wording
14 ^a	Partnership agreements reflect the father's interests & concerns as well as the mother's	Case/treatment plans reflect the father's needs & desires as well as the mother's.	Case/treatment plan requirements reflect the father's input as well as the mother's.	The public agency experts felt this item was unclear. When asked to restate what it meant in their own words, responses included "considering the needs of the child", "needs and desires of the parents, not in relation to the children", "how we are reaching out to fathers." There was consensus in this group that the word 'input' was key to making this item clear, but also recognized it may then be redundant to the suggested changes to item 11.
15	Mothers are more committed to the care and well-being of their children than most fathers	Mothers are more committed to the care and well-being of their children than most fathers.	Mothers are more committed to the care and well-being of their children than most fathers.	There were a couple of comments on this item during the public agency group, but none were related to confusion or misunderstanding.
16	Mothers put more thought into program projects and activities	Mothers put more effort into completing their case/treatment plan.	Mothers put more effort into completing their case/treatment plan.	Experts did not offer comments on this item.
17	I find it hard to let fathers be in charge after assigning them a task	I find it hard to let fathers be in charge of providing child care.	I find it hard to let fathers be in charge of providing child care.	For both this and item 18, one public agency expert stated that cultural aspects of the families may impact these behaviors (e.g., cultures in which there is strict delineation of child care roles).

Table 3 (Continued)

Item #	DFFA Original Wording	DFFA-CW Draft Wording	DFFA-CW Final Wording	Rationale for final wording
18	I usually don't interact with fathers who come with mothers	I usually don't interact with fathers when mothers are present.	I usually don't interact with fathers when mothers are present.	See explanation for item 17.
19 ^a	During program projects, I tend to assist fathers more so they get things done the way I want them	During visitations, I tend to intervene more with fathers than mothers in order to ensure children are properly disciplined or cared for.	I tend to coach fathers more than mothers on how to appropriately care for children.	Both expert groups had issues with this item, particularly the word 'intervene'. They stated it should be replaced with other options such as coaching, guidance, demonstrate, interject, or engage. 'Intervene' felt too intrusive or heavy-handed. Through the discussion, it appeared that the participants understood the concept of the item (the assumption that men need more parenting training than women). The public agency experts also thought the phrase 'disciplined or cared for' was confusing in part because such actions are rare during visitations. They suggested leaving it more broad 'interactions with their children'. The final wording changed the item from situation specific to more global. This was done because 1) the other items in the Staff Bias subscale are global and 2) the Head Start context of program projects is not truly analogous to the child welfare context of visitations.

Table 3 (Continued)

Item	DFFA Original	DFFA-CW	DFFA-CW	Rationale for final wording
#	Wording	Draft Wording	Final Wording	Rationale for final wording
20	I tend to judge how good a father is by his child's appearance	I tend to judge how good a father is by his child's appearance.	I tend to judge how good a father is by his child's appearance.	Experts did not offer comments on this item.
21	I tend to judge how good a father is by his child's appearance	I tend to judge how good a father is by his ability to meet the material needs of his child.	I tend to judge how good a father is by his ability to meet the material needs of his child.	Experts did not offer comments on this item.

^aDenotes that the item was revised based on the comments from the expert panel.

Table 4

Demographic Characteristics of Panel Experts

	n = 11
Agency type	
Public	8 (73%)
Private non-profit	3 (27%)
Gender	
Female	10 (91%)
Male	1 (9%)
Years experience in child	welfare
Mean (SD)	11 (8)

Table 5 Most common missing data patterns by survey page breaks

N cases with	Page 1	Page 2	Page 3	Page 4	Page 5	Page 6
pattern	ASI 1-7	ASI 8-14	ASI 15-22	AMI 1-7	AMI 8-14	AMI 15-20
4	С	M	M	M	M	M
15	C	C	M	M	M	M
6	C	C	C	M	M	M
4	C	C	C	C	M	M
7	C	C	C	C	C	M
13	M	M	M	M	M	M

C = Completely answered all items on page.
M = Missing responses to all items on page.

Table 6

Details of degree of major recoding

Recoded Major	N	%
Social Work	180	38.7%
Social Work ^a	178	37.3%
3 msw,mba in pa, med counselling	1	0.2%
UG Anthropology/Sociology MSWork	1	0.2%
Psychology	96	20.1%
Psychology ^a	90	18.9%
Psychology (B.A.) and English (B.A.)	1	0.2%
Psychology & criminal justice	2	0.4%
Psychology/Sociology double major	2	0.4%
Education/Psychology	1	0.2%
Behavioral Health	81	17.0%
Human Services ^a	24	5.0%
Counseling / Mental Health ^a	17	3.6%
Child Development ^a	8	1.7%
Biobehavioral Health	1	0.2%
Addictions/Mental Health	1	0.2%
art therapy	1	0.2%
Behavioral Science	8	1.7%
behavioral science/human services	1	0.2%
Child and Family Studies	1	0.2%
Family and Child Studies	2	0.4%
Family Studies	2	0.4%
Human Development and Family Studies	1	0.2%
Human Development and Family Studies with a concentration in Case Management	1	0.2%
Individual and Family Services	1	0.2%
marriage and family therapy	2	0.4%
mental health and human services	1	0.2%
Rehabilitation Services	1	0.2%
Social Science	5	1.0%
Therapeutic Recreation	1	0.2%
Other Humanities	107	22.4%
Criminal Justice / Criminology ^a	41	8.6%
Sociology ^a	34	7.1%

Table 6 (Continued)

Recoded Major	N	%
Education ^a	18	3.8%
BA in History; Juris Doctor	1	0.2%
Communications	2	0.4%
English	2	0.4%
English/Education	1	0.2%
Family and Consumer Science	1	0.2%
General Studies	1	0.2%
Interdisciplinary Studies	1	0.2%
Liberal Arts	2	0.4%
Philosophy	1	0.2%
Political Science	1	0.2%
Religion	1	0.2%
Other	13	2.7%
Public Administration ^a	3	0.6%
Public Health ^a	1	0.2%
Strategic Leadership	1	0.2%
social administration	1	0.2%
Organizational Behavior	1	0.2%
Mechanical Engineering	1	0.2%
Environmental Sciences	1	0.2%
Biology	1	0.2%
BA	1	0.2%
APRN	1	0.2%
Accounting	1	0.2%

^aOne of the ten majors listed as options on the survey. All others are written responses from participants.

Table 7

Model fit indices for LPA

								Adj. LMR-		
	# of		%					LRT p-		
	classes		converge					value (H ₀ : K		
Σ_k	K	LL	best LL	$npar^a$	BIC	CAIC	AWE	classes; H ₁ : K+1 classes)	$\hat{B}F_{K, K=1}$	$cm\hat{P}_K$
	1	-2582.784	100%	8	5215.120	5190.859	5224.150	< 0.01	< 0.10	< 0.01
	2	-2231.083	100%	13	4542.693	4503.264	4557.362	< 0.01	< 0.10	< 0.01
	3	-2076.604	100%	18	4264.707	4210.113	4285.017	< 0.01	< 0.10	< 0.01
Class-	4	-2028.515	98%	23	4199.502	4129.741	4225.453	0.40	>0.99	0.18
invariant,	5	-2013.065	6%	28	4199.573	4114.648	4231.167	0.09	0.34	0.17
diagonal	6	-1996.502	5%	33	4197.420	4097.329	4234.654	0.18	>0.99	0.51
$\Sigma_k = \Sigma$	7	-1982.533	1%	38	4200.454	4085.198	4243.330	0.07	>0.99	0.11
	8	-1968.856	1%	43	4204.071	4073.651	4252.590	0.20	>0.99	< 0.01
	9	-1690.092	6%	48	4217.515	3531.930	3731.675	0.85	>0.99	< 0.01
	10	-1950.000	3%	53	4228.304	4067.553	4288.105			< 0.01
	1	-2582.784	100%	8	5215.124	5190.859	5224.150	< 0.01	< 0.10	< 0.01
	2	-2161.605	100%	17	4428.515	4376.953	4447.697	< 0.01	< 0.10	< 0.01
	3	-2026.269	83%	26	4213.593	4134.734	4242.929	0.80	< 0.10	< 0.01
C1	4	-1989.938	14%	35	4196.681	4090.524	4236.172	0.06	< 0.10	0.06
Class-	5	-1959.226	2%	44	4191.006	4057.552	4240.652	0.63	>0.99	0.94
varying, diagonal Σ_k	6	-1943.078	<1%	53	4214.459	4053.709	4274.261	<0.01 ^b	>0.99	< 0.01
uragonar $\mathcal{L}_k =$	7	-1937.607	<1%	62	4259.267	4071.219	4329.224	0.50^{b}	>0.99	< 0.01
	8	-1934.202	<1%	71	4308.206	4092.861	4388.318	0.67 ^b	>0.99	< 0.01
	9	-1949.539	<1%	80	4394.630	4151.987	4484.897			< 0.01
	10	No convergence								

Table 7 (Continued)

								Adj. LMR-		
	# of		%					LRT p-		
	classes		converge					value (H ₀ : K classes; H ₁ : K+1		
Σ_k	K	LL	best LL	npar ^a	BIC	CAIC	AWE	classes, H ₁ . K+1	$\hat{B}F_{K, K=1}$	$cm\hat{P}_K$
	1	-2076.767	100%	14	4240.255	4197.793	4256.052	< 0.01	< 0.10	< 0.01
	2	-2050.340	88%	19	4218.373	4160.746	4239.812	0.29	< 0.10	< 0.01
	3	-2022.060	36%	24	4192.787	4119.993	4219.866	0.12	< 0.10	0.02
Class-	4	-2003.487	3%	29	4186.613	4098.654	4219.333	0.24	0.97	0.46
invariant,	5	-1987.966	6%	34	4186.542	4083.419	4224.905	0.12	>0.99	0.48
unrestricted	6	-1975.192	1%	39	4191.966	4073.677	4235.971	0.15	>0.99	0.3
$\Sigma_k = \Sigma$	7	-1961.173	1%	44	4194.900	4061.446	4244.546	0.44	>0.99	< 0.01
	8	-1954.045	1%	49	4211.617	4062.997	4266.904	0.47	>0.99	< 0.01
	9	-1945.594	2%	54	4225.686	4061.902	4286.616	0.46	>0.99	< 0.01
	10	-1939.443	1%	59	4244.355	4065.407	4310.927			< 0.01
	1	-2076.767	100%	14	4240.255	4197.793	4256.052	0.10	< 0.10	< 0.01
	2	-1929.766	63%	29	4039.170	3951.212	4071.891	<0.01 ^b	>0.99	0.98
	3	-1887.460	<1%	44	4047.474	3914.020	4097.120	0.27^{b}	>0.99	0.02
Class-	4	-1853.792	1%	59	4073.054	3894.105	4139.625	0.09^{b}	>0.99	< 0.01
varying,	5	-1837.304	<1%	74	4132.993	3908.549	4216.490	0.74 ^b	>0.99	< 0.01
unrestricted	6	-1816.010	<1%	89	4183.322	3913.382	4283.744	0.32^{b}	>0.99	< 0.01
$\Sigma_k = \Sigma$	7	-1789.776	<1%	104	4223.769	3908.334	4341.117	0.24 ^b	>0.99	< 0.01
	8	-1773.975	<1%	119	4285.083	3924.153	4419.356	0.22^{b}	>0.99	< 0.01
	9	-1774.498	<1%	134	4379.047	3972.619	4530.243	0.50^{b}	>0.99	< 0.01
	10	-1801.643	<1%	149	4526.252	4074.330	4694.374			< 0.01

^aNumber of parameters estimated. ^bTest unreliable due to non-replication of LL

Table 8

Descriptive statistics for continuous study variables

	<u>Total Sample</u>		Ma	ıles	Fem	nales	
Measure	M	SD	M	SD	M	SD	Possible range
ASI							
BS	1.70	0.88	2.15	0.82	1.62	0.87	0 - 5
HS	1.47	0.56	1.48	0.90	1.47	0.85	0 - 5
AMI							
BM	1.14	0.96	1.38	1.01	1.10	0.95	0 - 5
HM	1.41	0.92	1.29	0.85	1.44	0.93	0 - 5
DFFA-CW							
Attitudes	4.72	0.45	4.64	0.44	4.73	0.45	1 - 5
Behavior	4.51	0.54	4.45	0.55	4.51	0.54	1 - 5
Bias	3.88	0.64	3.70	0.65	3.91	0.64	1 – 5

BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men; Attitudes = Staff Attitudes; Behavior = Staff Behavior; Bias = Staff Bias

Table 9

Bivariate Pearson correlation matrix

Measure	BS	HS	BM	HM	Attitudes	Behavior
HS	.491**	-				
BM	.772**	.561**	-			
HM	.607**	.457**	.726**	-		
Attitudes	143**	098*	140**	171**	-	
Behavior	143**	083	119**	102*	.597**	-
Bias	410**	296**	439**	408**	.291**	.297*

BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men; Attitudes = Staff Attitudes; Behavior = Staff Behavior; Bias = Staff Bias *p = 0.05 **p < 0.01

Table 10

Results of one-sample dependent t-tests for hypotheses 1.1, 1.2, and 2.1

Hypothesis	N	M	SD	t	df	p	95% C.I.
Total Sample							
1.1: HM – BM	490	0.27	0.70	8.73	489	< 0.001	0.21, 0.34
1.2: BS – HS	490	0.23	0.88	5.86	489	< 0.001	0.15, 0.31
2.1: Bias – Attitudes	489	-0.85	0.67	-28.00	488	< 0.001	-0.90, -0.79
Males							
1.1: HM – BM	77	-0.09	0.70	-1.09	76	0.28	-0.25, 0.07
1.2: BS – HS	77	0.67	1.01	5.80	76	< 0.001	0.44, 0.90
2.1: Bias – Attitudes	77	-0.94	0.69	-12.06	76	< 0.001	-1.10, -0.79
Females							
1.1: HM – BM	410	0.34	0.68	10.24	409	< 0.001	0.28, 0.41
1.2: BS – HS	410	0.15	0.83	3.76	409	< 0.001	0.07, 0.23
2.1: Bias – Attitudes	409	-0.83	0.67	-25.12	408	< 0.001	-0.89, -0.76

BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men; Attitudes = Staff Attitudes; Bias = Staff Bias

Table 11
Frequencies for discretized sexism variables

	I	3S	I	HS	F	BM	F	ΙΜ
Score Range	N	%	N	%	N	%	N	%
Three category variable								
0.0 - 0.999	101	20.6%	152	31.0%	233	47.6%	177	36.1%
1.0 - 1.999	200	40.8%	188	38.4%	158	32.2%	183	37.3%
2.0 - 5.0	189	38.6%	150	30.6%	99	20.2%	130	26.5%
Four category var	riable							
0.0 - 0.999	101	20.6%	152	31.0%	233	47.6%	177	36.1%
1.0 - 1.999	200	40.8%	188	38.4%	158	32.2%	183	37.3%
2.0 - 2.999	146	29.8%	128	26.1%	72	14.7%	97	19.8%
3.0 - 5.0	43	8.8%	22	4.5%	27	5.5%	33	6.7%

Table 12

Model fit indices for LCA with 3-category sexism variables

# of		%						Adj. LMR- LRT <i>p</i> -		
classes		converge		$\operatorname{Adj.} X^{2}_{LR}$				value (H₀: K		
K	LL	best LL	$npar^a$	(df), p -value	BIC	CAIC	AWE	classes; H ₁ : K+1 classes)	$\hat{B}F_{K, K+1}$	$cm\hat{P}_K$
1	-2097.685	100%	8	756.379 (72), <0.01	4244.925	4220.661	4253.951	<0.01	<0.10	<0.01
2	-1804.785	100%	17	170.58 (63), <0.01	3714.876	3663.313	3734.056	<0.01	<0.10	<0.01
3	-1745.255	100%	26	51.519 (54), 0.57	3651.564	3572.705	3680.901	0.12	>10	0.99
4	-1738.524	93%	35	38.057 (45), 0.76	3693.852	3587.695	3733.343	0.14	>10	<0.01
5	-1733.310	3%	44	27.630 (36), 0.84	3739.174	3605.720	3788.820	1.00	>10	<0.01
6	-1727.999	1%	53	17.006 (27), 0.93	3784.301	3623.550	3844.103	1.00	>10	<0.01

^aNumber of parameters estimated.

Table 13

Classification diagnostics for the 3-class model using 3-category variables ($E_3 = 0.821$)

	Estimated				
Class k	Proportion	90% C. I. ^a	$mcaP_k$	$AvePP_k$	OCC_k
1	0.399	[0.346, 0.444]	0.420	0.926	18.81
2	0.400	[0.348, 0.467]	0.374	0.931	20.23
3	0.200	[0.145, 0.245]	0.208	0.888	31.64

^a Bias-corrected bootstrap 90% confidence intervals

Table 14 ${\it Classification\ diagnostics\ for\ the\ 4-class\ model\ using\ 3-category\ variables\ (E_4=0.835) }$

	Estimated				
Class k	Proportion	90% C. I. ^a	$mcaP_k$	$AvePP_k$	OCC_k
1	0.337	[0.189, 0.403]	0.365	0.880	14.40
2	0.137	[0.058, 0.246]	0.110	0.847	34.80
3	0.325	[0.217, 0.410]	0.316	0.952	41.14
4	0.200	[0.142, 0.245]	0.208	0.885	30.75

^a Bias-corrected bootstrap 90% confidence intervals

Table 15

Item probabilities for the 3-class model using 3-category variables

Sexism	Variable			
Scale	Level	Class 1	Class 2	Class 3
-	0	0.476	0.035	0.010
BS	1	0.505	0.474	0.084
	2	0.018	0.492	0.906
	0	0.571	0.189	0.032
HS	1	0.377	0.478	0.208
	2	0.052	0.333	0.761
	0	1.000	0.190	0.000
BM	1	0.000	0.740	0.131
	2	0.000	0.070	0.869
	0	0.738	0.166	0.000
HM	1	0.212	0.619	0.206
	2	0.050	0.216	0.794

Table 16

Item probabilities for the 4-class model using 3-category variables

Sexism	Variable				
Scale	Level	Class 1	Class 2	Class 3	Class 4
	0	0.569	0.000	0.038	0.010
BS	1	0.431	0.738	0.442	0.087
	2	0.000	0.262	0.520	0.903
_	0	0.632	0.200	0.195	0.031
HS	1	0.340	0.487	0.498	0.201
	2	0.028	0.312	0.308	0.768
	0	1.000	1.000	0.000	0.005
BM	1	0.000	0.000	0.911	0.131
	2	0.000	0.000	0.089	0.864
	0	0.750	0.431	0.151	0.000
HM	1	0.206	0.414	0.636	0.201
	2	0.044	0.155	0.213	0.799

Table 17

Model comparisons for DIF testing

				<u>Uni</u>	form-DIF	VS.			
Sexism <u>No-DIF vs. Uniform-DIF</u> <u>Nonuniform-DIF</u>									
Item	LRTS	Df	p	LRTS	Df	p			
BS	30.392	1	< 0.001	6.822	3	0.08			
HM	13.22	1	< 0.001	0.322	3	0.96			

BS = Benevolent Sexism (towards women); HM = Hostility towards Men

Table 18

Item probabilities by gender within each class

Sexism	Variable	Non-Sexist		Low HM/ No BM		Low Ambivalence		Moderate Ambivalence	
Scale	Level	Male	Female	Male	Female	Male	Female	Male	Female
BS	0	0.619	0.204	0.000	0.000	0.042	0.007	0.012	0.002
	1	0.374	0.752	0.868	0.510	0.515	0.159	0.100	0.018
	2	0.007	0.043	0.132	0.490	0.443	0.834	0.887	0.980
HS	0	0.687	0.687	0.000	0.000	0.201	0.201	0.031	0.031
	1	0.285	0.285	0.724	0.724	0.478	0.478	0.207	0.207
	2	0.029	0.029	0.276	0.276	0.321	0.321	0.762	0.762
ВМ	0	1.000	1.000	1.000	1.000	0.109	0.109	0.002	0.002
	1	0.000	0.000	0.000	0.000	0.812	0.812	0.139	0.139
	2	0.000	0.000	0.000	0.000	0.079	0.079	0.859	0.859
НМ	0	0.709	0.278	0.567	0.171	0.128	0.023	0.000	0.000
	1	0.235	0.448	0.325	0.394	0.640	0.321	0.157	0.029
	2	0.056	0.274	0.108	0.435	0.232	0.656	0.843	0.971

Table 19

Means and standard deviation for Bias by latent class

Class	M	SD
Non-Sexist	4.18	0.49
Low HM/No BM	4.07	0.62
Low Ambivalence	3.82	0.48
Moderate Ambivalence	3.38	0.72

Table 20

Results of post-hoc tests for Bias between latent classes

	Estimated		Effect Size
Class Comparison	Difference	p	(Cohen's d)
Non-Sexist v. Low HM/No BM	0.10	0.31	
Non-Sexist v. Low Ambivalence	0.36	< 0.001	0.74
Non-Sexist v. Moderate Ambivalence	0.80	< 0.001	1.29
Low HM/No BM v. Low Ambivalence	0.25	0.003	0.46
Low HM/No BM v. Moderate Ambivalence	0.69	< 0.001	1.03
Low Ambivalence v. Moderate Ambivalence	0.44	< 0.001	0.72

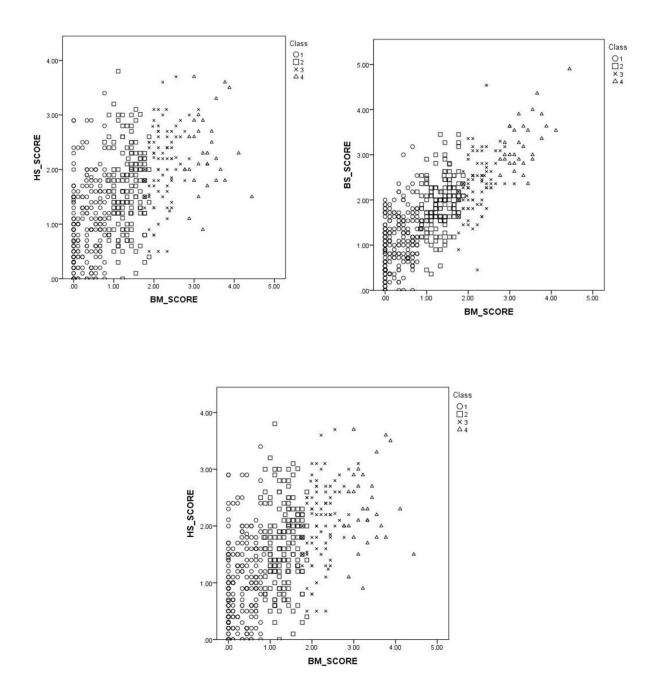


Figure 1. Scatterplots of scores on sexism measures, grouped by class, for the 4-class inviariant unrestricted $\Sigma_k = \Sigma$ model. Scores on the BM scale appeared to be the primary determinant of class assignment as individuals with similar scores on the other three scales are spread across the four classes based on their BM score.

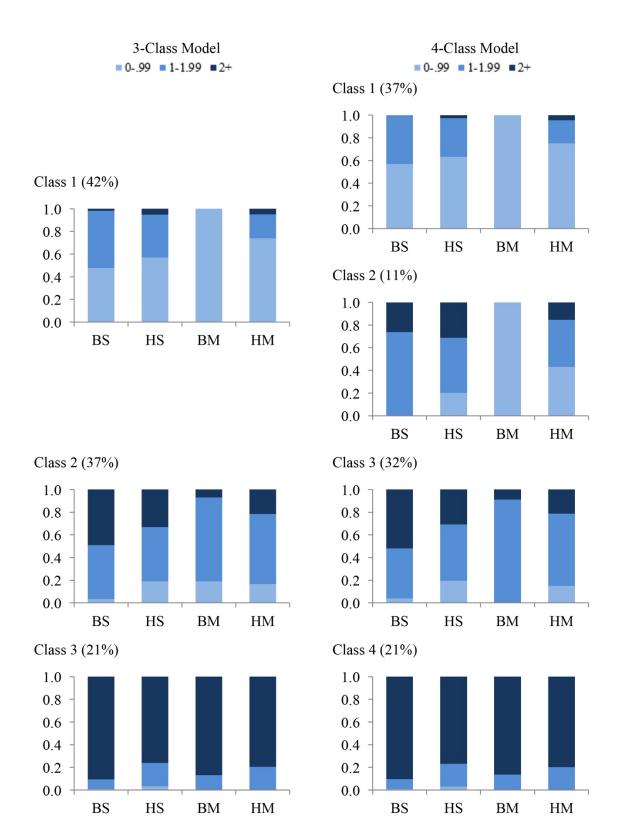


Figure 2. Item probabilities for the 3-class and 4-class models using 3-category variables. BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men

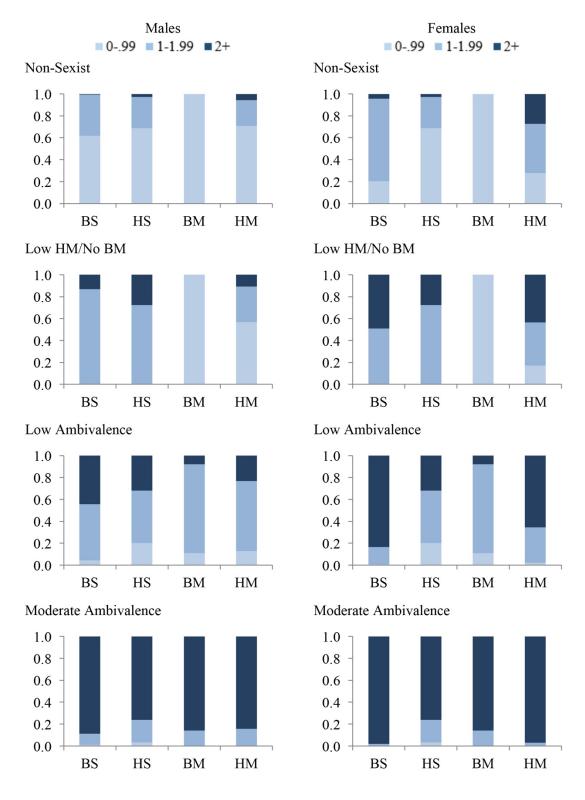


Figure 3. Item probabilities by gender within class.
BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men

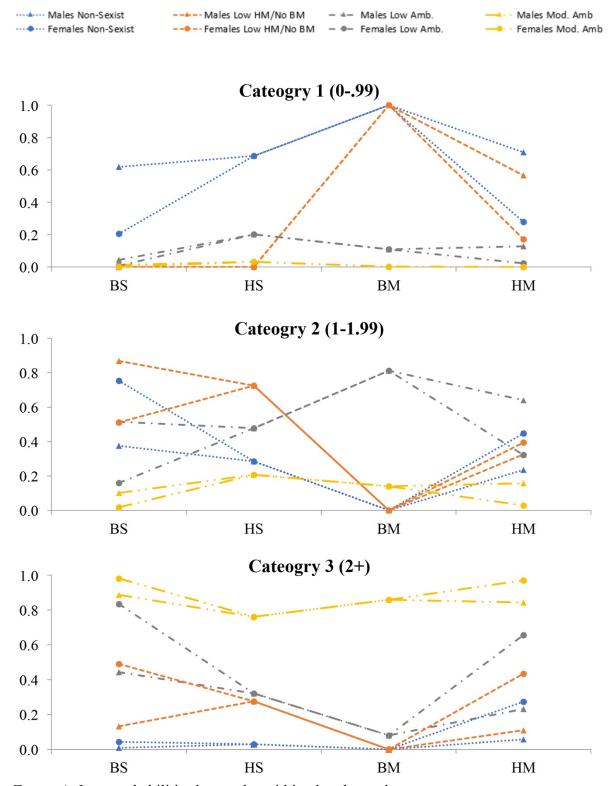


Figure 4. Item probabilities by gender within class by each response category. BS = Benevolent Sexism (towards women); HS = Hostile Sexism (towards women); BM = Benevolence towards Men; HM = Hostility towards Men

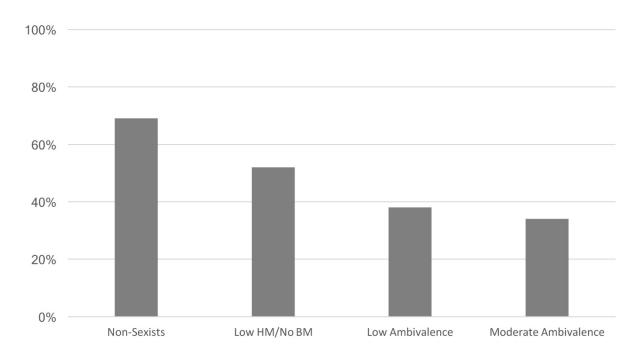


Figure 5. Probability of scoring 5.0 on the DFFA-CW Attitudes scale for each latent class.

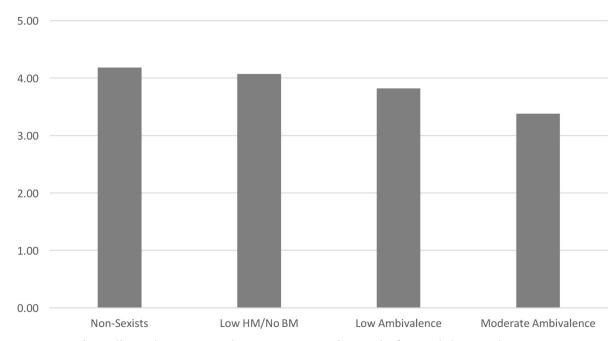


Figure 6. Bias adjusted means on the DFFA-CW Bias scale for each latent class.

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APPENDICES

Appendix A: Research Questions and Hypotheses

Research Question 1: To what degree do child welfare workers (CCWs) endorse ambivalent sexism?

- Hypothesis 1.1: CWWs will more strongly endorse HM than BM.
- Hypothesis 1.2: CWWs will more strongly endorse BS than HS.
- Hypothesis 1.3: CWWs will be more ambivalent towards men than women.

Research Question 2: To what degree do CWWs reflect a preference for interacting with mothers when providing services?

Hypothesis 2.1: CWWs score on the Staff Bias scale will be significantly lower than Staff Attitudes scale score, reflecting stronger preference for mothers over fathers.

Research Question 3: What is the relationship between CWWs sexism profile (i.e., latent class) and favorable attitudes towards father involvement in child welfare services?

- Hypothesis 3.1: Strong endorsement of BS will be negatively correlated with favorable attitudes towards father involvement.
- Hypothesis 3.2: Strong endorsement of ambivalence towards men will be negatively correlated with favorable attitudes towards father involvement.
- Hypothesis 3.3: Non-sexists (low on all AMI/ASI subscales) will be positively correlated with favorable attitudes towards father involvement.

Appendix B: Survey Recruitment Invitation Emails

Initial recruitment email to agency administrators

Subject line: Urgent assistance requested

Dear [insert name],

Many child welfare agencies struggle with parent engagement, particularly engaging fathers. I am studying what influences child welfare workers and supervisors to engage with parents on their cases. This information may be useful in developing new programs, policies, or training that will improve parent engagement – and outcomes for children.

I have contacted you because you are an administrator within [organization name]. I am requesting your assistance by asking you to forward an email invitation to your child welfare staff. The invitation contains a link to a survey and a chance for your staff to win one of four \$100 cash cards. Most people finish the survey in less than 20 minutes.

All survey responses will be anonymous and will not be able to be connected to [organization name] or any individual. However, I will gladly share the results of the study with you! The invitation clearly states that staff participation is voluntary and will not impact employment. This research study has been approved by the University of South Florida IRB.

Please let me know by [insert date] your willingness to pass along the survey invitation. I will then send you the survey invitation in a ready-to-forward format. This research is part of my dissertation and all data must be collected by [date]. I may follow-up with a phone call in two weeks to confirm your participation. If you are not the person able to make this decision, please contact me with the name and email information of the appropriate administrator.

Feel free to contact me if you have questions. Thank you in advance for your consideration.

Email invitation to study participants

Subject line: Brief survey for child welfare workers! \$100 prize!

Hello!

My name is Katrina Brewsaugh and I am a PhD Social Work student at the University of South Florida. I am studying how child welfare workers and supervisors interact with parents on their cases.

You are being asked to participate in this research study because you are a child welfare case manager or supervisor. Your participation is voluntary, anonymous, and will not affect your employment. The research is not affiliated with [organization name].

If you would like to participate, all you need to do is take a short, 10 - 20 minute survey by clicking here: [link inserted here]. Two male and two female participants will be randomly selected to win a \$100 gift card after the survey is completed.

If you have questions about participating, please contact me using the information provided below.

Thank you for your time.

First follow-up reminder email sent via direct email recruitment

Subject line: Reminder: Brief survey for child welfare workers! \$100 prize!

Hello!

A couple weeks ago you received an invitation to complete a survey investigating how child welfare workers and supervisors interact with parents on their cases. A final reminder will be sent in 1 week.

If you would like to participate, all you need to do is take a short, 10-20 minute survey by clicking here: [link inserted here]. Two male and two female participants will be randomly selected to win a \$100 gift card after the survey is completed.

You are being asked to participate in this research study because you may be a child welfare case manager or supervisor. Your participation is voluntary, anonymous, and will not affect your employment. The research is not affiliated with [organization name].

If you have questions about participating, please contact me using the information provided below.

Thank you for your time.

Second follow-up reminder email sent via direct email recruitment

Subject line: Last Chance: Brief survey for child welfare workers! \$100 prize!

Hello!

This is a final reminder for your chance to complete a survey about child welfare workers' and supervisors' engagement with parents. Your response is requested in the next 7 days.

If you would like to participate, all you need to do is take a short, 10 - 20 minute survey by clicking here: [link inserted here]. Two male and two female participants will be randomly selected to win a \$100 gift card after the survey is completed.

If you have questions about participating, please contact me using the information provided below.

Thank you for your time.

Appendix C: Survey Items

Eligibility Screen

- 1. Do you work in the United States?
 - Yes [taken to #2]
 - No [taken to exclusion screen]
- 2. Are you a supervisor?
 - Yes [taken to #3]
 - No [taken to #4]
- 3. Please check all types of workers for whom you provide <u>direct</u> supervision. Direct supervision means you are responsible for overseeing, reviewing, and directing workers' day-to-day tasks.
 - Child abuse and neglect investigators
 - Case managers for children placed in substitute care (aka foster care)
 - Case managers for children reunified with parents after placement in substitute care
 - Case managers for children whose parents' rights have been terminated (aka adoption)
 - Case managers for teens in substitute care (aka supervised independent living, APPLA, etc.)
 - In-home workers to prevent removal of children at risk of abuse or neglect
 - None of the above.

[If any option, other than 'none of the above', are checked, taken to #5. If 'none of the above', taken to exclusion screen.]

- 4. Please check all tasks that are part of your direct work with children and/or families.
 - Child abuse and neglect investigator
 - Case manager for children placed in substitute care (aka foster care)
 - Case manager for children reunified with parents after placement in substitute care
 - Case manager for children whose parents' rights have been terminated
 - Case manager for teens in substitute care (aka supervised independent living, APPLA, etc.)
 - In-home worker to prevent removal of children at risk of abuse or neglect
 - None of the above.

[If any option, other than 'none of the above', are checked, taken to #5. If 'none of the above', taken to exclusion screen.]

Background Questionnaire

- 5. Your Gender
 - Male

- Female
- 6. State in which you work
 - Drop-down list of states
- 7. Age
 - Drop-down range 18 to 70+
- 8. What is your race?
 - Asian
 - Black/African American
 - Hawaiian/Pacific Islander
 - Hispanic
 - Native American/Alaska Native
 - White/Caucasian
 - Multi-racial
 - Other [text box for description]
- 9. Do you have any children?
 - Yes [taken to #10]
 - No [taken to #12]
- 10. How many children do you have?
 - Drop-down menu of 1, 2, 3, 4, 5 or more
- 11. What is the age of your youngest child?
 - 0-5 years
 - 6-10 years
 - 11-13 years
 - 14-17 years
 - 18 years or older
- 12. What is the highest level of education you have completed?
 - High school or GED [skip to #14]
 - Associate's degree [skip to #14]
 - Bachelor's degree
 - Master's degree
 - Post-graduate professional degree (such as JD, MD, etc.)
 - Doctoral degree
- 13. What was your major?
 - Social Work
 - Psychology
 - Sociology
 - Criminal Justice

- Counseling
- Child Development
- Education
- Public Health
- Public Administration
- Human Services
- Other (specify)
- 14. How long have you worked in child welfare/foster care?
 - Less than 1 year
 - 1-3 years
 - 4-7 years
 - 8-10 years
 - 11-15 years
 - 15-20 years
 - 21 or more years
- 15. Which setting best describes your workplace?
 - Public child welfare agency
 - Private non-profit child welfare agency
 - Private for-profit child welfare agency
 - Other [text box for description]

Participant then completes the ASI, AMI, and DFFA-CW (presented in randomized order).

31. Please estimate the number of contacts you have had with biological parents of children on your (or your workers') caseload in the past month.

	Face-to-Face Contact	Phone, email, letter, text or
		other contact not done face-to-
		face
Mothers	• None	• None
	• 1-4	• 1-4
	• 5-10	• 5-10
	• 11-15	• 11-15
	• 16-20	• 16-20
	• 21-25	• 21-25
	• 26 or more	• 26 or more
Fathers	• None	• None
	• 1-4	• 1-4
	• 5-10	• 5-10
	• 11-15	• 11-15
	• 16-20	• 16-20
	• 21-25	• 21-25
	• 26 or more	• 26 or more

Debrief Screen

Text: At the beginning of the survey you were told that the purpose was to investigate what influences child welfare workers and supervisors to engage with parents on their cases. This was not entirely true. In fact, the purpose was to investigate if sexism is related to workers' beliefs about father involvement. Some research has suggested that child welfare workers may be reluctant to involve fathers because of traditional beliefs about men being unable, unwilling, or unsafe to care for children. Deception was only used in this survey to really be able to study the relationship we're interested in. If people know beforehand what we're really studying, it might influence their responses. We ask that you not discuss this survey with anyone else at your agency, otherwise it may influence their responses.

Would you like to submit your responses for inclusion in the study?

- Yes, submit my responses.[taken to survey closing screen]
- No, do not submit my responses. [taken to statement below]

You have indicated that you do not want your responses included in the study. Please confirm:

- Submit my responses.[taken to survey closing screen]
- Do NOT submit my responses. Your data will be erased. [taken to survey closing screen]

Survey Closing Screen

Text: Thank you for your time and energy to participate in this survey! If you know of others who may qualify for the survey, please email them this link: [hyperlink].

As a participant, you can enter to win one of four \$100 gift cards (two males and two females will be chosen). To enter the drawing click here [hyperlinked]. This link will take you to a completely separate survey that will not be connected in any way to your previous responses.

If you would like to receive the results of the study when they are available, please click here [hyperlink].

Exclusion Screen

Thank you for your interest in completing the survey. Unfortunately, you do not appear to meet the eligibility criteria. For more information, please contact the primary investigator, Katrina Brewsaugh.

Lottery Screen

Your contact information will be used solely for the purpose of a lottery entry and/or sending you the survey results. Your information cannot be connected to your survey responses. If you are selected as a lottery winner, an email will be sent to you.

- 1. Please enter your email address. Be sure it is one you use regularly in order to ensure you receive the lottery notification/study results.
- 2. If you would like to enter the lottery, please indicate your gender (2 male and 2 female participants will be chosen).
- 3. Would you like to receive the final study results?

Appendix D: The Ambivalent Sexism Inventory (ASI)

Relationships Between Men and Women

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the following scale: 0 = disagree strongly; 1 = disagree somewhat; 2 = disagree strongly; 3 = agree slightly; 4 = agree somewhat; 5 = agree strongly.

The Ambivalent Sexism Inventory (ASI)

- 1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.
- 2. Many women a e actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."
- 3. In a disaster, women ought not necessarily to be rescued before men.
- 4. Most women interpret innocent remarks or acts as being sexist.
- 5. Women are too easily offended.
- 6. People are often truly happy in life without being romantically involved with a member of the other sex.
- 7. Feminists are not seeking for women to have more power than men.
- 8. Many women have a quality of purity that few men possess.
- 9. Women should be cherished and protected by men.
- 10. Most women fail to appreciate fully all that men do for them.
- 11. Women seek to gain power by getting control over men.
- 12. Every man ought to have a woman whom he adores.
- 13. Men are complete without women.
- 14. Women exaggerate problems they have at work.
- 15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

- 16. When women lose to men in a fair competition, they typically complain about being discriminated against.
- 17. A good woman should be set on a pedestal by her man.
- 18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.
- 19. Women, compared to men, tend to have a superior moral sensibility.
- 20. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.
- 21. Feminists are making entirely reasonable demands of men.
- 22. Women, as compared to men, tend to have a more refined sense of culture and good taste.

Appendix E: The Ambivalence Toward Men Inventory (AMI)

Relationships Between Men and Women

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the following scale: 0 = disagree strongly; 1 = disagree somewhat; 2 = disagree slightly; 3 = agree slightly; 4 = agree somewhat; 5 = agree strongly.

Ambivalence Toward Men Inventory (AMI)

- 1. Even if both members of a couple work, the woman ought to be more attentive to taking care of her man at home.
- 2. A man who is sexually attracted to a woman typically has no morals about doing whatever it takes to get her in bed.
- 3. Men are less likely to fall apart in emergencies than women are.
- 4. When men act to "help" women, they are often trying to prove they are better than women.
- 5. Every woman needs a male partner who will cherish her.
- 6. Men would be lost in this world if women weren't there to guide them.
- 7. A woman will never be truly fulfilled in her life if she doesn't have a committed, long-term relationship with a man.
- 8. Men act like babies when they are sick.
- 9. Men will always fight to have greater control in society than women.
- 10. Men are mainly useful to provide financial security for women.
- 11. Even men who claim to be sensitive to women's rights really want a traditional relationship at home, with the woman performing most of the housekeeping and child care.
- 12. Every woman ought to have a man she adores.
- 13. Men are more willing to put themselves in danger to protect others.
- 14. Men usually try to dominate conversations when talking to women.

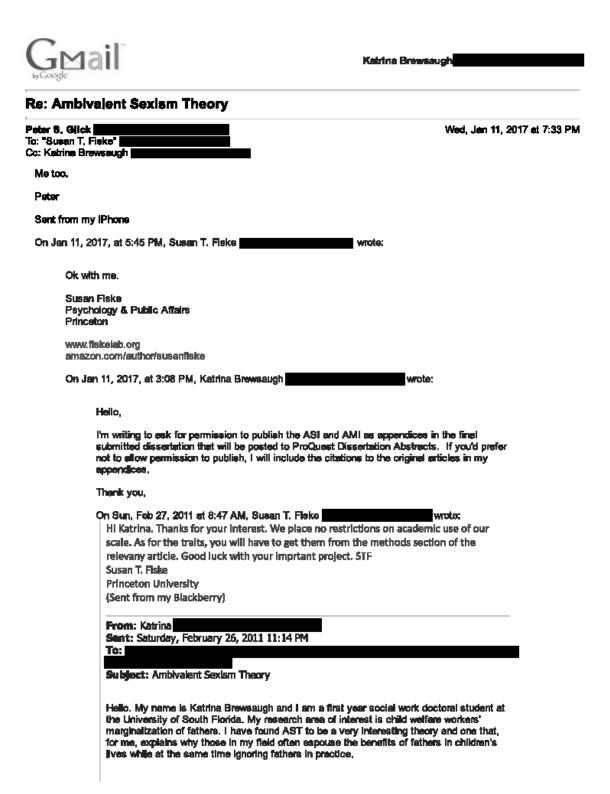
- 15. Most men pay lip service to equality for women, but can't handle having a woman as an equal.
- 16. Women are incomplete without men.
- 17. When it comes down to it, most men are really like children.
- 18. Men are more willing to take risks than women.
- 19. Most men sexually harass women, even if only in subtle ways, once they are in a position of power over them.
- 20. Women ought to take care of their men at home, because men would fall apart if they had to fend for themselves.

Appendix F: The Dakota Father Friendly Assessment – Child Welfare (DFFA-CW)

This questionnaire explores perspectives about father involvement. References to <u>case(s)</u> include <u>in-home and out-of-home cases</u>. References to <u>Fathers</u> include <u>Father Figures</u>. Please rate your agreement with each statement [strongly agree, agree, neutral, disagree, strongly disagree].

- 1. My agency's mission statement applies to both mothers and fathers.
- 2. Fathers should be involved in the intake and assessment process.
- 3. It is important that fathers attend case functions.
- 4. It is important to have services for the whole family.
- 5. Fathers bring unique strengths to parenting that meet a child's growth and development needs.
- 6. Fathers not living in the home should also receive announcements related to their child's case.
- 7. I encourage mothers to allow fathers to be involved in the child's life, even if she doesn't desire his involvement (domestic violence cases omitted).
- 8. I actively recruit fathers who do not live with the mother as placement options for a child in out-of-home care.
- 9. I actively recruit paternal family members as placement options for a child in out-of-home care.
- 10. I make an effort to have fathers sign case-related documents (e.g., consent forms, safety plans, case plans, etc.).
- 11. I make an effort to have fathers take part in the case/treatment planning process.
- 12. I try to schedule home visits when both parents are available.
- 13. The message I give to fathers is that their role is critical to their child's development.
- 14. Case/treatment plan requirements reflect the father's input as well as the mother's.
- 15. Mothers are more committed to the care and well-being of their children than most fathers.
- 16. Mothers put more effort into completing their case/treatment plan.
- 17. I find it hard to let fathers be in charge of providing child care.
- 18. I usually don't interact with fathers when mothers are present.
- 19. I tend to coach fathers more than mothers on how to appropriately care for children.
- 20. I tend to judge how good a father is by his child's appearance.
- 21. I tend to judge how good a father is by his ability to meet the material needs of his child.

Appendix G: Reprint Permissions



I am currently in the intro to research methods course in which our semester-long assignment is to write a research proposal. Currently, my design is to determine worker ambivalence using the ASI and AMI and then compare to the level of father engagement in client records. I would like to also include the trait listing and rating exercise used in the 1999 article that introduced the AMI (published in Psychology of Women Quarterly).

I have two questions:

- 1) Are there any rights restrictions on the use of the ASI/AMI?
- 2) Would it be possible to obtain a template of the response forms used for the trait exercise?

Thank you for your consideration,

Katrina Brewsaugh, MSW

Director of Research for One Hope United

Spirit Drum and Bugle Corps Alumnus

Baritone Line 1998-2003

Katrina Brewsaugh, MSW

Appendix G: IRB Approval



RESEARCH INTEGRITY AND COMPLIANCE Institutional Review Boards, FWA No. 00001669

12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799 (813) 974-5638 • FAX(813) 974-7091

9/21/2016

Katrina Brewsaugh, MSW School of Social Work

RE: Expedited Approval for Continuing Review

IRB#: CR2 Pro00018561

Title: An Exploration of the Relationship between Child Welfare Workers' Ambivalent Sexism and Beliefs about Father Involvement

Study Approval Period: 10/20/2016 to 10/20/2017

Dear Ms. Brewsaugh:

On 9/20/2016 5:19 PM, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents contained within including those outlined below.

Approved Item(s):

Protocol Document(s):

AST and Fathers Study Protocol Clean

Waiver of documentation of consent has been renewed.

The IRB determined that your study qualified for expedited review based on federal expedited category number(s):

- (6) Collection of data from voice, video, digital, or image recordings made for research purposes.
- (7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with USF HRPP policies and procedures and as approved by the USF IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an

amendment. Additionally, all unanticipated problems must be reported to the USF IRB within five (5) calendar days.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D., Chairperson USF Institutional Review Board