

Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

Rachael A. Spencer

Date

Temporary Assistance for Needy Families (TANF), Intimate Partner Violence and Child
Maltreatment: How TANF Generosity Affects Family Violence

By

Rachael A. Spencer

Doctor of Philosophy

Behavioral, Social, and Health Education Sciences

Kelli A. Komro, M.P.A., Ph.D.

Advisor

Melvin Livingston, Ph.D.

Committee Member

Briana Woods-Jaeger, Ph.D.

Committee Member

Accepted:

Lisa A. Tedesco, Ph.D. Dean of the James T. Laney School of Graduate Studies

Date

Temporary Assistance for Needy Families (TANF), Intimate Partner Violence and Child
Maltreatment: How TANF Generosity Affects Family Violence

By
Rachael A. Spencer
M.P.A.

Advisor: Kelli A. Komro, M.P.A., Ph.D.

An abstract of
A dissertation submitted to the Faculty of the
James T. Laney School of Graduate Studies of Emory University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Behavioral, Social, and Health Education Sciences
2021

Abstract

Temporary Assistance for Needy Families (TANF), Intimate Partner Violence and Child Maltreatment: How TANF Generosity Affects Family Violence

By

Rachael A. Spencer

Background: Family violence, including intimate partner violence (IPV) and child maltreatment is a pervasive public health problem. While all families are at risk, experiencing poverty increases families' risk of violence. Rooted in historical, structural racism, African American (AA) families are more likely to experience the intersection of poverty and family violence. Temporary Assistance for Needy Families (TANF), a conditional cash transfer program, has the potential to reduce disparities in violence experience.

Methods: This study uses a mixed methods, triangulation design involving secondary data analysis and semi-structured qualitative interviews. In Chapter 2 and 3, we use Difference-in-Differences (DD) study designs involving the Fragile Families and Child Wellbeing (FFCW) dataset across waves 1-5 to understand how TANF policy generosity affects women's risk of IPV, self-reported child maltreatment, economic pressure, and depression and how race moderates these relationships. For Chapter 4, we use semi-structured interviews to understand how TANF policies influence women's wellbeing and their interactions with their intimate partners. Data are analyzed using thematic analysis and validated through second-coding and member-checking.

Results: In Chapter 2, less restrictive sanctions and a higher ratio of families receiving TANF for every 100 families in poverty (the TANF-to-Poverty Ratio; TPR) increased coercive IPV, especially among AA women. In Chapter 3, decreases in self-reported child physical abuse were associated with a \$100 increase in the maximum cash benefits per month and a one unit increase in the TPR. Increases in child physical abuse scores were associated with imposition of time limits and results were similar for AA and White mothers. In Chapter 4, we identified four primary themes that together suggest that TANF stigma, low cash benefits, and conditions negatively affected women's economic and psychological wellbeing and created conflict with partners, although to a greater extent for women belonging to stigmatized groups including women of color and IPV survivors.

Conclusions: TANF affects family wellbeing but low cash benefits, stigma, and conditionality associated with TANF undermine the protective effect of TANF. TANF creates structural barriers for those experiencing intersecting challenges to employment and could be designed to better address family violence.

Temporary Assistance for Needy Families (TANF), Intimate Partner Violence and Child
Maltreatment: How TANF Generosity Affects Family Violence

By
Rachael A. Spencer
M.P.A.

Advisor: Kelli A. Komro, M.P.A., Ph.D.

A dissertation submitted to the Faculty of the
James T. Laney School of Graduate Studies of Emory University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Behavioral, Social, and Health Education Sciences
2021

Acknowledgements

I would like to thank the participants & community-based organizations for their time and dedication to this research. I am grateful to my chair, Dr. Kelli Komro and members of my committee, Drs. Briana Woods-Jaeger and Melvin Livingston for their support, guidance, and dedication to my growth. I would also like to thank the professionals who helped make this research possible, including Dr. Cari Jo Clark, Em Lemon, Shelby Rentmeester, Nolan Sroczynski, and BSHEs staff for their partnership, support, scholarly effort, and wisdom. I would also like to thank Scott Burris, JD, and Lindsay K. Cloud, JD, with Temple University Beasley School of Law Center for Public Health Law Research and the LawAtlas team for legal scholarship and EITC and MW coding.

Finally, I would like to express my personal gratitude to my family, especially Bryan & Maya, friends, colleagues, and quarantine pod members for all of their support during this difficult time and process.

Table of Contents

Contents

Chapter 1: Introduction	1
Chapter 2: The Impact of Temporary Assistance for Needy Families (TANF), Minimum Wage, and Earned Income Tax Credit on Women’s Well Being and Intimate Partner Violence Victimization	79
Chapter 3: Association Between Temporary Assistance for Needy Families (TANF) and Child Maltreatment Among a Cohort of Fragile Families	120
Chapter 4: Women Experiencing Temporary Assistance for Needy Families: Implications for Women’s Wellbeing and Intimate Relationships	151
Chapter 5: Conclusion	195
APPENDICES	203
REFERENCES	231

List of Tables & Figures:

Chapter 1: Introduction

Table 1. Cities Selected for Inclusion in the Fragile Families and Child Wellbeing Study, by Measures of Welfare Generosity, Labor Market Strength, and Child Support Enforcement (Reproduced from Reichman et al, 2001)

Table 2. Retention and Participation Rates of Mothers and Primary Caregivers, Waves 1-5

Table 3. Chapter 2 Focal TANF Policies

Table 4. Chapter 2 Outcomes, Moderators, and Covariates

Table 5. Chapter 3 Outcome, Covariate and Moderator Measures

Table 6. New York, Missouri, and Kansas State TANF Policies by Year

Table 7. Chapter 4 Examples of Interview Questions

Chapter 2: The Impact of Temporary Assistance for Needy Families (TANF), Minimum Wage, and Earned Income Tax Credit on Women’s Well Being and Intimate Partner Violence Victimization

Table 1. Participant Characteristics, by Wave (n=4045)

Table 2. Participant Characteristics by Wave and Among White and African American Women

Table 3. Estimates of Policy Effect on Violence Outcomes by Women’s Educational Attainment (\leq HS vs $>$ HS)

Table 4. Estimates of Policy Effect on Intermediate Well Being Outcomes by Women’s Educational Attainment (\leq HS vs $>$ HS)

Table 5. Estimates of Policy Effect on Violence Outcomes by Women’s Educational Attainment (\leq HS vs $>$ HS) and Race (White vs African American)

Table 6. Estimates of Policy Effect on Intermediate Outcomes by Women’s Educational Attainment (\leq HS vs $>$ HS) and Race (White vs African American)

Chapter 3: Association Between Temporary Assistance for Needy Families (TANF) and Child Maltreatment Among a Cohort of Fragile Families

Table 1. TANF Policy Changes in FFCW Study States, by Year

Table 2. Study Population Characteristics by Education (\leq HS and $>$ HS) and FFCWS Wave

Table 3. Study Population Characteristics by Mother's Race (White and African American) and FFCWS Wave

Table 4. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) Contemporaneous and One Year Lagged Models

Table 5. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs. African American), Contemporaneous

Table 6. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs. African American), One Year Lagged Models

Chapter 4: Women Experiencing Temporary Assistance for Needy Families: Implications for Women's Wellbeing and Intimate Relationships

Table 1. New York, Missouri, and Kansas State TANF Policies by Year

Table 2. Examples of Interview Questions

Table 3. Participant Characteristics by State of TANF Receipt

List of Figures

Chapter 1: Introduction

Figure 1. Family Stress Model Adapted for Violence (FSMV)

Figure 2. Theoretical Model

Figure 3. Study Design Figure

Chapter 2: The Impact of Temporary Assistance for Needy Families (TANF), Minimum Wage, and Earned Income Tax Credit on Women's Well Being and Intimate Partner Violence Victimization

Figure 1. Family Stress Model Adapted for Violence (FSMV)

Figure 2. Theoretical Model

Chapter 3: Association Between Temporary Assistance for Needy Families (TANF) and Child Maltreatment Among a Cohort of Fragile Families

Figure 1. Theoretical Model

Chapter 4: Women Experiencing Temporary Assistance for Needy Families: Implications for Women's Wellbeing and Intimate Relationships

Figure 1. Family Stress Model Adapted for Violence

Chapter 1: Introduction

Authors:

Rachael A. Spencer

Family violence, including intimate partner violence (IPV) and child maltreatment, is a pervasive public health problem associated with significant health sequelae (Black et al., 2011; Campbell, 2002; Gilbert et al., 2009; Hughes et al., 2017; Hussey et al., 2006; Sedlak et al., 2010; Wathen & MacMillan, 2013). All families are at risk of violence; however, experiencing poverty and economic insecurity increases families' risk of violence (Black et al., 2011; Capaldi et al., 2012; Conrad-Hiebner & Byram, 2020; Sedlak et al., 2010; van IJzendoorn et al., 2020). The Family Stress Model (FSM) suggests a relationship between poverty and family dynamics, linking economic pressure to poor mental health and partner conflict and “spilling over” into low-nurturant parenting (Conger et al., 2000a; Masarik & Conger, 2017). The FSM has been extended to issues of family violence (Ahmadabadi et al., 2018; Fox et al., 2002; Warren & Font, 2015) and is well tested among families of diverse racial/ethnic backgrounds (Holmes et al., 2020; Masarik & Conger, 2017).

In 1996, the federal government adopted the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), replacing Aid to Families with Dependent Children (AFDC), a program with essentially unlimited federal matching funds for state monies spent on “needy children” with Temporary Assistance for Needy Families (TANF), a block grant and cash transfer program that “requires work in exchange for time-limited assistance” (Office of Family Assistance; United States Department of Labor, 2021b). Within federal parameters, state policy makers specify the generosity level for each TANF policy that governs amount of benefits,

access to benefits, and flexibility of choices within the system (Clasen & Clegg, 2007). Overall, more generous TANF policies appear to influence positively multiple constructs of the FSM, including mental health, economic pressure, IPV, and child maltreatment (Cancian et al., 2013; Cheng, 2007; Davis, 2018; Fein & Lee, 2003; Joo Lee et al., 2004; Kalil et al., 2002; Knox et al., 2000; Ovwigho et al., 2003; Pavetti et al., 2003; C. Paxson & J Waldfogel, 2001; Paxson & Waldfogel, 2002; Riger & Staggs, 2004; Shook, 1999; Slack et al., 2007; Tolman & Raphael, 2000).

The relationship between TANF and family violence deserves further examination, however. Most earlier studies examined the changes occurring from shift from AFDC policies to TANF, limiting inferences that could be made about the effect of changes in individual policies. Conclusions drawn from earlier studies should be reconsidered as participation in TANF has decreased and working families are increasingly exposed to increases in minimum wage (MW) and earned income tax credits (EITC) (Floyd, 2020; National Conference of State Legislatures; Williams & Waxman, 2019), which have been associated with reductions in the risk of family violence (Livingston et al., under review; Raissian & Bullinger, 2017; Spencer et al., 2020). Finally, an explicit examination of the TANF-family violence relationship by race and characteristics of stigmatizing group belonging is needed. Populations that qualify for and access TANF may benefit disproportionately from access to TANF benefits, but often experience multiple intersecting social identities associated lower levels of education, poor mental health, and recent IPV experience (Office of Family Assistance, 2020a; Pelton, 2015; Romero et al., 2002; Taylor & Barusch, 2004; Tolman & Raphael, 2000), that reduce their economic and psychological wellbeing, decrease access to resources, and increase their risk for violence (Gillum, 2019; McDaniel et al., 2017; Overstreet & Quinn, 2013; Whittle et al., 2017). For African Americans (AA), whose experience of structural racism (Bailey et al., 2017) has resulted

in persistently high rates of poverty compared to White Americans, experience of concentrated neighborhood poverty (Drake & Rank, 2009), and TANF experience (Office of Family Assistance, 2020a) and consistently high levels of hiring discrimination (Quillian et al., 2017), these structural barriers and stigmas overlap and compound the toll on their wellbeing. More generous TANF policies may help to address disparities in violence for stigmatized groups, but especially AA groups, by moderating the effects of structural racism, structural discrimination, and hiring discrimination that make TANF compliance and exit with sufficient resources in place more difficult and limiting the extent to which caseworkers are able to actualize individual-level biases influenced by structural racism (Bailey et al., 2017). Despite the potentially protective effect of generous TANF policies, explicit examinations of the relationship of TANF generosity and race remains limited.

This study begins to fill these gaps by examining the effect of TANF policy generosity on IPV and child maltreatment using a triangulation design (Creswell & Clark, 2007; Creswell et al., 2011) involving secondary analyses and semi-structured interviews. Guided by the Family Stress Model Adapted for Violence (FSMV), we conducted secondary analyses of the Fragile Families and Child Wellbeing Study (FFCW), a longitudinal birth-cohort of children born to urban families, the majority of whom are experiencing low income (Reichman et al., 2001). Specifically, we used Difference-in-Differences models (Wing et al., 2018) to understand the relationship between TANF policy generosity and family violence, economic pressure, and depression over 4 waves of FFCW data and to examine how this relationship differs between White and AA families. Using the FSMV as a guide, we also conducted semi-structured qualitative interviews with women who have recent TANF experience and applied thematic analysis (Guest et al., 2011) to explore how TANF policies affect women's wellbeing and

relationships with intimate partners, exploring how structural discrimination in TANF may have affected these relationships. Our Chapters are organized as follows:

Chapter 2: Guided by the Family Stress Model Adapted for Violence (FSMV), we evaluated the effects of TANF policies on adult IPV, depression, and economic pressure.

Hypothesis 1.1: Generous TANF policies (defined as policies with more flexible guidelines and resources) will reduce IPV.

Hypothesis 1.2: Generous TANF policies will reduce depression and economic pressure.

Hypothesis 1.3: The protective effect of generous TANF policies on IPV will be greater among African American women compared to White women.

Chapter 3: Guided by the Family Stress Model, we evaluated the effects of TANF policies on children's exposure to physical maltreatment and neglect.

Hypothesis 2.1: Generous TANF policies will reduce child maltreatment.

Hypothesis 2.2: The protective effect of generous TANF policies on IPV will be greater among African American families (families with an African American primary caregiver) compared to White families.

Chapter 4: Among women experiencing TANF, explore perceptions of and lived experiences with TANF policies.

Question 1: How do women perceive that TANF policies influence their relationships with intimate partners and wellbeing (economic pressure and psychological wellbeing)?

Question 2: How are the relationships between TANF policies and women's wellbeing and relationships with intimate partners influenced/impacted by structural discrimination?

1. Significance

1.1. Poverty is a key contributing factor to family violence disparities

Family violence, including intimate partner violence (IPV) and child maltreatment, is a pervasive public health problem associated with short- and long-term health sequelae (Black et al., 2011; Campbell, 2002; Gilbert et al., 2009; Hughes et al., 2017; Hussey et al., 2006; Sedlak et al., 2010; Wathen & MacMillan, 2013). Intimate partner violence (IPV), defined as “physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner” (Breiding et al., 2015) has been associated with low-income (Tankard & Iyengar, 2018), depression, physical injury, and post-traumatic stress disorder among IPV survivors (Campbell, 2002). Child maltreatment includes child physical abuse, or “any non-accidental physical injury to the child,” and neglect, or “the failure of a parent or other person with responsibility for the child to provide needed food, clothing, shelter, medical care, or supervision to the degree that the child’s health, safety, and well-being are threatened with harm” (Child Welfare Information Gateway, 2016). Both forms of child maltreatment have been associated with a host of public health problems including smoking, obesity, sexual risk taking, poor mental health, and violence perpetration that last into adulthood (Gilbert et al., 2009; Hughes et al., 2017; Hussey et al., 2006).

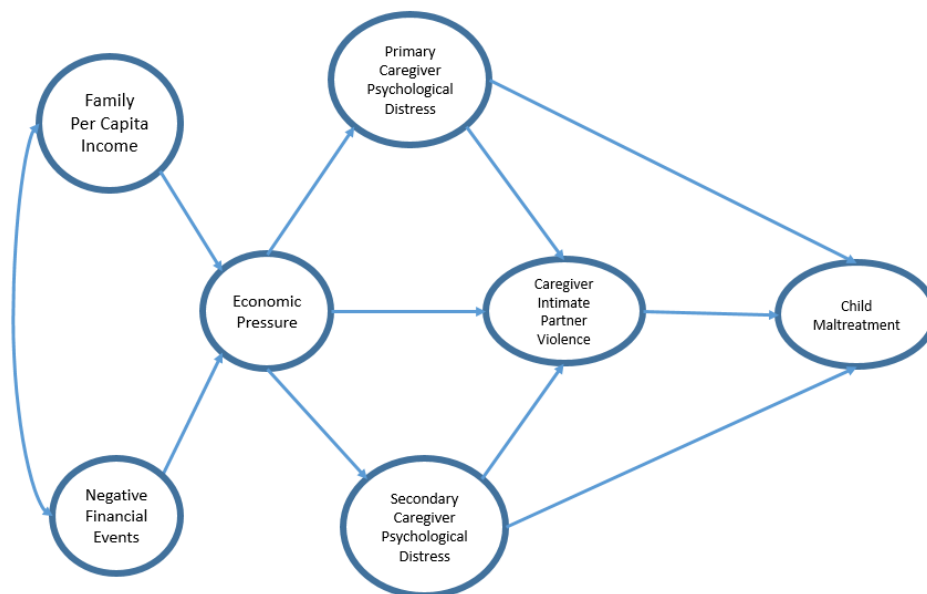
While all families are at risk of experiencing family violence, families experiencing poverty have often been found to be at greater risk of both IPV and child maltreatment (Black et al., 2011; Capaldi et al., 2012; Conrad-Hiebner & Byram, 2020; Sedlak et al., 2010; van IJzendoorn et al., 2020). The Family Stress Model (FSM), while not explicitly designed to address violence, provides important insight into the relationship between low-income status and family dynamics (Conger et al., 2000a; Conger et al., 2002). The FSM creators hypothesize that *negative financial events*, or “acute financial stress created by unfavorable changes in economic

circumstances” (e.g., being fired or laid off or a reduction in income), combined with *low family per capita income*, will produce *economic pressure*, or objective measures of economic hardship (e.g., inability to buy necessities or eviction due to lack of payment) (Conger et al., 2002).

Economic pressure results in *caregiver relationship conflict*, defined as “behaviors that reflect both aggressive and angry responses, such as criticism, defensiveness, and insensitivity and the withdrawal of support” (Conger et al., 2002), and *caregiver psychological distress*, defined as poor mental health “ranging from normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression” (Masarik & Conger, 2017). As a result, caregivers engage in *low nurturant-involved parenting*, defined by the two dimensions of “(a) the involvement of the parent with the child through appropriate monitoring, discipline, and standard setting and (b) the parent’s supportiveness of the child while avoiding overly harsh or punitive behavior” (Masarik & Conger, 2017). The FSM is well-tested, with studies finding that the model fit well to the experiences of families of diverse racial and ethnic groups (Holmes et al., 2020; Masarik & Conger, 2017).

Empirical evidence suggests that the FSM can be adapted to family violence (FSMV; Figure 1). Studies that have examined the FSM for violence outcomes suggest that economic pressure leads to increased adult IPV (Fox et al., 2002) and to child maltreatment via maternal psychological distress (Warren & Font, 2015). Empirical evidence finds that children whose mothers experience psychological and economic IPV are at increased risk of parenting practices that include physical punishments (Ahmadabadi et al., 2018; Postmus et al., 2012).

Figure 1. Family Stress Model Adapted for Violence (FSMV)



1.2 TANF provides conditional support to families experiencing poverty

In 1996, the federal government enacted the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) to overhaul the federal welfare system serving families experiencing poverty. PRWORA eliminated multiple welfare programs, including Aid to Families with Dependent Children (AFDC), a program with essentially unlimited federal matching funds for state monies spent on “needy children who had been deprived of parental support or care.” In its stead, the federal government enacted Temporary Assistance for Needy Families (TANF), a block grant and cash transfer program that “requires work in exchange for time-limited assistance” (Office of Family Assistance; United States Department of Labor, 2021b). TANF has four primary goals:

Provide assistance to needy families so that children can be cared for in their own homes; Reduce the dependency of needy parents by promoting job preparation, work and marriage; Prevent and reduce the incidence of out-of-wedlock pregnancies;

Encourage the formation and maintenance of two-parent families(Office of Family Assistance)

In the implementation of TANF, the federal government created a work-first framework that emphasized the time-limited nature of welfare in the United States. First, federal policy makers established a block grant and required state-level matching funds (so-called Maintenance of Effort or MOE funds) in order to limit federal contributions to TANF. State policy makers could allocate this pool of money to fund TANF or other state-led programs as long as the money is spent to further at least one of the four main TANF goals outlined by federal policy. Second, the federal government created a welfare to work framework that decoupled TANF from Medicaid and imposed federal lifetime limits on TANF receipt, restricting the number of months a person may receive federally-funded TANF benefits, which effectively reinforced the idea of welfare as a short-term assist on the way to employment (Dodge et al., 2008). The federal government also threatened to reduce federal contributions if states failed to engage a percentage of all adult TANF participants in core activities designed to prepare participants for work (known as the “work participation rate”). Within this framework, state policy makers were encouraged to levy sanctions, or reductions in financial benefits, against participants who are required to, but fail to, comply with work requirements ("Social Security Act," 1996). Finally, the federal government incentivized states to reduce their TANF caseloads by decreasing the states’ required work participation rates if states reduce their TANF caseloads relative to either the 1996 or the prior year caseload (known as the caseload reduction credit). Federal policy makers updated this framework via in the Deficit Reduction Act of 2005 ("Deficit Reduction Act of 2005," 2006). However, policy makers have retained the same basic structure and level of block funding for TANF since its creation.

State policymakers have significant discretion in the design and implementation of TANF. State governments provide cash, childcare vouchers, job training programs, and other resources to those who meet state-determined eligibility requirements, such as low income, limited assets, and citizenship or legal residency status. Across states, 2019 cash benefits range from 22.7% to 81.4% of the federal poverty level in Mississippi and Wyoming, respectively (Burnside & Floyd, 2019). In 32 states and the District of Columbia, a diversion payment may be made to TANF eligible participants as a short-term assist in lieu of ongoing TANF benefits. There is also variation in who is required to participate in the work requirements, or activities such as job search, employment, training, and education in exchange for TANF benefits. In 2019, six states provide no work exemptions for single-parent families with young children (Colorado, Idaho, New Mexico, Utah, South Carolina, and West Virginia) while others vary in terms of the length of work exemptions afforded to these families. Sanctions, or the financial reduction in benefits levied on a TANF unit for failure to comply with work requirements, differ across states. In 2019, for the initial instance of noncompliance, two states apply no financial sanction, 22 apply the sanction only to the non-compliant individual (partial sanction), and 25 states sanction the entire TANF unit (full family sanction) either immediately upon noncompliance or after a period of noncompliance (gradual sanction) (Pavetti et al., 2003). States use time limits, or the maximum number of months a unit can receive benefits over the life course (lifetime limits), within a specified period of time (periodic limits), or at the same financial level (benefit reduction limits) in different combinations to encourage shorter-term TANF receipt. For example, in 2019, California had a benefit reduction limit that reduced cash benefits after 48 months of receipt while Louisiana had both a lifetime limit of 60 months and a periodic limit of 24 months of TANF receipt within every 60 months. In 2018, the median maximum monthly income a single parent with two children may earn and still be eligible for

TANF was \$839.50 and ranged from \$268 in Alabama (12.0% of the state monthly median per capita income) to \$2227 in Minnesota (73.3% of the average state monthly median per capita income). Many states apply financial penalties to TANF unit when an adult has a child while receiving TANF, also known as family caps. Finally, in 2019, only 16 states required TANF applicants conduct and document a job search either before or while applying for benefits as a condition of TANF eligibility.

1.3 Recipients of TANF face multiple, intersecting stigmas and structural barriers to resource access

Policy makers hypothesized the movement from “welfare to work” would coincide with reductions in poverty, which could have significant implications for rates of violence. After the implementation of TANF, there was an uptick in employment among individuals with low education, defined as having a high school diploma or less, and among single parents – the primary recipients of TANF (Moffit & Garlow, 2018). However, there remains a significant number of families with low-incomes that continue to be affected by TANF. In 2020, TANF served approximately 2.9 million individuals (Office of Family Assistance, 2020b).

Given their experience of poverty, the populations that qualify for and access TANF are often experiencing multiple intersecting factors that reduce their economic and psychological wellbeing and increase their risk for violence. Compared to the general population, the adult population receiving TANF is more likely to have a high school education or less (Office of Family Assistance, 2020a), experience poor physical health and mental illness (Taylor & Barusch, 2004), and report recent and lifetime IPV experience (Pelton, 2015; Romero et al., 2002; Tolman & Raphael, 2000). Individuals experiencing these intersecting challenges often face multiple forms of stigma, or internal and external manifestations of a devalued social identity (Crocker et al., 1998), layered on top of the stigma associated with receiving TANF

benefits (Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006). Experiencing stigma reduces access and ability to benefit from informal and formal resources (Gillum, 2019; McDaniel et al., 2017; Overstreet & Quinn, 2013; Whittle et al., 2017) owing to both individualized biases toward the stigmatized individual as well as structures that are not designed to meet the needs of those experiences stigma, or structural discrimination. For African Americans, the harmful effects of stigma are compounded by structural racism, or the “totality of ways in which societies foster racial discrimination through mutually reinforcing systems” (Bailey et al., 2017) which has resulted in persistently high rates of poverty, experience of concentrated neighborhood poverty (Drake & Rank, 2009), and TANF experience (Office of Family Assistance, 2020a). These multiple intersecting and reinforcing systems, combined with individually held and operationalized biases toward stigmatized groups overlap and compound the toll on African American’s wellbeing.

TANF could be an important and supportive policy for those experiencing stigma and poverty; and yet, several TANF policies have been identified as creating and exacerbating obstacles and barriers for groups experiencing stigma (Campbell et al., 2016; Casey et al., 2004; East & Bussey, 2007; Monnat, 2010; Parisi et al., 2006; Schram et al., 2009). Work requirements, or the mandate that participants engage in work, educational activities, job search, or training in exchange for benefits, have been found to disadvantage groups who, for multiple structural reasons, do not have equal access to the supports necessary to consistently participate (Siegel et al., 2004). For example, redlining into neighborhoods of concentrated disadvantage, lack of access to healthcare, and abusive interference with work participation have, in part, created structural barriers for African Americans, those with mental health challenges, and IPV survivors, respectively (Holmes et al., 2020; Romero et al., 2002; Stromwall, 2001; Thomas et al., 2017; Tolman & Raphael, 2000). Second, enforcing policies that involuntarily separate

families from TANF, such as full-family sanctions and time limits, is particularly burdensome for those who have structurally limited access to employment. For example, African Americans have faced persistently elevated levels of employment discrimination (Quillian et al., 2017) and have reduced access to economic supports and employment due to mass incarceration (Wildeman & Wang, 2017). IPV survivors often have reduced savings and limited employment histories owing to economic abuse (Postmus et al., 2020). Those with mental illness often face barriers to employment and access to Social Security Disability, an instrumental support that would not require them to work in exchange for cash (Dirth & Branscombe, 2017; Whittle et al., 2017). Finally, requiring TANF participants to cooperate with child support petitions from a non-custodial parent creates barriers for IPV survivors who are fleeing abusive partners and fear being found by them (An & Choi, 2019).

State and federal governments have acknowledged the potential for TANF to differentially impact certain groups by carving out state-specific exceptions and developing solely state funded programs for groups that have barriers to employment (Parrott & Schott, 2009). Among those groups receiving time-limited exemptions from work requirements are the medically ill, those caring for an ill relative, and pregnant individuals (*Welfare Rules Database*, 2017). The federal government developed one notable exception for IPV through the Family Violence Option (FVO), a component of the TANF framework. Under the FVO, states could opt to screen individuals for IPV, refer them to services, and provide IPV survivors with exemptions from multiple eligibility criteria, requirements, and other punitive policies such as work requirements, child support enforcement rules, and time limits ("Personal Responsibility and Work Opportunity Reconciliation Act of 1996," 1996). The extent to which aspects of the FVO have been adopted differs significantly across states and the effectiveness of the FVO to create equity for IPV survivors, in both practice and in design, remains in doubt (An & Choi, 2019;

Holcomb et al., 2017). Further, FVO protections are generally limited in scope to three categories of exemptions - time limits, work requirements, and participation in child support petitions (Holcomb et al., 2017) – so IPV survivors are not exempted from the majority of TANF policies and could be experiencing obstacles that are not addressed through the FVO.

1.4 TANF is a plausible prevention strategy for IPV and child maltreatment

The FSMV suggests that TANF could be an important and supportive policy for those experiencing stigma, structural barriers, and poverty; and yet the evidence remains equivocal with groups experiencing stigma benefiting to a lesser extent (Campbell et al., 2016; Casey et al., 2004; East & Bussey, 2007; Monnat, 2010; Parisi et al., 2006; Schram et al., 2009). Here we review the theoretical linkages and evidence for the relationships between individual TANF policies and constructs in the FSMV, including IPV and child maltreatment.

Cash Benefits. In addition to rental assistance, childcare vouchers, and job training programs, TANF provides a monthly cash benefit to families. There is empirical evidence that an increase in income decreases IPV (Buller et al., 2018; Gibbs et al., 2017; Knox et al., 2000) and child maltreatment (Berger et al., 2017; Cancian et al., 2013) among both TANF recipients and low-income recipients of other cash transfers. For example, one study found that, in a randomized controlled trial of TANF recipients, self-reported IPV victimization decreased when the TANF recipients received an increase in TANF monetary benefits compared to the control group (Knox et al., 2000). An increase in cash assistance through the child support pass through was also associated with a decrease in child welfare involvement among TANF recipients (Cancian et al., 2013). It should be noted, however, that TANF cash benefits are not sufficient to raise a family of three above the poverty level, resulting in residual economic pressure. In 2019, cash benefits provided to a family of three ranged from 22.7% to 81.4% of the federal poverty level (Burnside & Floyd, 2019).

Benefits Conditions. The primary focus of TANF is to ensure that participants only receive TANF when necessary and to move towards employment as quickly as possible. To achieve these goals, policy makers designed benefits conditions that determine participants' eligibility for and access to TANF based on participant criteria, circumstance, and conduct (Clasen & Clegg, 2007). Benefit conditions of circumstance and criteria determine who is eligible to receive TANF while conditions of conduct determine what a recipient must do in exchange for benefits.

Time Limits. With the creation of TANF in 1996, the federal government imposed a 60 month-long time limit for federally funded TANF receipt and allowed states to use federal funds to support only 20 percent of the state's TANF caseload for more than 60 months. Time limits were established to reinforce the concept of TANF as a temporary program, to incentivize participants to leave TANF for employment in anticipation of time limits, and to redirect participants to engage in employment once benefits end (Fein & Lee, 2003; Lindhorst & Mancoske, 2006). Within this framework, states have several options for determining time limit generosity. States may opt to impose the 60-month time limit, cover the cost of additional months of TANF participation if they so decide, or reduce the time a recipient may receive TANF within that state below the 60-month threshold. Recipients who "time out" of TANF are no longer eligible to receive TANF in that state.

Overall, time limits may impact IPV and child maltreatment through multiple pathways as predicted by the FSMV:

1) **Increased IPV and child maltreatment due to increased psychological distress.**

Studies have hypothesized that time limits might increase psychological distress among TANF recipients who fear "timing out" of TANF benefits (Fein & Lee, 2003; Morris & Hendra, 2009).

The evidence for this hypothesis is drawn from studies conducted in the early 2000s when

sanctions policies and TANF conditions of conduct (such as work requirements) were instituted at the same time that TANF time limits were instituted. One advantage of these studies is that they were conducted before any recipient could actually experience “timing out” of TANF. One study of the effect of an experimental program in Florida found that time limits were associated with a decrease in the number of days of depressive episodes and did not affect parenting warmth or styles (Morris & Hendra, 2009). However, this study could not isolate the effect of time limits since the same program simultaneously instituted additional policy changes, including an increase in cash benefits. In other studies by Paxson and Waldfogel, researchers found that the imposition of time limits in the implementation of TANF were significantly and positively associated with state-level cases of child maltreatment and the number of children in out of home care (C. Paxson & J Waldfogel, 2001; Paxson & Waldfogel, 2002).

2) **Increased IPV and child maltreatment due to increased economic pressure when a family “times out” of TANF.** Timing out of TANF would create a negative financial event in the form of lost income that, according to the FSMV would lead to family violence. Indeed, lost income is a significant predictor of child maltreatment (Conrad-Hiebner & Byram, 2018; van IJzendoorn et al., 2020). It is not likely that those who reach time limits will easily be able to replace that lost income as those who experience time limits face significant barriers to employment including IPV experience (Lindhorst & Mancoske, 2006), lower levels of educational attainment, limited employment histories, cognitive challenges, and poor health (L. A. Pavetti & J. Kauff, 2006). Overall, leaving TANF due to time limits is associated with lower levels of income, underemployment (Hetling et al., 2006b), and economic hardship (Farrell et al., 2008). One study using data from the NCANDS system from the 2004-2015 time period found that, states with time limits that were less than the 60 month median had an approximately 30%

increase in both child maltreatment and neglect victims compared to states with more generous time limit policies (Ginther & Johnson-Motoyama, 2017).

For states that have adopted FVO protections, ongoing IPV experience is a common reason to extend benefits beyond the state's time limits (Holcomb et al., 2017). However, there are numerous structural-level and individual-level barriers to IPV survivors' receiving formal recognition of their status. These barriers include the documentation required by some states to prove IPV survivor status (e.g., court documentation) as well as aspects of the caseworker's approach to the client-caseworker relationship, including caseworkers' lack of knowledge of the time limit exception criteria, discretion in certifying IPV survivor status, and reliance on self-report of IPV status, rather than systematic screening, to initiate an exemption (Farrell et al., 2008). Experience with the child welfare system constitutes good cause for extending time limits in some states, however, most recipients need to self-report their experience to their caseworker in order to receive the extension (Farrell et al., 2008).

3) Mixed Effects on IPV and child maltreatment due to increased employment. In anticipation of experiencing a time limit or as a result of experiencing a time limit, an adult TANF recipient may seek employment. The employment process is believed to promote mental health through self-reliance, self-esteem, personal growth, and less depression as participants enter the workforce (Cheng, 2007; Fein & Lee, 2003; Tankard & Iyengar, 2018) and this would have positive effects on both IPV and child maltreatment according to the FSMV. Further, employment reduces IPV by providing mental health benefits for IPV survivors and perpetrators (Tankard & Iyengar, 2018) and is hypothesized to increase a survivor's ability to leave a violent relationship (Kalmuss & Straus, 1982). However, the positive impact of employment on IPV is not universal; employment may actually increase the risk of IPV for some women (Tolman & Raphael, 2000), especially in contexts where women do not usually work or the male partner is

unemployed or holds traditional gender norms (Atkinson et al., 2005; Buzawa & Buzawa, 2013; Heise & Kotsadam, 2015; Macmillan & Gartner, 1999). Further, an increase in employment hours has been found to contribute to substandard parenting and neglect, especially in single-parent households experiencing low income (Berger, 2007).

Sanctions. When TANF replaced AFDC in 1996, the federal government encouraged states to increase their work participation rates and to levy sanctions, or reductions in financial benefits, against participants who are required to, but fail to, comply with work requirements (Fein & Lee, 2003; "Social Security Act," 1996). The extent to which sanctions are employed differs significantly across states, with early studies of sanctioning practices finding that, over a 10-month period, 5, 10, and 12 percent of TANF recipients were sanctioned in South Carolina, Illinois, and New Jersey, respectively (Pavetti et al., 2004). The generosity of sanctioning policies can be conceived of in multiple terms. First, there is the type of the negative financial event that is imposed. The types of financial sanctions include the following: 1) none – there is no financial sanction but rather a notice to the noncompliant adult; 2) a partial sanction that only affects the noncompliant adult's portion of the benefits; 3) a gradual sanction that begins as a partial sanction and then affects the entire unit's benefits after a period of noncompliance; and 4) a full family sanction that reduces a family's financial benefit to \$0 when any adult is non-compliant. Second, is the duration of the sanction, ranging from "until compliance" to forever. Third, there are the requirements by which a recipient can cure a sanction ranging from signaling willingness to comply to complying for a specified number of days. Finally, there is the punishment for repeated noncompliance with sanctions (ranging from a financial penalty to permanent ineligibility) (Pavetti et al., 2003). The transparency with which sanctions are imposed and clarity with which caseworkers communicate the behavior or actions needed to end

a sanction (i.e., cure a sanction) also determine how and how long a recipient may experience a sanction (Pavetti et al., 2003).

Similar to time limits, sanctions may affect IPV and child maltreatment via multiple pathways as predicted by the FSMV:

- 1) **Increased IPV and child maltreatment due to increased psychological distress.** The anticipatory threat of a financial sanction for failing to comply with TANF requirements or the experience of a sanction may be associated with poorer mental health that, as predicted in the FSMV, would result in both IPV and child maltreatment. In a 2018 study by Davis using longitudinal data from the 2000, 2005, 2010 and 2015 waves of the Behavioral Risk Factor Surveillance System (BRFSS), the stringency of sanctions, defined as the amount of benefit reduction and number of family members affected, was associated with poorer mental health among single mothers with lower education levels (Davis, 2018).
- 2) **Increased IPV and child maltreatment due to increased economic pressure when a family experiences a sanction.** Having a case closed due to sanctions leads to greater economic distress and poorer mental health among mothers with lower education levels (Davis, 2018) and food insecurity, unemployment, under-employment, and low-wage employment (Born et al., 1999; Cook et al., 2002; Fraker, 1997; Joo Lee et al., 2004; Kalil et al., 2002; Pavetti et al., 2003; Wu, 2008). There is some empirical evidence that conditions of conduct influence violence as well as its mediators; having a case closed due to sanctions has been associated with a greater risk of experiencing a child welfare event (Ovwigbo et al., 2003) and with experience of child neglect (Fein & Lee, 1999). Further, a 2017 study by Ginther and colleagues found that states with sanctions that are more stringent have a significant increase in both child maltreatment and neglect cases as well as foster care placements (Ginther & Johnson-Motoyama, 2017).

3) **Mixed Effects on IPV and child maltreatment due to increased employment.** Similar to time limits, sanctions may decrease violence by persuading individuals to take the “welfare-to-work” pathway (Fein & Lee, 2003). Studies suggest that populations who are most likely to be sanctioned often do not go on to gainful employment. They have significant barriers to employment, including IPV experience (Kalil et al., 2002) housing and transportation challenges, and lower education levels (Cherlin et al., 2001).

TANF-to-Poverty Ratio. While each individual policy may have a direct impact on negative financial events or family per capita incomes, together they and other TANF policies create a package of policies that affect access to TANF and desirability of TANF access among families with low-incomes. As such, the TANF-to-Poverty Ratio (TPR), a measure of the number of families in poverty receiving TANF for every 100 families in poverty within a state in a given year, represents the construct of overall TANF generosity within a state. This ratio demonstrates not only how many families successfully apply because they find TANF to be a desirable benefit, but also how many families in poverty are able to receive and maintain TANF access. Using the TPR as a framework, there is reason to believe that TANF benefits are decreasing in generosity. In 1997, the overall TPR was 68 compared to 23 in 2017. States have followed this trend to differing extents with some states offering more generous TANF benefits compared to others. In 2017, the TANF-to-Poverty Ratio was 6 in Georgia compared to 65 in California (Floyd, 2020)

As an overall measure of TANF generosity and shaped by each individual TANF policy, the TPR relates to family violence via low family per capita income, negative financial events, and psychological well-being. Therefore, when sanctions policies, cash benefits, and time limits are more generous, we would anticipate a higher TPR and decreased experiences of family violence as predicated in the FSMV.

1.5 African American families may be especially likely to benefit from generous TANF policies

Rooted in a long history of structural racism, or the “totality of ways in which societies foster racial discrimination through mutually reinforcing systems” (Bailey et al., 2017; Drake et al., 2011; Drake & Rank, 2009; Font & Maguire-Jack, 2015), African American (AA) families are 3 times as likely to experience poverty and are 12 times as likely to live in concentrated poverty compared to White families (Drake & Rank, 2009; Semega et al., 2017). The practice of redlining has resulted in African American families being more likely to reside in communities with concentrated disadvantage (Bailey et al., 2017; McLoyd, 1990; Morrison Gutman et al., 2005). Since 1967, AAs have had the lowest real median household income compared to all other races including Whites who had almost double the average median household income of AAs in 2016 (\$39,490 versus \$65,041) (Semega et al., 2017). African American families are more likely to be among the working-poor, or “people who spent at least 27 weeks in the labor force... but whose incomes still fell below the poverty level” compared to Whites (U.S. Bureau of Labor Statistics, 2018). In part, greater poverty rates have contributed to significant exposure to TANF among AA families. In 2020, AA families comprised 13.4% of the U.S. population (United States Census Bureau, 2020a), but the same percentage of TANF participants as White Americans – approximately 31% (Office of Family Assistance, 2020a).

Related to their experiences of structural racism and greater rates of poverty, AA families experience higher rates of family violence compared to White families. Children of AA families are overrepresented among confirmed child maltreatment cases with analyses of the National Child Abuse and Neglect Data System (NCANDS) demonstrating 1 in 5 will have a confirmed maltreatment report by age 18 compared to 1 in 8 in the overall US population and 1 in 10 White children (Wildeman et al., 2014). Greater insight is needed into how characteristics of the

investigating agency, neighborhood (Font & Maguire-Jack, 2015), and practitioner contribute to these disparities (Drake et al., 2011; Pelton, 2015); however, retrospective self-reports among adolescents also point to greater rates of physical neglect among AA children compared to White children (Hussey et al., 2006). In a nationally representative survey, 4 in 10 AA women reported experiencing IPV in their lifetime compared to 3 in 10 White women (Black et al., 2011). While significantly more research is needed to contextualize the IPV that all women experience, studies have found that AA women experience more severe forms of IPV including bidirectional IPV (Langhinrichsen-Rohling et al., 2012) and IPV-related homicide compared to Whites (Caetano et al., 2005; Petrosky et al., 2017). It is notable then, that these higher rates among AAs compared to Whites disappear, are significantly attenuated, or even reverse after accounting for income and material factors (Cheng & Lo, 2013; Dettlaff et al., 2011; Kim & Drake, 2017, 2018; Pelton, 2015; Putnam-Hornstein et al., 2013; Wulczyn et al., 2013).

On the whole, structures and policies that are intended to support people experiencing the intersection of poverty and violence actually perpetuate low-income status and disempower communities of color (Gillum, 2019; McDaniel et al., 2017) and studies suggest that AFDC and TANF are not exceptions. AFDC was designed for widows and low-income families and AA women were at the helm of the welfare reform movement that argued for a minimum income for all Americans (Gordon, 1994). The movement lost momentum when AFDC benefits were reduced in the 1980s and as deserving and undeserving welfare recipients were defined often in terms of race (Neubeck & Cazenave, 2002; Quadagno, 1994). Scholars note that the notion that welfare recipient is synonymous with African American race reduced support for a generous welfare system among the White, U.S. population, leading to even more restrictions over time in the “guise of making women more self-reliant” (Johnson, 2010; Reese, 2005). Studies suggest a racialized approach to policy making whereby having a higher proportion of AA welfare

recipients has been significantly associated with stricter TANF policies (Bentele & Nicoli, 2012; Burnside & Floyd, 2019; Hahn et al., 2017) and a higher percentage of AA residents is associated with reduced investment in cash benefits in favor of social policy programs (Parolin, 2019).

In the institution of TANF in place of AFDC, the federal government formalized and sought to standardize the work-first approach to supporting low-income families but this approach appears to be experienced differently by race. In terms of TANF implementation, AA families may be especially likely to experience the disincentives and negative financial events that are associated with stringent conditions. Compared to White families, AA families are more likely to be sanctioned (Fording et al., 2007; Kalil et al., 2002; Pavetti et al., 2003; Schram et al., 2009). Using case data from Florida TANF offices over a 24-month period, Fordham and colleagues found that, while White families were more likely to be sanctioned in the initial months when sanctions are often the result of self-selection off of TANF, AA families were more likely to be sanctioned over a 9-month period. Indeed, sanctioning rates for AA families surpassed White families by 22 to 35 percent (Fording et al., 2007). Further, AA families are more likely to experience time limits, which have been associated with lower levels of employment and lower income (Hetling et al., 2006b).

Disproportionate sanctioning and time limit experiences among AA families stem, at least in part, from structural racism that reduces AA families' ability to meet TANF requirements. AA families experience reduced access to transportation and stable housing, (McDaniel et al., 2017) lack access to affordable or high quality childcare (Schmit & Walker, 2016), and healthcare (Richardson & Norris, 2010). Across states, the primary reasons for failure to comply with welfare requirements include lack of transportation, serious health issues, and lack of childcare (Bazelon & Watts, 1999; Oggins & Fleming, 2001). Further, AA families

are less likely to make a successful transition from TANF to full-time employment and cycle back into TANF more frequently compared to White families (Danziger & Tolman, 2004; Monnat & Bunyan, 2008; Schram et al., 2009). Hiring discrimination may be one important contributing factor in the disparities in the welfare-to-work transition for AA families compared to White families; in a meta-analysis of hiring discrimination field experiments, Quillian and colleagues found that African Americans have experienced consistently higher levels of hiring discrimination compared to Whites since 1989 (Quillian et al., 2017). Despite less or equal use of substances (McCabe et al., 2007; Swendsen et al., 2012), disproportionate incarceration of AA populations for drug related offenses (Camplain et al., 2020; Western & Pettit, 2005; Wildeman & Wang, 2017), further reduces access to TANF – as of 2018, 21 states deny TANF benefits to individuals convicted of a drug-related felony (*Welfare Rules Database*, 2017) – and facilitates inequitable hiring practices (Pager & Shepherd, 2008). As a result, the greater the emphasis on employment within a state TANF-policy scheme, the poorer the outcomes are likely to be for AA families compared to White families. As Schram, 2005 notes “a policy regime that punishes welfare recipients who can not find work for reasons associated with historical legacies of race recreates the social disadvantage it seeks to ameliorate.”

Structural racism influences individual biases against people of color, and this too has been identified among TANF caseworkers. Caseworkers have significant discretion in the application of policies (Fording et al., 2007; Pavetti et al., 2003). Even accounting for TANF recipient characteristics, caseworkers are more likely to sanction AA families compared to White families (Keiser et al., 2004; Lee & Yoon, 2012). Caseworkers also may provide less support to AA families because they are more likely to exhibit “discrediting” markers, such as long-term TANF use, resulting in worse treatment. In a 2006 study, Bonds found that AA recipients in Wisconsin were assigned less desirable work requirements and experienced more drug testing

compared to White recipients (Bonds, 2006). Studies also report that White TANF recipients were more likely to report that their caseworkers were helpful compared to AA TANF recipients (Bonds, 2006; Gooden, 1998).

While TANF policy generosity may be unlikely to affect individual-level biases, it may have a significant effect on the mechanisms underlying disparities in TANF outcomes which link to higher rates of violence among AA families. We hypothesize that more generous TANF policies may help to address racial disparities in violence, benefiting AA families to a greater extent than White families for a number of reasons. First, more generous policies may dampen the effects of structural racism and hiring discrimination that make TANF compliance and voluntary exit more difficult for AA families compared to White families. Second, more generous TANF policies may limit the extent to which caseworkers are able to actualize individual-level biases, which are influenced by structural racism.

1.6 Gaps in understanding of the TANF-family violence relationship persist

Overall, studies indicate that TANF has an impact on families' experience of violence; however, gaps in our knowledge of this relationship persist for several reasons.

First, with few exceptions, the study of the relationship between TANF and family violence has been conducted within the context of the shift from AFDC to TANF in 1996 or shortly thereafter. Access to and receipt of TANF among families experiencing poverty has decreased over time (Floyd, 2020) suggesting that TANF policies may be becoming less generous and the inferences drawn from the AFDC-to-TANF transition period need to be explored. Further, the switch from AFDC to TANF simultaneously implemented a package of policies, which precluded a strong causal inference as to which of the individual policies affected violence or mediators of violence. Few studies followed populations likely to be affected by

TANF over time because they were conducted immediately after the policy change, which also limits causal inferences drawn from these studies.

Second, the time frame of prior studies also could not account for the manner in which state policymakers have progressively increased the value of minimum wage (MW) and earned income tax credits (EITC) for working families (Williams, 2016). Both of these policies encourage employment among families that have considerable overlap with those who might be eligible for TANF (National Conference of State Legislatures; Williams & Waxman, 2019) and have been associated with changes in several constructs involved in the FSMV as well as IPV and child maltreatment (Livingston et al., under review; Raissian & Bullinger, 2017; Spencer et al., 2020).

Minimum Wage. The federal MW establishes a wage floor per hour – currently \$7.25/hour - that can be amended upwards by state or local governments. In 2019, approximately 1.6 million individuals earned the federal MW or below (U.S. Bureau of Labor Statistics, 2020a). However, 29 states and the District of Columbia as well as some cities have established MW at higher rates creating a significant range in MW across locales (United States Department of Labor, 2021a). As of January 1, 2021, the state-level MW ranged from \$7.25 per hour in 21 states (5 of which had no MW laws) to \$13.69 per hour (Washington) (United States Department of Labor, 2021a) Increasing the MW has been highlighted by the National Academies of Sciences as a primary anti-poverty strategy (National Academies of Sciences, 2019) and may reduce violence by incentivizing work and reducing stress associated with poverty. Specifically, it is hypothesized that increasing the MW reduces low income-earners' stress via improved living conditions (Cooper, 2015), increased job satisfaction, social status, and feelings of empowerment, termed as "control over destiny" (Leigh et al., 2018). Studies suggest that increasing the MW may have a protective effect against formal child neglect cases

(Raissian & Bullinger, 2017) as well as self-reported child maltreatment behaviors (Livingston et al., under review).

Earned Income Tax Credit. The EITC is a tax credit for low- to moderate-income workers. As of 2020, the EITC has been adopted at the federal level and 28 states and the District of Columbia offer an additional, state-level EITC (Tax Policy Center, 2021). The amount of state-level EITC varies from 3% of the federal EITC (Montana) to 85% of the federal EITC (California). State-level EITCs may also differ in terms of their refundability. A refundable tax credit means that if the credit is larger than the tax owed, then the tax payer receives the balance of the difference while a non-refundable tax credit would just offset the balance owed. The federal EITC and 22 state EITCs are refundable. A recent study found that an increase in exogenous income from the EITC was also associated with a decrease in child maltreatment across multiple models (Berger et al., 2017); however the mechanisms of effect are not quite clear. The EITC may impact violence through increased employment and income which, in turn, reduces economic pressure and improves caregiver mental health. Qualitative studies suggest that the EITC increases financial well-being and thereby reduces financial stress associated with long- and short-term debt, increases asset accumulation to buffer against future financial stress, and promotes mental health by creating feelings of social inclusion (Sykes et al., 2014). Overall, quantitative studies have produced mixed results regarding the EITC and mental health mediators of violence, but have also been of lower quality (Pega et al., 2013).

Third, with few exceptions, there is a dearth of studies explicitly examining the structural aspects of TANF that create obstacles for individuals by group-level belonging, including race and ethnicity (McDaniel et al., 2017; Nicoll, 2015). It remains typical to examine how individual factors and biases contribute to differential access (Angermeyer et al., 2014). However, employing a wider lens that explores how structures, programs and policies create

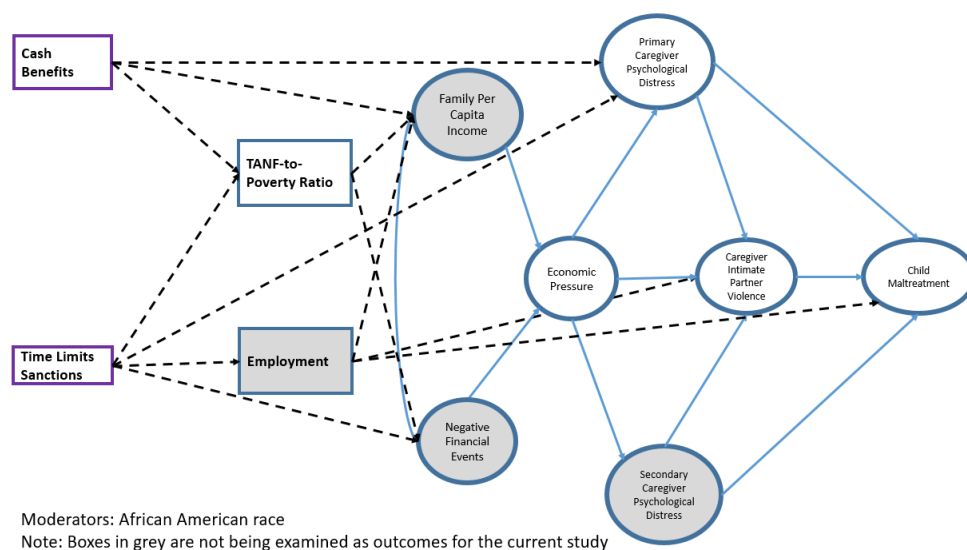
differential experiences by group belonging helps to identify patterns and other mutually reinforcing mechanisms, such as housing, labor, transportation, and education that also need to be addressed (Bailey et al., 2017; McDaniel et al., 2017).

1.7 Theoretical Model

Based on the Family Stress Model (Conger et al., 2000a) which we have adapted for violence, this study analyzes longitudinal data across five waves and interviews with women who have experience with TANF to understand the influence of TANF policies on family violence and how experience of these policies differs by group belonging, including race. Overall, we hypothesize that more generous TANF policies will be associated with reduced IPV and child maltreatment. Further, AA families will benefit to a greater extent from more generous policies compared to White families due to their disproportionate exposure to poverty, IPV, and child maltreatment and differences in their experiences of TANF implementation. Our focal TANF policies include: cash benefits, work-related sanctions, and time limits. We selected these policies because they:

- 1) Apply to the population of interest for the current study –families with at least one child; and
- 2) Have been found to or hypothesized to affect family per capita income, negative financial events, or mental health as defined by the FSM; or
- 3) Have been hypothesized to relate to IPV and/or child maltreatment.

Figure 2. Theoretical Model



2. Innovation

This proposal is innovative for three key reasons. First, we seek to shift the current TANF-family violence prevention research paradigm from empirically-based studies, to theoretically-based research. Our research moves policy research from the realm of economics literature that is largely empirically-based to the realm of behavioral science by applying a well-established theoretical model, the FSMV in both the qualitative and quantitative aspects of our study to explore its applicability to the study of TANF and family violence.

Second, we broaden the understanding of the effectiveness of policies to prevent violence on multiple forms of violence by taking a dual generation approach. This approach is strengthened by our application of many of the best practices for examining the impact of policies on health, including using intensive longitudinal analysis across multiple waves among individuals who are most likely to be directly affected the change in targeted policy (Leigh et al., 2018). Rather than crude state-level cross-sectional or ecological study design, we will conduct

a series of strong quasi-experiments using a longitudinal data set of families, including a significant number of families who either qualify for or believe that they qualify for TANF. Third, using a structural lens, we explicitly examine differential impacts of TANF and adjacent policies by group—belonging, including race and ethnicity. Focusing on systems-level discrimination may also be more effective at increasing dominant group support for “reparative policies” (Adams et al., 2006; Lowery et al., 2007), such that access and enjoyment of TANF may become more equitable.

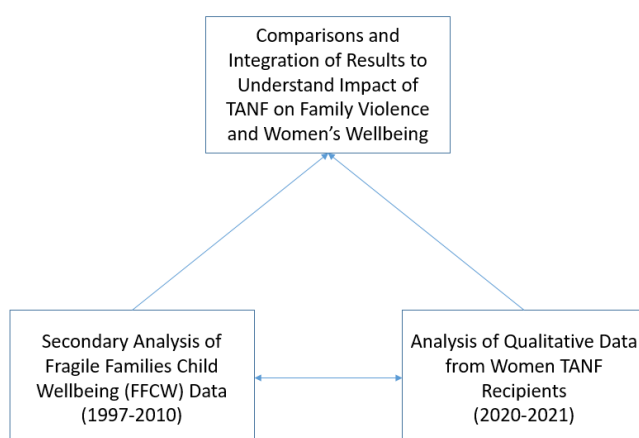
3. Approach

3.1. Study Overview

The current study uses a mixed methods, triangulation design (Creswell & Clark, 2007; Creswell et al., 2011) that involves both secondary analysis of the Fragile Families and Child Wellbeing (FFCW) dataset and semi-structured qualitative interviews with recent TANF recipients to understand how TANF policies influence family violence and women’s wellbeing. A triangulation design allows us to give equal weight to quantitative and qualitative results, both of which are helpful in evaluating the application of the FSMV to the relationship between TANF and family violence. For Chapters 2 and 3, we apply a series of rigorous, quasi-experimental analyses of the FFCW dataset across waves 2, 3, 4, and 5 using Difference-in-Differences designs (Wing et al., 2018) to understand how exposure to TANF policy generosity affects FFCW participants’ risk of experiencing IPV, child maltreatment, economic pressure, and depression. We anticipate that AA families will benefit to a greater extent from more generous TANF policies compared to White families and so, for both Chapters 2 and 3, we also examine how AA race moderates the relationships between TANF policies and family violence using a modified Difference-in-Differences design using data from the same waves. For Chapter 4, we use semi-structured interviews (Hennink et al., 2011; Patton, 2002) with women who have

experience with TANF to explore the hypothesized relationships between TANF policies, women's wellbeing, and their interactions with their intimate partners as articulated in our theoretical model. Analysis is conducted using thematic analysis (Guest et al., 2011) and participants are recruited until thematic saturation is reached. Together, the qualitative and quantitative approaches create a deeper understanding of how TANF policy generosity affects family violence and women's wellbeing in order to inform pragmatic public policy approaches that can reduce family violence and increase quality of life for families experiencing poverty.

Figure 3. Study Design



3.2 Fragile Families and Child Wellbeing Study

The outcome data for Chapters 2 and 3 of our proposed research are drawn from the Fragile Families and Child Wellbeing Study (FFCW), a longitudinal, birth cohort study of approximately 5,000 children born in 20 cities with populations greater than 200,000 people (see Reichman et al. 2001 for information on the study sample and design) (Reichman et al., 2001). Families were followed over six waves of data collection and interviewed when the child was born (age 0) and again when the child was 1, 3, 5, 9, and 15 years old. The FFCW study was primarily designed to examine health and other outcomes related to childbearing, welfare reform, and the role of

fathers. We use data from Waves 1-5 for this study because Wave 6 involves only the primary caregiving parent introducing selection bias in reports of IPV and the construct of child maltreatment changes significantly from earlier waves to wave 6 when the child has become a teen.

The FFCW study data were designed to be representative of “non-marital births in each of the 20 cities, and they also will be representative of non-marital births in US cities with populations over 200,000.” While the study also sampled marital births, the sample is not necessarily representative of marital births. This is because the study sampled births in hospitals with the most non-marital births, not births from all hospitals within a city. The FFCW used a complex, multi-stage clustered sampling design that took place in three phases.

Phase One – Selection of Cities. First, the universe of cities with populations equal to or greater than 200,000 people ($n=77$) were ranked based on the generosity of their welfare policies, the strength of the child support system, and labor conditions. The authors selected these three measures because they are believed to act as moderators of one another. For example, more generous welfare measures may relate to family structure and wellbeing differently when the labor market is thriving compared to when the labor market is in recession.

Welfare generosity was defined via two indicators: 1) as the amount of TANF cash benefits provided to a family of four and 2) the value of the monthly cash benefit divided by the median monthly rent in that city. Then, cities were assigned to a quartile based on generosity of benefits. Subsequently, researchers defined as a high benefit city, moderate benefit city and low benefit city using the following criteria:

- High benefits – a city had either 1) two extreme high values (top quartile) for both indicators or 2) top quartile value for at least one indicator and the other indicator was not in the bottom quartile;

- Moderate benefits – a city did not have an extreme value for either indicator;
- Low benefits – a city had either 1) two extreme low values (bottom quartile) for both indicators or 2) bottom quartile value for at least one indicator and the other indicator was not in the bottom quartile.

If the indicators for a city straddled or came close to the quartile boundary, the researchers also considered time limits and work requirements in assigning the level of welfare generosity for that state, where no time limits and no work requirements were considered more generous and might move a city into a higher level of generosity.

The strength of the child support system was defined via three indicators including the following: 1) the rate by which families established paternity in 1994 and 1995; 2) the proportion of AFDC cases in which child support was awarded in 1995; and 3) the proportion of AFDC cases with a child support payment in 1995. Cities were then organized into quartiles based on each indicator and then assigned the following categories:

- Strong child support system –high values (top quartile) for two out of three indicators
- Moderate child support – one or fewer extreme values for the indicators
- Weak child support system –low values (bottom quartile) for two out of three indicators

Because cities often use different denominators to calculate their indicators, authors also took into consideration their history of child support enforcement to classify the strength of their child support system.

The labor market was characterized primarily by the 1997 unemployment rates. Where unemployment rates in 1997 did not provide sufficient information about the labor market because, for example, the 1997 rate differed significantly from prior years, job growth rates and rates of population growth were used to characterize the environment. The study then classified the labor market as:

- Strong Labor Market
- Moderate Labor Market
- Weak Labor Market

Subsequently, the cities were divided into two groups – cities with extreme values for all three measures (e.g., high benefits welfare, strong child support system, and strong labor markets) and cities with one or more moderate values for the three measures. From the extreme value group, cities were divided into the eight categories of extreme values and eight cities were randomly selected, with the selection probability for each city proportional to its population. The following cities with extreme policy, labor, and child support systems were included in the study: Indianapolis, IN; Austin, TX; Boston, MA; San Jose, CA; Richmond, VA; Corpus Christi, TX; Toledo, OH; New York, NY. From the group that had at least one moderate value on any of the three measures, another eight cities were randomly selected using the same technique. These cities include: Baltimore, MD; Pittsburgh, PA; Nashville, TN; Norfolk, VA; Jacksonville, FL; San Antonio, TX; Philadelphia, PA; and Chicago, IL. In total, the nationally representative sample was drawn from 12 states: California, Texas, Maryland, Pennsylvania, Virginia, Indiana, New York, Massachusetts, Tennessee, Illinois, Florida, and Ohio.

The cities with moderate values were added to the study sample to support the authors to “detect the effects of other city level variables and non-linearities and to be nationally representative of unwed births in large cities while increasing the data collection budget by only about 25%.” Four additional cities from three additional states were selected for inclusion in the study based on researchers’ specific interest and these cities include: Newark, NJ; Oakland, CA; Detroit, MI; and San Jose, CA; and Milwaukee, Wisconsin.

City sample size was determined based on the city’s values on welfare benefits, child support system, and labor market strength. Cities that have extreme values on all three measures

generally were assigned a sample size of 325 individuals (75 marital and 250 nonmarital births) and cities with at least one moderate value on any of the three measures were assigned a sample size of 100 individuals (25 marital and 75 nonmarital births; (Table 1).

Table 1. Cities Selected for Inclusion in the Fragile Families and Child Wellbeing Study, by Measures of Welfare Generosity, Labor Market Strength, and Child Support Enforcement (Reproduced from Reichman et al, 2001)

		Child Support Enforcement								
		Strict			Moderate			Lenient		
		Strong	Average	Weak	Strong	Average	Weak	Strong	Average	Weak
Welfare Generosity	Labor Market									
	High Benefits	Boston (n=99)	Pittsburgh (n=100)	Toledo (n=101)				San Jose (n=326)	Oakland (n=330)	New York (n=384)
		Milwaukee (n=348)		Detroit (n=327)						
	Moderate Benefits	Norfolk (n=99)	Philadelphia (n=337)	Newark (n=342)	Jacksonville (n=102)	Baltimore (n=338)			Chicago (n=155)	
Low Benefits	Indianapolis (n=325)		Richmond (n=327)		Nashville (n=102)			Austin (n=326)	San Antonio (n=100)	Corpus Christi (n=331)

Phase Two – Selection of Hospitals. Within each city, hospitals were selected with the goal of collecting a sample representative of all non-marital births within that city. In five, smaller cities (e.g., Austin), researchers sampled all of the cities birthing hospital and in two larger cities (e.g., New York), birthing hospitals were randomly selected for inclusion in the study. In the remaining cities, hospitals were ranked ordered based on the number of non-marital births and those hospitals with the fewest non-marital births were excluded from the study due to cost considerations.

Phase Three – Selection of Births. Within each hospital, births were randomly selected for inclusion into the study until the study recruited a sufficient number of marital and non-marital births established by researchers to represent the percentage of non-marital births in the city that occurred in either 1996 or 1997. These quotas were updated with information from the hospital as well as throughout the recruitment process when researchers had better data on the numbers of

marital and non-marital births within the hospital. Parents and their offspring were excluded from the study when:

- The parents planned to put the child up for adoption;
 - The father was not living;
 - The child was not living at the time of the birth or had died prior to the baseline interview;
 - The parents were not able to participate in the interview in English or Spanish;
 - Illness of the mother or the child prevented the parent from participating in the interview;
- and
- The parent was under the age of 18 (when prohibited by the hospital).

The study notes that less than 5% of the study population were ruled ineligible to participate based on adoption plans, child or mother illness, father not living, language, or baby died.

Participants & Retention. In total, the FFCW includes 4898 births born to mothers who were 21% non-Hispanic White (n=1030), 48% non-Hispanic Black (n=2326), 27% Hispanic (n=1336), 4% other race/ethnicity (n=194) and <1% who were missing data on race/ethnicity (n=12; Table 2). During waves 1-5, the FFCW sought to collect data from mothers regardless of their caregiving status. For waves 1-5, the participation rate for mothers ranged from 89% (n=4364) at Wave 2 conducted in 1999-2001 to 76% (n=3515) at wave 5 conducted between the years 2014-2017.

During Waves 3-5, primary caregivers also participated in an in-home survey focused on parenting, child behaviors, and parent-child behaviors. Mothers may or may not have participated in this in-home survey regardless of whether or not they responded to the survey designated for mothers. Of the 3,298 caregivers involved in Wave 3 who took the in-home survey, 96% (n=3,129) were identified as the child's biological mother. Mothers were also the

super-majority of primary caregivers of participants in the in-home surveys in Waves 4 (97%), 5 (92%), and 6 (88%).

Table 2. Retention and Participation Rates of Mothers and Primary Caregivers, Waves 1-5

Participant Characteristics	Wave 1 (98-00)	Wave 2 (99-01)	Wave 3 (01-03)	Wave 4 (03-06)	Wave 5 (07-10)
Mother % (N)	86 (4898)	89 (4364)	86 (4231)	84 (4139)	76 (3515)
12-month TANF Receipt % (N)					
Yes	35 (1738)	25 (1085)	918	781	465
No	64 (3123)	75 (3273)	3306	3347	3043
Missing/Don't Know/Refused	<1 (36)	6	7	11	7
TANF Receipt (N; Current)	not measured				
Yes	n/a	566	625	532	342
No	n/a	354	290	246	122
Missing/Don't Know/Refused	n/a	165	2	3	1
Primary Caregivers, N	n/a	n/a	3259	2989	3630

Biological Mothers, % (N)	n/a	N/a	96 (3129)	97 (2900)	92 (3353)
---------------------------	-----	-----	-----------	-----------	-----------

The FFCW study is ideal for examining TANF's impact on family violence for a number of reasons. First, the FFCW oversampled non-marital births and so a significant number of FFCW families are likely to be experiencing low-income and be affected by our policies of interest. While this also presents challenges in determining an appropriate comparison group of participants using our study design, the FFCW data set contains multiple measured variables to controlling for individual and state-level characteristics across groups. Second, FFCW data allow us to use longitudinal analysis across more than two waves among individuals who are most likely to be directly affected by the change in targeted policy (Leigh et al., 2018). Finally, the FFCW study states were selected from strata representing differing levels of TANF generosity at the time the study was initiated in 1999 (Reichman et al., 2001). Thus, participants selected into the FFCW have different exposures to levels of state TANF generosity and that also differ in TANF generosity trajectories over time.

Another aspect of the FFCW that makes it ideal for studying TANF's relationship to family violence is that participants in the FFCW have different levels of exposure to state policy environments that may be generous with regard to other economic policies, including minimum wage and EITC, that have been associated with family violence. FFCW participants have been exposed to policy environments that are generous across all three study policies (California), moderately generous with regard to TANF but less generous with regard to MW and EITC (Tennessee) or the least generous across MW, EITC, and TANF (Texas). This variation creates an opportunity to examine how TANF affects family violence in multiple different policy environments.

Generalizability of Data from FFCW Sample. Using the nationally representative sample drawn from 16 cities across 12 states and applying the sample weights, the FFCW was designed to be representative of non-marital births in cities with populations equal to or greater than 200,000 people. Alternatively, using data from all 20 cities in the sample and applying the city-level weights renders the data representative of births in that particular city for the year in which the data were collected. Although we will account for selection bias and attrition in other ways described below, the current study will not apply weights to the sample because we do not seek to answer questions that will require the application of weights, namely we are not trying to estimate the prevalence of an occurrence and because we have longitudinal data and not multiple cross-sections of a population.

The generalizability of findings from a study using the FFCW is increased by the complex sampling frame as well as by the relatively high retention rates of mothers within the sample. However, there are important limitations to the generalizability of study findings, including the likelihood that higher educated, more advantaged populations are more likely to be excluded from the study because they are more likely to be married (Parker & Stepler, 2017). Notably, the population is also more likely to be located in an urban environment further limiting generalizability to rural or suburban populations.

3.3 Modeling TANF Policies

To model the generosity of TANF policies, we primarily draw from extant literature that has examined the relationship between TANF policies and family violence (Fein & Lee, 2003; Ovwigho et al., 2003; C Paxson & J Waldfogel, 2001; Slack et al., 2003) and TANF policies and mental health (Davis, 2018). Where there are gaps in the family violence literature, we draw from theoretical literature linking TANF to economic well-being (Pavetti et al., 2003). Finally, if the policy has not been explicitly modeled in either family violence or theoretical literature, we

draw from De Jong and colleagues who created a summary score of Welfare Dimensions to model TANF generosity (De Jong et al., 2005; Soss et al., 2006). We selected De Jong and colleagues' modeling of TANF policies because they offer a framework to examine TANF in a nuanced manner with different levels of TANF generosity compared to other studies that simply examine the presence or absence of a particular policy. De Jong and colleagues modeled TANF policies as more restrictive when they added more obligations onto the recipient, provided or resulted in fewer benefits to participants, or reduced participants' options. Overall, this approach is consistent with literature suggesting that fewer resources are associated with family violence (Berlin et al., 2009; Capaldi et al., 2012; Sedlak et al., 2010; van IJzendoorn et al., 2020), IPV survivors may be unable to meet obligations due to abuser interference or mental or physical health conditions (Renzetti, 2009; Thomas et al., 2017), and greater obligations increase the risk of sanctions or involuntary removal from TANF (Pavetti, 2018; Pavetti et al., 2003) which are associated with fewer resources, food insecurity, unemployment, under-employment, and low-wage employment. (Born et al., 1999; Cook et al., 2002; Fraker, 1997; Joo Lee et al., 2004; Kalil et al., 2002; Pavetti et al., 2003; Wu, 2008) Using factor analysis, De Jong and colleagues (2005) demonstrated that policies can represent distinct policy dimensions and allow for an examination of a host of TANF policies at once. (De Jong et al., 2005) We do not use De Jong and colleagues' factor analysis to model TANF, however, based on the criticism that De Jong and colleagues used statistics, rather than a theoretical framework, to guide their analysis and excluded policy dimensions that did not fit well in their model, regardless of their theoretical import (Soss et al., 2006). Because a significant number of studies were conducted in the early 2000s and policies have changed over time, we make modifications to the coding scheme to better distinguish between levels of generosity (Table 3). Modifications are noted below.

3.4 Chapter 2: Guided by the Family Stress Model Adapted for Violence (FSMV), we evaluated the effects of TANF policies on adult IPV, depression, and economic pressure.

Hypothesis 1.1: Generous TANF policies (defined as policies with more flexible guidelines and resources) will reduce IPV.

Hypothesis 1.2: Generous TANF policies will reduce depression and economic pressure.

Hypothesis 1.3: The protective effect of generous TANF policies on IPV will be greater among African American women compared to White women.

3.4.1 Chapter 2 Study Population

For the current analysis, we use data from mothers collected over five waves of the FFCW study, baseline through year 9. Mothers were included if they met several criteria. First, we restricted the analysis sample to mothers if they were 20 years of age or older at baseline. Restricting the sample in this way allowed us to address any potential confounding between age and education because we define our intervention and comparison groups by level of education. Second, women were included if they were in a current relationship at the time of the interview, defined as: 1) being either married, steadily romantically involved, or in an on-again-off-again relationship with the father of the focal child in the FFCW study or; 2) not living with the father of the focal child (all or most of the time) but married to or currently living with a partner. These criteria were utilized because only mothers who were in a current relationship were asked questions about IPV experience.

Our analysis includes data reported by mothers regardless of their relationship to the child's biological father per guidance from extant literature (Barnett, 2008) and because mothers may experience IPV from both married and unmarried intimate partners. Further, we include mothers who did and did not move out of state during the study in order to increase sample size

and variation in policy exposure. We assume that mothers are exposed to the state policy in the state in which they are living at the time of the interview.

3.4.2 Chapter 2 Measures

3.4.2.1 Chapter 2 Focal TANF Policy Exposures

TANF policies that are hypothesized to affect IPV and mediators of the TANF-IPV relationship and the measure of overall TANF generosity (i.e., the TANF-to-Poverty Ratio) are modeled as separate primary exposure variables. We are taking this approach because we are interested in the separate effects of each policy as well as the overall effect of TANF generosity and this is a common approach in the literature that has examined the relationship between TANF policies, family violence, and mediators of the relationship. (Cheng, 2007; Davis, 2018; Fein & Lee, 2003) All primary exposure variables are drawn from the Welfare Rules Database organized and maintained by the Urban Institute, (*Welfare Rules Database*, 2017) a database of TANF policies.

Cash benefits. This is a continuous variable indicative of the generosity of TANF monetary policies in effect in July of each year in 2015 dollars. The variable is the amount of TANF monetary benefits in 2015 dollars allocated for a unit containing one adult and two children who are not subject to a family cap, has no special needs, pays for shelter, and lives in the most populous area of the state. The amount is calculated by the Welfare Rules Database and the modeling is similar to Davis's 2018 approach when he examined the relationship between TANF conditionality and mental health using the BRFSS (Davis, 2018). For states for which two or more levels of benefits are provided, we model the amount of benefits that will affect a greater number of TANF recipients. For example, in California and Massachusetts, we estimate the non-exempt and exempt cash benefit levels, respectively (*CalWORKs Annual Report 2015*, 2015; Kaye et al., 2001). For Wisconsin, we modeled the amount provided to those engaged in

Community Service Jobs because they comprise the majority of TANF recipients in that state (*W-2 Take-up Study*, 2009). Higher cash benefits values indicate higher levels of generosity.

Time Limits. Time limits indicate whether and to what extent financial penalties were applied to cases after a certain duration of TANF receipt and were conceptualized in multiple ways depending on the outcome of interest and the power to detect differences across policy categories. As a categorical variable, time limits take the form of a lifetime limit (a maximum number of months a person may receive TANF within a lifetime), a benefit reduction limit (a reduction in the amount of cash benefits after a unit receives TANF for a specified period of time), and a periodic limit (a limit on the number of months a unit may receive TANF benefits within a certain timeframe). In descending order of generosity, states have no limits (0), a benefit reduction only limit (1), a periodic limit only (2), a lifetime limit only (3), a lifetime limit and a benefit reduction limit (4), or a lifetime limit and a periodic limit (5). To date, no state has implemented all three limits simultaneously.

Where statistical power was insufficient to model each time limit separately, we collapsed categories of time limits into a dichotomous variable indicating whether a state applies a limit to the length of time a person may receive the full financial benefit associated with TANF. The most generous policies either apply no time limit to benefit receipt or apply only a benefit reduction limit (0) while the least generous limits reduce case benefits to zero for a period of time or forever (1). The least generous time limits may take the form of a lifetime limit (a maximum number of months a person may receive TANF within a lifetime) and/or a periodic limit (a limit on the number of months a unit may receive TANF benefits within a certain timeframe). Some states may also apply a lifetime limits and a benefit reduction limit. In this instance, we model these limits as the least generous.no limits/benefit reduction limit only (1),

Sanctions. This dichotomous variable indicates the financial severity associated with an adult's failure to comply with work activities. We model sanctions as generous if they impose no full family sanction (i.e., either no financial penalty or a partial financial penalty that results in a benefit reduction; 0). A sanction is less generous if it imposes a gradual sanction – a sanction that begins with a partial reduction and converts into a full reduction in benefits after a certain period of noncompliance – or a full family sanction, which results in an immediate, sanction that diminishes benefits to \$0 for the entire assistance unit (1). Sanctions are modeled for the initial instance of noncompliance and the worst possible sanction imposed upon a family, usually levied for repeated noncompliance.

Diversion Payment. This dichotomous variable indicates whether a state has a formal program in place to divert eligible participants from enrolling in TANF by providing cash payments or alternative services. Diversion payments are modeled as 0 if no program exists and 1 if such a program is in place.

TANF-to-Poverty Ratio. This variable is derived from a dataset provided by the Center for Budget and Policy Priorities (Floyd, 2020) and is indicative of the generosity of TANF policies. According to the CBPP “ratios are calculated by dividing the number of TANF cases (based on administrative data from Health and Human Services or, since late 2006, data collected from states by CBPP) by the number of families with children in poverty (CPS data).” The number of families in poverty are devised by creating two-year averages of the poverty numbers “to improve the reliability of the state-level poverty data” and “the years cited here are for the latter of the two years.” A higher ratio indicates an overall higher level of TANF generosity.

Table 3. Chapter 2 Focal TANF Policies

Policy	Description	Generosity Levels	Relation to Model
Cash Benefits	Amount of monetary benefits per state per year allocated to a family of three with no special circumstances	A higher dollar value indicates a higher level of generosity	Decrease Low Per Capita Income (Increase Income) and Increase Psychological Well-being
Time Limits	The number of months in which an individual is eligible to receive TANF during his/her lifetime	Very Strict = Periodic + Lifetime Limit (5) Strict = Benefit + Lifetime Limit (4) Moderately Strict = Lifetime Limit only (3) Moderate = Periodic Limit only (2) Moderately Generous = Benefit Limit Only (1) Generous = No time limit (0)	Increase Negative Financial Events and Decrease Psychological Well-being
Sanctions	The financial reduction imposed on a TANF case when an adult is deemed	Strict = Full family/Gradual Full Family (1)	Increase Severity of Negative Financial Events and Decrease

Policy	Description	Generosity Levels	Relation to Model
	non-compliant with TANF work requirements.	Generous = No Financial Penalty/Partial Penalty (0)	Psychological Well-being
Diversion payment	Indicates whether individuals may be offered short-term resources to avert enrollment in TANF benefits	Strict = diversion payments in place (1) Generous = no diversion (0)	Decreases access to income
TANF-to-Poverty Ratio	The number of families in poverty receiving TANF per every 100 families in poverty in a state averaged over two calendar years	A higher ratio indicates a higher overall level of TANF generosity	Decrease in negative financial events (sanctions/time limits) and increase in cash benefits and other TANF supports

3.4.3 Chapter 2 Focal State-Level Economic Policy Variables

Given the increasing significance and use of minimum wage and Earned Income Tax Credits as anti-poverty measures (National Academies of Sciences, 2019) and evidence that they may be associated with violence, we examine these policies as focal exposures in our Chapter 2 study. *State-level Minimum Wage and EITC Laws* were drawn from the Emory Family Economic Security Policy Surveillance (FESP) system. The FESP conducted original legal data collection

to document both the state specific MW and EITC for each of the fifty states and Washington DC. Legal data collection and coding was carried out by blinded independent coding by two trained legal researchers. A senior attorney supervised all legal coders and resolved any divergences by examining the original legal text. Legal coders thus determined the prevailing state MW and EITC in each state and month.

Earned Income Tax Credit. This ordinal variable indicates whether a state has a refundable EITC (0), an EITC that is not refundable (1) or no state-level EITC at all (2) in January of the prior calendar year. The EITC variable is lagged by one year to accurately model when women would experience the tax credit.

Minimum Wage. State specific MW was modeled as the state minimum wage policy in January of a given year adjusted to 2015 dollars. If the state has no minimum wage laws, we model the default federal government minimum wage in January of each year adjusted to 2015 dollars.

3.4.4 Chapter 2 Outcomes

Adult Intimate Partner Violence (IPV). Similar to extant literature, (Nicklas & Mackenzie, 2013) adult IPV was operationalized as mother's self-report of behaviorally approximated measures of coercive control and emotional abuse. Items included in both constructs are drawn from the Conflict Tactics Scale (Straus et al., 1996) and from work by Lloyd (1997) who identified violent behavior through interviews with survivors of abuse. For each form of abuse, possible responses included never (0), sometimes, (1) and often (2). Respondents were not given any specific timeframe as a reference; however, the questions are framed in the present tense suggesting current behavior.

Coercive control was measured at Waves 2, 3, 4, and 5 with 4 separate items, including: 1) tries to keep you from seeing or talking with your friends or family (isolation); 2) tries to prevent you from going to work or school (work coercion); 3) withholds money, makes you ask

for money, or takes your money (economic abuse); and 4) tries to make you have sex or do sexual things you don't want to do (forced sex). Women who responded that the abuse occurred sometimes or often were considered exposed to that specific form of coercive control. Given the potential for each item to have a different relationship with TANF policies, we examined the separate impact of TANF on each controlling item.

Emotional abuse consisted of a single item measured at Waves 2, 3, 4, and 5 indicating whether the partner insults or criticizes the woman's ideas. Women were considered to have been exposed to emotional abuse if they responded with sometimes or often to this item. Studies have generally found a lower prevalence of violence in the FFCW sample than would be expected for the elevated risk factors among this population. This is likely due to the fact that FFCW study asks about current abuse rather than past year abuse and omits less serious acts of physical abuse, such as pushing, that are frequently asked about in other prevalence studies (McLanahan et al., 2014). Further, while many studies group physical and sexual abuse items together or separate sexual violence items into their own construct, we have incorporated the item about sexual coercion with other coercive items in a manner consistent with extant literature. Our reasoning for this is two-fold. This item inquires about the abuser using coercion for sexual purposes, rather than his perpetration of sexually violent acts, and one study using factor analysis found that this item clearly loaded onto the same factor as the other coercive items, whereas the physical violence items loaded onto a separate factor (Nicklas & Mackenzie, 2013).

3.4.5 Chapter 2 Intermediate Outcomes

Depression. Adult Depression was measured among mothers at waves 2, 3, 4, and 5 using the Composite International Diagnostic Interview-Short Form (CIDI-SF). (Kessler et al., 1998) The CIDI-SF is a standardized instrument that indicates whether a person experienced a

DSM-IV major depressive episode in the previous year. Example items include losing interest, feeling tired, and trouble sleeping for 2 or more weeks in a row in the past year. Adults' scores were calculated using guidelines provided by the FFCW study and indicate the presence (yes/no) of a liberal diagnosis for major depressive episode (Bendheim-Thoman Center for Research on Child Wellbeing (CRCW), 2018).

Economic Pressure. Economic pressure is operationalized as a count of positive responses to questions regarding objective indicators of material hardship in the past 12-months. Economic pressure was reported by the mother at waves 2, 3, 4, and 5 via 7 items that were derived from the 1996 Survey on Income and Program Participation (SIPP) Survey and the 1997 and 1999 Social Indicators Survey (SIS). Respondents were asked if, in the past 12 months: 1) you did not pay the full amount of the rent or mortgage; 2) eviction from your home or apartment for not paying the rent or mortgage; 3) you did not pay the full amount of the gas, oil, or electricity bill; 4) someone in your household who needed to see a doctor or go to the hospital couldn't go because of cost; 5) your gas or electric service were turned off; 6) you ever stayed at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing; 7) your telephone service was turned off.

There are no standardized scoring methods for these items (*Scales Documentation and Question Sources for Three-Year Questionnaires*, 2006). Consistent with extant literature (Osborne et al., 2012), we assign each affirmative response a value of 1 and sum across items to create a score of economic pressure ranging from 0 (no stress) to 7 (highest level of stress).

Employment. This dichotomous variable indicates whether participants were employed (1) or not employed (0) in the week prior to the interview. Participants were employed if they did any regular work for pay within the week prior to the interview or, if they were on vacation, if they did any regular work for pay in the week prior to going on vacation.

Table 4. Chapter 2 Outcomes, Moderators, and Covariates

Construct	Wave					# of items	Scale	Sample Items
	1	2	3	4	5			
Primary Outcome: Coercive Control		X	X	X	X	4	Conflict Tactics Scale (Straus et al., 1996) and adaptations from	Tries to prevent you from going to work or school; withholds money
Primary Outcome: Emotional Abuse		X	X	X	X	1	Lloyd (Lloyd, 1997)	the partner insults or criticizes the woman's ideas
Secondary Outcome: Depression		X	X	X	X	15	Composite International Diagnostic Interview-Short Form (Kessler et al., 1998)	Losing interest, feeling tired, and trouble sleeping for 2 or more weeks in a row in the past year
Secondary Outcome: Economic pressure		X	X	X	X	7	Based on the 1996 Survey on Income and Program	Not paid the full amount of rent or mortgage; received free food or meals

							Participation and 1997/99 Social Indicators Survey	
Secondary Outcome: Employment		X	X	X	X	1	n/a	did any regular work for pay within the week prior to the interview
Covariates: Mother's Demographics	X					2	n/a	Age; race/ethnicity
Moderator: Mother's Race/ethnicity	X					1	n/a	Non-Hispanic White, Non-Hispanic Black
Covariates: State environment						4	n/a	Family Violence Option work waiver; Median income
Covariate: Unemployment	X	X	X	X	X	1	n/a	% unemployment in the respondent's city of residence

3.4.6 Chapter 2 Moderators

Mother's Race. To understand the impact of TANF policy generosity by race, we model the relationship between each of the TANF policies and outcomes as moderated by the mother's race defined as non-Hispanic White and non-Hispanic Black.

3.4.7 Chapter 2 Covariates

To better isolate the violence prevention effects of economic policies on violence we included:

Family Violence Option. The FVO was modeled as a dichotomous variable indicating the presence (0) or absence (1) of a work waiver for survivors of IPV.

Unemployment Rate. The unemployment rate is calculated by dividing the number of unemployed individuals by the number of individuals in the labor force in the Metropolitan Statistical Area in which the mother was living in the month when she was interviewed.(Donnelly, 2015)

State Median Income. This is a continuous variable indicating the average median income in each state in a given year in 2015 dollars. Median income data were drawn from the U.S. Census Bureau database.(United States Census Bureau, 2019) The state median income value has been adjusted to 2015 dollars and divided by 1000 for interpretability.

Women's Age. Women's age in years at Wave 1 was included as a continuous variable.

Women's Race/Ethnicity. Women's self-reported race/ethnicity at Wave 1 was included as a categorical variable indicating if a woman's race/ethnicity was: non-Hispanic White (1); non-Hispanic African American (2); Hispanic (3), or other (4).

3.5 Chapter 3: Guided by the Family Stress Model, we evaluated the effects of TANF policies on children's exposure to physical maltreatment and neglect.

Hypothesis 2.1: Generous TANF policies will reduce child maltreatment.

Hypothesis 2.2: The protective effect of generous TANF policies on IPV will be greater among African American families (families with an African American primary caregiver) compared to White families.

3.5.1 Chapter 3 Study Population

The study population of interest includes children involved in the FFCW. However, because of their age, children are not able to report on their own experience of maltreatment. Therefore, we include reports of child maltreatment from the primary caregiver mother, defined by the study as

mothers who live with their children at least 50% of the time (*Frequently Asked Questions*). We focus on the effect of TANF policies on mothers because they are the majority of primary caregivers within the FFCWS cohort and because women are the primary adult recipients of TANF (Office of Family Assistance, 2016). To better understand the effect of policies on our outcomes of interest, we restricted our population to mothers between the ages of 20 and 28 at wave 3 in order to reduce the confounding effect of age and education and because women in this sample remain under age 40 by the final wave, and therefore likely to be experience TANF.

3.5.2 Chapter 3 Measures

3.5.2.1 Chapter 3 Focal TANF Policy Exposures

Data for all TANF policies were downloaded from the Urban Institute's Welfare Rules Database in by the first author in September 2019 (*Welfare Rules Database*, 2017). Where TANF policies differ based on the composition of the household (single-parent households vs. two-parent households), each policy was coded to represent TANF generosity to single-parent households.

Cash benefits. This continuous variable indicates the amount of TANF monetary benefits allocated for a unit containing one adult and two children that is not subject to a family cap, has no special needs, pays for shelter, and lives in the most populous area of the state as determined by the Urban Institute. The cash benefit has been adjusted to 2015 dollars and divided by 100 for interpretability.

Limits. This dichotomous variable indicates whether a state applies a limit to the length of time a person may receive the full financial benefit associated with TANF. The most generous policies either apply no time limit to benefit receipt or apply only a benefit reduction limit (a reduction in the amount of cash benefits after a unit receives TANF for a specified period of time; 0) while the least generous limits reduce case benefits to zero for a period of time or forever (1). The least generous time limits may take the form of a lifetime limit (a maximum

number of months a person may receive TANF within a lifetime) and/or a periodic limit (a limit on the number of months a unit may receive TANF benefits within a certain timeframe). Some states may also apply a lifetime limits and a benefit reduction limit. In this instance, we model these limits as the least generous.

Sanction Type. This dichotomous variable indicates the financial severity associated with an adult's failure to comply with work activities. We model sanctions as generous if they impose no full family sanction (i.e., either no financial penalty or a partial financial penalty that results in a benefit reduction; 0). A sanction is less generous if it imposes a gradual sanction – a sanction that begins with a partial reduction and converts into a full reduction in benefits after a certain period of noncompliance – or a full family sanction, which results in an immediate, sanction that diminishes benefits to \$0 for the entire assistance unit (1). Sanctions are modeled for the initial instance of noncompliance and the worst possible sanction imposed upon a family, usually levied for repeated noncompliance.

Diversion Payment. This dichotomous variable indicates whether a state has a formal program in place to divert eligible participants from enrolling in TANF by providing cash payments or alternative services.

Family Caps. This dichotomous variable indicates whether a TANF unit's cash benefits are reduced or do not increase relative to the family size when someone in the unit has a child while receiving TANF.

TANF-to-Poverty Ratio (TPR). This variable is derived from a dataset provided by the Center for Budget and Policy Priorities (Floyd et al., 2017) and is indicative of the generosity of TANF policies. According to the CBPP “ratios are calculated by dividing the number of TANF cases (based on administrative data from Health and Human Services or, since late 2006, data collected from states by CBPP) by the number of families with children in poverty (CPS data).”

The number of families in poverty are devised by creating two-year averages of the poverty numbers “to improve the reliability of the state-level poverty data” and “the years cited here are for the latter of the two years.” A higher ratio indicates an overall higher level of TANF generosity.

3.5.2.2 Chapter 3 Outcomes

Outcome and covariates are measured across a range of developmental periods as part of the FFCW dataset and modeled using extant literature that has analyzed FFCW data or the FFCW scale validation documentation as a guide (*Scales Documentation Navigator*, 2019). Similar to extant literature (Berger et al., 2017; Slack et al., 2011), and guided by the FFCW Scales Documentation (*Scales Documentation and Question Sources for Three-Year Questionnaires*, 2006), we operationalize child maltreatment as the primary caregiver’s (PCG; typically the mother) self-report of maltreatment and neglect behaviors perpetrated against the focal child of interest for the FFCW study (Table 5). Self-reported violence items are drawn from the physical aggression, psychological aggression, and neglect subscales of the Parent-Child Conflict Tactics Scales (CTSPC) (Straus et al., 1998).

Neglect. Neglect is measured at Waves 3, 4, and 5 with 5 items, including: 1) left the child home alone even when someone should be with the child; 2) being so caught up with their own problems that they were not able to show or tell their child that they loved him/her; 3) being unable to make sure the child got the food he/she needed; 4) being unable to make sure their child got to a doctor or hospital when needed; and 5) being so drunk or high that they had a problem taking care of their child.

Physical aggression. This form of maltreatment is measured at Waves 3, 4, and 5 with 5 items, including: 1) spanked child on the bottom with a bare hand; 2) hit child on the bottom

with something like a belt, hairbrush, a stick or some other hard object; 3) slapped child on the hand, arm, or leg; 4) pinched child; and 5) shook child.

Psychological aggression. Psychological aggression is measured at Waves 3, 4, and 5 with 5 items, including: 1) shouted, yelled, or screamed at the child; 2) threatened to spank or hit the child but didn't actually do it; 3) swore or cursed at the child; 4) called the child dumb or lazy or some other name like that; and 5) said they would send the child away or would kick him/her out of the house.

Possible responses to all subscales included this has never happened (0), once (1), twice (2), 3-5 times (3), 6-10 times (4), 11-20 times (5), 20+ times (6) or this has occurred but not in the past year (7) (Straus et al., 1998). If the violence occurred previously, but not in the past year, we assign the response a 0 value. We then summed scores within each domain for a possible score ranging between 0 to 30 based on the frequency of each form of violence within each violence domain. To allow for comparisons across all models, all outcomes were transformed using the percent of maximum possible scaling method (Cohen et al., 1999; Moeller, 2015).

There is no standardized way of modeling subscales of maltreatment using the CTSPC and maltreatment has been operationalized using multiple different methods using the FFCW data (Font & Berger, 2015; Warren & Font, 2015). There is concern around operationalizing the CTSPC measures as subscales due to the limited internal consistency in the FFCW population (i.e., Cronbach's alpha less than 0.7 for all subscales) (Nicklas & Mackenzie, 2013; *User's Guide for the Fragile Families and Child Wellbeing Study Public Data, Year 9, 2018*). However, following Berger (2007) and Straus et al. (1998) we operationalize these items as scales because these maltreatment events are rare resulting in reduced correlation between items.

Further, validity for rare events, such as neglect or abuse, will have a high level of temporal consistency.

Table 5. Chapter 3 Outcome, Covariate and Moderator Measures

Construct	Wave					# of Items	Scale	Sample Items
	1	2	3	4	5			
Child Abuse: Neglect			X	X	X	5	Parent-Child Conflict Tactics Scale (CTSPC)	was so drunk or high that she had a problem taking care of her child
Child Abuse: Physical Aggression			X	X	X	5	(Straus et al., 1998)	Shook child; Hit child with an object
Child Abuse: Psychological Aggression			X	X	X	5		Swore or cursed at the child; threatened to throw the child out of the house
Covariates: Child Demographics			X			1	n/a	Gender
Covariates: Adult Demographics	X	X	X	X	X	2	CIDI (Kessler et al., 1998)	Age; race/ethnicity; number of biological children, drug use; conservative caseness for depression

Construct	Wave					# of Item s	Scale	Sample Items
	1	2	3	4	5			
Moderator: Primary Caregiver Mother's Race/ethnicity			X			1	n/a	Non-Hispanic White, Non- Hispanic Black
Covariates (State): State Economic Policy environment						2	n/a	EITC; Minimum Wage policies in 2015 dollars; median income
Covariate: Unemployment	X	X	X	X	X	1	n/a	% unemployment in the respondent's city of residence

3.5.3 Chapter 3 Moderator

The moderator for the relationship between each of the TANF policies and child maltreatment that will be explored for Chapter 3 is the primary caregiver's race defined as non-Hispanic White and non-Hispanic Black.

3.5.4 Chapter 3 Covariates

Work Exemptions for PCG Mothers. This dichotomous variable indicates whether a TANF program exempts the PCG mother from work requirements for 12 months or more after giving birth.

Earned Income Tax Credit. This ordinal variable indicates whether a state has a refundable EITC (0), an EITC that is not refundable (1) or no state-level EITC at all (2) in the prior calendar year. The EITC variable is lagged by one year to accurately model when women would experience the tax credit.

Minimum Wage. State specific MW was modeled as the contemporaneous state minimum wage policy adjusted to 2015 dollars. If the state has no minimum wage laws, we model the default federal government minimum wage adjusted to 2015 dollars.

Unemployment Rate. The unemployment rate is calculated by dividing the number of unemployed individuals by the number of individuals in the labor force in the Metropolitan Statistical Area in which the mother was living in the month when she was interviewed.(Donnelly, 2015)

State Median Income. This is a continuous variable indicating the average median income in each state in the contemporaneous month and year of the interview. Median income data were drawn from the U.S. Census Bureau database (United States Census Bureau, 2019). The state median income value has been adjusted to 2015 dollars and divided by 1000 for interpretability.

Demographic Covariates. We additionally control for differences in mothers' wave 3 marital status (married versus non-married), number of biological children, any drug use in the past year, diagnosis of conservative depression using the Composite International Diagnostic Interview-Short Form (CIDI-SF) (Kessler et al., 1998), age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, or other), and focal child's sex.

3.6 Chapters 2 & 3 Research Design

For Chapters 2 and 3, we apply Difference-in-Differences (DD) study designs utilized commonly in public health research (Dimick & Ryan, 2014; Snow, 1855; Wing et al., 2018) to estimate the

effect of TANF policies on violence outcomes and women's wellbeing. DD study designs are strong quasi-experimental designs that allow for plausible causal inference. Using design elements and under certain assumptions, the study designs can approximate the internal validity associated with the gold standard of experimental research, the randomized controlled trial (RCT). While the RCT uses randomization to reduce potential bias due to unobservable characteristics (Shadish et al., 2002), we are not able to randomly assign TANF policies to states based on generosity. Therefore, we consider exposure to TANF policies to be a continuous natural experiment in which those that experience the intervention (i.e., policy changes) can be compared in terms of family violence outcomes to comparison groups that are less likely to experience a change in TANF policy generosity. To be able to apply DD designs, we must satisfy several conditions, including parallel trends, positivity, and endogeneity (Wing et al., 2018).

Parallel trends. The parallel trends assumption requires that unobservable confounders that vary across groups are time invariant and that any time-variant confounders are the same across groups (i.e., group invariant). When applied to our current study, we assume that trends in family violence outcomes would be the same for individuals who experience policy changes and those who do not experience policy changes **but for** the policy intervention. To evaluate the parallel trends assumption in the DD models, we will compare results with and without a state*year interaction term which accounts for state linear trends (Wing et al., 2018). If the treatment effect remains the same or qualitative similar, then we posit that our assumption holds.

Positivity. The assumption of positivity requires that there are units of analysis in the study that overlap in terms of confounding covariates in both the intervention and comparison conditions so that they are comparable (Petersen et al., 2012). For example, there should be individuals who experience policy changes and those who do not in the FFCW data set who

share similar racial/ethnic and education characteristics so that a comparison of effect is reasonable. To establish that we have met this assumption, we have reviewed the demographic characteristics across states and across intervention and comparison groups (Appendix A).

Endogeneity. Finally, the assumption of endogeneity requires that changes in the exposure variable are unrelated to or not caused by outcome of interest. In the instance where a variable reasonably relates both to changes in TANF policies and family violence, such as in the case of poverty rate which might spur policy makers to increase generosity of TANF policies and simultaneously increase family violence, we can meet this assumption in one of two ways. First, we can incorporate time fixed effects if poverty rates are not changing significantly over time. Second, if poverty rates are changing significantly over time, we can make our model conditional on the third variable by including the variable as a covariate in the model.

Theoretically Significant Policy Change. Further, in order to apply the DD study design, data has to be collected both prior to and after the policy change and there has to be sufficient variability in TANF policies in order to be able to detect an effect. While there is no specific guidance on the variability and policy changes that must occur to detect an effect, variability was deemed sufficient if the TANF policies met several criteria. First, there must have been at least one policy change during the years of 1998-2010 (the years in which FFCW data were collected and utilized for this study) that was theoretically and meaningfully related to family violence via the FSMV. Second, each level of TANF generosity must have been instituted by at least one state in each year of FFCW data collection to allow for a comparison across states. Finally, policy changes had to have occurred at different times rather than being clustered together in one or two years to account for a potential history threat. All policies examined for the current study, including the TANF-to-Poverty ratio, were examined for and deemed to have met the criteria necessary to conduct the current study (Appendix B).

3.6.1 Defining intervention and control groups

We provide plausible causal inference by comparing changes in outcomes over time among those who are more likely to be exposed to TANF (“intervention group”) compared to those who are less likely to experience TANF policies over time (“comparison group”). Our intervention group is mothers who have a high school diploma/GED or less and our comparison group is mothers who have more than a high school education. Our comparison group is much less likely to receive TANF, as individuals with more than a high school education have comprised no more than 10% of the TANF population since 1998 (Office of Family Assistance, n.d.). Finding significant differential effects across our intervention and comparison groups would bolster evidence for a causal relationship between TANF and our outcomes of interest. Similarly, our comparison group of women with more than a high school diploma are significantly less likely to be employed in jobs earning the minimum wage (U.S. Bureau of Labor Statistics, 2020a) supporting our use of this comparison group for examining the effect of minimum wage on our outcomes in Chapter 2. With regard to our examination of the effect of EITC in Chapter 2, there is the potential for greater overlap in EITC exposure between the two groups (Jones, 2013). However, the gradient relationship between education and income (U.S. Bureau of Labor Statistics, 2020b) suggests that comparison individuals are less likely to qualify for or receive a substantial benefit from the non-refundable EITC compared to the intervention group and even less likely to benefit from a refundable EITC.

3.7 Chapters 2 & 3 Analyses

All models were estimated using PROC MIXED or PROC GLMMIX based on modeling of the outcome variable in SAS v9.4 (SAS, 2019). Because the data follows individuals over time, outcome data are serially autocorrelated. We adjust for this in our model by clustering the standard errors within person.

3.7.1 Overall Effects Estimation. The model takes the following general form:

$$g(Y_{ist}) = \beta_0 + \beta_1 P_{st} + \beta_2 G_i + \beta_3 G_i * P_{st} + Year_t + Z_{ist} + N_{st} + \epsilon_{ist}$$

Where Y is the outcome for mother i in state s at time t , P is the TANF policy in state s at time t , G is an indicator for whether mother i is likely to be affected by the TANF policy (i.e., \leq HS education), $Year$ is a series of year fixed effects, Z represents available individual level covariates, N represents available state level covariates including all TANF policies to account for simultaneous policy changes within the TANF policy environment, and $g()$ is the link function. Year fixed effects are included to account for trends in violence outcomes common across states. The difference in difference estimate is β_3 , the estimated change among those most likely to have been affected by TANF minus the estimated change among the comparison group.

Effects by Race. To estimate race specific effects, we expanded the previously described model to include appropriate three-way interaction by race, intervention group, and policy as well as all lower ordered terms. Race specific difference in difference effects were estimated for each outcome.

3.7.2 Model Building

Prior to conducting the analysis, data were cleaned using an iterative three phase process of screening, diagnosing and editing (Van den Broeck et al., 2005). Screening involves using univariate and bivariate analyses and graphs to identify relationships among variables and “lack or excess of data, outliers, strange patterns in joint distributions and unexpected analysis results and other types of inferences and abstractions” (Van den Broeck et al., 2005; Wilkinson, 1999). Subsequently, we diagnosed potential issues (e.g., data is outside or inside the range of possible measurements) and treated the issues by correcting, deleting, or leaving the values and documented our choices. We also examined focal policies of interest for multicollinearity by calculating the Variance Inflation Factor (VIF). A VIF of 10 or greater was considered indicative

of a potential issue suggesting that TANF policies should be examined in separate models. The VIF values ranged from 1-3.5, suggesting no such issue.

Longitudinal data are autocorrelated; therefore, we clustered errors at the person level and initially apply the unstructured error structure (type=UN) that allows each pair of measurement occasions to have a different covariance and we will make simplifying assumptions as necessary. Our secondary approach was to model the compound symmetry (CS) error structure, which assumes that correlation remains constant across measurement occasions. This selection was guided by theory and empirical evidence related to outcome data, the relatively limited time length between measurements (ranging between 1 year and 5 years), and goodness of fit statistics (Singer et al., 2003), including a comparison of AIC and BIC values for non-nested models where the lowest AIC and BIC values indicate better fit (Akaike, 1974). We justify our application of the CS error covariance structure via the following rationale: 1) a person's experience of poverty, a key predictor of violence and poor mental and economic health, is relatively stable within the U.S. as earnings mobility is quite limited in the United States, especially for AA families (Akee et al., 2019; Chetty et al., 2017); 2) although different trajectories of violence are certainly possible, many women who experience violence will continue to experience violence at a later point in time (Swartout et al., 2012); and 3) while rates of child maltreatment are quite high in early life and then drop off as the child moves through life cycles (Sedlak et al., 2010) parents' use of abusive tactics may be ingrained from their own experience of abuse and therefore be consistently correlated over time (Renner & Slack, 2006).

For each focal policy of interest, two primary models were built. The first model estimated our main effects and the second model examined differences by race.

Model 1. The first model estimated the differential effects of TANF policies on the intervention group (mothers with a high school diploma or less) compared with mothers with

more than a higher school education. This model includes TANF policies, time fixed effects, individual level covariates, and state level covariates.

Model 2. This model estimates the moderating impact of AA race (vs. White) on the relationship between TANF policies and focal outcomes. This model includes TANF policies, individual race, an interaction of each TANF policy by race and by group status, time fixed effects, individual level covariates, and state level covariates.

Given that TANF may require time to implement after a policy change, we examined both contemporaneous and one-year lagged models.

Sensitivity Analyses. Where possible, to examine whether main effects models are robust to potential residual confounding caused by systematic differences in outcomes by education that were unaccounted for by variables in the model. Specifically, we will add education specific time trends to statistically significant main effects models to determine whether the effect substantially remained the same. If there is a potential violation of the parallel trends assumption, we will report it in results and report both sets of models.

3.7.3 Challenges/Alternative Approaches

We initially intended to examine physical IPV as a primary outcome for this study, but were unable to do so because of the low prevalence of physical IPV in the study. The low prevalence of physical IPV in the study was likely due to the phrasing of questions around violence suggesting current experience. We examined multiple different ways to incorporate physical violence as outcomes in the analyses, but ultimately, too few women reported this form of violence to examine physical violence as a separate outcome.

While we planned to include state fixed effects to account for any time invariant differences between states, our decision to include women who moved outside FFCW states precluded our ability to incorporate state fixed effects. We included women who moved outside

FFCW states to avoid selection bias given the correlation between movement out of FFCW states and IPV experience in this sample. Since we were unable to account for state-level fixed effects, we added measured covariates to account for potential confounding across groups.

3.7.4 Missing Data

Missing data was scrutinized for patterns (Orme & Reis, 1991) and then were treated based on level of missingness, patterns of missingness, and potential associations between the missing values and the outcome and other study variables of interest (Saunders et al., 2006). Multiple imputation (Rubin, 1987) has been suggested by the FFCW research team as an acceptable method for dealing with missing data in the FFCW dataset (Lundberg, 2017) and was considered as an option. However, we instead handled missing data using full information maximum likelihood (FIML) because missing data on predictor variables was limited (range 0% -4%) (Allison, 2012).

3.8 Chapter 4: Among women experiencing violence, explore perceptions of and lived experiences with TANF policies

Question 1. How do women perceive that TANF policies influence their relationships with intimate partners and wellbeing (economic pressure and psychological wellbeing)?

Question 2. How are the relationships between TANF policies and women's wellbeing and relationships with intimate partners influenced/impacted by structural discrimination?

3.8.1 Study Setting

Participants recruited for the study had experience with TANF in urban areas of New York, Missouri, and Kansas. These states have diverse TANF policy environments, giving us the best chance to capture multiple, different experiences of our TANF policies of interest (Table 6).

Table 6. New York, Missouri, and Kansas State TANF Policies by Year

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
TANF to Poverty Ratio	The number of families on TANF for every 100 families in poverty per state	2019	42	10	11
Cash Benefits	Amount of monetary benefits per state per month allocated to a family of three with no special circumstances	2018	789	429	292
Lifetime Time Limits	The number of months in which an individual is eligible to receive TANF during his/her lifetime in that state	2019	60	24	45
Work - Related Sanctions	The punitive financial measures taken against an individual or family for first failing to	2019	Benefit is reduced by the pro rata share of the noncompliant adult until compliance.	Entire unit is ineligible for benefits until compliance or 3 months,	Benefit is reduced by 50% for at least 10 weeks. Sanction

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
	meet TANF work requirements.			whichever is longer.	ends when participant completes 4 consecutive weeks of participation in work activities for an average of 30 hours per week in the 10-week period.
Child Support Sanctions	The punitive financial measures taken against an individual or family for first failing to cooperate with child support requirements.	2019	The unit's benefit is reduced by 25% until compliance.	Entire unit loses benefits for 3 months.	The unit's benefit is reduced by 25% until compliance.
Family Violence	Work requirements exemptions for individuals who	2019	Can be exempted from work exemption.	No work exemptions exist.	Temporary work exemption

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
Option Exemptions	meet TANF definitions of domestic violence victims.				exists while the family undergoes intensive case management.
	Length of time and type of time limits extended for period in which the unit is fleeing from or receiving treatment for domestic violence or abuse.	2019	Lifetime limits can be waived for at least four months and are re-evaluated at least every six months.	Lifetime limits can be extended for 6 months at a time.	Lifetime limits can be extended on a case by case basis.
<p>*Data provided for most recent year available on the Welfare Rules Database.</p> <p>** Unlike New York and Kansas, Missouri has not formally adopted the FVO, but enacted its own policies to address the needs of IPV survivors.</p>					

3.8.2 Community participation

In this community-engaged study, the research team worked with two community-based organizations located in large cities. One organization is located in the northeast and provides services to individuals who have experience with IPV or gender-based violence. Another is located in the midwest and is an early childhood education center head start that provides services to many families who have experience with IPV. The community partners were

involved in reviewing and commenting on the protocol, referring participants using a referral flyer and script (Appendix C), and reviewing and commenting on study results. In particular, we engaged with partners in the following manner:

Planning Phase

- 1) Meet with community partners to discuss the study process, referral of eligible participants for recruitment, development of the interview protocol

Data Collection Phase

- 1) Train staff and/or staff of organizations working as part of the community partner on referral protocol.
- 2) Check-in bi-monthly with community partner representatives to ensure that no additional edits to the protocol need to be made.
- 3) Work with the community partner to review any adverse events as defined in section 17.2 below and make revisions to the protocol as necessary.
- 4) Provide additional training or guidance to ensure that referrals to the study are appropriate and meet eligibility criteria.

Data Analysis & Dissemination Phase

- 1) Present initial findings to partners to receive feedback and response to data analysis.
- 2) Work with community partners to identify a date, location and time to report on findings.

3.8.3 Participant Referrals and Recruitment

Purposive sampling was used for this study because we sought to interview individuals with specific experiences to explore our theoretical model (Palinkas et al., 2015). Participant inclusion criteria included the following:

- 1) Adult (18+ years of age);
- 2) Have had lifetime contact with TANF, preferably in the past 24 months (applied for TANF, received TANF, or had issues with a TANF case for themselves and/or their child);
- 3) Have a minor child (age<18 years old); and
- 4) Have access to a safe location and a telephone to participate in a 1-1.5 hour-long interview.

The following were the exclusion criteria for the current study:

- 1) Participants who are unable to provide informed consent to participate in the study for any reason, including, for example being drunk or high at the interview. We assessed for this by asking the participant questions about the purpose of the study and what she is being asked to do prior to initiating the interview.

Participants were identified for recruitment into the study via two methods:

Referrals through community partners. The PI worked with community partner staff members to determine eligibility of and refer eligible participants for recruitment. Gatekeepers at the community partner organizations who provide support services to women were provided with a recruitment flyer and trained by the PI on the purpose of the study, the eligibility requirements, and how to talk about the study using a standard script. Typically, participants were screened for eligibility by community partners in the course of their work when meeting with new and existing clients. Support providers also were asked to consider contacting prior clients to determine their interest in participating in the study.

Snowball Referral Method. At the end of each interview, the PI asked the participant if she knows of anyone else who might be eligible for and interested in participating in the study.

If yes, that person was asked to refer eligible study participants to the study team by offering the participant contact information for the PI to arrange for an interview .

The participant was asked to provide a telephone number and/or email address that as a safe way to be contacted to arrange for an interview time. Then the referring person entered the contact information into a REDCap form (Appendix D). REDCap is a secure online database and data can only be accessed by the PI and the co-Investigators on the study. The PI for the study, a doctoral candidate, then recruited the participants over the phone using a recruitment script and confirmed eligibility for the study prior to setting a date for participation.

3.8.4 Field Methods

In-depth semi-structured interviews were selected for the current research because we sought to understand individual experiences with and perceptions of TANF policies (Hennink et al., 2011; Patton, 2002). Due to restrictions associated with COVID-19, recruitment and interviews were conducted over the phone or virtually over Zoom, based on the technology available to the participant. Research indicates that phone interviews yield quality data on par with data gathered from face-to-face interviews (Novick, 2008; Sturges & Hanrahan, 2004). When interviewed, the participant was located in a private location of her choice. The PI who conducted the interviews was located in her private office.

The personal and sensitive nature of this study required thorough ethical considerations to ensure that the research is not coercive or places participants in danger of further abuse. By the nature of recruiting women directly through service organizations, women were already connected to a system of supports. With the participants' permission, the PI was prepared to connect the participants with resources in coordination with the CBO to manage distress that may occur during or because of the interview. No participants requested to be connected to resources as a result of stress and, unprompted, most indicated that they appreciated the

opportunity to speak about their experiences. Further, due to precautions associated with the COVID-19 pandemic, all interviews were conducted remotely over Zoom when the participant could be in a safe, private location (Hartmann & Krishnan, 2014, 2016). The Emory University Institutional Review Board approved the research.

Informed consent was obtained and documented by the PI, a doctoral candidate, who read the informed consent document to the participants, provided time to answer any questions that the participant may have and asked a series of questions to ensure that informed consent could be given. This process included asking participants to describe the purpose of the study and what they would be asked to do if they joined, and asking participants to practice how they would respond if they didn't want to answer a question or stop the interview. The PI then documented consent in an online, HIPAA compliant platform. Each interview was audio recorded with the verbal permission of the participant. Each participant received a \$50 gift card as remuneration for their time and contributions to the study.

The interview began with a calendar landmarking exercise to help improve recall of retrospective events involving TANF applications, participation, and experience of TANF policies. Calendar landmarking exercises, also referred to as life history calendars (Freedman et al., 1988), are used widely in the social sciences (Glasner & van der Vaart, 2009) to improve participant recall of retrospective events compared to other techniques (Schwarz & Sudman, 2012), even when the period of inquiry is within the past two years (Belli et al., 2001). This approach serves to support recall by providing *bounding cues* or temporal points against which the domains of interest can be anchored, *sequencing* events (Belli, 1998) by identifying what happened before or after an event to “reduce the risk of omitting events,” and enable the establishment of linkages between domains of research inquiry via *top-down* and *parallel retrieval* (Glasner & van der Vaart, 2009). The calendar landmarking exercise has been used to

improve recall of IPV events among IPV survivors and is particularly appropriate when inquiring about events that have occurred throughout the life course (Yoshihama et al., 2005).

Subsequently, a standard, semi-structured interview was conducted using an interview guide.

Specific questions were asked of the participant based on her responses to the calendar landmarking exercise and more general questions were asked of all participants. Finally, participants completed a brief demographics form covering information about their age, self-identified race, experiences with other forms of governmental assistance, and health.

3.8.5 Measures

The interview guide was developed by the PI based on the constructs in the Family Stress Model and was revised and edited based on feedback from the research team and three different community partners who have experience providing services to IPV survivors and families experiencing poverty. The guide covered multiple domains including participants' experience with TANF, effects of TANF on intimate relationships and wellbeing, and perceptions of TANF policies (Table 7). To guide our study, we focused on several primary TANF policies of interest – cash benefits, time limits, sanctions, and mandatory child support participation – because these policies have been posited to relate to IPV and women's wellbeing and are likely to have an influence on most, if not all, TANF cases. Using open-ended questions, we also encouraged participants to identify additional policies that may have affected their TANF experiences.

Table 7. Chapter 4 Examples of Interview Questions

Domain	Question Examples
Experience with TANF	<p>Could you describe for me why you were sanctioned?</p> <p>Probe: Were you aware in advance that you would be sanctioned? Why or why not? How did you find out that you were sanctioned?</p>

Relationship between TANF and mood/stress level	How did receiving TANF cash benefits affect your mood or stress level?
Relationship between TANF and intimate partner relationships	How did experiencing a sanction affect your relationship with your partner? Your interactions with your partner?
Relationship between TANF and economic well-being	How did your experience of TANF ending affect your ability to buy items that you need like transportation or groceries?

3.8.6 Data Analysis

The interviews were anonymized and transcribed verbatim by the PI. Data analysis was conducted using thematic analysis (Guest et al., 2011) to identify and explain descriptive themes across interviews relating experience of TANF policies to women's wellbeing and relationship quality. We also characterized women by their self-identified race, experiences of IPV, and state of TANF experience to look for themes that emerged across these diverse characteristics and indications of areas to explore in future comparison research with a larger sample. Structural discrimination was considered present if a participant described an obstacle to accessing TANF benefits being specifically associated with a stigmatized identity (e.g., being an IPV survivor).

The PI created codes, or analytical labels to related instances of data, to create structure from unstructured data (LeCompte, 2000) in order to identify emergent themes and explore the application of the current study's theoretical model. The PI developed a codebook by first creating analytical memos and noting common themes that emerged from the data or that mapped onto the theoretical framework (Hennink et al., 2010), then creating and defining codes from a subset of three transcripts, one from each state represented in the data (Hennink et al.,

2011). The codes were primarily deductive in nature, drawn from the Family Stress Model (e.g., psychological wellbeing) although inductive codes (e.g., instrumental support) were also identified. Finally, the PI organized a total of 31 codes into a coding tree using MAXQDA, a qualitative software analysis tool.

The PI then coded three transcripts that were not used to create the codebook and ensured that the transcripts represented women who had experience across different states – New York, Kansas, and Missouri. A second coder, a doctoral candidate at Emory University who was a member of the research team, recoded two transcripts using the codebook and the PI calculated interrater reliability using Cohen's Kappa in MAXQDA (Mayring, 2004). Because the initial Cohen's Kappa did not indicate a high level of agreement ($\geq .8$) (McHugh, 2012; Miles & Huberman, 1984), the PI and second coder met to understand where differences existed and explored underlying causes of the disagreement (e.g., ambiguity in the codebook definitions, different perspectives and experiences of the coders) (Garrison et al., 2006). Once consensus was reached, the PI updated the codebook and then both coders coded two additional transcripts to calculate the interrater reliability and met again to discuss differences. Updates to the codebook were made and the process was repeated one additional time until the *a priori* Cohen's Kappa statistic ($\geq .80$) was reached. well defined The PI and second coder then independently recoded all of the transcripts, calculating Cohen's Kappa after each transcript was double coded and disagreements in coding were reconciled. PI selected the final coded transcript used for analysis. For all 13 interviews, Cohen's Kappa ranged from 0.81 to 0.95.

Codes were added and redefined as needed using constant comparison until thematic saturation was reached. For this study, thematic saturation was and defined in accordance with the study purpose and design (Saunders et al., 2018) and conceptualized as the point at which “no additional data are being found whereby the (researcher) can develop properties of the

category” (Glaser & Strauss, 2017). In particular, we sought saturation across participants and policy contexts in defining and describing key issues and experiences relevant to our research question and as defined by deductive codes in the Family Stress Model. While we used data from participants across diverse environments to achieve this level of saturation, we were not seeking saturation in terms of how these issues differ by policy context or even within a specific policy context, which would have required a much larger sample size. We operationalized thematic saturation as the point “in data collection and analysis when new information produces little or no change to the codebook” (Guest et al., 2006). There is no universal, minimum number of participants necessary to achieve thematic saturation in a non-probabilistic qualitative sample. However, studies have demonstrated that as few as 12 in-depth interviews are needed to reach thematic saturation, especially for an investigation of higher-level concepts (Ando et al., 2014; Guest et al., 2006), as is the case with this study. Similar to Guest and colleagues (2006), we tracked changes made to the codebook during the double coding process to identify the point at which no new codes were added or refined. No new codes were added after the seventh transcript when the two coders revised the codebook for a third time, and no codes were refined after the tenth transcript was analyzed by both coders. Three additional interviews were completed to ensure that no new codes were required or refined. The analysis of the three additional interviews confirmed that the codebook was stable and interview concepts could be adequately categorized using existing codes (i.e., no additional codes were needed or refined). Therefore, we concluded that thematic saturation, as defined in this study as the ability to describe key issues and experiences relevant to our research question and as defined by deductive codes in the Family Stress Model, had been reached. The calendar landmarking exercise was recorded for reference only.

Member-checking with professionals at the community-based organizations that partnered with the study team then took place to increase confidence in validity of the interpretation of study results (Birt et al., 2016). The PI presented main themes and supporting quotes and providers gave their perceptions of the interpretation, added context to the themes and quotes. Member-checking occurred twice: once with 10 advocates and case managers at the site in the northeast and a second time with 18 case managers, therapists, and advocates at the site in the midwest. While no changes to coding were needed, the member-checking phase suggested that sub-themes were representative of higher-order constructs and thus could be further synthesized into main themes. After the two member-checking events occurred, the research team further synthesized the data reorganizing the results under 4 main themes.

3.8.7 Challenges/Alternative Approaches

The COVID-19 pandemic presented multiple challenges to engaging CBOs and participants and, for these reasons, the study team shifted the study questions and study sites to accommodate. Initially, the study team sought to make comparisons in experiences across White and African American TANF participants to explain the findings in Chapters 2 and 3; however, participants often did not have the time or safe space to participate in interviews because of increased child care obligations and center closings due to the pandemic. For these reasons, we updated our research question and sought to understand structural discrimination more generally, which could encompass aspects of race and ethnicity if those topics arose during interviews. Second, while study staff obtained initial participation and protocol review from a CBO that provides support to IPV in an urban center in Georgia, the pandemic caused the organization to lose staff and capacity to participate in referrals to the study. Subsequently, the PI established another relationship with a center that services IPV survivors and survivors of gender-based violence in New York, a state with a particularly high TANF-to-Poverty Ratios and where the researcher has

existing relationships. Given New York's relatively generous time limits and sanctioning policies, a second site located in Missouri was added to increase referrals to the study among those who had experiences with time limits and more stringent sanctions.

4. Summary

Through the TANF program, state and federal governments could increase the wellbeing of families who more likely to experience the intersection of poverty and violence, and yet the potential of TANF to achieve these goals remains understudied. In particular, there is a dearth of studies explicitly examining TANF impacts by race and other group identities that, for numerous structural reasons, may benefit from increased access to generous TANF policies. Using primary data from TANF recipients and secondary data analysis of data from families more likely to be affected by TANF, the results of this study are designed to contribute to knowledge of the relationship between IPV, child maltreatment, and TANF generosity. The totality of our studies enables us to make recommendations to improve the structure and implementation of TANF which directly impacted a monthly average of 2.9 million individuals in 2019 alone (Office of Family Assistance, 2020a).

Chapter 2: The Impact of Temporary Assistance for Needy Families (TANF), Minimum Wage, and Earned Income Tax Credit on Women’s Well Being and Intimate Partner Violence Victimization

Authors:

Rachael A. Spencer

Melvin Livingston

Briana Woods-Jaeger

Shelby Noe

Nolan Sroczynski

Kelli Komro

Note: A version of this article has been published in a peer-reviewed journal as follows:

Spencer, R. A., Livingston, M. D., Woods-Jaeger, B., Rentmeester, S. T., Sroczynski, N., & Komro, K. A. (2020). The Impact of Temporary Assistance for Needy Families, Minimum Wage, and Earned Income Tax Credit on Women’s Well Being and Intimate Partner Violence Victimization. *Soc Sci Med*, 266. <https://doi.org/https://doi.org/10.1016/j.socscimed.2020.113355>

ABSTRACT

Women experiencing poverty and women of color disproportionately experience intimate partner violence (IPV) victimization. Economic policies targeting women at this intersection of poverty and IPV, including Temporary Assistance for Needy Families (TANF), Minimum Wage (MW), and Earned Income Tax Credits (EITCs), may be powerful violence prevention tools. Using data from waves 1 (1998-2000) through 4 (2007-2010) of the U.S.-based Fragile Families and Child Wellbeing (FFCW) birth cohort study, we apply a difference-in-difference (DD) study design to estimate both the overall and race-specific effects of state-level economic policies on non-physical IPV and several intermediate outcomes. In DD models analyzing the difference in

violence outcomes by intervention group (i.e., TANF exposure based on women's educational attainment, \leq high school vs $>$ high school) and by race (African American vs White) few state-level TANF policies were associated with IPV victimization and the MW had no differential effect, but the refundable EITC was protective against IPV. Of the few TANF policies associated with IPV – sanctions and the ratio of families receiving TANF for every 100 families in poverty (the TANF-to-Poverty Ratio) - those linked with fewer TANF restrictions seemed to increase coercive victimization, especially among African American (AA) women. With regard to intermediate variables, we found no overall impact of economic policies on depression or economic hardship, while monetary benefits and the TPR, were associated with a decrease in employment. The effect of TANF policies by race on intermediate outcomes was complex and analyses suggest that while White women are more likely to be employed when TANF time limits are in place, they also experience larger increases in economic hardship events compared to AA women. Research into the effects of cash transfer conditionality on mediators outside of the FSMV, including economic instability, perceived stress, bargaining power, and coercive IPV to interfere with TANF compliance, is needed.

Keywords: Intimate Partner Violence, Social Determinants of Health, Economic Policies

BACKGROUND

Intimate partner violence (IPV) perpetrated against women has been associated with poor mental and physical health (Campbell, 2002; Tankard & Iyengar, 2018), and disproportionately affects women experiencing poverty (Capaldi et al., 2012). The intersection of poverty and violence is notable among African American (AA) women who are more likely to experience IPV and poverty compared to White women (Semega et al., 2017). The Family Stress Model (FSM) describes a causal pathway linking economic pressure, created by low income and negative financial events (e.g., job loss), to poor mental health and partner conflict (Conger et al., 2000b; Masarik & Conger, 2017). Temporary Assistance for Needy Families (TANF) is a multi-policy, state-run program that provides cash and other assistance to individuals experiencing poverty (Office of Family Assistance) and primarily impacts women at greatest risk of IPV – women experiencing poverty with a high school education or less (Office of Family Assistance, 2018). Research suggests that more generous TANF policies protect against IPV and positively impact mediators described in the FSM (Cheng, 2007; Davis, 2018; Joo Lee et al., 2004; Kalil et al., 2002; Knox et al., 2000; Pavetti et al., 2003; Riger & Staggs, 2004; Tolman & Raphael, 2000). However, the evidence is not conclusive and with few exceptions, most studies examining the relationships between TANF and IPV were conducted in the 2000s. This time frame limited researchers' ability to examine how changes in TANF policies, TANF use (Floyd et al., 2017), and states' increasing use of minimum wage (MW) laws and the Earned Income Tax Credits (EITCs) to encourage work affected women's wellbeing. Studies have also overlooked potential differences in the impact of TANF on women's outcomes by race, a critical oversight given disparities in structural discrimination, poverty, and violence experienced among African American women. Understanding the relationship between TANF and women's

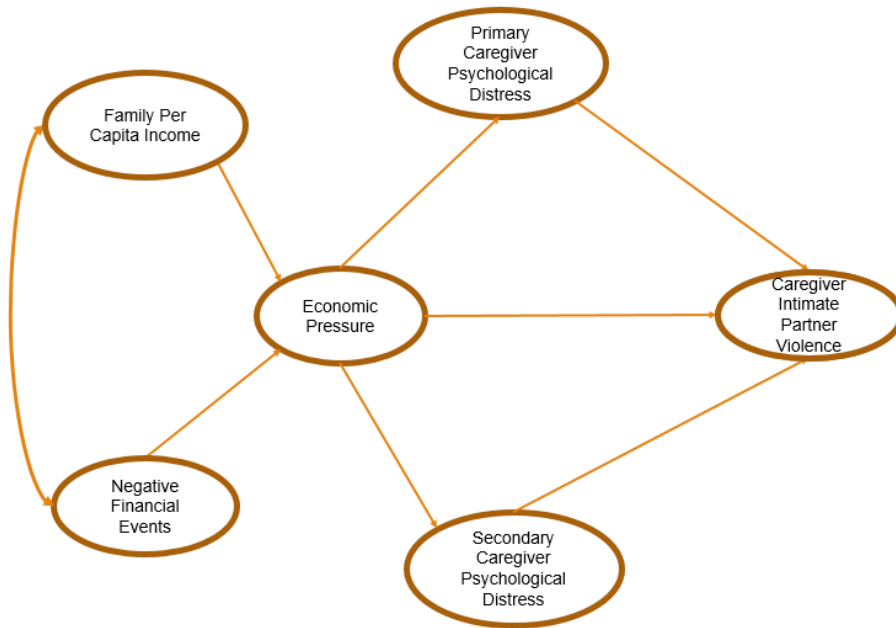
experience of IPV and wellbeing is essential to developing policies and resources to meet the needs of those at greatest risk of experiencing violence and its health consequences.

Poverty and Women's Wellbeing

Populations experiencing poverty have significant health and social challenges, including a greater risk for intimate partner violence (IPV) (Capaldi et al., 2012), defined as “physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner” (Breiding et al., 2015). In turn, IPV may sustain or deepen individual poverty (Tankard & Iyengar, 2018), due to its associations with depression, physical injury, and post-traumatic stress disorder (Bacchus et al., 2018; Campbell, 2002).

The Family Stress Model (FSM), a well-tested model that fits well to the experiences of families of diverse racial and ethnic groups (Masarik & Conger, 2017), provides important insight into the relationship between low-income status and family dynamics (Conger et al., 2000b; Conger et al., 2002). The FSM creators hypothesize that *negative financial events* (e.g., being fired or laid off or a reduction in income), combined with *low family per capita income*, will produce *economic pressure* (e.g., inability to buy necessities or eviction due to lack of payment). (Conger et al., 2002) Economic pressure results in *caregiver psychological distress and caregiver relationship conflict* (Conger et al., 2002) which represents a wide continuum of behaviors ranging from disagreements to violent behaviors between caregivers (Family Stress Model Adapted for Violence (FSMV); Figure 1). Studies that have examined the FSM for IPV outcomes suggest that economic pressure leads to increased adult IPV (Fox et al., 2002).

Figure 1. Family Stress Model Adapted for Violence (FSMV)



Temporary Assistance for Needy Families (TANF)

Temporary Assistance for Needy Families (TANF) is a multi-policy, state-run program that provides cash and other assistance to individuals with low-incomes (Office of Family Assistance). The overall focus of TANF is to provide assistance to families experiencing poverty and reduce state-program dependence by encouraging family maintenance and employment. With the institution of TANF, the federal government: mandated that adult recipients look for or participate in employment; increased income disregards that effectively increase the amount of money a person may earn from employment while remaining income eligible for TANF; instituted a federal time limit of 60 months on TANF receipt; and encouraged the use of sanctions or financial disincentives to enforce TANF conditions (Office of Family Assistance).

Within the federal parameters, states have significant discretion in determining the level of TANF generosity, or level of resources, access criteria, and level of penalties for failure to

comply with program rules. Across states, cash benefits range from 20% to 60% of the federal poverty level (Burnside & Floyd, 2019). Sanctions, or the financial reduction in cash benefits levied on a TANF unit (i.e., family) for failure to comply with work requirements, differ across states. States use time limits, a maximum number of months a unit can receive cash benefits over the life course (lifetime limits), within a specified period of time (periodic limits), or at the same financial level (benefit limits), in different combinations to reduce continuous TANF receipt.

A significant number of families experiencing poverty either access TANF or qualify for TANF. These families are disproportionately headed by women with low education levels (Office of Family Assistance, 2016) and women experiencing IPV (Pelton, 2015; Romero et al., 2002; Tolman & Raphael, 2000). Notably, there is a significant variation in TANF use across states, or the TANF to Poverty Ratio (TPR) which indicates the number of families receiving TANF for every 100 families in poverty; in 2018, 4 out of every 100 families in poverty received TANF in Louisiana, one of the least generous TANF policy regimes, compared to 68 in every 100 families in California, one of the most generous (Floyd et al., 2017).

Cash Transfers, TANF, and Women's Wellbeing

Cash transfer programs are interventions designed to provide monetary benefits to individuals experiencing very low income. While not necessarily designed to affect IPV, transfers increasingly are being explored as an intervention to reduce family violence (Buller et al., 2018; Gibbs et al., 2017). Unconditional cash transfers, or programs that provide monetary benefits without any behavioral requirements of the participant, have been highlighted as effective interventions for IPV, albeit with some caveats that relate, for example, to the size of the transfer relative to the local median income (Buller et al., 2018; Gibbs et al., 2017). The effect of conditional cash transfer programs, or programs that require participants to engage in behaviors or activities in exchange for the cash benefit, is more mixed (Buller et al., 2018; Gibbs

et al., 2017). Conditionality may protect against IPV by empowering women and helping women gain access to employment and other services (Brody et al., 2017). However, conditionality also may result in men's increased use of coercive and physical IPV to restrict women's participation in the cash transfer program (Tolman & Raphael, 2000) or to use abuse to assert dominance in the relationship in response to women's empowerment (Buller et al., 2018; Gibbs et al., 2017).

TANF, a conditional cash transfer program, likely affects women's experience of IPV victimization through multiple pathways. Similar to other cash transfer programs, (Buller et al., 2018) TANF has plausible influence on women's economic pressure and mental health. Experiencing harsher sanctions has been associated with food insecurity, unemployment, underemployment, and low-wage employment (Born et al., 1999; Cook et al., 2002; Fraker, 1997; Joo Lee et al., 2004; Kalil et al., 2002; Pavetti et al., 2003; Wu, 2008). Leaving TANF due to time limits, or the maximum number of months of TANF receipt possible within a state, is associated with lower levels of income, underemployment (Hetling et al., 2006b), and economic hardship (Farrell et al., 2008). Full family sanctions have been associated with worse mental health (Davis, 2018). Employment, a foundational aim of TANF and a requirement of non-exempt TANF recipients, also likely mediates the TANF-IPV relationship. While the employment process is believed to promote mental health (Cheng, 2007; Fein & Lee, 2003; Tankard & Iyengar, 2018) and increase a survivor's ability to leave a violent relationship (Kalmuss & Straus, 1982), employment may actually increase the risk of IPV for some women (Tolman & Raphael, 2000). Risk of employment-related IPV may be higher in contexts where women do not usually work or the male partner is unemployed or holds traditional gender norms (Atkinson et al., 2005; Buzawa & Buzawa, 2013; Heise & Kotsadam, 2015; Macmillan & Gartner, 1999). Studies suggest that women TANF recipients often experience increased IPV, especially

controlling behaviors, when men seek to interfere with their work opportunities as a means of reasserting power over the survivor.(Tolman & Raphael, 2000) Most state policy makers adopted the “family violence option,” (FVO) and instituted temporary work waivers for current and recent survivors of IPV to buffer against the potential harmful impact of conditionality. However, not all states have adopted the FVO, there is significant variation in FVO policies across states (e.g., the length of time a waiver may be offered) (Holcomb et al., 2017) and in implementation of the waiver at the caseworker level (An & Choi, 2019; Lindhorst et al., 2008). Barriers to accessing these waivers are often prohibitive (Farrell et al., 2008).

There are significant gaps in understanding of the TANF-IPV relationship. Most of the studies were conducted using data from the transition from AFDC to TANF (Morris & Hendra, 2009) or using data from the early- to mid-2000s (Knox et al., 2000), limiting the causal inference that can be made about the impact of individual TANF policies. Further, the focus on individual TANF policies limits understanding of how overall TANF access and generosity, in the form of the TPR, affects violence and women’s wellbeing.

Given their short timeframe, studies are often unable to account for how TANF operates within the state economic policy environment in which state policy makers use the Minimum Wage and Earned Income Tax Credit (EITC) to persuade families in poverty to work and decrease demand for TANF. The federal MW establishes a wage floor per hour – currently \$7.25/hour – that, as of 2019 has been increased by 29 states and the District of Columbia creating a significant range in MW across locales (United States Department of Labor, 2021a). In addition to incentivizing work, the MW may affect family violence by reducing the number of individuals in poverty and relieving stress among both perpetrators and survivors.(Cooper, 2015; Leigh et al., 2018) The EITC is a tax credit for low- to moderate-income workers and has been adopted at the federal level and in 29 states and the District of Columbia (Williams & Waxman, 2019).

State policy makers may increase the generosity of the EITC by offering a larger tax credit or designing the state credit to be refundable, which means that if the credit is larger than the tax owed, then the person receives a refund for the difference. The EITC may impact violence through increased employment and income which, in turn, reduces economic pressure and improves caregiver mental health (Sykes et al., 2014). Overall, quantitative studies have produced mixed results regarding the EITC and mental health mediators of violence, but have also been of lower quality (Pega et al., 2013). To the best of our knowledge, no studies have looked at the effect of the refundability of the EITC on violence, even though refundable EITCs may provide the greatest benefit to those most vulnerable to the poverty-violence intersection.

Racial Disparities in Violence, Poverty, Mental Health, and TANF Benefits

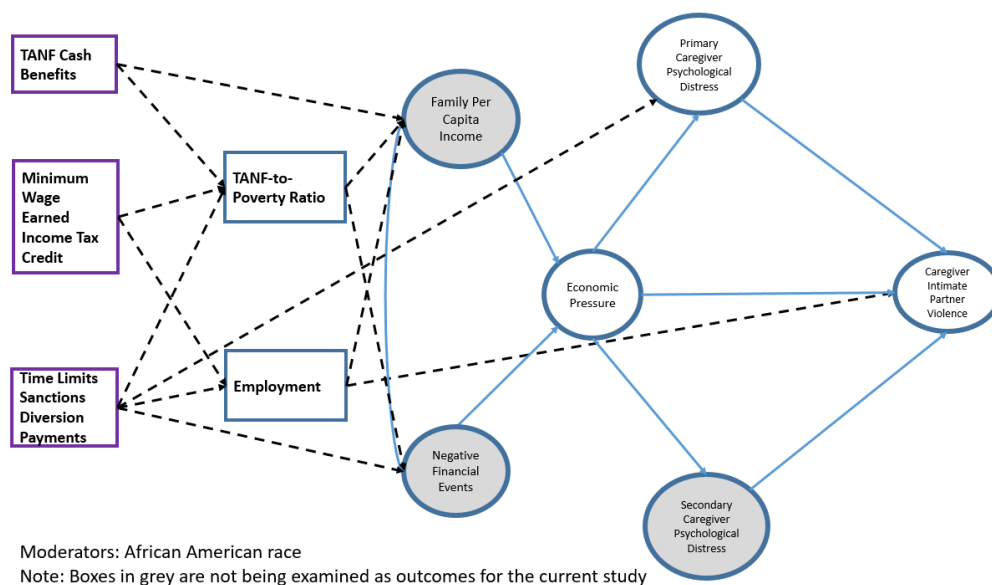
Compared to White families, African American families experience persistently higher rates of IPV (Black et al., 2011) owing to both structural racism (Bailey et al., 2017) and, relatedly, their disproportionate experiences of low income and poverty (Drake & Rank, 2009; Semega et al., 2017). African Americans are more likely to live in communities with concentrated disadvantage (McLoyd, 1990; Morrison Gutman et al., 2005), resulting in reduced access to resources to resolve issues associated with poverty. The impact of TANF generosity on women's experiences is also likely to differ by race because AA women are further disadvantaged by their experience of structural discrimination both within TANF and in structures adjacent to TANF (Gillum, 2019; McDaniel et al., 2017). Compared to White families, AA families are more likely to be sanctioned (Fording et al., 2007; Kalil et al., 2002; Pavetti et al., 2003; Schram et al., 2009), and experience time limits, which have been associated with lower levels of employment and lower income (Hetling et al., 2006b). The effect of these policies on women's outcomes is magnified by disparities in access to transportation and stable housing (McDaniel et al., 2017), affordable or high quality childcare (Schmit & Walker, 2016),

healthcare (Richardson & Norris, 2010), and employment (Quillian et al., 2017) that make compliance with TANF rules and goals more difficult. Disparities in access and use of healthcare for depression exemplifies these conditions; AA individuals experiencing depression are more likely to report work impairment, rate their depression as severe (McGuire & Miranda, 2008), and less likely to have sought treatment for depressive disorders (Williams et al., 2007), even as they are less likely to experience major depressive disorder compared to White individuals (Weinberger et al., 2018). These disparities suggest the need to examine differences in the influence of TANF on IPV, employment, economic wellbeing, and mental health on women by race, and yet studies often only control for race or do not examine differences by race.

Conceptual Model

Guided by the FSMV and empirical evidence (Atkinson et al., 2005; Buller et al., 2018; Buzawa & Buzawa, 2013; Corman et al., 2017; Davis, 2018; Fein & Lee, 2003; Heise & Kotsadam, 2015), we hypothesize that more generous TANF policies are protective against family violence (Figure 2). We further hypothesize that African American women will benefit to a greater extent from more generous TANF policies compared to White women because more generous TANF policies limit the extent to which structural racism within and in structures adjacent to TANF affect AA women's ability to receive services and resources from TANF.

Figure 2. Theoretical Model



Population and Analysis Sample

The population for the current study is drawn from the Fragile Families and Child Wellbeing (FFCW) study, a longitudinal, birth cohort study of 4,898 children born in 20 cities with populations greater than 200,000 people (see Reichman et al. 2001 for information on the study sample and design) (Reichman et al., 2001). Families were followed over six waves of data collection beginning at Wave 1 when the child was born and again when the child was 1, 3, 5, 9, and 15 years old.

For the current analysis, we use data from mothers collected over five waves of the FFCW study, baseline through year 9. Mothers were included if they met several criteria. First, we restricted the analysis sample to mothers if they were 20 years of age or older at baseline because we seek to compare women who have lower-levels of education to women with higher levels of education and limiting the population to those whose high school education is likely to remain static addresses any potential confounding between age and education. Second, women were included if they were in a current relationship at the time of the interview, defined as: 1) being either married, steadily romantically involved, or in an on-again-off-again relationship with the father of the focal child in the FFCW study or; 2) not living with the father of the focal

child (all or most of the time) but married to or currently living with a partner. These criteria were utilized because only mothers who were in a current relationship were asked questions about IPV experience.

Our initial analytic sample began with 4,898 women who provided data at Wave 1. We then excluded women who were not at least age 20 at Wave 1 (n=849) or had missing data on age (n=4), were missing data on education at wave 1 (n=3), did not report being in a relationship at any wave (n=471), had missing data on their state of residence at Waves 2 through 5 (n=11), and had missing data on race/ethnicity at Wave 1 (n=5). In all, our final sample included 3,545 women who contributed data at Wave 2 (n=3,316), 3 (n=3,208), 4 (n=3,100) or 5 (n=2,710).

METHODS

Design

We apply Difference-in-Differences (DD) study designs utilized commonly in public health research (Dimick & Ryan, 2014; Snow, 1855; Wing et al., 2018) to estimate both the overall and race-specific effects of state-level TANF policies on IPV and several intermediate outcomes. We consider exposure to TANF policies to be a continuous natural experiment within states and over time. Those that experience the intervention (i.e., policy changes) can be compared in terms of IPV outcomes to a comparison group that is less likely to experience a change in TANF policy generosity, and yet both groups are exposed to other state-level factors that may influence IPV. We also control for potential state- and individual-level confounders.

Defining intervention and control groups. We provide plausible causal inference by comparing changes in outcomes over time among those who are more likely to be exposed to TANF (“intervention group”) compared to those who are less likely to experience TANF policies over time (“comparison group”). Our intervention group is mothers who have a high school

diploma/GED or less and our comparison group is mothers who have more than a high school education. Our comparison group is much less likely to receive TANF, as individuals with more than a high school education have comprised no more than 10% of the TANF population since 1998.(Office of Family Assistance, n.d.) Finding significant differential effects across our intervention and comparison groups would bolster evidence for a causal relationship between TANF and our outcomes of interest. Similarly, our comparison group of women with more than a high school diploma are significantly less likely to be employed in jobs earning the minimum wage(U.S. Bureau of Labor Statistics, 2020a) supporting our use of this comparison group for examining the effect of minimum wage on our outcomes. With regard to EITC, there is the potential for greater overlap in EITC exposure between the two groups (Jones, 2013). However, the gradient relationship between education and income (U.S. Bureau of Labor Statistics, 2020b) suggests that comparison individuals are less likely to qualify for or receive a substantial benefit from the non-refundable EITC compared to the intervention group and even less likely to benefit from a refundable EITC.

Measures

Main Outcome Measures.

Adult Intimate Partner Violence (IPV). Similar to extant literature (Nicklas & Mackenzie, 2013), adult IPV was operationalized as mother's self-report of behaviorally approximated measures of coercive control and emotional abuse. Items included in both constructs are drawn from the Conflict Tactics Scale (Straus et al., 1996) and from work by Lloyd (Lloyd, 1997) who identified violent behavior through interviews with survivors of abuse. For each form of abuse, possible responses included never (0), sometimes, (1) and often (2). Respondents were not given any specific timeframe as a reference; however, the questions are framed in the present tense suggesting current behavior.

Coercive control was measured at Waves 2, 3, 4, and 5 with 4 separate items, including: 1) tries to keep you from seeing or talking with your friends or family (isolation); 2) tries to prevent you from going to work or school (work coercion); 3) withholds money, makes you ask for money, or takes your money (economic abuse); and 4) tries to make you have sex or do sexual things you don't want to do (forced sex). Women who responded that the abuse occurred sometimes or often were considered exposed to that specific form of coercive control. Given the potential for each item to have a different relationship with TANF policies, we examined the separate impact of TANF on each controlling item.

Emotional abuse consisted of a single item measured at Waves 2, 3, 4, and 5 indicating whether the partner insults or criticizes the woman's ideas. Women were considered to have been exposed to emotional abuse if they responded with sometimes or often to this item.

Intermediate Outcomes.

Depression. Adult Depression was measured among mothers at waves 2, 3, 4, and 5 using the Composite International Diagnostic Interview-Short Form (CIDI-SF) (Kessler et al., 1998). The CIDI-SF is a standardized instrument that indicates whether a person experienced a DSM-IV major depressive episode in the previous year. Example items include losing interest, feeling tired, and trouble sleeping for 2 or more weeks in a row in the past year. Adults' scores were calculated using guidelines provided by the FFCW study and indicate the presence (yes/no) of a liberal diagnosis for major depressive episode (Bendheim-Thoman Center for Research on Child Wellbeing (CRCW), 2018).

Economic Pressure. Economic pressure is operationalized as a count of positive responses to questions regarding objective indicators of material hardship in the past 12-months. Economic pressure was reported by the mother at waves 2, 3, 4, and 5 via 7 items that were derived from the 1996 Survey on Income and Program Participation (SIPP) Survey and the 1997

and 1999 Social Indicators Survey (SIS). Respondents were asked if, in the past 12 months: 1) you did not pay the full amount of the rent or mortgage; 2) eviction from your home or apartment for not paying the rent or mortgage; 3) you did not pay the full amount of the gas, oil, or electricity bill; 4) someone in your household who needed to see a doctor or go to the hospital couldn't go because of cost; 5) your gas or electric service were turned off; 6) you ever stayed at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing; 7) your telephone service was turned off.

There are no standardized scoring methods for these items (*Scales Documentation and Question Sources for Three-Year Questionnaires*, 2006); however, consistent with extant literature, (Osborne et al., 2012) we will assign each affirmative response a value of 1 and sum across items to create a score of economic pressure ranging from 0 (no stress) to 7 (highest level of stress).

Employment. This dichotomous variable indicates whether participants were employed (1) or not employed (0) in the week prior to the interview. Participants were employed if they did any regular work for pay within the week prior to the interview or, if they were on vacation, if they did any regular work for pay in the week prior to going on vacation.

Independent Variables.

Data for all TANF policies were drawn from the Welfare Rules Database maintained by the Urban Institute (*Welfare Rules Database*, 2017). Where TANF policies differ based on the composition of the household (single-parent households vs. two-parent households), each policy was coded to represent TANF generosity to single-parent households.

Cash benefits. This continuous variable indicates the amount of TANF monetary benefits allocated for a unit containing one adult and two children that is not subject to a family

cap, has no special needs, pays for shelter, and lives in the most populous area of the state. The cash benefit has been adjusted to 2015 dollars and divided by 100 for interpretability.

Limits. This categorical variable indicates whether a state applies any limit to the length of time a person may receive the full financial benefit associated with TANF. These limits take the form of a lifetime limit (a maximum number of months a person may receive TANF within a lifetime), a benefit reduction limit (a reduction in the amount of cash benefits after a unit receives TANF for a specified period of time), and a periodic limit (a limit on the number of months a unit may receive TANF benefits within a certain timeframe). In descending order of generosity, states have no limits (0), a benefit reduction only limit (1), a periodic limit only (2), a lifetime limit only (3), a lifetime limit and a benefit reduction limit (4), or a lifetime limit and a periodic limit (5). To date, no state has implemented all three limits simultaneously.

Sanction Type. This dichotomous variable indicates the financial severity associated with sanctions imposed for failure to comply with work activities for a single parent family unit. In terms of levels of generosity, we model sanctions as generous if they impose no full family sanction (i.e., either no financial penalty or a partial financial penalty; 0). A sanction is less generous if it imposes a gradual sanction – a sanction that begins with a partial reduction and converts into a full reduction in benefits after a certain period of noncompliance – or a full family sanction, which results in an immediate, sanction that diminishes benefits to \$0 for the entire assistance unit (1). Sanctions are modeled for the initial instance of noncompliance and the worst possible sanction imposed upon a family, usually levied for repeated noncompliance.

Diversion Payment. This dichotomous variable indicates whether a state has a formal program in place to divert eligible participants from enrolling in TANF by providing cash payments or alternative services. Diversion payments are modeled as 0 if no program exists and 1 if such a program is in place.

TANF-to-Poverty Ratio (TPR). This variable is derived from a dataset provided by the Center for Budget and Policy Priorities (Floyd et al., 2017) and is indicative of the generosity of TANF policies. According to the CBPP “ratios are calculated by dividing the number of TANF cases (based on administrative data from Health and Human Services or, since late 2006, data collected from states by CBPP) by the number of families with children in poverty (CPS data).” The number of families in poverty are derived by creating two-year averages of the poverty numbers “to improve the reliability of the state-level poverty data” and “the years cited here are for the latter of the two years.” A higher ratio indicates an overall higher level of TANF generosity.

Earned Income Tax Credit. This ordinal variable indicates whether a state has a refundable EITC (0), an EITC that is not refundable (1) or no state-level EITC at all (2) in January of the prior calendar year. The EITC variable is lagged by one year to accurately model when women would experience the tax credit.

Minimum Wage. State specific MW was modeled as the state minimum wage policy in January of a given year adjusted to 2015 dollars. If the state has no minimum wage laws, we model the default federal government minimum wage in January of each year adjusted to 2015 dollars.

Control Variables.

Family Violence Option. The FVO was modeled as a dichotomous variable indicating the presence (0) or absence (1) of a work waiver for survivors of IPV.

Unemployment Rate. The unemployment rate is calculated by dividing the number of unemployed individuals by the number of individuals in the labor force in the Metropolitan Statistical Area in which the mother was living in the month when she was interviewed (Donnelly, 2015).

State Median Income. This is a continuous variable indicating the average median income in each state in a given year in 2015 dollars. Median income data were drawn from the U.S. Census Bureau database (United States Census Bureau, 2019). The state median income value has been adjusted to 2015 dollars and divided by 1000 for interpretability.

Age. Women's age in years at Wave 1 was included as a continuous variable.

Race/Ethnicity. Women's self-reported race/ethnicity at Wave 1 was included as a categorical variable indicating if a woman's race/ethnicity was: non-Hispanic White (1); non-Hispanic African American (2); Hispanic (3), or other (4).

Analysis

All models were estimated using PROC GLIMMIX in SAS v9.4 (SAS, 2019). Because the data follows individuals over time, outcome data are serially autocorrelated. To adjust for this, we model person-level random intercepts for all models.

Overall Effects Estimation. The model takes the following general form:

$$g(Y_{ist}) = \beta_0 + \beta_1 P_{st} + \beta_2 G_i + \beta_3 G_i * P_{st} + Year_t + Z_{ist} + N_{st} + \epsilon_{ist}$$

Where Y is the outcome for person i in state s at time t , P is the TANF policy in state s at time t , G is an indicator for whether person i is likely to be affected by the TANF policy (i.e., has a low-level of education), $Year$ is a series of year fixed effects, Z represents available individual level covariates, N represents available state level covariates, and $g()$ is the link function selected based on the outcome distribution. Year fixed effects are included to account for trends in violence outcomes common across states. The difference in difference estimate is β_3 , the estimated change among those most likely to have been affected by TANF minus the estimated change among the comparison group.

Effects by Race. To estimate race specific effects, we expanded the previously described model to include appropriate three-way interaction by race, intervention group, and policy as well

as all lower ordered terms. Race specific difference in difference effects were estimated for each outcome. The three-way interaction allowed for explicit tests of the difference between these race specific difference in differences estimates.

Missing Data. Missing data were handled using maximum likelihood via PROC GLIMMIX because missing data on predictor variables was limited (range 0% -4%) (Allison, 2012). Missing data included 6 cases of missing data for TANF initial sanctions and 11 cases of mother's race/ethnicity. Attrition in our analytic initial sample ranged from 7% (Wave 2) to 24% at Wave (5).

RESULTS

At baseline, the 3,545 participants were 26.7 years old (SD 5.6) on average (Table 1). Across all waves, the plurality of participants were non-Hispanic African American women (range: 44.6%-48.2%) and had a high school education or less (range: 58.0%-58.8%). In Wave 2, approximately one third of participants had received TANF or believed they were eligible for TANF (37.7%; n=1131) and the percentage of participants who met this criteria decreased until Wave 5 (26.8%; n=675). Women reported fewer coercive IPV experiences over time from Wave 2 (18.2%; n=474) to Wave 5 (10.8%; n=231). The most frequently reported coercive victimization experiences were isolating behaviors and the least common were sexually coercive behaviors. Approximately one-third of women reported experiencing emotional IPV at all Waves (range: 31.3%-36.4%). Across all waves, more than half of the women were employed (range: 55.3%-63.8%), about one-fifth of women met the liberal criteria for depression using the CIDI (range: 15.6%-20.0%), and reported experiencing fewer than 1 economic hardship event (range: 0.6-1.0).

Table 1. Participant Characteristics, by Wave (n=4045)

	Wave 1 (Birth; n=3,545)	Wave 2 (Year 1; n=3,316)	Wave 3 (Year 3; n=3,208)	Wave 4 (Year 5; n=3,100)	Wave 5 (Year 9; n=2,710)
Age, mean (sd)	26.7 (5.6)	27.9 (5.6)	29.7 (5.6)	31.8 (5.6)	35.9 (5.6)
Race/Ethnicity, % (n)					
Non-Hispanic White	23.1 (821)	23.8 (790)	23.8 (763)	23.0 (715)	23.3 (631)
Non-Hispanic AA	44.6 (1615)	45.6 (1513)	46.4 (1488)	47.4 (1469)	48.2 (1305)
Hispanic	27.1 (959)	26.5 (877)	25.8 (828)	25.8 (800)	24.9 (675)
Other	4.3 (150)	4.1 (136)	4.0 (129)	3.8 (116)	3.6 (99)
Education, % (n)					
≤High School	58.8 (2085)	58.1 (1928)	58.0 (1861)	58.4 (1809)	58.3 (1579)
>High School	41.2 (1460)	41.9 (1388)	42.0 (1347)	41.6 (1291)	41.7 (1131)
TANF					
Received TANF	n/a	21.5 (714)	18.3 (590)	15.6 (483)	11.4 (308)
Believed Eligible for TANF	n/a	16.2 (417)	14.5 (376)	15.6 (414)	15.4 (367)
In a relationship*	n/a	78.3 (2610)	80.4 (2584)	78.9 (2448)	79.3 (2152)

Intimate Partner Violence Victimization, % (n)	n/a				
Any Coercion	n/a	18.2 (474)	15.6 (402)	15.0 (366)	10.8 (231)
Isolation Coercion	n/a	11.1 (290)	9.6 (248)	10.3 (253)	7.2 (154)
Work Coercion	n/a	6.1 (159)	4.6 (119)	4.4 (107)	2.6 (55)
Economic Coercion	n/a	7.0 (182)	6.2 (160)	5.3 (128)	4.6 (98)
Forced Sex Coercion	n/a	2.2 (56)	2.1 (53)	2.0 (48)	1.4 (31)
Emotional	n/a	36.4 (950)	35.4 (916)	31.5 (774)	31.3 (671)
Employed	n/a	55.3 (1832)	57.7 (1850)	60.3 (1865)	63.8 (1728)
Depression Liberal Diagnosis, % (n)	n/a	15.6 (506)	20.0 (641)	17.0 (526)	16.9 (456)
Economic Pressure Events, mean (SD)	n/a	0.6 (1.1)	1.0 (1.4)	0.7 (1.2)	0.9 (1.3)
* Note: Relationship status is based on mother's relationship with biological father of focal child only at Wave 1 and is based on mother's relationship with father of focal child and other intimate partners in Waves 2-5.					

Compared to White women, AA women were younger on average at each wave by approximately 2.5 years (Table 2). African American women also were more likely to be in the intervention group, more likely to have received or believe that they were eligible for TANF, and

more likely to have experienced any IPV coercion. Across all waves, African American women reported more hardship events on average (range: 0.73-1.08) than White women (range: 0.53-0.68).

	Wave 1 (Birth; n=3,545)		Wave 2 (Year 1; n=3,316)		Wave 3 (Year 3; n=3,208)		Wave 4 (Year 5; n=3,100)		Wave 5 (Year 9; n=2,710)	
	White (n=821)	AA (n=1615)	White (n=790)	AA (n=1513)	White (n=763)	AA (n=1488)	White (n=715)	AA (n=1469)	White (n=631)	AA (n=1305)
Economic Pressure	n/a	n/a	0.55	0.73	0.53	0.90	0.62	0.85	0.68	1.08
Events, mean (SD)			(1.06)	(1.11)	(1.01)	(1.16)	(1.16)	(1.19)	(1.19)	(1.29)

In adjusted DD models analyzing the difference in violence outcomes by intervention group (i.e., TANF exposure based on women’s educational attainment, \leq HS vs $>$ HS), few TANF policies were significantly associated with women’s experiences of IPV (Table 3). Two of the sixty tests were statistically significant at the $p < .05$ level of significance. A one unit increase in the TPR was associated with an increased odds of isolation IPV victimization for intervention group (\leq HS) by one percent compared to the comparison group ($>$ HS). Compared to states with no or a partial financial worst sanction, having a gradual or full worst sanction was associated with a decreased odds of work coercion IPV for the intervention group (\leq HS) by 56% compared to the comparison group ($>$ HS).

State-level MW policies were not related to women’s experiences of violence. State-level refundable EITCs were significantly associated with two of the six IPV outcomes. Compared to states with no EITC, having a refundable EITC decreased the odds of isolation victimization by 45% and decreased the odds of money coercion by 53% for the intervention group (\leq HS) compared to the comparison group ($>$ HS).

Table 3. Estimates of Policy Effect on Violence Outcomes by Women’s Educational Attainment (\leq HS vs $>$ HS)

Policy	Emotional Abuse, Odds Ratio (95% CI)	Any Coercion, Odds Ratio (95% CI)	Isolation Coercion, Odds Ratio (95% CI)	Work Coercion, Odds Ratio (95% CI)	Money Coercion, Odds Ratio (95% CI)	Sex Coercion, Odds Ratio (95% CI)
Maximum Benefits	0.97 (0.90, 1.05)	1.01 (0.92, 1.11)	0.95 (0.86, 1.06)	1.00 (0.88, 1.15)	0.91 (0.80, 1.04)	1.06 (0.86, 1.30)
Limits						
No Limit	Ref	ref	ref	Ref	Ref	ref

Policy	Emotional Abuse, Odds Ratio (95% CI)	Any Coercion, Odds Ratio (95% CI)	Isolation Coercion, Odds Ratio (95% CI)	Work Coercion, Odds Ratio (95% CI)	Money Coercion, Odds Ratio (95% CI)	Sex Coercion, Odds Ratio (95% CI)
Benefit Limit	1.12 (0.61, 2.05)	0.97 (0.42, 2.26)	0.83 (0.31, 2.25)	1.84 (0.48, 7.03)	0.79 (0.24, 2.62)	0.64 (0.09, 4.70)
Periodic Limit	0.67 (0.28, 1.57)	0.95 (0.27, 3.34)	0.67 (0.15, 3.01)	6.77 (0.74, 62.46)*	1.10 (0.17, 7.24)	0.18 (0.01, 2.96)
Lifetime Limit	0.97 (0.51, 1.85)	0.83 (0.39, 1.78)	0.55 (0.22, 1.36)	1.29 (0.37, 4.52)	1.29 (0.43, 3.86)	0.34 (0.05, 2.14)
Benefit + Lifetime Limits	0.97 (0.90, 1.05)	0.83 (0.28, 2.42)	0.97 (0.27, 3.56)	2.09 (0.31, 14.13)	0.68 (0.16, 2.98)	3.67 (0.12, 110.20)
Periodic + Lifetime Limits	0.99 (0.50, 2.91)	1.16 (0.52, 2.59)	0.92 (0.35, 2.39)	1.97 (0.53, 7.34)	2.02 (0.63, 6.43)	0.35 (0.05, 2.39)
Sanction – Initial						
None/Partial	Ref	Ref	ref	ref	Ref	ref
Gradual/Full	1.00 (0.75, 1.32)	0.85 (0.60, 1.20)	0.94 (0.62, 1.41)	0.61 (0.35, 1.06)*	0.86 (0.52, 1.42)	0.79 (0.35, 1.78)
Sanction – Worst						

Policy	Emotional Abuse, Odds Ratio (95% CI)	Any Coercion, Odds Ratio (95% CI)	Isolation Coercion, Odds Ratio (95% CI)	Work Coercion, Odds Ratio (95% CI)	Money Coercion, Odds Ratio (95% CI)	Sex Coercion, Odds Ratio (95% CI)
None/Partial	Ref	Ref	ref	Ref	Ref	Ref
Gradual/Full	1.02 (0.75, 1.37)	0.77 (0.53, 1.11)	0.83 (0.54, 1.27)	0.56 (0.32, 0.98)**	1.28 (0.75, 2.17)	0.62 (0.27, 1.43)
Diversion						
None	Ref	Ref	ref	Ref	Ref	Ref
Any	1.15 (0.83, 1.60)	0.78 (0.52, 1.16)	0.64 (0.39, 1.04)*	1.47 (0.79, 2.75)	0.91 (0.51, 1.63)	0.49 (0.19, 1.30)
Ratio	1.00 (0.99, 1.01)	1.01 (1.00, 1.01)	1.01 (1.01, 1.02)***	1.01 (0.99, 1.02)	0.99 (0.98, 1.00)	1.01 (0.99, 1.04)
EITC						
None	Ref	Ref	Ref	Ref	Ref	Ref
EITC, Non-refundable	0.59 (0.28, 1.24)	0.88 (0.37, 2.09)	0.86 (0.26, 2.81)	2.18 (0.20, 23.56)	0.87 (0.26, 3.00)	1.89 (0.14, 26.52)
EITC, Refundable	0.86 (0.63, 1.18)	0.71 (0.48, 1.04)*	0.55 (0.35, 0.85)***	0.62 (0.34, 1.11)	0.46 (0.26, 0.80)***	0.68 (0.28, 1.62)
Minimum Wage	0.97 (0.81, 1.17)	1.03 (0.81, 1.31)	0.94 (0.72, 1.23)	1.25 (0.85, 1.83)	0.92 (0.65, 1.31)	0.89 (0.50, 1.59)
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$						

Similarly, few TANF policies were associated with hypothesized mediators or intermediate outcomes in adjusted DD models (Table 4). A one dollar increase in the possible maximum cash benefits was associated with a decreased odds of employment by 8% in the intervention group. Among the intervention group, a one unit increase in the TPR was associated with a decreased odds of employment by one percent compared to the comparison group. No TANF policies were significantly associated with women's experience of a diagnosis of depression or economic hardship.

Table 4. Estimates of Policy Effect on Intermediate Well Being Outcomes by Women's Educational Attainment (\leq HS vs $>$ HS)

Policy	Employment, Odds Ratio (95% CI)	Depression, Odds Ratio (95% CI)	Economic Hardship, Estimate (95% CI)
Maximum Benefits	0.92 (0.85, 0.98)**	1.02 (0.93, 1.11)	0.02 (-0.03, 0.06)
Limits			
No Limit	Ref	Ref	Ref
Benefit Limit	0.84 (0.45, 1.57)	0.67 (0.32, 3.28)	-0.17 (-0.51, 0.17)
Periodic Limit	1.18 (0.47, 3.01)	1.40 (0.74, 2.64)	-0.42 (-0.90, 0.07)
Lifetime Limit	1.04 (0.61, 1.77)	1.40 (0.74, 2.64)	-0.09 (-0.40, 0.21)
Benefit + Lifetime Limits	1.58 (0.74, 3.40)	0.50 (0.20, 1.23)	-0.15 (-0.58, 0.28)
Periodic + Lifetime Limits	1.27 (0.71, 2.27)	0.68 (0.35, 1.34)	-0.22 (-0.54, 0.10)
Sanction – Initial			

None/Partial	Ref	Ref	Ref
Gradual/Full	1.05 (0.80, 1.34)	1.01 (0.74, 1.38)	-0.07 (-0.21, 0.07)
Sanction – Worst			
None/Partial	Ref	Ref	Ref
Gradual/Full	1.22 (0.93, 1.60)	1.30 (0.93, 1.82)	0.07 (-0.09, 0.22)
Diversion			
None	Ref	Ref	Ref
Any	0.87 (0.65, 1.16)	1.30 (0.92, 1.85)	-0.05 (-0.21, 0.11)
Ratio	0.99 (0.98, 1.00)***	1.00 (0.99, 1.01)	-0.002 (-0.006, 0.002)
EITC			
None	Ref	Ref	Ref
EITC, Non-refundable	0.93 (0.48, 1.79)	1.76 (0.82, 3.79)	0.13 (-0.17, 0.44)
EITC, Refundable	0.94 (0.52, 1.70)	1.38 (0.97, 1.96)	0.13 (-0.03, 0.30)
Minimum Wage	0.87 (0.64, 1.16)	1.18 (0.82, 1.70)	-0.03 (-0.13, 0.07)

Table 5 shows the results from race-specific IPV models. There was only one statistically significant different effect among White women compared to African American women.

Compared to states with no or partial worst sanctions, having a gradual or full worst sanction reduced the odds of coercive victimization among AA women in the intervention group (\leq HS) by 59% compared to the comparison group of AA women. There was no significant effect of sanctions among White women (OR: 1.27; 95% CI: 0.57, 2.83).

Table 5. Estimates of Policy Effect on Violence Outcomes by Women's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs African American)

Policy	Emotional Abuse			Coercion – Any		
	White Women DD Odds Ratio (95% CI)	AA Women DD Odds Ratio (95% CI)	Difference by race p-value	White Women DD (95% CI)	AA Women DD Odds Ratio (95% CI)	Difference by race p-value
Maximum Benefits	0.88 (0.73, 1.06)	0.94 (0.81, 1.08)	.62	1.05 (0.85, 1.30)	0.96 (0.81, 1.14)	.52
Limits						
No Limit	ref	ref	Ref	ref	Ref	Ref
Benefit Limit	0.63 (0.13, 3.08)	0.93 (0.36, 2.38)	.66	0.29 (0.05, 1.66)	0.98 (0.32, 2.96)	.21
Periodic Limit	0.91 (0.08, 10.70)	1.25 (0.15, 10.79)	.85	1.00 (0.05, 19.78)	0.98 (0.09, 11.15)	.99
Lifetime Limit	0.95 (0.24, 3.74)	1.20 (0.59, 2.45)	.74	0.77 (0.18, 3.38)	0.74 (0.31, 1.76)	.96
Benefit + Lifetime Limits	0.60 (0.12, 2.97)	0.59 (0.17, 2.07)	.99	0.28 (0.05, 1.70)	1.86 (0.34, 10.22)	.11
Periodic + Lifetime Limits	0.74 (0.18, 2.98)	1.05 (0.45, 2.46)	.64	0.77 (0.17, 3.44)	0.99 (0.35, 2.84)	.76

Sanction – Initial						
None/Partial	ref	ref	Ref	ref	Ref	Ref
Gradual/Full	0.85 (0.47, 1.54)	0.82 (0.51, 1.33)	.94	0.92 (0.45, 1.90)	0.47 (0.26, 0.84)**	.15
Sanction – Worst						
None/Partial	ref	ref	Ref	Ref	Ref	Ref
Gradual/Full	0.78 (0.41, 1.49)	0.99 (0.55, 1.78)	.60	1.27 (0.57, 2.83)	0.41 (0.20, 0.85)**	.04
Diversion						
None	ref	ref	Ref	Ref	Ref	Ref
Any	0.99 (0.52, 1.90)	1.00 (0.62, 1.62)	.98	1.08 (0.48, 2.41)	0.54 (0.29, 0.98)**	.17
Ratio	1.00 (0.98, 1.02)	0.99 (0.98, 1.01)	.41	0.99 (0.97, 1.01)	1.01 (1.00, 1.03)	.14
EITC						
None	ref	ref	Ref	Ref	Ref	Ref
EITC, Non- refundable	0.41 (0.10, 1.70)	0.54 (0.21, 1.40)	.75	0.98 (0.19, 5.22)	0.57 (0.18, 1.86)	.61
EITC, Refundable	0.76 (0.38, 1.54)	0.72 (0.43, 1.19)	.89	0.57 (0.25, 1.31)	0.56 (0.31, 1.02)*	.98
Minimum Wage	0.99 (0.65, 1.53)	1.00 (0.73, 1.36)	.98	1.08 (0.63, 1.85)	1.06 (0.72, 1.58)	.97

Table 6 shows race-specific intermediate outcomes. There were no differential effects of policies on depression by racial group. Differential effects by racial group were found on employment and economic hardship outcomes. Compared to states implementing no limits on benefit receipt, implementing a lifetime limit, a combined benefit plus lifetime limit, or a periodic plus lifetime limit increased the odds of being employed among intervention White women compared to comparison White women. However, there was no significant difference in the odds of employment among intervention AA women compared to comparison AA women when a lifetime limit, benefit limit plus lifetime limit, or periodic plus lifetime limit was implemented.

With regard to economic hardship in the previous 12 months, for every \$100 increase in maximum benefits, White women in the intervention group experienced a small increase in the number of economic hardship events. Maximum benefits were not associated with economic hardship among AA women. Compared to states with no limits, having lifetime limits significantly increased the number of hardship events for White women in the intervention group. Whereas, African American women in the intervention group experienced a decreased number of economic hardship events in the previous year. Compared to states with no limits on TANF benefit receipt, states' implementation of periodic and lifetime limits significantly reduced the number of economic hardship events for AA women in the intervention group. However, there was no significant effect among White women.

Table 6. Estimates of Policy Effect on Intermediate Outcomes by Women's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs African American)

Policy	Employment	Depression	Economic Hardship (one-year lag)
--------	------------	------------	----------------------------------

	White DD Odds Ratio (95% CI)	AA DD Odds Ratio (95% CI)	Diff by race p- value	White DD Odds Ratio (95% CI)	AA DD Odds Ratio (95% CI)	Diff by race p- value	White DD Estimate (95% CI)	AA DD Estimate (95% CI)	Diff by race p- value
Maximum Benefits	0.94 (0.80, 1.10)	0.95 (0.84, 1.07)	.93	1.09 (0.90, 1.32)	0.93 (0.81, 1.08)	.21	0.11 (0.03, 0.20)** *	-0.02 (- 0.08, 0.03)	.001
Limits									
No Limit	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	ref
Benefit Limit	1.66 (0.42, 6.50)	0.47 (0.21, 1.06)*	.10	0.76 (0.14, 4.22)	0.42 (0.16, 1.07)	.52	0.44 (- 0.30, 1.17)	-0.28 (- 0.66, 0.11)	.07
Periodic Limit	2.83 (0.32, 25.51)	0.96 (0.21, 1.06)	.44	0.85 (0.06, 12.46)	1.06 (0.09, 12.14)	.91	0.38 (- 0.69, 1.46)	-0.70 (- 1.45, 0.04)*	.09
Lifetime Limit	3.12 (0.95, 10.25)*	0.73 (0.16, 5.76)	.02	1.53 (0.35, 6.61)	1.31 (0.64, 2.70)	.84	0.72 (0.07, 1.38)**	-0.42 (- 0.73, - 0.10)**	.0007
Benefit + Lifetime Limits	4.78 (1.19, 19.26)* *	0.65 (0.40, 1.31)	.02	0.19 (0.03, 1.07)*	1.03 (0.27, 4.00)	.11	0.06 (- 0.71, 0.83)	-0.07 (- 0.63, 0.50)	.79

Periodic + Lifetime Limits	2.72 (0.81, 9.13)	0.77 (0.22, 1.93)	.05	0.63 (0.14, 2.78)	0.73 (0.31, 1.71)	.86	0.36 (- 0.30 (1.01)	-0.54 (- 0.92, - 0.16)** *	.01
Sanction – Initial									
None/ Partial	Ref	Ref	Ref	ref	Ref	ref	Ref	Ref	ref
Gradual/ Full	1.22 (0.72, 2.05)	1.14 (0.75, 1.73)	.85	0.89 (0.47, 1.68)	1.04 (0.63, 1.72)	.70	-0.11 (- 0.39, 0.17)	-0.07 (- 0.28, 0.15)	.81
Sanction – Worst									
None/ Partial	Ref	Ref	Ref	ref	Ref	ref	Ref	Ref	Ref
Gradual/ Full	1.77 (1.00, 3.13)**	1.29 (0.77, 2.16)	.42	1.30 (0.65, 2.62)	1.17 (0.62, 2.18)	.82	-0.0003 (-0.31, 0.31)	-0.01 (- 0.27, 0.24)	.95
Diversion									
None	Ref	Ref	Ref	ref	Ref	ref	Ref	Ref	ref
Any	1.77 (1.00, 3.13)**	1.29 (0.77, 2.16)	.37	2.35 (1.14, 4.86)**	1.20 (0.74, 1.96)	.13	0.19 (- 0.13, 0.52)	-0.06 (- 0.26, 0.14)	.19
Ratio	0.72 (0.40, 1.27)	0.99 (0.65, 1.48)	.56	1.00 (0.98, 1.02)	0.98 (0.97, 1.02)	.14	0.01 (- 0.01, 0.01)	-0.0002 (-0.005, 0.005)	.82

					0.99)**				
					*				
EITC									
None	Ref	ref	Ref	ref	Ref	Ref	Ref	Ref	Ref
EITC, Non- refundable	1.13 (0.31, 4.09)	1.12 (0.51, 2.44)	.99	2.02 (0.44, 9.26)	1.43 (0.52, 3.98)	.71	-0.02 (- 0.65, 0.62)	0.23 (- 0.11, 0.57)	.50
EITC, Refundabl e	1.09 (0.59, 2.03)	0.95 (0.61, 1.48)	.73	0.97 (0.45, 2.09)	1.08 (0.63, 1.84)	.82	0.13 (- 0.24, 0.49)	0.31 (0.09, 0.53)	.40
Minimum Wage	0.76 (0.53, 1.09)	0.95 (0.73, 1.23)	.31	1.35 (0.86, 2.14)	1.22 (0.89, 1.67)	.71	0.17 (- 0.07, 0.41)	0.01 (- 0.12, 0.13)	.23

DISCUSSION

We found that few state-level TANF policies were associated with women's wellbeing and IPV victimization while the refundable EITC, a cash transfer policy with comparatively fewer conditions, had a protective influence for economically vulnerable women. Of the few TANF policies associated with IPV, those linked with fewer TANF restrictions seemed to increase coercive victimization, especially among African American women. This suggests that when TANF is less accessible and women are not subject to TANF conditionality, they experience less violence but not via our FSMV hypothesized mediators of depression, economic hardship, or employment. A refundable EITC was associated with a reduction in multiple forms of coercion and its effects did not differ by race. The effect of TANF policies by race was complex and analyses suggest that while White women are more likely to be employed when TANF time limits are in place, they also experience larger increases in economic hardship events compared

to AA women. Further research into the effects of cash transfer conditionality on mediators outside of the FSMV, including economic instability, perceived stress, bargaining power, and coercive IPV to interfere with TANF compliance, is needed.

Few of the TANF policies were significantly associated with IPV outcomes, and those policies that were significantly associated with IPV outcomes revealed a complex picture of results. For example, the odds of women experiencing coercive behaviors were found to increase when the TPR is higher (more families in poverty receiving TANF) or when TANF sanctioning policies reduced benefits but allowed for continued TANF access. In particular, a higher TPR raised the risk of isolation coercion, that is, interference with a woman spending time with her friends or family. Also, more restrictive TANF sanctioning policies that involuntarily terminate case benefits for those with repeated noncompliance were associated with reduced interference with work or other employment. The interpretation of these findings is complex. We do not find that a higher TPR or restrictive sanctioning policies lead to significantly greater employment, reduced depression, or reduced economic hardship for intervention women compared to women who likely are not affected by TANF policies. Indeed, a higher TPR was associated with a small, but significant decrease in employment among in the intervention group compared to the comparison group. In light of these findings, we propose the need for further research into how TANF conditionality may increase men's use of coercive behavior to interfere with women's TANF-mandated activities (Tolman & Raphael, 2000) or result in economic instability, which has also been associated with increased risk of IPV in the FFCW sample (Lucero et al., 2016). However, our findings should be considered with caution, given our use of multiple tests and fewer statistically significant results than would be expected by chance.

In comparison to the TANF policies, state-level refundable EITCs were protective against both isolation and monetary coercion. The refundable aspect of the EITC may be protective because it reaches women earning low levels of income, unlike the non-refundable EITC

(Hoffman, 2007), which had no protective effect in this study. The mechanisms for this effect require further study. Despite extant literature suggesting benefits associated with the EITC (Pega et al., 2013; Sykes et al., 2014), we found no relationship between the state-level EITC and employment, depression, or economic pressure for women in this study. Further research into the mechanisms of effect, such as women's increased bargaining power in the relationship or reduced couple-based arguments over money (Buller et al., 2018; Gibbs et al., 2017), are needed. Further, a deeper understanding of who does and does not benefit from the EITC policies is needed, as studies of TANF recipients reveal that many families are unable to work due to violence (Lindhorst & Mancoske, 2006) or other employment barriers (L. A. Pavetti & J. Kauff, 2006) and that, while conditionality benefits some, it often worsens conditions for those who are most vulnerable to mental health issues (Davis, 2018).

In race-specific models, few of the TANF policies were associated with our outcomes of interest. Only TANF worst sanctioning policies differentially affected African American and White women's IPV experience. We found that, when a state implements strict worst sanctions compared to no or partial worst sanctions, AA women have reduced odds of coercive victimization, but there was no effect among White women. While AA women are more likely to be sanctioned and to have their cases closed due to sanctioning (Fording et al., 2007; Kalil et al., 2002; Monnat, 2010; Pavetti et al., 2003; Schram et al., 2009), the causal mechanism for this decrease in violence needs significant additional research. We found no indication that strict worst sanctions are associated with differences in employment, depression, or economic hardship for the intervention AA group versus the comparison AA group or White women. Further research should examine how sanctions are associated with coercive victimization. Our findings suggest this relationship is complex and potentially differs based on race.

Examining differences in intermediate outcomes across White and AA women, we found only a few TANF policies affected employment and economic hardship differentially by race.

Our finding that, when exposed to certain benefit limits, White women are much more likely to become employed compared to AA women highlights the roles of structural racism (Bailey et al., 2017), structural discrimination (Gillum, 2019; McDaniel et al., 2017) and hiring discrimination (Quillian et al., 2017) in employment disparities for women of color who are more likely to cycle back into TANF compared to White families (Danziger & Tolman, 2004; Monnat & Bunyan, 2008; Schram et al., 2009). We find that even though White women appear to do better in the employment realm after being exposed to TANF benefit limits, they also experience a small but significant increase in economic hardship events compared to AA women. It may be true that, even though AA women are more likely to experience time limits and therefore may need to search for jobs as a result (Hetling et al., 2006b), White women find jobs easier and, in anticipation of a time limit, exit TANF earlier for employment. This suggests that more effective assistance, such as the improved allocation of childcare subsidies (Showalter et al., 2019), is needed to protect against economic hardship as women transition from TANF to work. We further note that, while AA women in our study worked at similar rates to White women in the study, AA women were far more likely to experience economic hardship events and receive TANF or believe that they were eligible for TANF compared to White women suggesting the need for policies to improve equitable access to resources for working women.

Strengths and Limitations

Our study has several methodological strengths. We use a strong quasi-experimental design that allows us to control for sources of both measured and unmeasured confounding. Our study also analyzes data over an extended period of TANF implementation (1996 through 2010) across multiple states to allow us to examine the impact of individual TANF policies on women's IPV experience and wellbeing controlling for several potential confounders. Further, our use of longitudinal outcome data allows us to examine changes in women's risk of IPV and wellbeing.

Our study is limited by our reliance on women's self-report of current IPV victimization and wellbeing and so the prevalence of IPV experienced by our sample likely is underestimated. The impact of underreporting on our findings is mitigated by our belief that accuracy in reporting is likely unrelated to changes in our policies of interest. We were unable to control for variations in TANF implementation or county-level factors associated with TANF implementation, such as conservative leaning of the county (Monnat, 2010), that might have influenced our outcomes.

Future Directions and Policy Recommendations

Altogether, the findings of our study suggest that conditionality of cash transfers on women's wellbeing and IPV experience require additional study to identify interventions to adequately support and protect the most vulnerable women. If, as the sum of our findings suggest, conditionality is found to be particularly harmful to women, efforts such as gender transformative programming (Buller et al., 2018) and greater use of the family violence option (i.e., work waiver for survivors of IPV) to reduce TANF conditionality could be important steps. For example, the federal government could mandate that states adopt the family violence option – as of 2018, 26 states do not exempt IPV survivors from work requirements. Further, states could reduce the prohibitive barriers associated with applying for the family violence option, such as requiring a TANF recipient to provide a police report (Farrell et al., 2008).

Conclusion

Overall, TANF is not realizing its potential to benefit women and reduce their experiences of violence. Rather, allowing greater, albeit inconsistent, access to TANF increases experiences of violence, especially among AA women, suggesting the need to reduce the effects of TANF conditionality on women TANF recipients. In contrast, a refundable EITC that has fewer conditions, was protective against multiple forms of violence. The mechanisms of effect are rather complex, suggesting the need for further investigation into how modern-day TANF policies affect women's IPV experience and wellbeing. Differential impact by race across White

and AA women highlight the role of structural discrimination and disparities in personal and community resources in women's experience of TANF. Further research into the effects of cash transfer conditionality and effects by race is needed to identify appropriate interventions that may best protect women at greatest risk of poor outcomes and violence.

Chapter 3: Association Between Temporary Assistance for Needy Families (TANF) and Child Maltreatment Among a Cohort of Fragile Families

Authors:

Rachael A. Spencer

Melvin D. Livingston

Kelli A. Komro

Nolan Sroczynski

Shelby T. Rentmeester

Briana Woods-Jaeger

ABSTRACT

Background: Child maltreatment disproportionately affects families experiencing poverty and structural discrimination, including African American (AA) families. Temporary Assistance for Needy Families (TANF), a cash transfer program, may reduce child maltreatment disparities.

Objective: Our aim is to understand TANF's impact on mother's perpetration of child maltreatment and whether the effect differs across AA and White mothers.

Participants and Setting: Participants are **2,457 primary caregiving mothers participating** in waves 3 (2001-2003), 4 (2003-2006), and 5 (2007-2010) of the U.S.-based Fragile Families and Child Wellbeing birth cohort study.

Methods: We use a difference-in-differences study design to estimate overall and race-specific effects of TANF policies on **caregivers' self-report of child neglect and physical and psychological maltreatment** measured by **the Child-Parent Conflict Tactics Scale**. State-level TANF policy exposures include the TANF-to-Poverty Ratio (TPR), maximum cash benefits for a single-parent family of three, time limits, sanctions, diversion payments, and family caps.

Results: Decreases in the physical abuse scores were associated with a \$100 increase in the maximum cash benefits (Beta -0.56 (95% CI -1.08, -0.04) and a one unit increase in the TPR (Beta: -0.06 (95% CI -0.11, -0.004)). Increases in physical abuse scores were associated with imposition of TANF limits (Beta: 2.76 (95% CI 0.18, 5.35)). No significant differences were found for AA mothers versus White mothers.

Conclusions and Relevance: Increasing TANF cash benefits should be prioritized to reduce poverty-related child maltreatment disparities. TANF time limits should be reconsidered.

Keywords: Child maltreatment; Temporary Assistance for Needy Families; structural racism

BACKGROUND

Child maltreatment, including physical and psychological abuse and neglect, is a pervasive public health problem associated with short- and long-term health sequelae (Gilbert et al., 2009; Hughes et al., 2017; Hussey et al., 2006; Wathen & MacMillan, 2013). While all families are at risk of violence, experiencing poverty and its material hardships increases families' risk of child maltreatment (Conrad-Hiebner & Byram, 2020; Sedlak et al., 2010; van IJzendoorn et al., 2020). Owing to structural racism and discrimination (Bailey et al., 2017; McDaniel et al., 2017; Quillian et al., 2017), African American (AA) families experience persistently higher rates of poverty and, consequently, more frequent incidents of child maltreatment compared to White families (Sedlak et al., 2010). The Family Stress Model (FSM) links poverty to poor parenting behaviors through economic pressure, psychological distress, and caregiver conflict (Conger et al., 2000a). Given the link between poverty and child maltreatment, programs that increase economic and other resources for families experiencing poverty could be plausible interventions to prevent disparities in child maltreatment (Conrad-Hiebner & Byram, 2020; National Academies of Sciences, 2019).

In 1996, the federal government enacted the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) to overhaul the federal welfare system serving families experiencing poverty. PRWORA eliminated Aid to Families with Dependent Children (AFDC), a program with essentially unlimited federal matching funds for state monies spent on “needy children who had been deprived of parental support or care,” and replaced it with Temporary Assistance for Needy Families (TANF), a block grant and cash transfer program that “requires work in exchange for time-limited assistance” (United States Department of Labor, 2021b). TANF has four primary goals ranging from encouraging participants to end their dependence on government programs by become gainfully employed to increasing the likelihood that children will be cared for in their own homes or the homes of relatives (Office of Family

Assistance, 2019). TANF provides participants with cash transfers, childcare vouchers, jobs training programs, and rental assistance. The implementation of TANF was associated with an uptick in employment among individuals with a high school diploma or less and among single parents – the primary recipients of TANF (Moffit & Garlow, 2018) - but also a reduction in TANF receipt among individuals experiencing poverty. The TANF-to-Poverty Ratio (TPR), or the number of families living in poverty who receive TANF for every 100 families in poverty, decreased from a high of 68 in 1996 to a low of 22 in 2018 (Floyd, 2020).

The federal government devolved significant control of TANF to the states, which set different levels of TANF generosity, or level of and access to TANF resources. States determine the amount of sanction, or financial penalty, rendered against a family when an adult is “non-compliant” with work requirements. States may implement time limits that reduce a family’s TANF access for periods of time or forever within that state after a certain length of TANF receipt. Many states apply financial penalties to TANF units when an adult has a child while receiving TANF, also known as family caps. In an effort to reduce TANF receipt, states may also offer diversion payments or resources in lieu of TANF enrollment. Policy variation across states is one component affecting access to TANF (Nicoll, 2015). In 2018, the TPR ranged from a high of 68 in California to a low of 4 in Louisiana and Tennessee (Floyd, 2020).

Based on the constructs in the FSM, TANF is a plausible intervention to prevent child maltreatment. Yet the empirical evidence for TANF both as a poverty alleviation program (National Academies of Sciences, 2019) and a child maltreatment intervention remains mixed (Conrad-Hiebner & Byram, 2020). In part, the evidence remains equivocal because TANF both provides benefits but has several conditions which increase the likelihood of a family experiencing income loss – a powerful predictor of future child maltreatment (Conrad-Hiebner & Byram, 2020). For example, among welfare recipients, being randomly assigned to more stringent TANF conditions, including sanctions, family caps, and time limits compared to AFDC

(Fein & Lee, 2003) and experiencing a sanction (Ovwigbo et al., 2003; Shook, 1999; Slack et al., 2007) were associated with an increase in child welfare involvement. Conversely, increasing income via the TANF child support pass through decreased child welfare involvement (Cancian et al., 2013). At the state-level, more stringent welfare policies have been associated with state-level increases in child maltreatment cases and out of home care (C. Paxson & J Waldfogel, 2001; Paxson & Waldfogel, 2002).

Stringent TANF conditions have been shown to negatively impact multiple mediators described in the FSM. Those who are involuntarily separated from TANF due to time limits experience lower per capita incomes in the year after TANF separation compared to those who leave TANF voluntarily or involuntarily for other reasons (Lindhorst & Mancoske, 2006). TANF sanctions and time limits have been associated with economic hardship (Bloom et al., 2002; Farrell et al., 2008; Kalil et al., 2002; Pavetti et al., 2003). In a 2018 study by Davis, strict sanctions for work requirements noncompliance were associated with poorer mental health among single mothers with lower education levels (Davis, 2018). The relationship between TANF and caregiver relationship quality is quite complex. Women's experience of TANF programming may increase women's ability to leave violent relationships, but may also increase risk of violence victimization when partners use coercion, potentially to interfere with TANF work requirements (Spencer et al., 2020; Tolman & Raphael, 2000).

Gaining employment, while not explicitly mentioned in the FSM, is a TANF goal and has been shown to influence the TANF-child maltreatment relationship (Conrad-Hiebner & Byram, 2020; Courtney et al., 2005; Slack et al., 2003). The employment process may protect against child maltreatment by increasing family resources, buffering against economic instability, and promoting mental health (Cheng, 2007; Fein & Lee, 2003; Tankard & Iyengar, 2018). However, an increase in employment hours has been found to contribute to substandard parenting and neglect, especially in single-parent households experiencing low income (Berger, 2007).

Further, many populations may not experience employment's protective effect because of significant employment barriers, such as lack of childcare access, mental health challenges, and violence experience (Lindhorst & Mancoske, 2006; L. Pavetti & J. Kauff, 2006). These populations are more likely to be underemployed or unemployed after being involuntarily separated (Hetling et al., 2006a; Joo Lee et al., 2004; Wu, 2008) (Fein & Lee, 2003).

TANF and Disparities by Race

Rooted in structural racism, or the “totality of ways in which societies foster racial discrimination through mutually reinforcing systems” and higher rates of poverty (Bailey et al., 2017; Drake et al., 2011; Drake & Rank, 2009; Font & Maguire-Jack, 2015), African American (AA) families experience persistently higher rates of child maltreatment compared to White families (Sedlak et al., 2010; Wildeman et al., 2014). Indeed, disparities in child maltreatment among AAs compared to Whites disappear, are significantly attenuated, or even reverse after accounting for income and material factors (Cheng & Lo, 2013; Dettlaff et al., 2011; Kim & Drake, 2017, 2018; Pelton, 2015; Putnam-Hornstein et al., 2013; Wulczyn et al., 2013).

More generous TANF policies may help to address racial disparities in violence, benefiting AA families to a greater extent than White families for a number of reasons. First, more generous policies may dampen the effects of structural racism and hiring discrimination that make TANF compliance and voluntary exit more difficult for AA families compared to White families. Racial housing segregation and the discriminatory distribution of basic resources, including transportation and stable housing (McDaniel et al., 2017), affordable or high quality childcare (Schmit & Walker, 2016), educational and employment opportunities (Williams & Collins, 2016), and healthcare (Richardson & Norris, 2010) create an interconnected system of structural racism that reduces AA participants' ability to meet the requirements of and enjoy the benefits of TANF and employment. Consistently higher levels of hiring discrimination (Pager & Shepherd, 2008; Quillian et al., 2017) likely contributes to AA families remaining on, cycling

back into, and remaining on TANF until they reach time limits more frequently compared to White families (Danziger & Tolman, 2004; Hetling et al., 2006a; Monnat & Bunyan, 2008; Schram et al., 2009). Despite less or equal use of substances (McCabe et al., 2007; Swendsen et al., 2012), disproportionate incarceration of AA populations for drug related offenses (Camplain et al., 2020; Western & Pettit, 2005; Wildeman & Wang, 2017), further reduces access to TANF – as of 2018, 21 states deny TANF benefits to individuals convicted of a drug-related felony (*Welfare Rules Database*, 2017) – and facilitates inequitable hiring practices (Pager & Shepherd, 2008). Second, more generous TANF policies may limit the extent to which caseworkers are able to implement individual-level biases, which are influenced by structural racism (Bailey et al., 2017). TANF caseworkers, who have significant discretion in the application of policies (Fording et al., 2007; Pavetti et al., 2003), have been shown to be more likely to sanction AA families compared to White families (Fording et al., 2007; Kalil et al., 2002; Keiser et al., 2004; Lee & Yoon, 2012; Pavetti et al., 2003; Schram et al., 2009) and assign AA families less desirable work requirements (Bonds, 2006) compared to White TANF recipients.

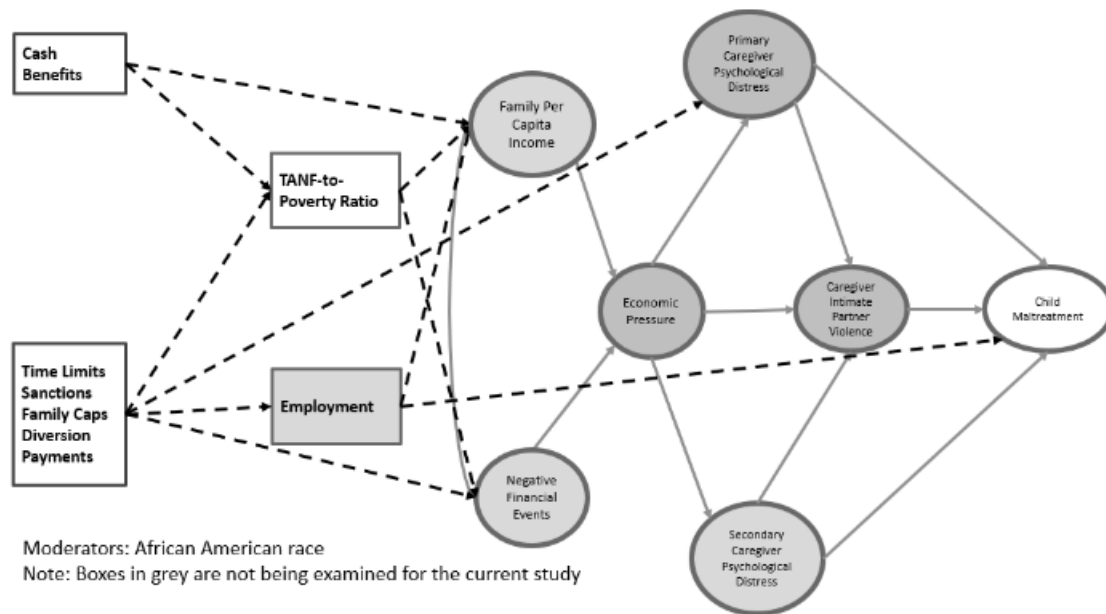
Despite growing attention both to the impact of TANF policies on child maltreatment and its impact by race, extant literature has several important gaps. Most studies of the TANF-child maltreatment relationship were conducted in the 2000s, limiting inferences that could be made about individual policies since most changed simultaneously during the AFDC-TANF transition. The time frame of these studies also could not account for the manner in which state policymakers have progressively increased the value of minimum wage (MW) and earned income tax credits (EITC) for working families. For example, as of 2020, 29 states and D.C., have set a Minimum Wage, or an hourly wage floor, above the federal minimum wage of \$7.25 per hour (National Conference of State Legislatures). As of 2020, 29 states and D.C. established state-level Earned Income Tax Credits (EITC) that provide tax credits to working families below a certain income threshold per family size (Williams & Waxman, 2019). Both of these policies

encourage employment among families experiencing poverty (National Conference of State Legislatures; Williams & Waxman, 2019) and have been associated with changes in the risk of family violence (Livingston et al., under review; Raissian & Bullinger, 2017; Spencer et al., 2020). Further, the majority of studies examined the relationship between TANF generosity and formal cases of child maltreatment, which present multiple reporting biases. Formal cases of child maltreatment are hampered by the lack of a standard definition of child maltreatment across states and over time (U.S. Department of Health & Human Services et al., 2017) and are screened by multiple individuals before they are accepted for investigation, supporting multiple interpretations of those laws (Drake et al., 2011). Finally, the dearth of studies examining the effect by race is a critical limitation to the extant literature.

Theoretical Model

Guided by the FSM, theoretical work linking TANF policies to child maltreatment (Fein & Lee, 2003), and empirical evidence detailed above, we hypothesize that more generous TANF policies will protect against child maltreatment (Figure 1). We further hypothesize that TANF policies that increase resources and decrease the level and severity of conditions of conduct and sanctions will be more protective among AA families compared to White families.

Figure 1. Theoretical Model



METHODS

Study population

The study population includes the primary caregiver (PCG) mother in the Fragile Families and Child Well-being study (FFCW). Mothers are both the majority of PCGs within the FFCW cohort and primary adult recipients of TANF (Office of Family Assistance, n.d.). To better understand the effect of policies on our outcomes of interest, we restricted our population to PCG mothers between the ages of 20 and 28 when the focal child was three years of age in order to reduce the confounding effect of age and education.

Our population began with 4,898 mothers who were recruited into the FFCW and was reduced to 2,457 when we removed mothers ages 28+ at year 3 (n=1648), non-PCG mothers (n=575), and mothers missing state-identifying data at all waves (n=207), age (n=1), race (n=7), and education (n=3).

Defining intervention and control groups. We provide plausible causal inference by using a difference-in-differences (DD) study design to compare the association between TANF policy dimensions and child maltreatment outcomes over time among those most likely to receive TANF compared to those who are less likely to be a recipient of TANF. The group most

likely to be affected by TANF includes mothers with a high school diploma or less at year 3 (\leq HS) while those less likely to be affected by TANF are mothers who have more than a high school education ($>$ HS) at year 3. The use of education-based comparison groups to estimate the effects of policies is common in economics literature (Leigh et al., 2019) and is appropriate for our study because TANF recipients since individuals with a high school diploma or less have comprised approximately 90% of the TANF population since 1998 (Office of Family Assistance, n.d.). We include women who lived in any state with a TANF system, regardless of whether the state was included as part of the original FFCW study. As a result, sample sizes in non-FFCW states were quite small, reducing our ability to include state-level fixed effects. We therefore model between-state differences using a combination of individual and state level covariates as described below.

Measures

Outcomes. Outcomes are neglect and physical and psychological abuse self-reported by the PCG mothers in the past 12 months. Each subdomain of self-reported abuse is measured using 5 items from the Parent-Child Conflict Tactics Scales (Straus et al., 1998) at years 3, 5, and 9. Mothers are asked how frequently they engaged in each act of abuse in the previous 12 months (range: this has never happened (0) to 20+ times (*Scales Documentation Navigator*, 2019)). If the violence occurred previously, but not in the past year, we assign the response a 0 value. We then summed scores within each domain for a possible score ranging between 0 to 30. To allow for comparisons across models, outcomes were transformed using the percent of maximum possible scaling method (Cohen et al., 1999; Moeller, 2015).

Independent Variables. TANF policy data were downloaded from the Urban Institute's Welfare Rules Database in by the first author in September 2019 (*Welfare Rules Database*, 2017) and coded to represent TANF generosity to single-parent households.

Cash benefits. This continuous variable adjusted to 2015 dollars indicates the TANF monetary benefits allocated for a unit containing one adult and two children that is not subject to a family cap, has no special needs, pays for shelter, and lives in the state's most populous area.

Limits. This dichotomous variable indicates whether a state applies a time limit, such that case benefits are reduced to zero. Time limits may take the form of a lifetime limit (a maximum number of months a person may receive TANF within a lifetime) and/or a periodic limit (a limit on the number of months a unit may receive TANF benefits within a certain timeframe).

Sanction Type. This dichotomous variable indicates whether sanctions for work requirement "non-compliance" reduce benefits to \$0 for the entire family. This could take the form of a gradual sanction – a sanction that begins with a partial reduction and converts into a full reduction in benefits after a certain period of noncompliance – or an immediate full family. Sanctions are modeled for the initial instance of noncompliance and the worst possible sanction imposed upon a family, usually levied for repeated noncompliance.

Diversion Payment. This dichotomous variable indicates whether a state has a formal program to divert eligible participants from enrolling in TANF for a certain period of time by providing cash or alternative services.

Family Caps. This dichotomous variable indicates whether a TANF unit's cash benefits are reduced or do not increase relative to the family size when someone in the unit has a child while receiving TANF.

TANF-to-Poverty Ratio (TPR). This variable is derived from a dataset provided by the Center for Budget and Policy Priorities (Floyd, 2020) and is indicative of TANF access. The TPR is calculated by dividing the number of TANF cases by the number of families with children in poverty. A higher ratio indicates an overall higher level of TANF access.

Control Variables.

PCG Mothers Work Exemptions. This dichotomous variable indicates the presence of an exemption from work requirements for 12 or more months for PCG mothers after giving birth.

Earned Income Tax Credit. This ordinal variable indicates whether a state has a refundable EITC (0), an EITC that is not refundable (1) or no state-level EITC at all (2) in the prior calendar year. The EITC variable is lagged by one year to accurately model when women would experience the tax credit.

Minimum Wage. State specific MW was modeled as the contemporaneous state minimum wage policy adjusted to 2015 dollars. If the state has no minimum wage laws, we model the default federal government minimum wage adjusted to 2015 dollars.

Unemployment Rate. The unemployment rate is calculated by dividing the number of unemployed individuals by the number of individuals in the labor force in the Metropolitan Statistical Area in which the mother was living in the month when she was interviewed. (Donnelly, 2015)

State Median Income. This is a continuous variable indicating the average median income in each state in the contemporaneous month and year of the interview. Median income data were drawn from the U.S. Census Bureau database (United States Census Bureau, 2019). The state median income value has been adjusted to 2015 dollars and divided by 1000 for interpretability.

Demographic Covariates. We additionally control for differences in mothers' wave 3 marital status (married versus non-married), number of biological children, age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, or other), and focal child's sex. Because TANF is predicted to impact all of the time-varying control variables in the model, we included only wave 3 values to achieve balance between the two groups.

Analysis

Models were estimated using PROC MIXED in SAS v9.4. (SAS, 2019) Because the data follows individuals over time, outcome data are serially autocorrelated. We adjust for this in our model by clustering the standard errors within person.

Overall Effects Estimation. The model takes the following general form:

$$Y_{ist} = \beta_0 + \beta_1 P_{st} + \beta_2 G_i + \beta_3 G_i * P_{st} + \text{Year}_t + Z_{ist} + N_{st} + \epsilon_{ist}$$

Where Y is the outcome for mother *i* in state *s* at time *t*, P is the TANF policy in state *s* at time *t*, G is an indicator for whether mother *i* is likely to be affected by the TANF policy (i.e., ≤HS education), Year is a series of year fixed effects, Z represents available individual level covariates, and N represents state-level covariates including TANF policies. Year fixed effects account for trends in outcomes common across states. We use a random statement to account for state-level, between-subject variation and adjust the denominator degrees of freedom using the Kenward-Roger method (Kenward & Roger, 1997) to account for the limited number of state-level clusters (Chen & Wei, 2003). The DD estimate is β_3 , the estimated change among women with ≤HS education compared to the estimated change among women with >HS education.

Effects by Race. To estimate race specific effects, we expanded the above model to include three-way interaction by race, intervention group, and policy. Race specific DD effects were estimated for each outcome.

Missing Data. Attrition (11%-22% by wave) was handled using maximum likelihood via PROC MIXED because missing data on predictors was minimal. Missing data included 7 cases of missing data for TANF initial sanctions and 8 cases for mother's missing interview date data.

Sensitivity Analyses. Sensitivity analyses were conducted to examine whether models were robust to potential residual confounding caused by systematic differences in child maltreatment by education that were unaccounted for by variables in the model. We added education specific time trends to statistically significant main effects models to determine whether the effect remained substantially the same. Models with additional, individual-level

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Worst Sanctions			IN TX							
Diversion					PA		MI TN			
Family Caps				IL				MD		
FFCW States: California (CA), Texas (TX), Maryland (MD), Michigan (MI), New Jersey (NJ), Pennsylvania (PA), Virginia (VA), Indiana (IN), Wisconsin (WI), New York (NY), Massachusetts (MA), Tennessee (TN), Illinois (IL), Florida (FL), Ohio (OH) * Indicates a maximum cash benefit change of \$20 or more										

At wave 3, our sample of mothers was 24.78 years old on average (SD 2.83), majority non-Hispanic African American (53.40%; n=1123), more likely to be employed than not (54.50%; n=1144; Table 2). Mothers self-reported psychological abuse as the most common or frequent form of violence and self-reported neglect as the least common. Although women were recruited while living in FFCWS states, by wave 5 women reporting living in all 50 states, the District of Columbia and several U.S. territories. At wave 3, the focal child was approximately 3 years old (mean 38.49 months, SD 3.18) and, across all waves, the focal child was more slightly more likely to be male (range 52.25%-52.65%).

Using Pearson chi-square tests and independent sample t-tests, we compared the characteristics of families headed by mothers with more than a high school diploma (>HS) and those with a high school diploma or less (≤HS). At each wave, the population of mothers with >HS were slightly older (p<.001), more likely to be White (p<.001), slightly more likely to be employed (>HS range 67.34%-70.56%; ≤HS range 46.67%-57.08%; p<.001), and had higher yearly household income before taxes on average compared to mothers with ≤HS (>HS range

\$20,782.17-\$29,789.39; \leq HS range \$36,527.57-\$49,200.35; $p < .001$). On average, there was no difference in self-reported physical abuse scores ($>$ HS score range 13.14-23.45; \leq HS score range 12.85 – 21.92) or self-reported psychological abuse scores ($>$ HS score range 26.19-30.29; \leq HS score range 24.01-29.79) across groups. Neglect was self-reported at equal levels among the $>$ HS group (score range 0.95-2.16) compared to the \leq HS group at all waves (score range 1.10-2.66). With the exception of wave 5 in which children of mothers with $>$ HS were slightly younger ($>$ HS mean child age 112.28 (SD 4.58); \leq HS mean child age 112.92 (SD 4.60)), the age of children in the samples were, on average the same.

Table 2. Study Population Characteristics by Education (\leq HS and $>$ HS) and FFCWS Wave

	Wave 3 (n=2103)			Wave 4 (n=1,937)			Wave 5 (n=2238)		
	\leq HS (n=1311)	$>$ HS (n=792)	p-value	\leq HS (n=1213)	$>$ HS (n=722)	p-value	\leq HS (n=1381)	$>$ HS (n=854)	p-value
Mother									
Age in years, mean (SD)	24.42 (2.77)	25.37 (2.82)	<.001	26.49 (2.79)	27.52 (2.75)	<.001	30.82 (2.80)	31.77 (2.79)	<.001
Race, % (n)									
Non-Hispanic White	15.18 (199)	20.08 (159)	.004	15.17 (183)	19.53 (141)	.01	14.55 (201)	19.67 (168)	.002
Non-Hispanic African American	51.33 (673)	56.82 (450)	.02	52.93 (642)	58.59 (423)	.02	50.76 (701)	58.78 (502)	<.001

	Wave 3 (n=2103)			Wave 4 (n=1,937)			Wave 5 (n=2238)		
	≤HS (n=1311)	>HS (n=792)	p-value	≤HS (n=1213)	>HS (n=722)	p-value	≤HS (n=1381)	>HS (n=854)	p-value
Physical Abuse Score, mean (SD)	21.92 (17.21)	23.45 (16.76)	.12	19.61 (17.08)	20.12 (15.81)	.44	12.85 (14.87)	13.14 (14.06)	.43
Psychological Abuse Score, mean (SD)	27.71 (16.84)	28.16 (15.76)	.29	29.79 (17.72)	30.29 (15.80)	.86	24.01 (17.85)	26.19 (17.30)	.06
Neglect Abuse Score, mean (SD)	1.44 (4.95)	0.95 (3.28)	.13	1.10 (3.74)	1.09 (3.74)	.93	2.66 (7.14)	2.16 (5.13)	.05

Table 3 provides the study population characteristics of families headed by White and AA mothers. Using Pearson chi-square tests and independent sample t-tests, we compared the characteristics of families headed by White and AA mothers at each wave. At waves 3 and 5, AA mothers on average were slightly younger than White mothers ($p < .05$). There were no statistically significant differences in employment rates among White mothers (range 58.94% - 62.05%) and AA mothers (range 55.98% - 63.03%; p -values $> .05$); however, White mothers reported far higher average yearly household income before taxes at each wave (White range \$38,406.98-\$54,832.22; AA range \$22,948.25-\$31,394.34; $p < .001$). At each wave, AA mothers self-reported significantly higher physical abuse scores (score range 15.25-25.75) compared to

	Wave 3			Wave 4			Wave 5		
	White (n=358)	AA (n= 1123)	p- value	White (n=324)	AA (n= 1066)	p- value	White (n=369)	AA (n= 1204)	p- value
Age in months, mean (SD)	38.06 (2.70)	38.30 (3.22)	.16	60.60 (2.14)	61.45 (2.32)	<.001	111.87 (3.90)	112.34 (4.58)	.06
Gender, % (n)									
Male	52.79 (189)	52.54 (590)	.93	52.47 (170)	53.38 (569)	.77	53.93 (199)	52.57 (633)	.65
Female	47.21 (169)	47.46 (533)		47.53 (154)	46.62 (497)		46.07 (170)	47.43 (571)	
Focal Variables									
Physical Abuse Score, mean (SD)	21.46 (16.09)	25.75 (17.47)	.002	16.75 (14.23)	22.92 (17.32)	<.001	10.12 (12.50)	15.25 (15.72)	<.001
Psychological Abuse Score, mean (SD)	27.45 (17.38)	30.03 (15.96)	.02	29.43 (16.77)	31.73 (16.76)	.03	25.77 (17.16)	26.87 (18.24)	.34
Neglect Score, mean (SD)	0.73 (3.06)	1.40 (4.68)	.14	0.54 (2.31)	1.12 (3.79)	.28	2.20 (5.62)	2.56 (6.86)	.97

In adjusted DD models, maximum cash benefits, time limits, and the TPR were related to mothers' self-reports of physical abuse (Table 4). In contemporaneous models, a \$100 increase

in the maximum cash benefits and a one unit increase in the TPR were associated with a 0.56 (95% CI -1.08, -0.04) and 0.06 (95% CI -0.11, -0.004) decrease in self-reported physical abuse scores for the \leq HS group compared to the $>$ HS group. Compared to states with no or a benefit reduction limit only, having a lifetime and/or periodic limit was associated with an increase of 2.76 (95% CI 0.18, 5.35) in self-reported physical abuse scores for the \leq HS group compared to the $>$ HS group. Similarly, in models in which TANF policies were lagged by one year, a \$100 increase in the maximum cash benefits and a one unit increase in the TPR were associated with a 0.52 (95% CI -1.04, -0.005) and 0.05 (95% CI -0.11, -0.0001) decrease in the self-reported physical abuse score for the \leq HS group compared to the $>$ HS group. While limits on TANF receipt had a similar direction of effect, they were not statistically significantly related to self-reported physical abuse scores. In these models, TANF policies were not statistically significantly related to the mothers' self-reports of psychological abuse or neglect.

In sensitivity analyses, findings from our contemporaneous and lagged models were robust to education group-specific time trends. In contemporaneous models, the effect of a lifetime and/or periodic limit on physical abuse scores for the intervention group (\leq HS) compared to the comparison group ($>$ HS) (Beta 2.58; 95% CI -0.09, 5.25) and the results for a \$100 increase in maximum benefits (Beta -0.50; 95% CI: -1.04, 0.03) were similar in magnitude and direction, but with only slightly widened confidence intervals. A one unit increase in the TPR (Beta -0.05; 95% CI -0.11, 0.01) retained the same direction and magnitude of effect but had slightly widened confidence intervals including the null. For lagged models, the significant results retained the same direction and magnitude of effect but had slightly widened confidence intervals that now include the null. A \$100 increase in maximum benefits was associated with a 0.47 decrease in physical abuse scores (95% CI -1.00, 0.06) and a one unit increase in the TPR was associated with a 0.04 decrease in physical abuse scores (95% CI -0.11, 0.02).

In sensitivity models incorporating additional individual-level covariates for mother's probable caseness for a conservative diagnosis of depression and past year drug use at wave 3, findings were similarly robust. In contemporaneous models, the effect of a lifetime and/or periodic limit on physical abuse scores for the intervention group (\leq HS) compared to the comparison group ($>$ HS) (Beta 2.51; 95% CI -0.06, 5.09), a \$100 increase in maximum benefits (Beta -0.53; 95% CI: -1.05, -0.01), and a one unit increase in the TPR 0.05 (95% CI -0.11, -0.0001) were similar in magnitude and direction with regard to mothers' reports of physical abuse, but with only slightly widened confidence intervals. For lagged models, the results for a \$100 increase in maximum benefits (Beta -0.50; 95% CI: -1.01, 0.02) and a one unit increase in the TPR (Beta -0.05; 95% CI: -0.10, 0.004) were similar in magnitude and direction, but with only slightly widened confidence intervals.

Table 4. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) Contemporaneous and One Year Lagged Models

Policy	Physical Abuse		Psychological Abuse		Neglect	
	Beta (95% CI)		Beta (95% CI)		Beta (95% CI)	
	Concurrent	Lagged	Concurrent	Lagged	Concurrent	Lagged
Maximum Cash Limits	-0.56 (-1.08, -0.04)**	-0.52 (-1.04, -0.005)*	-0.36 (-0.92, 0.19)	-0.37 (-0.92, 0.19)	0.08 (-0.07, 0.23)	0.08 (-0.07, 0.23)
No Limit/ Benefit	Ref	Ref	Ref	Ref	Ref	Ref
Lifetime/ Periodic	2.76 (0.18, 5.35)**	1.26 (-1.13, 3.66)	2.04 (-0.69, 4.77)	0.84 (-1.70, 3.38)	-0.13 (-0.90, 0.64)	-0.39 (-1.09, 0.32)

Policy	Physical Abuse		Psychological Abuse		Neglect	
	Beta (95% CI)		Beta (95% CI)		Beta (95% CI)	
	Concurrent	Lagged	Concurrent	Lagged	Concurrent	Lagged
Sanction – Initial						
None/Partial	Ref	Ref	Ref	Ref	Ref	Ref
Gradual/Full	0.88 (-1.01, 2.76)	1.50 (-0.35, 3.34)	1.03 (-0.95, 3.02)	1.05 (-0.88, 2.99)	-0.04 (-0.62, 0.53)	0.26 (-0.31, 0.82)
Sanction – Worst						
None/Partial	Ref	Ref	Ref	Ref	Ref	Ref
Gradual/Full	1.27 (-0.94, 3.48)	2.02 (-0.02, 4.07)*	0.76 (-1.56, 3.09)	0.97 (-1.17, 3.11)	0.22 (-0.46, 0.90)	0.41 (-0.23, 1.05)
Diversion						
No	Ref	Ref	Ref	Ref	Ref	Ref
Yes	-0.13 (-2.23, 1.96)	-0.54 (-2.67, 1.58)	-0.69 (-2.87, 1.50)	-0.15 (-2.38, 2.09)	0.03 (-0.62, 0.67)	-0.05 (-0.68, 0.58)
Family Caps						
None	Ref	Ref	Ref	Ref	Ref	Ref
Any	1.72 (-0.34, 3.77)	1.71 (-0.36, 3.77)	1.21 (-0.97, 3.40)	1.17 (-1.03, 3.36)	-0.06 (-0.64, 0.52)	-0.03 (-0.61, 0.55)

Policy	Physical Abuse		Psychological Abuse		Neglect	
	Beta (95% CI)		Beta (95% CI)		Beta (95% CI)	
	Concurrent	Lagged	Concurrent	Lagged	Concurrent	Lagged
Ratio	-0.06 (-0.11, -0.004)**	-0.05 (-0.11, -0.0001)*	-0.001 (-0.06, 0.06)	0.01 (-0.05, 0.07)	0.002 (-0.01, 0.02)	0.003 (-0.01, 0.02)
*p<0.1; **p<0.05; ***p<0.01						

In both contemporaneous and lagged models examining difference in TANF policies on mothers' self-reports of child maltreatment across White and AA mothers, there were no statistically significant differences in the effect of TANF policies by race (Tables 5 and 6).

Table 5. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs. African American), Contemporaneous

Policy	Physical Abuse			Psychological Abuse			Neglect		
	White Women	AA Women	Diff by race p-value	White Women	AA Women	Diff by race p-value	White Women	AA Women	Diff by race p-value
Maximum Benefits	0.01 (-1.37, 1.39)	-0.25 (-1.07, 0.57)	0.75	1.00 (-0.45, 2.46)	-0.44 (-1.30, 0.42)	0.09	0.22 (-0.17, 0.61)	0.11 (-0.12, 0.35)	0.64
Limits									
No Limit/ Benefit Limit	ref	Ref	Ref	ref	Ref	Ref	Ref	Ref	Ref
Lifetime and/or Periodic Limits	3.39 (-4.91, 11.70)	-0.59 (-4.10, 2.92)	0.39	-0.38 (-8.95, 8.19)	-0.29 (-3.92, 3.33)	0.99	-1.55 (-3.93, 0.87)	-0.36 (-1.42, 0.70)	0.38
Sanction – Initial									
None/Partial	ref	Ref	Ref	ref	Ref	Ref	Ref	Ref	Ref
Gradual/Full	0.44 (-4.08, 4.96)	0.94 (-1.83, 3.71)	0.85	0.15 (-4.52, 4.82)	0.93 (-1.95, 3.81)	0.78	-0.64 (-2.02, 0.74)	-0.04 (-0.84, 0.77)	0.46
Sanction – Worst									
None/Partial	ref	Ref	Ref	ref	Ref	Ref	Ref	Ref	Ref
Gradual/Full	1.67 (-3.85, 7.20)	-0.20, -4.08, 3.67)	0.58	0.03 (-5.64, 5.71)	-0.20 (-4.27, 3.88)	0.95	-0.28 (-2.02, 1.47)	-0.20 (-1.32, 0.93)	0.94
Diversion									
No	ref	ref	Ref	ref	Ref	Ref	ref	Ref	Ref
Yes	-0.93 (-5.68, 3.81)	0.17 (-2.48, 2.82)	0.69	0.06 (-4.86, 4.98)	-0.77 (-3.48, 1.95)	0.77	-0.37 (-1.75, 1.01)	-0.06 (-0.86, 0.73)	0.71
Family Caps									
None	ref	Ref	Ref	ref	Ref	Ref	Ref	Ref	Ref
Any	0.80 (-4.21, 5.80)	3.22 (0.41, 6.02)	0.41	0.24 (-5.06, 5.53)	2.38 (-0.56, 5.31)	0.49	-0.06 (-1.46, 1.33)	-0.17 (-0.96, 0.62)	0.90
Ratio	-0.03 (-0.12, 0.07)	-0.02 (-0.10, 0.06)	0.98	-0.03 (-0.13, 0.06)	0.04 (-0.04, 0.12)	0.29	0.01 (-0.02, 0.04)	0.01 (-0.02, 0.03)	0.82

Table 6. Adjusted Estimates of Policy Effect on Child Maltreatment Outcomes by Mother's Educational Attainment (\leq HS vs $>$ HS) and Race (White vs. African American), One Year Lagged Models

Policy	Physical Abuse			Psychological Abuse					
	White Women	AA Women	Diff by race p-value	White Women	AA Women	Diff by race p-value	White Women	AA Women	Diff by race p-value
Maximum Benefits	-0.07 (-1.43, 1.29)	-0.23 (-1.05, 0.59)	0.84	0.85 (-0.58, 2.28)	-0.43 (-1.28, 0.43)	0.13	0.22 (-0.16, 0.61)	0.11 (-0.12, 0.34)	0.61
Limits									
No Limit/ Benefit Limit	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Lifetime and/or Periodic Limits	0.10 (-7.23, 7.43)	-0.98 (-4.12, 2.16)	0.79	-2.00 (-9.62, 5.62)	-0.71 (-3.97, 2.56)	0.76	-1.23 (-3.40, 0.94)	-0.77 (-1.69, 0.16)	0.70
Sanction – Initial									
None/Partial	Ref	Ref	Ref	Ref	ref	Ref	Ref	Ref	Ref
Gradual/Full	1.52 (-2.64, 5.68)	2.00 (-0.74, 4.75)	0.85	0.51 (-3.76, 4.77)	0.67 (-2.18, 3.52)	0.95	-0.72 (-2.04, 0.60)	0.33 (-0.47, 1.13)	0.18
Sanction – Worst									
None/Partial	Ref	Ref	Ref	Ref	ref	Ref	Ref	Ref	Ref
Gradual/Full	2.82 (-1.85, 7.50)	1.79 (-1.76, 5.34)	0.73	-0.51 (-5.29, 4.28)	-0.30 (-4.00, 3.40)	0.95	-0.28 (-1.83, 1.26)	0.28 (-0.80, 1.36)	0.56
Diversion									
No	ref	ref	Ref	Ref	ref	Ref	Ref	Ref	Ref
Yes	-1.64 (-6.37, 3.10)	-0.07 (-2.82, 2.69)	0.58	2.31 (-2.60, 7.22)	-1.01 (-3.85, 1.83)	0.25	-0.42 (-1.78, 0.94)	-0.21 (-1.00, 0.58)	0.80
Family Caps									
None	Ref	Ref	Ref	Ref	ref	Ref	Ref	Ref	Ref
Any	1.26 (-3.78, 6.29)	3.15 (0.32, 5.97)	0.52	1.01 (-4.31, 6.32)	1.95 (-1.02, 4.91)	0.76	0.02 (-1.35, 1.39)	-0.13 (-0.90, 0.64)	0.85
Ratio	-0.01 (-0.11, 0.09)	-0.02 (-0.10, 0.07)	0.95	-0.01 (-0.11, 0.09)	0.05 (-0.04, 0.13)	0.40	0.01 (-0.02, 0.04)	0.01 (-0.01, 0.03)	0.99

DISCUSSION

We found that generous TANF cash benefits and greater access to TANF decrease mothers' self-reports of physical child maltreatment while those that limited TANF access increased mothers' self-reports of physical child maltreatment. This effect did not differ between AA and White mothers. Increasing access to and amounts of cash transfers to families experiencing poverty and reconsidering policies that involuntarily separate families from TANF through time limits are warranted to protect families against child maltreatment.

This study adds to evidence that providing cash benefits to families is an important intervention for child maltreatment (Berger, 2004; Cancian et al., 2013; Paxson & Waldfogel, 2002; Shook, 1999; Slack et al., 2007; van IJzendoorn et al., 2020). While it is not yet clear the level of cash benefits needed to fully realize the potential of TANF to reduce child maltreatment, even small increases may be meaningful as current TANF cash benefits are set at between 22.7% to 81.4% of the federal poverty level (Burnside & Floyd, 2019). We note, however, that ours differs from extant literature in several important ways. First, ours is among the first to identify a protective impact of TANF on self-reported physical child maltreatment. Second, we found no statistically significant relationships between TANF policies and mother's self-report of neglect and this is in contrast to studies finding increases in child neglect when TANF policies are more stringent (Paxson & Waldfogel, 2002) or when families experience income losses owing to TANF policies (Fein & Lee, 2003; Slack et al., 2007). The difference in our results may be attributed to the nature of our outcome variables. First, we focus on mothers' self-reports of approximated measures of physical maltreatment and neglect while other studies of the TANF-child maltreatment relationship typically focus on child welfare involvement and investigations. Self-reported, approximated forms of violence likely differ from the forms of violence that may

come to the attention of child welfare systems. Further, the relationship between TANF policy generosity and involvement in the child welfare system may take on a different character compared to self-reports given the complex relationship between social programs, poverty, and child welfare (Fong, 2017). Second, neglect is the most commonly reported and investigated form of child maltreatment in the U.S. (U.S. Department of Health & Human Services et al., 2020) but also is widely defined across populations, state governments, and time (Fallon et al., 2010), adding additional complexities to prior studies that differ from this current one. Finally, few studies of the TANF-child maltreatment relationship have examined risk of physical maltreatment as a distinct construct from emotional abuse or neglect and this lack of standardization results in difficulties comparing results across studies of the TANF-child maltreatment relationship (Conrad-Hiebner & Byram, 2020).

Conditionality that reduced access to cash benefits significantly increased the likelihood of mothers' self-reported physical maltreatment in our study population. These findings bolster evidence for the harmful effect of income loss, including stringent TANF time limits on parenting behaviors (Conrad-Hiebner & Byram, 2020; Fein & Lee, 2003; C. Paxson & J Waldfogel, 2001; Slack et al., 2007). As of 2018, 47 states adopted time limits, 25 states adopted full family initial sanctions, and 46 states adopted full family worst sanctions; therefore, attention to interventions that help buffer against the harmful impact of these policies is needed. Interventions may be needed in both the short- and long-term as findings from our lagged and contemporaneous models support extant literature suggesting that TANF conditions inflict both acute and longer-term stress on families that results in violence (Fein & Lee, 2003; Morris & Hendra, 2009; Ovwigho et al., 2003; Shook, 1999).

While this study cannot speak to the exact mechanisms of effect, other studies examining relationships between TANF and mediators in the FSM have found that both the TPR and higher maximum benefits have been associated with decreases in employment among intervention mothers, but not mothers' experience of intimate partner violence victimization, depression, or economic pressure (Spencer et al., 2020). We cannot rule these factors out as potential mediators between TANF and child maltreatment; however, we posit that related constructs to those defined in the FSM should also be considered. First, one of the four TANF goals is to positively influence family cohesion, a significant predictor of child physical abuse (Stith et al., 2009) and a measure not examined in the previous study. In other words, TANF may improve family relationships that are non-violent but stressed over scarce family resources (Buller et al., 2018). Second, mothers are the primary recipients of TANF (Office of Family Assistance, n.d.) and, by receiving cash directly, women may experience less conflict with her child over resources (Belsky, 1993), reduced economic stress associated with poverty (Berger, 2004), and increased self-worth when they are compensated for caregiving (Weinberg, 2001). While all of these changes should be related to improvements in depression and psychological wellbeing, we note that TANF benefits are not sufficient to raise a family above the poverty level (Burnside & Floyd, 2019) and so poor psychological health may be a product of experiencing poverty.

Our study revealed no difference in the effect of TANF policies on child maltreatment across White and AA mothers. This result may be due to the fact that families receiving TANF remain in poverty and, at similar poverty levels, Whites experience higher or similar child maltreatment rates compared to AA families (Kim & Drake, 2018). In this regard, limited TANF spending did not lead to apparent racialized *consequences* in the present study. However, prior research has demonstrated that TANF remains racialized in *source* (Parolin, 2019). In other

words, while the racialized consequences did not manifest in this current study, inequalities across AA and White families that are created by systems, including TANF, are real (Bailey et al., 2017; Parolin, 2019). Increasing coordination among multiple systems could better support families and reduce child maltreatment disparities (Conrad-Hiebner & Byram, 2020), but without an intentional focus on equitable access to all of these programs racial/ethnic disparities in wellbeing will persist.

Strengths and Limitations

Our use of a longitudinal quasi-experimental design strengthens the conclusions drawn from this study in that it allows us to control for sources of both measured and unmeasured confounding. Our study also analyzes data over an extended period of TANF implementation across multiple states to allow us to examine the impact of individual TANF policies controlling for several potential confounders including national trends. Our study is limited by our reliance on women's self-report of child maltreatment so the prevalence of maltreatment experienced by our sample is likely underestimated. The impact of underreporting on our findings is mitigated by our belief that accuracy in reporting is likely unrelated to changes in our policies of interest. We were unable to control for variations in TANF implementation or county-level factors associated with TANF implementation, such as conservative leaning of the county (Monnat, 2010), that might have influenced our outcomes. Finally, we were unable to account for state fixed effects. Our comparison group is disproportionately less affected by TANF when compared to the intervention group, but, to the extent that there is an effect of TANF for caregivers with greater than a high school education our estimate would be a combination of the true effect and residual bias unaccounted for by the between states comparisons.

Future Directions and Policy Recommendations

Our study and others suggest that increasing cash among families experiencing poverty should be considered to reduce child maltreatment and racial disparities in the poverty-child maltreatment nexus. Studies of how increases in cash transfers work to reduce child maltreatment should be conducted to maximize the potential benefits associated with cash transfers. The use of conditions, especially time limits, should be reconsidered as policy mechanisms because they run counter to the primary TANF goal of providing “assistance to needy families so that children can be cared for in their own homes.” In sum, TANF can be used more effectively to reduce violence in the home.

Chapter 4: Women Experiencing Temporary Assistance for Needy Families: Implications for Women's Wellbeing and Intimate Relationships

Authors:

Rachael A. Spencer

Emily Lemon

Kelli A. Komro

Melvin D. Livingston

Briana Woods-Jaeger

ABSTRACT

Women who experience poverty and its related stressors are more likely to experience poor physical and mental health and relationships of poorer quality, sometimes characterized by intimate partner violence (IPV). Individuals experiencing these intersecting challenges often face multiple forms of stigma, or internal and external manifestations of a devalued social identity. Temporary Assistance for Needy Families (TANF), a state-led, block grant and conditional cash program for families experiencing poverty, is a plausible intervention to promote women's wellbeing and reduce IPV, although empirical studies have found mixed results of the program, especially among stigmatized groups. We conducted in-depth, semi-structured interviews with 13 women who had recent experience with TANF in three states. Using an intersectional lens, we explore the relationships between TANF policies and women's wellbeing and IPV experiences as well as how structural discrimination influences these

relationships. Data were analyzed using thematic analysis until thematic saturation was reached. Our analysis revealed four main themes: 1) Low cash and conditional benefits provided limited, short-term “relief” but women continued to experience poverty and hard choices; 2) TANF benefit levels and conditions increased women’s dependence on others for basic needs, often taxing relationships; 3) Women went to extraordinary measures to maintain access to TANF benefits, in large part to fulfill their roles as mothers; and 4) Stigma associated with TANF receipt creates psychological stress. Increasing the amount of TANF cash benefits provided to recipients, decreasing financial penalties associated with initial noncompliance, and allowing women to opt-in to participation in child support requirements are important first steps toward reducing barriers identified in the current study making TANF more beneficial and accessible.

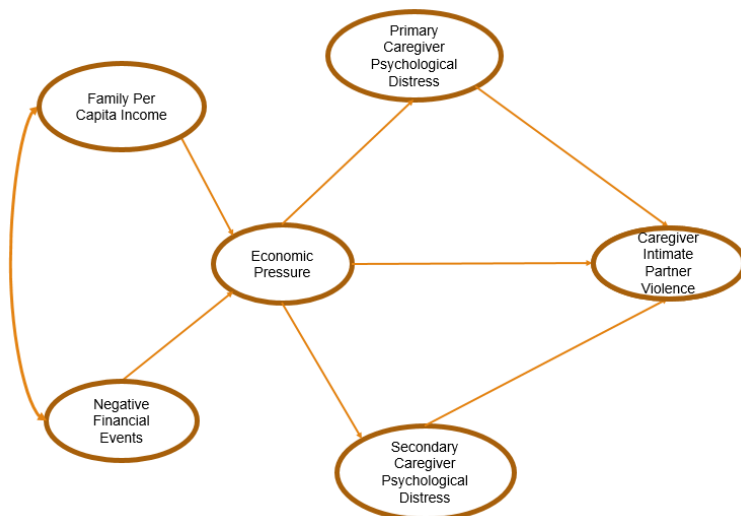
BACKGROUND

Women who experience poverty and its related stressors are more likely to experience poor physical and mental health (Adler & Newman, 2002) and relationships of poorer quality, sometimes characterized by intimate partner violence (IPV) (Black et al., 2011; Capaldi et al., 2012). While more satisfying or positive relationships can improve health (Robles et al., 2014), IPV, or “physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner)” (Breiding et al. (2015, p. 11), is associated with women’s experience of homelessness, depression, physical injury, and post-traumatic stress disorder (Black et al., 2011; Bullock et al., 2020; Campbell, 2002).

The Family Stress Model (FSM) (Conger et al., 2000b; Conger et al., 2002), provides important insight into the relationship between experiencing low income, wellbeing, and family dynamics including IPV (Fox et al., 2002) (Figure 1). The FSM creators hypothesize that *negative financial events*, or “acute financial stress created by unfavorable changes in economic circumstances” (e.g., being fired or laid off or a reduction in income), combined with *low family per capita income*, will produce *economic pressure*, or objective measures of economic hardship (e.g., inability to buy necessities or eviction due to lack of payment) (Conger et al., 2002). Economic pressure contributes to *psychological distress*, defined as poor mental health “ranging from normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression” (Masarik & Conger, 2017) and *caregiver relationship conflict*, defined as “behaviors that reflect both aggressive and angry responses, such as criticism, defensiveness, and insensitivity and the withdrawal of support” (Conger et al., 2002). The FSM is well-tested, with

studies finding that the model could be fitted to the experiences of TANF recipients and families of diverse racial and ethnic groups (Holmes et al., 2020; Masarik & Conger, 2017).

Figure 1. Family Stress Model Adapted for Violence



Temporary Assistance for Needy Families (TANF)

In 1996, the United States federal government replaced Aid to Families with Dependent Children (AFDC), a program aimed to provide cash grants for the benefit of children whose family had low or no income, with Temporary Assistance for Needy Families (TANF), a block grant and conditional cash transfer program designed to help low-income families with children achieve economic self-sufficiency (Office of Family Assistance; United States Department of Labor, 2021b). In replacing AFDC with TANF, the federal government created a work-first framework that emphasized the time-limited nature of the social safety net program, as articulated in the following goals:

Provide assistance to needy families so that children can be cared for in their own homes; Reduce the dependency of needy parents by promoting job preparation, work and marriage; Prevent and reduce the incidence of out-of-wedlock

pregnancies; Encourage the formation and maintenance of two-parent families
(Office of Family Assistance)

Unlike AFDC which did not place limits on the amount of money provided from the federal government to states, TANF capped the amount of federal assistance provided to states. Further, TANF established time limits on use of federal funds per individual TANF recipient to reinforce the concept of TANF as a temporary program, incentivize participants to leave TANF for employment in anticipation of time limits, and redirect participants to engage in employment once benefits end (Fein & Lee, 2003; Lindhorst & Mancoske, 2006; Office of Family Assistance, 2019). The federal limit on TANF spending is capped at 60 months for most individuals. Further, the federal government would also reduce block grant amounts if states failed to engage a percentage of all adult TANF participants in core activities designed to prepare participants for work. Within this framework, state policy makers were encouraged to levy sanctions, or reductions in financial benefits, against participants who fail to comply with work requirements ("Social Security Act," 1996). Finally, TANF sought to increase payments from non- or under-paying, non-custodial parents of children involved in TANF. To do so, TANF required that most custodial parents receiving TANF cooperate with efforts to collect child support monies from non-custodial parents and relinquish control of those monies to the state. The majority of states only "pass through" \$50 per child per month of the child support received to TANF participants, reserving the balance for state allocation (Miller et al., 2005; National Conference of State Legislatures, 2020). Federal policy makers updated this framework via in the Deficit Reduction Act of 2005 ("Deficit Reduction Act of 2005," 2006). However, policy makers have retained the same basic structure and level of block funding for TANF since its creation.

Government efforts to “end welfare as we know it” received popular support for multiple reasons, including assumptions of undeserving and lazy welfare recipients as well as racialized narratives about the average TANF recipient (Hancock, 2004). AFDC was designed for widows and low-income families and African American women were at the helm of the welfare reform movement that argued for a minimum income for all Americans (Gordon, 1994). However, the movement lost momentum when AFDC benefits were reduced in the 1980s and as “deserving” and “undeserving” welfare recipients were defined, often in terms of race (Neubeck & Cazenave, 2002; Quadagno, 1994). Scholars note that the notion that welfare recipient is synonymous with African American race reduced support for a generous welfare system among the White, U.S. population, leading to even more restrictions over time in the “guise of making women more self-reliant” (Johnson, 2010; Reese, 2005).

The implementation of TANF devolved significant control of the safety net program to state-level governments, which offers participants different supports in the forms of cash transfers, childcare vouchers, job training programs, and social programs (“Social Security Act,” 1996). As a result of state-level control, the level of TANF generosity, or level of benefits, eligibility requirements, and access, differs significantly across states. In 2019, cash benefits provided to recipients range from 22.7% to 81.4% of the federal poverty level (Burnside & Floyd, 2019). States may impose partial or full family sanctions, or financial penalties, when an adult eligible for employment is deemed “non-compliant” with work requirements. States may establish time limits that are longer or shorter than the federal 60-month time limit by funding additional months or, conversely, putting shorter limits on TANF receipt within the state. In 2018, time limits for the majority of individuals ranged from 12 months in Arizona to no time limits in California (*Welfare Rules Database*, 2017). Rules governing access to TANF has

resulted in significant differences in TANF use by state. In 2019, the ratio of families receiving TANF to the number of families with children in poverty ranged from a high of 68 in California to a low of 4 in Tennessee and Louisiana (Floyd, 2020). While the vast majority of families experiencing poverty do not access TANF each year (Floyd, 2020), TANF continues to have significant impact on families experiencing poverty. In fiscal year 2019, 1.6 million children and 437,000 adults received TANF (Office of Family Assistance, 2020a).

Structural Discrimination and TANF Policies

Given their experience of poverty, the populations that qualify for and access TANF are often experiencing multiple intersecting factors that reduce their economic and psychological wellbeing and increase their risk for violence. Compared to the general population, the adult population receiving TANF is more likely to have a high school education or less (Office of Family Assistance, 2020a), experience poor physical health and mental illness (Taylor & Barusch, 2004), and report recent and lifetime IPV experience (Pelton, 2015; Romero et al., 2002; Tolman & Raphael, 2000). Individuals experiencing these intersecting challenges often face multiple forms of stigma, or internal and external manifestations of a devalued social identity (Crocker et al., 1998), layered on top of the stigma associated with receiving TANF benefits (Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006). Experiencing stigma reduces access and ability to benefit from informal and formal resources (Gillum, 2019; McDaniel et al., 2017; Overstreet & Quinn, 2013; Whittle et al., 2017) owing to both individualized biases toward the stigmatized individual as well as structures that are not designed to meet the needs of those experiencing stigma.

TANF could be an important and protective program for those experiencing multiple forms of stigma and poverty; however, studies demonstrate that TANF policies often place these

groups at a disadvantage (Campbell et al., 2016; Casey et al., 2004; East & Bussey, 2007; Monnat, 2010; Parisi et al., 2006; Schram et al., 2009). Studies indicate that TANF policies are characterized by structural discrimination, or the ways in which institutional or structural conceptions of discrimination detach behaviors from intentional agents, instead linking them to rules, procedures, and policies that differentially impact one group over another (Carter & Murphy, 2015; Dirth & Branscombe, 2017; Feagin & Feagin, 1978; Friedman, 1975).

Structural discrimination within TANF takes several forms that create particular obstacles for certain groups. First, work requirements, or the mandate that participants engage in work, educational activities, job search, or training in exchange for benefits, have been found to disadvantage groups who, for multiple structural reasons, do not have equal access to the supports necessary to consistently participate (Siegel et al., 2004). For example, lack of access to healthcare and abusive interference with work participation have, in part, created structural and social barriers to employment for those with mental health challenges and IPV survivors, respectively (Holmes et al., 2020; Romero et al., 2002; Stromwall, 2001; Thomas et al., 2017; Tolman & Raphael, 2000). Second, enforcing policies that involuntarily separate families from TANF, such as full-family sanctions and time limits, is particularly burdensome for those who have structurally limited access to employment. IPV survivors often have reduced savings and limited employment histories owing to economic abuse (Postmus et al., 2020). Those with mental illness often face barriers to employment and access to Social Security Disability, an instrumental support that would not require them to work in exchange for cash (Dirth & Branscombe, 2017; Whittle et al., 2017). Finally, requiring TANF participants to cooperate with child support petitions from a non-custodial parent creates barriers for IPV survivors who are fleeing abusive partners and fear being found by them (An & Choi, 2019).

For African Americans, whose experience of higher rates of poverty are rooted in structural racism, or the “totality of ways in which societies foster racial discrimination through mutually reinforcing systems” (Bailey et al., 2017), strict TANF policies could be particularly disadvantageous as the effects of these policies are exacerbated by disproportionate barriers in multiple systems. For example, redlining into neighborhoods of concentrated neighborhood poverty (Drake & Rank, 2009), means that African Americans experience housing instability, and less access to healthcare and transportation barriers - the main reasons why most TANF recipients don’t “comply” with TANF (Bazelon & Watts, 1999; Oggins & Fleming, 2001). African Americans have faced persistently elevated levels of employment discrimination (Quillian et al., 2017) and have reduced access to economic supports and employment due to mass incarceration (Wildeman & Wang, 2017). These multiple intersecting and reinforcing systems, combined with individually held and operationalized biases overlap and compound the toll on African American’s wellbeing and ability to participate and voluntarily exit TANF with the means necessary to thrive.

State and federal governments have acknowledged the potential for TANF to differentially impact certain groups by carving out state-specific exceptions and developing solely state funded programs for groups that have barriers to employment (Parrott & Schott, 2009). Among those groups receiving time-limited exemptions from work requirements are the medically ill, those caring for an ill relative, and pregnant individuals (*Welfare Rules Database*, 2017). The federal government developed one notable exception for IPV through the Family Violence Option (FVO), a component of the TANF framework. Under the FVO, states could opt to screen individuals for IPV, refer them to services, and provide IPV survivors with exemptions from multiple eligibility criteria, requirements, and other punitive policies such as work requirements, child support enforcement rules, and time limits (“Personal Responsibility and Work Opportunity Reconciliation Act of 1996,” 1996). The extent to which aspects of the FVO

have been adopted differs significantly across states and the effectiveness of the FVO to create equity for IPV survivors, in both practice and in design, remains in doubt (An & Choi, 2019; Holcomb et al., 2017). Further, FVO protections are generally limited in scope to three categories of exemptions - time limits, work requirements, and participation in child support petitions (Holcomb et al., 2017) – so IPV survivors are not exempted from the majority of TANF policies and could be experiencing obstacles that are not addressed through the FVO. No exceptions have been made to address structural racism specifically.

The exemptions provided to groups disadvantaged by TANF policies are granted at the individual-level and on a case-by-case basis, suggesting that both interpersonal and structural factors are the cause of inequities (Nicoll, 2015) and both should be explored and addressed (Angermeyer et al., 2014). Studies suggest that attitudes relevant to individual and structural discrimination are separate and distinct (Angermeyer et al., 2014), suggesting that addressing individual-level biases will be inadequate to address structural level factors that contribute to disparities. In this study, we focus on structural discrimination for several reasons. First, discriminatory policies create obstacles to access, support, and resources even when individual discriminatory intent does not exist (Adams et al., 2008; Dirth & Branscombe, 2017). Second, focusing on systems-level discrimination may also be more effective at increasing dominant group support for “reparative policies” (Adams et al., 2006; Lowery et al., 2007), such that access and enjoyment of TANF may become more equitable.

TANF As A Wellbeing Intervention Strategy

The FSM suggests that TANF is a plausible intervention to promote women’s wellbeing and reduce IPV, although empirical studies have found mixed results (Tankard & Iyengar, 2018). Higher levels of TANF cash benefits have been shown to increase family wellbeing (Conrad-

Hiebner & Byram, 2020). However, some studies have demonstrated little effect of TANF on women's wellbeing (Spencer et al., 2020) and others suggest conditional cash transfer programs, such as TANF, may undermine the protective effect of increased income (Buller et al., 2018; Gibbs et al., 2017). TANF conditions that are less generous and increase the likelihood that a participant will be involuntarily separated from TANF, including sanctions and time limits, have been associated with lower income, economic hardship (Bloom et al., 2002; Farrell et al., 2008; Kalil et al., 2002; Pavetti et al., 2003) and poor mental health (Davis, 2018; Fein & Lee, 2003).

While the aforementioned studies provide important insights into the relationship between TANF and women's wellbeing and IPV experience, several important gaps remain in the literature. First, the majority of studies were conducted within the context of the shift from AFDC to TANF in 1996 or shortly thereafter. Access to and receipt of TANF among families experiencing poverty has decreased over time (Floyd, 2020), suggesting that TANF policies may be becoming less generous and the inferences drawn from earlier studies need to be explored. Further, while studies often shed light on aspects structural discrimination, a broader view of the policies that create potential inequities is needed to identify the groups who are disproportionately affected as well as the remedies that can increase equity in TANF access. Finally, by using an intersectional lens, or an explicit examination of the ways in which TANF systems and policies interact with women's multidimensional social identities (Crenshaw, 1989; Crenshaw, 1990), we seek to move beyond a single-factor explanation to explore the interplay of TANF policies and women's complex identities of race, IPV status, and economic positionality. The goal of this study is to use semi-structured interviews with women who have had recent experience with TANF to explore women's perceptions of and lived experiences with TANF policies. Specifically, we seek to understand:

- 1) How do women perceive that TANF policies influence their relationships with intimate partners and wellbeing (economic pressure and psychological wellbeing)?
- 2) How are the relationships between TANF policies and women’s wellbeing and relationships with intimate partners influenced/impacted by structural discrimination?

METHODS

Study Setting

Participants in this study primarily had experience with TANF in three U.S. states – New York, Missouri, and Kansas. While we do not seek to make explicit comparisons between women’s experiences across states, we sought out participants in diverse TANF policy environments in order to capture multiple, different experiences of our TANF policies of interest as they relate to our theoretical model (Table 1).

Table 1. New York, Missouri, and Kansas State TANF Policies by Year

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
TANF to Poverty Ratio	The number of families on TANF for every 100 families in poverty per state	2019	42	10	11
Cash Benefits	Amount of monetary benefits per state per month allocated to a	2018	789	429	292

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
	family of three with no special circumstances				
Lifetime Time Limits	The number of months in which an individual is eligible to receive TANF during his/her lifetime in that state	2019	60	24	45
Work - Related Sanctions	The punitive financial measures taken against an individual or family for first failing to meet TANF work requirements.	2019	Benefit is reduced by the pro rata share of the noncompliant adult until compliance.	Entire unit is ineligible for benefits until compliance or 3 months, whichever is longer.	Benefit is reduced by 50% for at least 10 weeks. Sanction ends when participant completes 4 consecutive weeks of participation in work activities

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
					for an average of 30 hours per week in the 10-week period.
Child Support Sanctions	The punitive financial measures taken against an individual or family for first failing to cooperate with child support requirements.	2019	The unit's benefit is reduced by 25% until compliance.	Entire unit loses benefits for 3 months.	The unit's benefit is reduced by 25% until compliance.
Family Violence Option Exemptions	Work requirements exemptions for individuals who meet TANF definitions of domestic violence victims.	2019	Can be exempted from work exemption.	No work exemptions exist.	Temporary work exemption exists while the family undergoes intensive case management.
	Length of time and type of time limits	2019	Lifetime limits can be	Lifetime limits can be	Lifetime limits can be extended

Policy	Description	Year*	State		
			New York	Kansas	Missouri**
	extended for period in which the unit is fleeing from or receiving treatment for domestic violence or abuse.		waived for at least four months and are re-evaluated at least every six months.	extended for 6 months at a time.	on a case by case basis.
<p>*Data provided for most recent year available on the Welfare Rules Database.</p> <p>** Unlike New York and Kansas, Missouri has not formally adopted the FVO, but enacted its own policies to address the needs of IPV survivors.</p>					

Community Engagement

In developing, implementing, and analyzing data for this community-engaged study, the research team worked with two community-based organizations located in large cities. One organization is located in the northeast and provides services to individuals who have experience with IPV or gender-based violence. Another is located in the midwest and is an early childhood education center head start that provides services to many families who have experience with IPV. The community partners were involved in reviewing and commenting on the protocol, supporting the development of the interview guide, referring participants, and reviewing and commenting on study team's interpretation of the study's main themes.

Participants

The participants in this study are 13 mothers who have experience with TANF, defined as applying for or receiving TANF for themselves or their child, within the past two years. Both purposive and snowball sampling procedures were used because we sought to recruit individuals who have experiences that are relevant to our research questions (Palinkas et al., 2015). Primarily, participants for this study were referred by two community-based organizations that partnered with us in the development of the protocol. After receiving the referral, the PI then recruited participants into the study. Women who completed the interview were also asked to refer other eligible women who were then vetted for eligibility by the PI before being recruited. Twelve of the women were recruited via the community-based organizations and one woman who participated was referred via snowball sampling.

Field Methods

In-depth semi-structured interviews were selected for the current research because we sought to understand individual experiences with and perceptions of TANF policies (Hennink et al., 2011; Patton, 2002). Due to restrictions associated with COVID-19, recruitment and interviews were conducted over the phone or virtually over Zoom, based on the technology available to the participant. Research indicates that phone interviews yield quality data on par with data gathered from face-to-face interviews (Novick, 2008; Sturges & Hanrahan, 2004). When interviewed, the participant was located in a private location of her choice. The PI who conducted the interviews was located in her private office.

The personal and sensitive nature of this study required thorough ethical considerations to ensure that the research is not coercive or places participants in danger of further abuse. By the nature of recruiting women directly through service organizations, women were already connected to a system of supports. With the participants' permission, the PI was prepared to

connect the participants with resources in coordination with the CBO to manage distress that may occur during or because of the interview. No participants requested to be connected to resources as a result of stress and, unprompted, most indicated that they appreciated the opportunity to speak about their experiences. Further, due to precautions associated with the COVID-19 pandemic, all interviews were conducted remotely over Zoom when the participant could be in a safe, private location (Hartmann & Krishnan, 2014, 2016). The Emory University Institutional Review Board approved the research.

Informed consent was obtained and documented by the PI, a doctoral candidate, who read the informed consent document to the participants, provided time to answer any questions that the participant may have and asked a series of questions to ensure that informed consent could be given. This process included asking participants to describe the purpose of the study and what they would be asked to do if they joined, and asking participants to practice how they would respond if they didn't want to answer a question or stop the interview. The PI then documented consent in an online, HIPAA compliant platform. Each interview was audio recorded with the verbal permission of the participant. Each participant received a \$50 gift card as remuneration for their time and contributions to the study.

The interview began with a calendar landmarking exercise to help improve recall of retrospective events involving TANF applications, participation, and experience of TANF policies. Calendar landmarking exercises, also referred to as life history calendars (Freedman et al., 1988), are used widely in the social sciences (Glasner & van der Vaart, 2009) to improve participant recall of retrospective events compared to other techniques (Schwarz & Sudman, 2012), even when the period of inquiry is within the past two years (Belli et al., 2001). This approach serves to support recall by providing *bounding cues* or temporal points against which

the domains of interest can be anchored, *sequencing* events (Belli, 1998) by identifying what happened before or after an event to “reduce the risk of omitting events,” and enable the establishment of linkages between domains of research inquiry via *top-down* and *parallel retrieval* (Glasner & van der Vaart, 2009). The calendar landmarking exercise has been used to improve recall of IPV events among IPV survivors and is particularly appropriate when inquiring about events that have occurred throughout the life course (Yoshihama et al., 2005).

Subsequently, a standard, semi-structured interview was conducted using an interview guide. Specific questions were asked of the participant based on her responses to the calendar landmarking exercise and more general questions were asked of all participants. Finally, participants completed a brief demographics form covering information about their age, race, experiences with other forms of governmental assistance, and health.

Measures

The interview guide was developed by the PI based on the constructs in the Family Stress Model and was revised and edited based on feedback from the research team and three different community partners who have experience providing services to IPV survivors. The guide covered multiple domains including participants’ experience with TANF, effects of TANF on intimate relationships and wellbeing, and perceptions of TANF policies (Table 2). To guide our study, we focused on several primary TANF policies of interest – cash benefits, time limits, sanctions, and mandatory child support participation – because these policies have been posited to relate to IPV and women’s wellbeing. Using open-ended questions, we also encouraged participants to identify additional policies that may have affected their TANF experiences.

Table 2. Examples of Interview Questions

Domain	Question Examples
--------	-------------------

Experience with TANF	Could you describe for me why you were sanctioned? Probe: Were you aware in advance that you would be sanctioned? Why or why not? How did you find out that you were sanctioned?
Relationship between TANF and mood/stress level	How did receiving TANF cash benefits affect your mood or stress level?
Relationship between TANF and intimate partner relationships	How did experiencing a sanction affect your relationship with your partner? Your interactions with your partner?
Relationship between TANF and economic well-being	How did your experience of TANF ending affect your ability to buy items that you need like transportation or groceries?

Data Analysis

The interviews were anonymized and transcribed verbatim by the PI. Data analysis was conducted using thematic analysis (Guest et al., 2011) to identify and explain descriptive themes across interviews relating experience of TANF policies to women's wellbeing and relationship quality. We also characterized women by their self-identified race, experiences of IPV, and state of TANF experience to look for themes that emerged across these diverse characteristics and indications of areas to explore in future comparison research with a larger sample. Structural discrimination was considered present if a participant described an obstacle to accessing TANF benefits being specifically associated with a stigmatized identity (e.g., being an IPV survivor).

The PI created codes, or analytical labels to related instances of data, to create structure from unstructured data (LeCompte, 2000) in order to identify emergent themes and explore the application of the current study's theoretical model. The PI developed a codebook by first

creating analytical memos and noting common themes that emerged from the data or that mapped onto the theoretical framework (Hennink et al., 2010), then creating and defining codes from a subset of three transcripts, one from each state represented in the data (Hennink et al., 2011). The codes were primarily deductive in nature, drawn from the Family Stress Model (e.g., psychological wellbeing) although inductive codes (e.g., instrumental support) were also identified. Finally, the PI organized a total of 31 codes into a coding tree using MAXQDA, a qualitative software analysis tool.

The PI then coded three transcripts that were not used to create the codebook and ensured that the transcripts represented women who had experience across different states – New York, Kansas, and Missouri. A second coder, a doctoral candidate at Emory University who was a member of the research team, recoded two transcripts using the codebook and the PI calculated interrater reliability using Cohen's Kappa in MAXQDA (Mayring, 2004). Because the initial Cohen's Kappa did not indicate a high level of agreement ($\geq .8$) (McHugh, 2012; Miles & Huberman, 1984), the PI and second coder met to understand where differences existed and explored underlying causes of the disagreement (e.g., ambiguity in the codebook definitions, different perspectives and experiences of the coders) (Garrison et al., 2006). Once consensus was reached, the PI updated the codebook and then both coders coded two additional transcripts to calculate the interrater reliability and met again to discuss differences. Updates to the codebook were made and the process was repeated one additional time until the *a priori* Cohen's Kappa statistic ($\geq .80$) was reached. well defined The PI and second coder then independently recoded all of the transcripts, calculating Cohen's Kappa after each transcript was double coded and disagreements in coding were reconciled. PI selected the final coded transcript used for analysis. For all 13 interviews, Cohen's Kappa ranged from 0.81 to 0.95.

Codes were added and redefined as needed using constant comparison until thematic saturation was reached. For this study, thematic saturation was and defined in accordance with the study purpose and design (Saunders et al., 2018) and conceptualized as the point at which “no additional data are being found whereby the (researcher) can develop properties of the category” (Glaser & Strauss, 2017). In particular, we sought saturation across participants and policy contexts in defining and describing key issues and experiences relevant to our research question and as defined by deductive codes in the Family Stress Model. While we used data from participants across diverse environments to achieve this level of saturation, we were not seeking saturation in terms of how these issues differ by policy context or even within a specific policy context, which would have required a much larger sample size. We operationalized thematic saturation as the point “in data collection and analysis when new information produces little or no change to the codebook” (Guest et al., 2006). There is no universal, minimum number of participants necessary to achieve thematic saturation in a non-probabilistic qualitative sample. However, studies have demonstrated that as few as 12 in-depth interviews are needed to reach thematic saturation, especially for an investigation of higher-level concepts (Ando et al., 2014; Guest et al., 2006), as is the case with this study. Similar to Guest and colleagues (2006), we tracked changes made to the codebook during the double coding process to identify the point at which no new codes were added or refined. No new codes were added after the seventh transcript when the two coders revised the codebook for a third time, and no codes were refined after the tenth transcript was analyzed by both coders. Three additional interviews were completed to ensure that no new codes were required or refined. The analysis of the three additional interviews confirmed that the codebook was stable and interview concepts could be adequately categorized using existing codes (i.e., no additional codes were needed or refined).

Therefore, we concluded that thematic saturation, as defined in this study as the ability to describe key issues and experiences relevant to our research question and as defined by deductive codes in the Family Stress Model, had been reached. The calendar landmarking exercise was recorded for reference only.

Member-checking with professionals at the community-based organizations that partnered with the study team then took place to increase confidence in validity of the interpretation of study results (Birt et al., 2016). The PI presented main themes and supporting quotes and providers gave their perceptions of the interpretation, added context to the themes and quotes. Member-checking occurred twice: once with 10 advocates and case managers at the site in the northeast and a second time with 18 case managers, therapists, and advocates at the site in the midwest. While no changes to coding were needed, the member-checking phase suggested that sub-themes were representative of higher-order constructs and thus could be further synthesized into main themes. After the two member-checking events occurred, the research team further synthesized the data reorganizing the results under 4 main themes.

RESULTS

On average, the thirteen participants in the study were 33 years old and had primary experiences with TANF in New York (n=5), Missouri (n=6) or Kansas (n=2; Table 3). Some had had experiences with TANF across multiple other states, including Florida and Colorado. In total, the landmarking and interview questions lasted an average of 61 minutes with a range between 40-80 minutes.

Table 3. Participant Characteristics by State of TANF Receipt

	Total	New York	Missouri	Kansas
	(n=13)	(n=5)	(n=6)	(n=2)

Age, mean (SD)	33 (7.0)	35 (9.2)	30.7 (4.8)	33.5 (9.2)
Race, % (n)				
White	23 (3)	0 (0)	17 (1)	100 (2)
Black, African American	54 (7)	80 (4)	50 (3)	0 (0)
Mixed Race	23 (3)	20 (1)	33 (2)	0 (0)
Open TANF Case Status, % (n)	69 (9)	100 (5)	67 (4)	0 (0)
Revealed IPV, % (n)	77 (10)	100 (5)	50 (3)	100 (2)

Theme 1: Low cash and conditional benefits provided limited, short-term “relief” but women continued to experience poverty and hard choices

All women reported experiencing short-term positive emotions and improved psychological wellbeing when cash benefits were deposited into their accounts. Seven of the 13 women used the word “relief” to describe how they felt when they confirmed deposits of the cash benefits. Receipt of the monies enabled them to pay basic bills (e.g., telephone) and buy food for their family members. Most of the monies were spent on taking care of the children’s basic needs. The TANF monies were spent very quickly to tend to these basic needs with little, if anything, left over for savings.

I feel good. I feel like, yeah, thank God. I feel relief!....I’m like yeah. It finally came. It means I can get this. I can get that. I can use this to get that with it now. You know. Almost like your paycheck. But it comes once a month on a card. And

you be happy when you get it and then it be gone right afterwards but hey. – African American/Black Participant, Missouri

Seven women discussed that the residual economic stress that they experienced, combined with low sums of money received in cash benefits were also associated with negative emotions. Two described feeling stress because they had limited governmental and social support and therefore they had high levels of residual economic pressure after spending TANF monies. One felt angry because she had paid into the system as a worker and felt angered by the amount she received in return. Another woman described feeling depressed because she was “broke” (Black Participant, New York) and the only person in her family receiving TANF.

I would immediately run down a list in my brain of what we were low on and what we needed. And then I kind of got a sense of relief of some of that stress being gone because I was gonna have some money coming in. But then also feeling like, what is this? Cause when you're not working and that's really the only income that you're getting, it's kind of also at the same time stressful, because you only have so much but you need so much. – Mixed Race, African American/Black and White/Caucasian Participant, Missouri

The fact that cash benefits were so low and were mostly, if not completely, allocated towards children's needs meant that women's receipt of benefits was not an issue with partners, even when IPV was present.

No. No, [my abusive partner] didn't [want the TANF money]. He didn't, because it was just use for like rent.... So I always tell him that so he know, he knew that I wasn't even taking it for myself. It was just going to help pay the bills, the rent. – African American/Black Participant, New York

One woman felt that the instability and residual pressure associated with low amounts of TANF cash benefits made her have moments of regret leaving her more economically stable, violent relationship.

I have had moments, to be honest, and I don't have them anymore, but I've had moments in the past when I was like, shit I just should have stayed. I should have shut my mouth put up with it and should have stayed cause at least he was paying the rent. That's how that made me feel. To actually look back at someone that was violent, chaos and instability in every way, sense and form and to think I should have just stayed because at least I was secure. – Mixed Race, American Indian and Latina Participant, New York

Due to their needs exceeding their individual resources, women were often forced to make hard choices, including choosing between their current wellbeing and comfort and their future ability to access resources.

I think I only have four more months [of TANF] left. So I decided to go and get myself taken off and I filled out the paperwork for that...because otherwise when the time comes that I really need it, I ain't gonna be able to have it right there. Because say like, right now, I feel like it's the time to get taken off because I could uh, work, go back to work, I can go to school in the evenings part time. I can look into maybe. I really don't know, like what I'm going to do with the kids as far as school yet. But I'm still trying to figure it out. Really don't even know if it's the best time to really get taken off, but to me, I know it's either now or never....I don't want to use it all up and then...I get pregnant and I need it again. And I can't

work. Like I absolutely can't work. – African American/Black Participant,
Missouri

Theme 2: TANF Benefit Levels and Conditions Increased Women's Dependence on Others for Basic Needs, Often Taxing Relationships

Women relied heavily on informal and formal supports to be able to overcome resource deficits while receiving TANF. For example, women were required to use social support and instrumental support from family members, friends, and community organizations to address residual economic pressure associated with TANF.

It's enough to cover just the basics. If you have outside help, though. So when I had all three of my kids I received \$298 I believe. So, or somewhere around like \$300. It was really close. But just enough to cover my phone bill, gas bill, light bill. And then outside help would provide from the pantry, we get food also would have \$600 in food stamps. I would get clothes from the daycare, and toiletries and personal hygiene items from there. And that was it. That's surviving – African American/Black Participant, Missouri

Informal support from family and friends also made a significant impact on women's ability to participate in TANF programming and to leave TANF with the resources necessary to support their families. Reliance on others could provoke conflict or at least stress within women's intimate relationships.

It was difficult, you know, [redacted] is my baby. So it's just kind of hard to like, I mean, my parents, they're fine with it, like, you know, her daycare was literally right around the corner. So it wasn't like, you know, it was like something out of the way for them. But then it kind of got out of the way, cause you know, they

would have to get her dressed, take her there. It was just a lot. So it was like it was kind of stressful that I couldn't take her to school myself and, you know, just go to work after. It was stressful. – African American/Black Participant, New York

For some participants, the low levels of TANF cash benefits and limited amount of child support passed through TANF caused some women to ask the father of the child to provide child support directly, even if he was mandated to pay child support to the state. Such requests could create moments of abuse and conflict.

Because he [the father of my child] is still having to come out of pocket when I need stuff for her and I can't do it.... It makes, it always gets thrown back in my face. It causes a lot of arguments to an already tense relationship....He'll be like, I don't understand why I have to give you money and the state money. He'll mention about how, he's even said in the midst of like a heated argument, how he regrets having a child in the first place because of all of this. It's just, it's a lot of different things. – Mixed Race, African American/Black and White/Caucasian Participant, Missouri

Access to informal resources, such as supports provided by family members, and connectedness to formal supports like subsidized childcare, Food Stamps, Section 8 Housing, and Disability moderated the impact of women's experiences of involuntary separation from TANF, such as time limits. Only those who experienced TANF in Kansas and Missouri reported having experience with time limits. Three women had their cases closed due to their experience of TANF time limits and an additional two had less than one month of benefits at the time of the interview before reaching their time limits.

My benefits ran out in June, I believe. So my food stamps I would take half of them, fill up my house, and because I wasn't at home all day, thanks to the daycare providing lunch and then the parent groups provided breakfast, I would eat there. And my kids are not at home. I was like, half my food stamps and I would do catering and sell dinners and that would be my extra income. And I did that straight for three months around schooling and around parent groups. – African American/Black Participant, Missouri

One woman reported being unaffected by time limits because she could make up the lost TANF income through increased employment hours and had her family to assist her with childcare and other needs.

[Reaching time limits] just went from me like working maybe like two or three hours in the morning to me working an actual day and getting off at normal times. I will still be able to get off in time for daycare. Even if I didn't...I could still, you know, had people to call on and to assist me – African American/Black Participant, Missouri

Three women indicated that they felt psychological stress owing to the loss of access to the safety net, even if they had already found employment.

[Time limits are] hard to think about because if for some reason, something did happen, I don't know what I would have to lean on because I, I probably don't have that option anymore....it does make you worry because especially with COVID and everything going on now. We don't know when these jobs might not be there. Or like we just don't know when something could happen and we don't have a job. – White/Caucasian Participant, Missouri

One woman who had significant social and tangible support from family members felt motivated to achieve her educational and professional goals by time limits.

I think honestly for me and motivates me more knowing that there's a limit, because it tells me hey look, you only have a certain amount of time for this. So either you're going to get it and swim or you're going to drown in your comfort zone....I think right now, I've used 15 [months of TANF benefits]. So I have about like I think 30 or so months. – Mixed Race, White/Caucasian and Pacific Islander Participant, Missouri

Often, women needed additional support as they mastered the TANF system and overcame financial sanctions when their actions were perceived as “noncompliant.” In these instances, women struggled to address barriers to access, forcing them again to rely on their informal and formal networks of support as they attempted to gain access to TANF.

The very first time I was on TANF. I got the letter, you know, I needed to call someone, but I'm like okay, you know, I'm trying to get a grasp on how quickly my reality has shifted, you know, along with being homeless and living in my sister's basement. I went through a DV case with my daughter's dad....So, when I got that letter, you know, I needed to contact my caseworker. First off, what caseworker? I had no clue. I was given an automatic sanction that first month because I'm trying to adjust to this new baby and you know our new living situation. – African American/Black Participant, Missouri

For women experiencing ongoing IPV and homelessness, psychological and economic stress was particularly high due to their limited social support and formal support networks, especially if IPV had caused them to lose access to benefits.

And then I was going through, I had ended up leaving him from a domestic and so, I...we were living together at that time. And I was living in a low income based apartment and I ended up losing that because of it. In the midst of that they had also cut my TANF off, not because I wasn't working, but because I had um. I didn't turn in an annual review on time. When I had told them that I was bouncing from place to place and trying to get myself together, they wouldn't renew my TANF until I had a valid mailing address....It was very overwhelming. Especially with me, like finally being able to flee a couple weeks later from that domestic and not having nothing. It was very...cause if I could've used that money at any time, that probably would have been the most time that I needed it. – Mixed Race, African American/Black and White/Caucasian Participant, Missouri

Theme 3: Women went to extraordinary measures to maintain access to TANF benefits, in large part to fulfill their roles as mothers

The women in the study described making multiple efforts to comply with TANF and maintain access to benefits for their families, including participating in work requirements. Of the thirteen women, eleven women experienced work requirements, such as job searches, job training programs, and educational classes, that could result in a work-related sanction. While some women felt that they gained significantly from training opportunities through Missouri's Job Corp and New York City's Parks Department, others felt that job searching was an additional psychological stressor and distraction that prevented them from dealing with more pressing issues.

So if you're over 21 and you're going back to school, it doesn't count toward your benefits. It doesn't matter like it can't be a replacement hours for a job or job

searching, I guess because they feel like after 21 you being in school I guess isn't as important. So it just doesn't count. So I have to still. So like right now, I'm doing my GED and I still have to do at least 40 hours of month, no actually it's more than that, I think it's 60 hours a month still because I'm over 21. – White/Caucasian Participant, Missouri

Their fear of the psychological stress and economic pressure associated with sanctions drove women to overcome high barriers to participation. Women described walking long distances to attend appointments, relying on others in their family to care for children while attending work, and bringing their infant child with them while working.

So there is a year where I didn't have daycare for [my child] and he couldn't get in until he was damn near one. So I had to...push him around the stroller while I did my volunteering.... I was kind of irritated with it because I'm like, Wow, I can't believe I have to do this with my son like and I got to clean and he's right here. – White/Caucasian Participant, Kansas

When asked how they budgeted their TANF benefits, women described largely spending the TANF resources to pay for their children's needs, often disregarding their own for long stretches of time.

I haven't bought clothes for me, you know, God, a couple years. I make sure the kids have what they need. But, I mean I go without things all the time – White/Caucasian Participant, Missouri

Even when women's partners demanded TANF monies as part of their controlling and abusive behaviors, women still managed to save enough money to care for their children.

Um, I think when I first was with [my father's child] and it happened, he was on drugs pretty bad. So sometimes he would, if that money hit, he would be like it'd be 12 in the morning and he want me go to the thing and get some cash out. And that's another reason why, like I had to leave him.... I mean I was always I was always glad that was coming in because that's what I had, you know, I could pay my rent and take care of my bills. But I can say that I didn't have to worry about like not doing that stuff. I didn't let him take it to where I couldn't pay my stuff. I always budgeted out like what I needed first. So I always made sure that me and my daughter was taken care of through all that so – White/Caucasian Participant, Kansas

For one IPV survivor in New York, the policy of tying access to a housing voucher for IPV survivors to TANF receipt was degrading and created psychological stress and reinforced stigmas associated with poverty and family violence. She persisted in accessing TANF in order to avoid being perceived as a bad mother and wanted to fulfill her responsibilities as a mother.

Because we low low income, like we modern day, this is like This like modern day slavery. It's not like enslaved, but it's like yeah cuz it's like you forcing us, you you constrict us like again. Why do I have to be I'm running for money. There's police reports, there's court dates. It's all that. It's the legal. It's a big thing. Why do I have, then to turn around and admit to the government, hey, hey, hey. You done whooped my ass and then took everything. Like I need the [housing] voucher, just so, you know, I could provide something different for us on that case, you know, I don't have to keep putting [my child] in that environment. Because according to the government, if I keep putting her in that environment, you know, that is neglectful

and that is a dangerous and that is a whole ACS case. – African American/Black Participant, New York

Women experienced conflicts and psychological stress when TANF required seven of the 13 women to participate in the initiation of child support petitions from the non-custodial parent of their child. While women had the option to indicate that they did not know who the non-custodial father was, only one described taking this route because she was afraid of the father of her child. Others revealed this information because they supported the idea of the father of their child contributing via child support, wanted to comply with the TANF system, or feared losing TANF benefits for perceived lack of compliance.

So once they give you the public assistance they automatically tried to put him on child support....Um, basically they told me, like, if you want to keep getting public assistance, you have to give us the name or give us some sort of information so we can contact them. Or you can simply say you don't know or you just don't know who your child's father is. But if they feel like they know who your child's father is and you're not giving them information like basically they threaten to cut you off of the public assistance. – African American/Black Participant, New York

Women whose TANF receipt resulted in the initiation of a child support petition mentioned receiving confrontational calls from the non-custodial father of their children. Women used words such as “horrible” (Black Participant, New York) to describe these calls. During these calls, women were often made responsible for explaining the TANF system and its child support requirements to the father.

In fact, the first time I ever had an issue with child support, actually coming and doing their job was the month before I was getting off of it and going into work

with my new job. My daughter's dad called me cussing and yelling - my oldest one – And he's like, 'Man, you got to talk to these people.' I'm like, 'What are you talking about,' 'They just took my money.' So we had a phone conference and they were trying to get help for child support for my TANF that I had been on for the past three years, but I was getting off of it. I had used up my lifetime, and I found a job that paid enough....And um yeah I basically had the vouch for him. - African American/Black Participant, Missouri

While some women supported the idea of applying for child support, many women felt that initiating child support petitions while receiving TANF placed unnecessary stress on family relationships and decreased the amount of monies they would receive in total to care for their children.

[My child's father] does for his daughter. So you do for her, so I'm not gonna make you do for her. You acknowledge her, you do for her, fine. Let's not make waste anybody's time that don't need to be wasted. And this causes a whole legal thing that's not necessary. Um, and third when you do child support through welfare, welfare, get a little percentage of child support, you don't see that money flat. – African American/Black Participant, New York

One woman felt that initiating a child support petition caused a chain of events whereby it increased the family's interactions with the court system and reduced the money that her child received from the non-custodial father.

With the child support, you know, they [non-custodial dads] miss a payment that becomes, you know, they can get jail time or they lose things. And if they don't pay

it, then not only this child support not get paid, but I don't receive anything either
- African American/Black Participant, Missouri

Establishing court orders made co-parenting significantly more difficult because it could disincentivize the non-custodial parent from engaging with the child or the family altogether.

Yeah, my second daughter's dad, I don't know if he stays away because of child support. Because I know a few years ago he was 13,000 in the hole to owe them.

But you can't take from somebody who doesn't have anything to give. – African American/Black Participant, Missouri

Several women also felt that cooperation with child support enforcement did not meet their own values and created additional stressors on the family. One woman discussed feeling that the TANF monies were there to pay for the mother's portion of the child's necessities and so the father should not be involved in the system.

Um, some people just aren't with the father. That doesn't mean the father doesn't take care of their, you know, their portion of the responsibility. But you as a mother has to go on public assistance so you could take care of your part of the responsibility if you if you understand what I'm saying. So it doesn't necessarily mean that the father is not doing what he has to do. – African American/Black Participant, New York

For IPV survivors, just the existence of the child support requirement and knowing that they might be asked to assist in a child support petition created structural barriers to TANF receipt and psychological stress.

When the [COVID-19] pandemic first really hit hard, I was like, I'm thinking about applying TANF... but I'm hesitant because I don't want it to trigger any type of

child support modification against my daughter's dad, which in some cases depending on the amount of TANF versus the child support, it can trigger a Child Support modification....Anytime they do anything like the fact they were taking it, like the fact that now they're taking 140 a month, rather than 117 a month, there tends to be some backlash. – Mixed Race, White/Caucasian and Pacific Islander Participant, Missouri

Women could be exempted from the child support requirement if they lived with the father of the child or revealed IPV and asked for an exemption. Two IPV survivors sought and were granted exemptions from the child support requirement, however the process was psychologically distressing. One survivor described feeling as though the case worker did not believe her and the second described waiting at least two weeks before she received a final disposition on her request.

I was terrified. I mean I had like cried for like three days before this because I'm like oh my God this is going to give him rights and he's gonna hurt my kid like I was just You know, I was losing it. And um, when I went in, I explained to them, I was like, look, I'm this is the situation. And I was like, he he's already beat one of his girlfriends and she ended up losing her kid....They ended up giving me this paper and it said we are we are denying, or we're closing the case due to harm to the mother of the child. So they ended up closing it and I haven't heard anything about it. -White/Caucasian Participant, Kansas

Theme 4: Stigma Associated with TANF Receipt Creates Psychological Stress

The act of applying for and receiving TANF was associated with psychological stress for all women. The majority of women across states described experiencing shame or embarrassment

during the application process, while using the benefits, and any time they went to the state offices to handle case-related issues. They and others around them discussed the stigma associated with benefits receipt.

My child's father, he was not present or being active during that time.....I mean, for me, it was just embarrassing. I mean, this whole situation is, um, embarrassing. I was working before like right before I got pregnant. During my pregnancy. I was working and it's just like I couldn't work because I had a lot of issues in my pregnancy. So, after a while, I couldn't work. So that's so, he wasn't helping me, I had no choice but to turn to public assistance. – African American/Black Participant, New York

Two women indicated that their partners also described women's receipt of TANF as inappropriate or somehow shameful.

His preconceived notion was always that people who remained on this were either abusing it or lazy and never want it better for themselves. – African American/Black Participant, Missouri

For three participants, the stigma of participating in TANF was tied closely to their race and the racialized narratives and treatment of TANF recipients.

That was one of the first time it was so evident that, despite you [TANF caseworker] working in this field, you don't really believe in what you're doing. And that this case worker might be experiencing some burnout from all the people who use it for whatever fraudulent reason. Which being Black, you know, the stigmas are tied to that. Black people really aren't welfare queens, but I know girls from Independence,

who are...It's on your paperwork. You mark your box. – African American/Black Participant, Missouri

Three women linked having negative feelings because they believed that the limited cash benefits provided by TANF perpetuated cycles of poverty. In particular, they described how TANF the combination of limited cash benefits, significant work requirements, and the overall burden associated with TANF ensures that those experiencing poverty will remain in poverty.

Kind of just being young and just being happy at the fact that I can get something versus now, knowing that you know that little bit of money, I can I can work and make way more money and do...with programs like that, you know, they want you to do the bare minimum and it's kinda built to hold you in poverty or to keep you at your lowest. And it was kinda like finding out, you know, applying for certain programs or being in certain programs and learning that, you know, that's the whole point of programs like that. – African American/Black Participant, Missouri

DISCUSSION

On the whole, women indicated that TANF cash benefits provided some relief from psychological stress and economic pressure, but that low levels of cash assistance, stigma, and conditions associated with TANF often negated these benefits. Across participants with TANF experience in different states, findings were fairly consistent and we identified multiple ways in which TANF created structural barriers based on women's multiple social identities, including race, age, relationship status, and IPV experience. Women who lacked access to formal and informal supports, an experience made more likely by IPV experience, described being in vulnerable positions characterized by high levels of psychological stress and economic pressure. Women exerted significant effort to continue to receive TANF, despite the stigmas associated

with receipt and the increased level of conflict with intimate partners, to fulfill their roles as mothers. Increasing the amount of cash benefits provided to families experiencing poverty, decreasing financial penalties associated with initial noncompliance, making efforts to reduce stigma and racialized narratives associated with TANF receipt, and allowing women to opt-in to participation in child support requirements are important first steps toward making TANF more beneficial and accessible.

Overall, our study reveals remarkably similar experiences among a diverse group of women, who share multiple similarities rooted in their experience of poverty. TANF cash benefits are not enough to raise a family above the poverty level (Burnside & Floyd, 2019) and, consequently women in this study continued to experience residual economic stress associated with poverty, which has been linked to poor mental and physical health (Adler & Newman, 2002). Increasing cash transfers to families has been associated with multiple benefits including increased family wellbeing and reduced IPV among TANF (Gibson-Davis et al., 2005) and non-TANF beneficiaries (Buller et al., 2018; Gibbs et al., 2017). While raising levels of cash benefits could significantly improve women's wellbeing, payments that are larger relative to the community in which women live could potentially increase IPV and conflict over how to spend monies (Buller et al., 2018; Hsu, 2017). Providing multiple, smaller payments throughout the month may help address the monthly build-up of stress and pressure that women described in this study and has been identified as a potentially protective mechanism against IPV (Hsu, 2017).

This study and others have identified the importance of women's access to informal and formal supports in participating in and exiting TANF with the means necessary to support their families (Holmes et al., 2020; Mistry et al., 2008). For example, having access to formal resources, including Section 8, and Social Security Disability, appeared to buffer the pain

associated with involuntary TANF separation, which included psychological and economic pressure (Farrell et al., 2008; Hetling et al., 2006b; Lindhorst & Mancoske, 2006; L. Pavetti & J. Kauff, 2006) and underemployment (Lindhorst & Mancoske, 2006; L. Pavetti & J. Kauff, 2006). Given the significant family health and violence implications associated with loss of TANF benefits (Fein & Lee, 2003; van IJzendoorn et al., 2020), numerous efforts, including the creation of refundable Child Tax Credits that provide monthly payments for families (Luscombe, 2021) and solely state-funded TANF support programs that offer continued support to those who meet federal time limits (Parrott & Schott, 2009) are important policy efforts to prevent families from a perilous economic cliff.

While women felt that TANF helped them in their caregiving roles, many suggested that TANF forced them into impossible choices and situations as mothers. Like other TANF participants (Halushka, 2020), women often went to extreme lengths to avoid sanctions for workforce noncompliance, which have been associated with significant psychological and economic stress (Davis, 2018; Kalil et al., 2002). This included overcoming work requirement choices limited by age and childcare access and multiple issues related to childcare, transportation, and mental and physical health that increased risks of women receiving work requirements-related sanctions in this and other studies (Bazon & Watts, 1999; Campbell et al., 2016; Oggins & Fleming, 2001). TANF also placed stress on mothers via the child support requirement, which appears to have a harmful psychological effect and negative implications for women's economic wellbeing and parenting stress. This requirement was particularly detrimental for single mothers who sought to establish co-parenting relationships with the father of their child. Initiating a child support case appeared to cause conflict regardless of whether IPV was present and de-incentivized non-custodial parents from providing cash supports for and

creating relationships with their children. There is increasing evidence that allowing custodial, TANF recipients to keep child support payments has no effect on women's participation in the labor force (i.e., does not detract from the welfare-to-work schema) (Cuesta & Cancian, 2015), may reduce family conflict such as child abuse (Cancian et al., 2013), and increases the likelihood that paternity will be established (Cancian et al., 2008). In light of the rising number of single-parent families in the United States (United States Census Bureau, 2020b) and TANF's social goals, the potential benefits of maintaining this mandatory policy should be reconsidered. Several states, including Colorado, have had success increasing pass through amounts and may provide guidance on how this might be achieved (National Conference of State Legislatures, 2020).

Similar to other studies (An & Choi, 2019; Holcomb et al., 2017), we find that multiple TANF policies act as unique barriers to IPV survivors' access to benefits, and that these experiences were often shaped by women's unique and overlapping social identities. Despite the wide adoption of child support protections for IPV survivors under the FVO (Holcomb et al., 2017), this study supports the findings of extant literature that single parents who are also IPV survivors face barriers to accessing the child support cooperation waiver (Hetling, 2011) and face structural discrimination because of the very existence of this requirement (An & Choi, 2019). We also identified procedural requirements around having a stable, physical address that created an obstacle for IPV survivors experiencing homelessness as a result of abuse (Smyth et al., 2006). When sanctions co-occurred with other TANF requirements around housing stability, women fleeing IPV were particularly disadvantaged. IPV experience is common among TANF recipients, a significant barrier to employment (Thomas et al., 2017), and a predictor of homelessness for women in the U.S. (Pavao et al., 2007; Smyth et al., 2006), suggesting that

TANF should play an important role in preventing homelessness or ameliorating the effects of homelessness in cooperation with housing programs (Baker et al., 2010).

TANF policies also created and enhanced multiple obstacles for African American women whose experiences with TANF are frequently influenced by multiple intersecting socially constructed identities defined by race, gender, and poverty. TANF stigma (Stuber & Kronebusch, 2004) united women's stories and perceptions of TANF but was experienced uniquely by African American women. While all women articulated their perceptions and experiences of negative associations with receiving TANF, African American women and their partners were particularly distressed by the racialized nature and narratives associated with TANF receipt (Hancock, 2004). Indeed, TANF systems have been found to disproportionately sanction African Americans (Lee & Yoon, 2012; Monnat, 2010), provide fewer cash benefits to African Americans living in states with higher Black populations (Parolin, 2019), and leave African American families living with significant economic hardship (Safawi & Floyd, 2020). The barriers to TANF participation described by women in this study have been found to be particularly relevant for African American women whose experience of redlining into neighborhoods of concentrated disadvantage have led to decreased access to the informal and formal supports that make participation in TANF possible (Bailey et al., 2017; Decker et al., 2019; Drake & Rank, 2009; Gillum, 2019; Western & Pettit, 2005). Further, women in this study expressed trepidation in involving the court system in their family's affairs. In other studies, involvement in the court system can be particularly daunting for African American women, who often lack the economic support to cut ties with the father of their child, but whose experiences with the police and justice systems leave them and their families worse off (Decker et al., 2019; Gillum, 2019). In member-checking events, participants suggested that the TANF

system as being particularly disadvantageous for Black families because they place stress on relationships that are already stressed by multiple systems. Given that TANF primarily serves custodial parents and their children, women primarily bear the brunt of systems that are not structurally designed to recognize women's multidimensional characteristics and provide them with appropriate services (Kulkarni, 2019).

Strengths & Limitations

The strengths of this study include the incorporation of perspectives from a geographically diverse sample of women with multiple direct experiences of TANF policies. Our community-engaged approach in which the community-based partners were involved in study protocol design, interview guide development, referrals, and sense-making of study results helped us ask meaningful and contextually-relevant questions in a sensitive manner. Further, our use of independent double coding data analysis and member-checking supports the validity of our findings. Our study's limitations include the use of purposive sampling among populations that are located in cities and already connected to formal supports, potentially limiting the transferability of findings.

Conclusions

Women's experiences of TANF created opportunities for the relief of psychological stress and economic pressure but these benefits often failed to materialize owing to TANF conditions. Women's experiences differed significantly based on the interaction of TANF policies and women's multiple, intersecting social identities related to IPV experience, poverty, marital status and race. In particular, IPV survivors faced structural discrimination in TANF's conditions despite widespread adoption of the FVO and IPV survivor-focused protections. Notably, no efforts have been officially developed to address TANF's contribution to structural

racism identified in this and other studies. Increasing cash benefits, decreasing financial penalties associated with initial noncompliance, and making child support petitions an opt-in feature of TANF would be important first steps in increasing equitable access to a program that has great potential to reduce the economic, emotional, and physical costs associated with poverty, stigma, and violence.

Chapter 5: Conclusion

Authors:

Rachael A. Spencer

Overall, our studies suggest that Temporary Assistance for Needy Families (TANF) affects family wellbeing but could be designed to better support women and families and reduce violence. In its current structure, TANF has the greatest potential to reduce child maltreatment, but conditionality, stigma, and low levels of cash benefits reduce its effectiveness as a prevention program. Although it remains plausible that more generous TANF policies could benefit African Americans to a greater extent by buffering against the effects of structural racism and individual biases, we found little evidence to support this hypothesis in our studies. Underscoring this point, we identified multiple aspects of structural discrimination inherent in TANF policies that created significant obstacles for stigmatized groups, forcing them to make extraordinary efforts to access TANF and support their families. The sum of our studies not only reflect upon the role of TANF in women's wellbeing, but also highlight the wider political, economic and social systems in which TANF operates and intersects. Through our research, we have identified ways in which TANF could be reoriented to build upon the strengths of families experiencing poverty not just to increase employment, but also independence, family wellbeing, and violence reduction.

The totality of our research indicates that TANF provides women experiencing poverty with important resources, but often does little to enhance women's overall wellbeing. In Chapter 2, our study of women's wellbeing in the Fragile Families and Child Wellbeing (FFCW) cohort suggested that women most likely to be affected by TANF policies (women with \leq high school

education) benefited little in terms of psychological and economic wellbeing and protection from IPV when exposed to more generous TANF policies. Our null findings may be due, in large part, to the fact that TANF cash benefits leave families experiencing poverty (Floyd, 2020; Safawi & Floyd, 2020), which is associated with psychological stress, economic pressure, parenting stress, and IPV experience (Adler & Newman, 2002; Capaldi et al., 2012; van IJzendoorn et al., 2020). Indeed, empirical evidence is equivocal on the effect of TANF as a poverty alleviation program (National Academies of Sciences, 2019). However, in the same study we found that a refundable Earned Income Tax Credit (EITC), a cash transfer program with fewer conditions, was protective against IPV experience, suggesting that TANF conditionality may also play an important role in the null results. Our Chapter 4 study of women with prior or current TANF experience found that TANF stigma, low TANF cash benefits, and TANF conditions negatively affected women's economic and psychological wellbeing and created conflict with partners, echoing earlier studies (Lindhorst & Mancoske, 2006; Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006; Tolman & Raphael, 2000; Tolman & Rosen, 2001). Women whose experiences are associated with stigma, including IPV survivors and women with poor mental health, have long been poorly served by TANF and its work-first, time-limited approach, which has contributed to widening inequalities (An & Choi, 2019; Corcoran et al., 2004; Davis, 2018; Holmes et al., 2020; Lindhorst & Mancoske, 2006; Thomas et al., 2017). Among the conditions most likely to impede women's access to TANF are requirements around cooperation with child support enforcement and the limited amount of money "passed through" from child support (An & Choi, 2019). Together, our two studies of TANF's effect on women's wellbeing suggests that the benefits women receive from TANF are negated by its conditions, with women experiencing stigma more likely to be negatively affected by stringent TANF conditions.

In its current form, TANF may have the greatest protective effect against self-reported child maltreatment, largely by increasing custodial parents' access to resources. In Chapter 3, our study of TANF and child maltreatment using data from the FFCW cohort revealed that increasing family per capita income (a \$100 increase in TANF cash benefits per month) and access to TANF operationalized as a higher TANF to Poverty Ratio were associated with a decrease in self-reported physical child maltreatment among those most likely to be affected by TANF. In that same study, we found that, compared to no time limits or benefit reduction limits only, exposure to periodic and/or lifetime limits were associated with an increase in self-reported physical maltreatment. While we did not explore issues around child maltreatment in our qualitative Chapter 4 study, women's perspectives articulated in that study can be used to offer insights into these relationships. Women in our qualitative study allocated most of their TANF monies to pay for children's expenses, which may have translated to improved relationships with children and reduced conflict over resources that contribute to child maltreatment (Belsky, 1993). Additionally, many women described their experiences of being involuntarily separated from TANF due to time limits as psychologically stressful and resulting in increased economic pressure. Extant literature generally suggests that an abrupt loss of income, such as experiencing a lifetime limit, is a primary predictor of child welfare involvement (Conrad-Hiebner & Byram, 2020; van IJzendoorn et al., 2020). Further, the loss of TANF income via time limits may be particularly burdensome because families that experience time limits often have significant barriers to employment (Lindhorst & Mancoske, 2006; L. A. Pavetti & J. Kauff, 2006) and experience economic hardship, unemployment, and underemployment after reaching time limits (Farrell et al., 2008; Hetling et al., 2006b). Given the costs associated with child maltreatment in both economic and human terms (U.S. Department of Health & Human Services et al., 2020),

sufficient resources should be allocated to support families while receiving TANF and to prevent families from falling off the economic cliff associated with time limits.

The results of our studies did not bear out our hypothesis that more generous TANF policies would benefit African American families more than White families, potentially by buffering the impact of structural racism and individual biases. The study presented in Chapter 2 demonstrated a reduced experience of IPV coercion among African American women compared to White women when TANF benefits were more accessible. The study results presented in Chapter 3 demonstrated no differential effects of TANF policies on self-reported child maltreatment across White and African American mothers. The reasons for these results are clearly complex, likely founded on multiple, intersecting explanations that deserve further study. First, it might be reasonable to find no differences in TANF policies on violence outcomes across race, given that families receiving TANF remain in poverty and, after accounting for income and material factors, higher rates of family violence among African Americans compared to Whites are significantly attenuated, or even reverse (Cheng & Lo, 2013; Dettlaff et al., 2011; Kim & Drake, 2017, 2018; Pelton, 2015; Putnam-Hornstein et al., 2013; Wulczyn et al., 2013). Second, the benefits of TANF may be undermined by the individual, interpersonal, and social stigma attached with TANF receipt and the long history of racialized narratives around TANF receipt and the “Welfare Queen,” (Hancock, 2004; Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006). Third, rooted in structural racism (Bailey et al., 2017; Wildeman & Wang, 2017), African Americans are more likely to experience identities that are stigmatized, including IPV survivors (Overstreet & Quinn, 2013), and face structural discrimination that presents significant barriers to TANF access and benefits (Thomas et al., 2017). Fourth, increasing the generosity of certain TANF policies does little to help African Americans overcome the wider system of structural

racism (Bailey et al., 2017) in which TANF has been implicated (Parolin, 2019; Safawi & Floyd, 2020). Without an intentional focus on equity, TANF policies likely will continue to contribute to disparities that African Americans face in terms of intersecting issues of poverty and violence.

Lessons Learned & Policy Recommendations

Our studies suggest multiple ways in which TANF can be adjusted to achieve its social aims while simultaneously reducing violence to improve family wellbeing. Increasing cash benefits that TANF recipients may earn, through child support pass-throughs and earnings disregards and allowing families to keep more assets in reserves to buffer against the effects of negative financial events could have an immediate and overall positive impact on families' wellbeing, born out in studies of unconditional cash transfers (Buller et al., 2018; Gibbs et al., 2017). In particular, increasing child support pass throughs may not only address family violence associated with poverty, but also improve co-parenting and willingness of non-custodial parents to engage in child support payments (Cancian et al., 2008; Cancian et al., 2013; Miller et al., 2005; National Conference of State Legislatures, 2020). Raising the amount of money that TANF recipients may earn has been identified as an important step towards equity as studies suggest TANF environments are less likely to provide generous cash benefits in states with higher African American populations (Parolin, 2019; Safawi & Floyd, 2020). Policy makers should explore ways in which TANF conditions can be lessened in order to promote TANF's social goals. For example, adopting solely state funded programs that provide continued support to families who reach time limits or are otherwise "hard to employ" could not only reduce child maltreatment, but may also be a way to effectively and efficiently spend state monies towards TANF priority areas (Parrott & Schott, 2009).

In the development of policies for families experiencing poverty moving forward, our studies and others (Buller et al., 2018; Gibbs et al., 2017; National Academies of Sciences, 2019) suggest that cash transfer programs with fewer conditions than TANF could reduce the number of families experiencing poverty related violence. Conditions appear to widen and cement inequalities (Davis, 2018; Venkataramani et al., 2020) and families who experience them often have few assets upon which to rely (Farrell et al., 2008; Hamilton et al., 2019; Lindhorst & Mancoske, 2006; Morris & Hendra, 2009; Narain & Ettner, 2017; Ratcliffe et al., 2016). Policy makers should strongly reconsider existing policies and future efforts to place work requirements and other conditions on programs that provide basic necessities, such as Medicaid and Supplemental Nutrition Assistance Program (SNAP or Food Stamps) (Katch et al., 2018; Ku et al., 2019; Wagner & Schubel, 2020). Currently, there are two competing cash transfer plans for families in response to the economic downturn related to the COVID-19 pandemic (Luscombe, 2021; Marr et al., 2021). The first, proposed by President Joseph Biden and supported by the U.S. House of Representatives, would shore up TANF and EITC benefits and make the Child Tax Credit refundable, increase its value, and spread payments throughout the year. The second plan proposed by Senator Romney of Utah would provide direct cash payments to parents but reduce eligibility for SNAP benefits and decrease both TANF and EITC. Both plans have the potential for violence reduction in that they provide monthly rather than lump sum cash benefits, which reduce economic stress and have the potential to reduce intimate partner violence (Hsu, 2017), increase cash benefits to those experiencing deep poverty, and may disproportionately benefit communities of color (Marr et al., 2021). While the future of TANF remains unclear, the need for public policy action to improve family wellbeing through investment in job training and

educational opportunities for adults, quality care for children, and a social safety net remains (Venkataramani et al., 2020).

Recommendations for Future Studies

With regard to future studies of the relationship between TANF and family violence, we find that the Family Stress Model (Conger et al., 2000a; Masarik & Conger, 2017) provides a useful framework for evaluating TANF's effects on wellbeing and family violence, however, our Chapter 4 study highlights several other constructs that deserve attention. Women frequently discussed stigma attached to TANF receipt (Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006; Whittle et al., 2017), which may moderate the relationship between TANF and women's psychological wellbeing. Exploring the role of women's support structures, defined in social and instrumental terms (Langford et al., 1997), may be important to understanding the differential effect of TANF on stigmatized groups (Mistry et al., 2008). Our Chapter 4 study indicated that women often have to put together a patchwork of supports just to survive and recent studies suggest that social support may be especially important for African American women who are experiencing TANF (Holmes et al., 2020). Since TANF is a program designed to engage participants in work in exchange for cash benefits, recipients and their partners beliefs around gender roles may be important moderating factors in the relationship between TANF and women's wellbeing and experience of IPV (Atkinson et al., 2005).

Our focus on TANF also enabled us to gain insight general approaches for studying programs that serve families experiencing poverty. First, while program policies are important measures of generosity, implementation measures are equally relevant (Komro et al., 2014). For example, participants in our study found that knowing their caseworker and building rapport enabled them to have greater access to TANF. Future studies should incorporate measures of

implementation that give meaning to policy generosity, such as the ratio of TANF participants per caseworker. Second, TANF is one of many systems with which families experiencing poverty interact (e.g., Supplemental Nutrition Assistance Program (SNAP), Women, Infants, and Children (WIC), Medicaid). Future studies should scrutinize how increasing generosity in one program affects receipt of benefits from another and the associated trade-offs in family health and wellbeing with these allocations of resources (Hendren & Sprung-Keyser, 2020; Nguyen, 2018). While our studies and others have taken important first steps toward understanding the effects of both structural racism and discrimination within and external to TANF, greater effort should be invested to use novel measures of structural level discrimination (Bailey et al., 2017; Groos et al., 2018; Parolin, 2019; Venkataramani et al., 2020). Efforts to understand the structural nature of the problem not only provide insights into structural changes that can be used to enhance access, but also increase dominant group support for structural change (Dirth & Branscombe, 2017).

Conclusion

In sum, TANF, a 25-year old conditional cash transfer program, remains an important, but flawed program for families experiencing poverty. Our studies highlight the many ways in which TANF influences wellbeing but underperforms as a violence prevention intervention owing to the multiple conditions imposed upon recipients. Reevaluating and reorienting this program to build upon the strengths of families as they are currently structured is not only important for making TANF an efficient program, but also one that is equitable and effective for those experiencing the intersection of poverty and violence.

APPENDICES

Appendix A. Demographic Characteristics of FFCW Participants by Education Status

	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	≤HS (n=3179)	>HS (n=1713)	≤HS (n=2802)	>HS (n=1557)	≤HS (n=2704)	>HS (n=1522)	≤HS (n=2667)	>HS (n=1467)	≤HS (n=2251)	>HS (n=1261)
Age, mean (SD)	23.82 (5.58)	25.25 (6.10)	24.92 (5.57)	29.14 (5.94)	26.70 (5.57)	30.89 (5.97)	28.84 (5.59)	32.97 (5.92)	32.98 (5.54)	37.05 (5.93)
Race, % (n)										
White	458	572	410	535	400	522	377	496	327	428
Black	1613	711	1436	640	1404	629	1399	621	1208	544
Hispanic	1022	312	885	281	829	272	825	263	659	218
Other	79	114	66	97	64	95	60	84	52	69
12-month household income (\$), mean (SD)	22386 (21562)	49882 (38647)	21171 (21409)	51589 (46302)	22726 (22394)	58601 (60643)	24508 (23491)	61230 (59630)	30087 (26008)	71635 (68425)

	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	≤HS (n=3179)	>HS (n=1713)	≤HS (n=2802)	>HS (n=1557)	≤HS (n=2704)	>HS (n=1522)	≤HS (n=2667)	>HS (n=1467)	≤HS (n=2251)	>HS (n=1261)
TANF receipt within past 12 months, n (%)	n/a	n/a	32 (903)	12 (180)	29 (781)	9 (136)	25 (661)	8 (119)	18 (394)	6 (70)
IPV – Physical, % (n)	n/a	n/a	2 (44)	1 (19)	2 (41)	1 (15)	2 (40)	<1 (7)	1 (29)	<1 (9)
IPV – Coercion, % (n)	n/a	n/a	15 (414)	11 (174)	13 (345)	10 (151)	11 (303)	9 (132)	8 (177)	9 (100)
Economic Hardship, mean (SD)	n/a	n/a	1.17 (1.57)	0.93 (1.47)	1.65 (1.89)	1.21 (1.74)	1.28 (1.67)	1.05 (1.57)	1.62 (1.82)	1.12 (1.64)
Depression Meets Conservative Criteria	n/a	n/a	13 (353)	11 (177)	15 (411)	13 (193)	12 (317)	12 (168)	14 (313)	9 (116)

	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	≤HS (n=3179)	>HS (n=1713)	≤HS (n=2802)	>HS (n=1557)	≤HS (n=2704)	>HS (n=1522)	≤HS (n=2667)	>HS (n=1467)	≤HS (n=2251)	>HS (n=1261)
Participated in Primary Caregiver Survey	n/a	n/a	n/a	n/a	74 (2005)	74 (1120)	69 (1850)	71 (1039)	92 (2074)	97 (1222)
Child Physical Abuse, n (%)	n/a	n/a	n/a	n/a	84 (1688)	82 (922)	79 (1466)	79 (824)	58 (1200)	54(660)
Child Psychological Abuse, n (%)	n/a	n/a	n/a	n/a	94 (1876)	94 (1053)	94 (1744)	95 (986)	84 (1740)	83 (1020)
Child Neglect, n (%)	n/a	n/a	n/a	n/a	13 (264)	9 (96)	12 (228)	10 (100)	22 (446)	19 (237)

Number of FFCW Participants in Each Wave by Treatment Status and State

State	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	≤HS	>HS	≤HS	>HS	≤HS	>HS	≤HS	>HS	≤HS	>HS
California	483	169	394	153	371	146	356	130	306	111
Florida	60	40	66	39	69	42	66	42	63	37
Illinois	97	58	89	50	84	50	81	52	61	36
Indiana	201	122	179	115	168	110	163	112	145	106
Maryland	223	115	190	106	188	99	199	95	164	82
Massachusetts	53	46	48	42	37	37	41	31	40	30
Michigan	221	117	191	98	185	96	183	89	160	85
New Jersey	249	114	204	104	192	108	179	101	129	81
New York	207	171	171	137	152	126	136	114	87	74
Ohio	54	38	52	35	56	33	56	35	49	25
Pennsylvania	264	155	236	133	219	133	238	136	210	110
Tennessee	49	48	45	45	44	42	39	39	42	36
Texas	504	249	442	234	421	221	405	218	337	191
Virginia	287	134	248	117	246	102	240	99	219	84
Wisconsin	217	121	206	114	198	112	179	97	146	79

Appendix B. State TANF Policy Changes Over Time

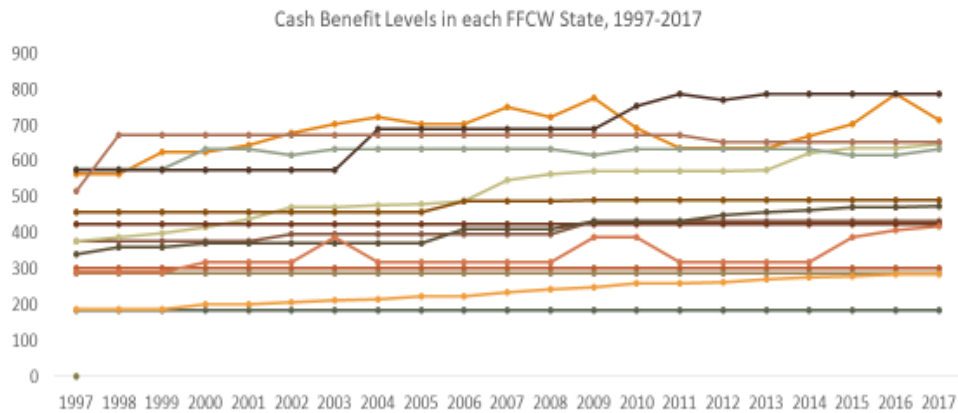
TANF Policy Changes Across FFCW States 2001-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maximum Cash Benefit*	CA	MD IL	CA NY	CA	OH	MD MI	CA	IL	CA OH	NY
Time Limits	MD	IN					MI			
Initial Sanctions			IN TX					NJ		
Worst Sanctions			IN TX							
Diversion					PA		MI TN			
Family Caps				IL				MD		

FFCWS States: California (CA), Texas (TX), Maryland (MD), Michigan (MI), New Jersey (NJ), Pennsylvania (PA), Virginia (VA), Indiana (IN), Wisconsin (WI), New York (NY), Massachusetts (MA), Tennessee (TN), Illinois (IL), Florida (FL), Ohio (OH)

* Indicates a maximum cash benefit change of \$20 or more

Cash Benefits (Actual \$)

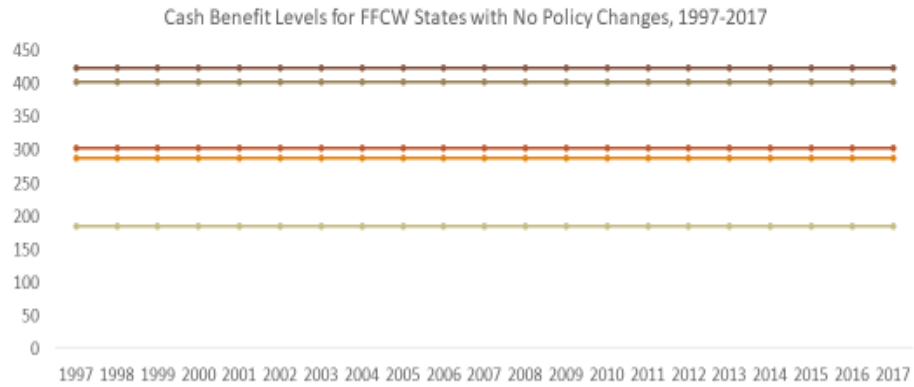


Between State Variations

	1997	2010	2017	Notes
Actual Benefits, Mean (SD)	392 (130)	462 (171)	476.2 (177)	
Lowest Cash Benefits Amount	185	185	185	Tennessee in 1997, 2010, 2010, and 2017
Highest Cash Benefits Amount	579	753	789	Massachusetts in 1997; New York In 2010 and 2017

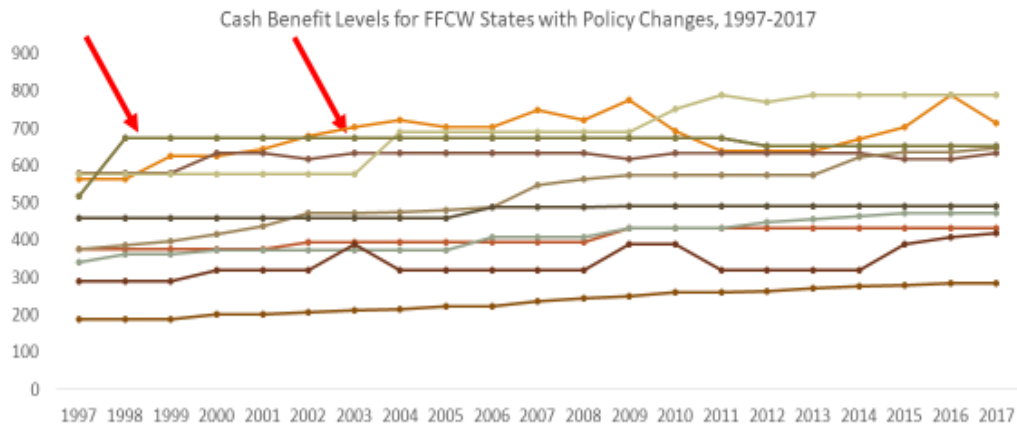
Actual Benefits Stagnant

FL, IN, NJ, PA, TN

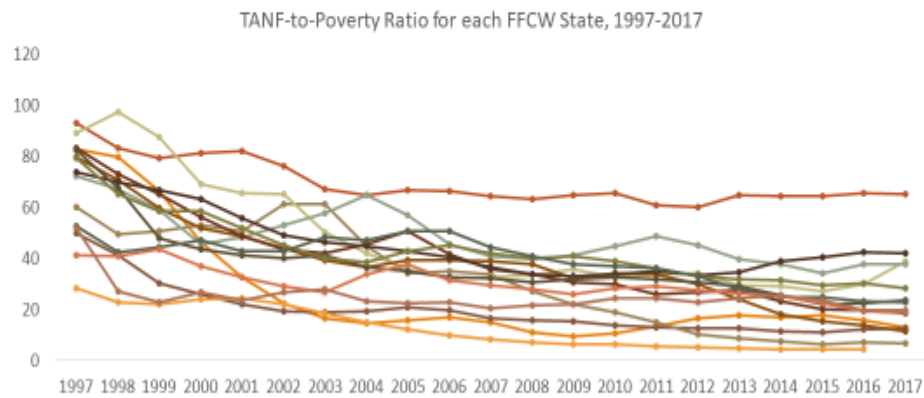


Actual Benefits Changes

CA, IL, MA, MD, NY, OH, TX, WI, VA, MI



TANF-to-Poverty Ratio



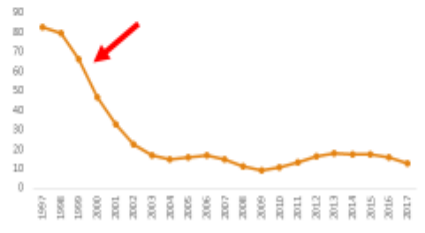
Between State Variations

	1997	2003	2010	2017	Notes
Average TANF to Poverty Ratio (SD)	69 (18)	41 (15)	30 (14)	24 (16)	
Lowest Ratio	37	16	6	4	1997 - Texas 2003 - Illinois 2010 - Texas 2017 - Texas
Highest Ratio	93	67	66	65	1997, 2003, 2010, 2017 - California

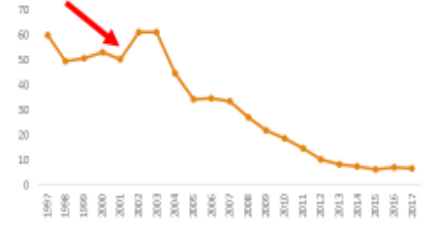
Within State Variations

	1997	2003	2010	2017	Notes
Biggest Change Over Time	83	17	11	13	Illinois
Smallest Change Over Time	41	27	29	19	Virginia

Illinois TANF-to-Poverty Ratio - Biggest Single Drop in One Year



Indiana TANF-to-Poverty Ratio - Single Biggest Increase in One Year



Appendix C. Recruitment Flyer and Recruitment Script

Participants Needed in a Research Study:

Temporary Assistance for Needy Families (TANF) and Women's Well-being

We are seeking to conduct confidential interviews with women who identify as White or Black/African American regarding their experiences with Temporary Assistance for Needy Families (also known as welfare, public assistance or cash assistance).

Women may be eligible for an interview if they meet the following criteria:

- 1) Adult (18+ years of age)
- 2) Identify as White or African American/Black
- 3) Have had contact with TANF in the past 12 months (applied for TANF, received TANF, or had issues with a TANF case for themselves and/or their child);
- 4) Have access to a safe location and a telephone to participate in a 1-1.5 hour-long interview.

Our study seeks to develop a deeper understanding of how women experience TANF and how these experiences with TANF affect women's well-being and their relationships. We also seek to explore explicitly how experiences differ among women by race.

Participation involves speaking over the phone or zoom with a trained interviewer from Emory University for about an hour and a half. Participants will receive a \$50 gift card for their participation.

Participants may be referred to the study using the following link:

<https://redcap.emory.edu/surveys/?s=KNJE48PFAK>

Please contact Rachael Spencer at 718-503-1376 or raspencer@emory.edu for more information.



Recruitment Script:

You are being asked to participate in a study looking at how women's experiences with Temporary Assistance for Needy Families (TANF also known as welfare) affect women's well-being, economic situation, and relationships with their intimate partners. This study is being conducted by a researcher at Emory University in coordination with [Operation Breakthrough /the Mayor's Office to ENDGBV].

You may choose not to participate in this study at any time. Your relationship with [Operation Breakthrough/the Family Justice Center] will not change in any way as a result of your decision whether to participate.

If you want to be part of this study, you will be asked to speak with the researcher in a phone or Zoom call and participate in an exercise creating a calendar of important dates and events in the past year and an interview. Using a calendar, you will identify important dates and events such as experiences with TANF and employment that occur within the past year. During the interview, we will use this calendar to explore your experiences with TANF and how these experiences impact your well-being and relationships with important people in your life. The calendar exercise will last about 15 minutes and the interview will last a little more than 1 hour. A trained Emory research team member will conduct both the calendar exercise and interview. You will also be asked some questions about yourself, like your age range, race etc. The interview will be recorded and only the research team will have access to the audio recording.

The study results will not benefit you personally but will help people understand how experiences with TANF affect women's well-being. If you complete all of the study activities, you will receive a \$50 Target or Walmart gift card.

The person who is interviewing is a researcher from Emory University who is a mandatory reporter of violence. This means that the information that you share with her will be confidential with the exception of ongoing or current:

- 1) Harm to a child, like if a child were in an ongoing or current physically abusive situation or neglectful situation;
- 2) Ongoing or current harm to yourself, like if you had a plan to cause physical harm to yourself;
- 3) Ongoing or current harm to another person, like if you had a plan to cause someone else physical harm.

If you reveal any of these three things, she will follow the [Operation Breakthrough/Family Justice Center] protocol and notify the staff there and any other authorities as necessary. Otherwise, everything that you share with her is anonymous and confidential.

Do you have any questions?

Can you describe, in your own words, what you are being asked to do?

What would happen if you decided not to participate?

What topics or issues would the researcher be required to tell your advocate about?

Appendix D. REDCap Form for Sharing Contact Information

TANF and Women's Well-being Research Study Referrals

This form enables you, as an advocate working as part of the Family Justice Center team, to refer a participant to the TANF and Women's Well-being research study conducted by Rachael Spencer, a PhD Candidate at Emory University. Please fill in the information below about yourself and the participant who may be eligible for the study. You may refer multiple participants for the study. If you have any questions, please contact Rachael Spencer at 718-503-1376. Thank you!

Thank you for considering referring to the TANF and Women's Well-being Study.

To assist with your referral, please use the recruitment flyer and script to contact the participant and confirm that she is interested in participating in the study.

Has the participant agreed to be contacted by the research team for this study? Yes No

Agency Name _____

Advocate Name (first and last) _____

Advocate Telephone Number _____

Advocate Email Address _____

Advocate Preferred Method of Contact (select all that apply) Email Telephone

PARTICIPANT/CLIENT INFORMATION

Participant First Name ONLY:

* must provide value

First name only, please

Approximately how old is the participant?

 ▾

Has participant had contact with Temporary Assistance for Needy Families (TANF or welfare) within the past 12 months? By contact, we mean attempted to apply or applied for TANF, opened a TANF case, received TANF benefits, or had issues with her TANF case).

- Yes
 No
 I don't know

[reset](#)

Is this participant a survivor of intimate partner violence (IPV)?

- Yes
 No

[reset](#)

What race(s) does the participant identify as? (select all that apply)

- Black or African American
 White
 Other
 I don't know

Methods that researcher can use to contact participant (Select all that apply):

* must provide value

- Telephone
 Email

Has participant had contact with Temporary Assistance for Needy Families (TANF or welfare) within the past 12 months? By contact, we mean attempted to apply or applied for TANF, opened a TANF case, received TANF benefits, or had issues with her TANF case).

- Yes
 No
 I don't know

[reset](#)

Is this participant a survivor of intimate partner violence (IPV)?

- Yes
 No

[reset](#)

What race(s) does the participant identify as? (select all that apply)

- Black or African American
 White
 Other
 I don't know

Methods that researcher can use to contact participant (Select all that apply):

* must provide value

- Telephone
 Email

Please write here anything else you would like the researcher to know about the participant or your referral. If you need to contact the research team, please call Rachael Spencer at 718-503-1376.

Appendix E. Informed Consent Form

Emory University

Oral Consent Script

For a Research Study

Study Title: Temporary Assistance for Needy Families (TANF) and Women's Well-being

IRB #: IRB00117946

Principal Investigator: Rachael Spencer, Behavioral, Social, and Health Education Sciences

Funding Source: Emory University Laney Professional Development Funds

Introduction and Study Overview

Thank you for your interest in our women's well-being research study. We would like to tell you everything you need to think about before you decide whether or not to join the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study.

The purpose of this study is to explore women's experiences with Temporary Assistance for Needy Families (TANF; also known as Welfare or cash assistance) and how these experiences affect women's well-being and relationships. The study is funded by Emory University Laney Graduate School Professional Development Funds. This study will take about 1.5 hours to complete.

If you join, you will be asked to complete a calendar of important dates and events within the past year and participate in an interview. Using a calendar, you will identify important dates and events such as experiences with TANF and employment that occur within the past year. During the interview, we will use this calendar to explore your experiences with TANF and how these

experiences impact your well-being and relationships with important people in your life. The calendar exercise will last about 15 minutes and the interview will last a little more than 1 hour. A trained Emory research team member will conduct both the calendar exercise and interview. The interviewer will keep a copy of the completed calendar for analysis and interviews will be digitally recorded and audio files transcribed.

We will also ask you a few questions including your age, racial background, and level of education.

There may be some risks to participants in this study. The researcher who will be interviewing you is a mandated reporter of current or ongoing child maltreatment, risks of harm to self or risks of harm to others. If you reveal this information, the researcher is required to share the information with your support staff advocate and contact the appropriate authorities.

The qualitative interview questions may make some participants feel uncomfortable or distressed. Your participation is voluntary and you may skip any questions or stop participating at any time. A breach of confidentiality, or the release of information that you provide for the study, is a potential risk.

This study is not designed to benefit you directly. If you are in the study, you will be helping the researchers learn more about the experiences that women have with TANF as well as how these experiences relate to women's well-being and relationships.

For your time and effort, you will get a \$50 Target gift card for your participation in this study.

We will only compensate you if you participate in all study activities.

Study records can be opened by court order. They also may be provided in response to a subpoena or a request for the production of documents. Certain offices and people other than the researchers may look at study records. Government agencies and Emory employees overseeing

proper study conduct may look at your study records. These offices include the Emory Institutional Review Board and the Emory Office of Research Compliance. Study funders may also look at your study records. Emory will keep any research records we create private to the extent we are required to do so by law. A study number rather than your name will be used on study records wherever possible. Your name and other facts that might point to you will not appear when we present this study or publish its results.

We will disclose your information when required to do so by law in the case of reporting child abuse or elder abuse.

De-identified data from this study (data that has been stripped of all information that can identify you), may be placed into public databases where, in addition to having no direct identifiers, researchers will need to sign data use agreements before accessing the data. We will remove or code any personal information that could identify you before your information is shared. This will ensure that, by current scientific standards and known methods, it is extremely unlikely that anyone would be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

Your data from this study may be useful for other research being done by investigators at Emory or elsewhere. To help further science, we may provide your deidentified data to other researchers. If we do, we will not include any information that could identify you. If your data or specimens are labeled with your study ID, we will not allow the other investigators to link that ID to your identifiable information.

Once the study has been completed, we will send you a summary of all of the results of the study and what they mean. We will not send you your individual results from this study.

You have the right to leave a study at any time without penalty.

The researchers also have the right to stop your participation in this study without your consent for any reason, especially if they believe it is in your best interest or if you were to object to any future changes that may be made in the study plan.

Contact Information

If you have questions about this study, your part in it, or if you have questions, or concerns about the research you may contact the following: Rachael Spencer, Principal Investigator, Telephone Number 718-503-1376

If you have questions about your rights as research participant, complaints about the research or an issue you rather discuss with someone outside the research team, contact the Emory Institutional Review Board at 404-712-0720 or toll-free at 877-503-9797 or by email at irb@emory.edu.

Consent

Do you have any questions about anything I just said? Were there any parts that seemed unclear?

Would you describe in your own words what you are being asked to do?

What would happen if you decided to stop the interview?

How would you let me know if didn't want to answer a question?

Do you agree to take part in the study?

Participant agrees to participate: Yes No

If Yes:

Name of Participant

Signature of Person Conducting Informed Consent Discussion Date Time

Name of Person Conducting Informed Consent Discussion

Appendix G. Qualitative Interview Guide

TANF and Women's Well-being: Qualitative Interview Guide

Introduction: XXX suggested that I contact you because you may be interested in participating in a study regarding women's experience with Temporary Assistance for Needy Families (TANF) also known as welfare. The goal of this study is to understand how women who experience violence also experience TANF. You are being asked to participate in this study because you have received TANF in the past 12 months and you have insight into how TANF affects the well-being of women who experience violence.

This interview will last approximately 1 hour to 1.5 hours and will be conducted in English. With your permission, this interview will be recorded and transcribed. The information that you provide will remain anonymous and, if any documents are published, we will refer to you by a first name different from your own that we will assign to you. Your participation in this study is entirely voluntary and you can end the conversation at any point. Thank you very much for your time and considering participating in this study.

Do you have any questions? Do you agree to participate in this interview? Do I have your permission to record our interview?

Interview Questions

NOTE: Not all questions will be asked during every interview – the landmarking exercise will guide whether and which questions will be asked of each participant.

1. Could you tell me a little bit about your family?
2. How would you describe your family's financial health? Probe: How does your income compare to your expenses?

3. I understand you've had experiences with TANF in the last year. Why did you apply for TANF? (Probe: shelter requirement, housing)
4. How did you find out how to apply for TANF?
5. Now, I want to talk about your experiences with TANF more specifically. Would you please use this piece of paper to make a timeline of your experiences with TANF and with employment? For each row, please put a check mark in the month where the event occurred.
 - a. To help guide you with this document, I want to walk you through the form and help us come to a common understanding of some terms:
 - i. The first few rows ask about your birthday, favorite holiday, and employment history just to help you remember what happened last year. For employment history, please indicate all of the months in which you were employed for cash at least 2 weeks in the month.
 - ii. The next row asks about if and when you applied for child support in the last year.
 - iii. The next row asks about the months in which you were in an relationship with an intimate partner, like a boyfriend, girlfriend or spouse.
 - iv. The next row asks about any and all of the times that you applied for TANF, even if your application was not accepted. For example, if you applied for TANF in December 2019 then put a check in that box.
 - v. For the next row, please indicate all of the months in the year 2019 that you received TANF cash benefits for yourself and/or your children. If you were ever dropped from or added to the case, please indicate that in the bottom row.
 - vi. Telling your caseworker that you experienced violence from your partner could be informal, like you just mentioned it to your caseworker, or more formal in which he/she documented your experience for the record.

vii. A work requirement is a daily activity that TANF requires an adult TANF recipient to participate in and this could be paid or unpaid work in exchange for TANF benefits.

viii. A sanction is a TANF policy that reduces cash benefits or cuts off benefits when a TANF recipient does not participate in TANF requirements. For example, a person receiving TANF does not attend a case meeting or does not participate in a work activity required by TANF and so his/her benefits are reduced by a certain amount or terminated.

ix. In the final row, please indicate any other important TANF events that occurred in the year that you'd like me to know about.

6. Using this timeline as a guide, I'd like to ask you about your experiences with TANF and how they affected your emotional well-being, your economic well-being, and your relationship with your partner.

*****ASKED ONLY BASED ON LANDMARKING EXERCISE RESPONSES*****

a. I see that you had an intimate partner during the last year. In just a few words, what was your relationship like with this person?

i. Do you have children with this person?

b. I see that you didn't have a partner during the last year. When was the last time you had a partner? Probe: In just a few words, what was your relationship like with this person?

i. Do you have children with this person?

c. I see that you applied for child support.

i. Could you help me understand why you applied for child support at that time? Probe: TANF requirement.

1. How did this application affect your ability to pay for things you need?

2. Your stress level?

3. Relationship with partner? Interactions with partner? Feelings of safety?

d. I see that you experienced a sanction.

i. Could you describe for me why you were sanctioned?

ii. How did you find out that you were sanctioned?

iii. How did that sanction affect your ability to pay for things that you need? By things you need, I mean things like your transportation or groceries.

1. How did the sanction affect your housing situation?

iv. Can you describe how experiencing a sanction affected your mood or stress level?

v. How did experiencing a sanction affect your relationship with your partner? Probes: Your interactions with him or her? How did it affect the way you thought about him or her? The way that you felt about your own safety?

vi. What did you have to do to resolve the sanction?

vii. How long did the sanction last?

e. I see that you didn't experience a sanction.

i. What is your understanding of why someone might be sanctioned? Probe: What happens when a person receives a sanction?

ii. How did you come to this understanding?

1. How did knowing this about sanctions affect your mood or stress level?

2. How did knowing this about sanctions affect your relationship with your partner? Your interactions with your partner? The way you felt about your own safety?

iii. Were you ever concerned that you might experience a sanction? Why?

f. I see that you stopped receiving TANF at some point in the year.

i. Why did you stop receiving TANF? Probe: To what extent was it your choice to stop receiving TANF?

1. To what extent, if at all, was the end of your benefits related to housing?
2. Child support?
3. Ability to qualify for other benefits?

ii. How did the end of TANF benefits affect your ability to buy items that you need like transportation or groceries?

1. Affect your housing situation?

iii. Your mood or stress level?

iv. Relationship with partner? Interactions with partner? Feelings of safety?

v. How did you earn income after TANF ended?

1. How did this change affect your ability to pay for things you need?
2. Your stress level?
3. Relationship with partner? Interactions with partner? Feelings of safety?

*****END OF LANDMARKING EXERCISE BASED QUESTIONS*****

a. Would you please share how you budgeted with your TANF benefits? Probe: What expenses did the benefits cover? What, if anything, did the TANF cash benefits not cover?

- a. How did receiving TANF cash benefits affect your mood or stress level?
- b. Relationship with partner? Interactions with partner? Feelings of safety?
- c. What other types of income helped you cover your expenses (Probe: SSI, Unemployment, Child Support, SSD, EITC).

i. How would you use these types of income to pay your expenses?

- b. What is your understanding of how long a person can receive TANF in this state?

- a. How did you come to this understanding?
- b. How did knowing this affect your mood or stress level?
- c. How did knowing this about time limits affect your relationship with your partner?

Interactions with this person? Feelings of safety?

- c. What was your relationship with your TANF primary caseworker like? By “primary” I mean the caseworker with whom you spent the most time.

- a. What do you think motivated his/her decisions about your family’s TANF case? Probe: Why do you think he/she made the decisions about your case that he/she did?

- d. Would you please describe your most memorable interaction with TANF?

vi. How did this affect your ability to pay your bills or buy important items?

vii. How did this affect your stress level or mood?

viii. How did this affect your relationship with your partner? Your feelings of safety?

- e. If there was a time when you thought you might be eligible for TANF benefits again, what would you do? Why?

- f. Thank you very much for your time. Is there anything else that you would like to add?

Now that we have finished our discussion, I would be grateful if you would please think of any other women that you know who have experience with TANF (Welfare). If there are any women who may be interested in participating, would you consider please giving them my phone number and/or email address? I can text or email you my contact information so that they can reach out to discuss participating in the study.

Appendix H. Interview Demographic Form

1. What is your age? _____
2. Which of these categories describes your race? (Mark ALL that apply).
 - White
 - Black, African-American
 - Asian or Pacific Islander
 - American Indian, Eskimo, Aleut
 - Hispanic
 - Other (Please write in) _____
3. Are you of Hispanic or Latino origin or descent?
 - Yes
 - No
4. What is your marital status?
 - Married
 - Widowed
 - Divorced
 - Separated
 - Never Married
7. What is the highest grade or year of regular school that you have completed? Mark (X)
ONE box.
 - No formal schooling
 - 8th grade or less
 - Some high school (grades 9, 10, 11, & 12)

- High School Diploma
- GED
- Some college or 2 year degree
- Technical or trade school
- Bachelor's degree
- Graduate or professional school

8. How many children do you have? _____

9. **In the past two weeks, have you done any work for pay? Yes No**

10. In the past 12 months, have you or anyone in your household applied for or received income from the following sources (Check ALL that apply)

- SNAP (Food Stamps, or EBT (Electronic Benefits Transfer)) applied or received
- Supplemental Security Income, SSI applied or received
- Social Security Disability Insurance, SSDI applied or received
- Unemployment Insurance or Worker's Compensation applied or received

11. At the end of the month, do you usually have . . . Mark (X) ONE box

- Some money left over
- Just enough to make ends meet
- Not enough to make ends meet

7. On a scale of 1 to 10, how would you rate your mental health? (1 being poor, 10 being excellent)

8. on a scale of 1 to 10, how would you rate your physical health (1 being poor, 10 being excellent)

REFERENCES

- Adams, G., Biernat, M., Branscombe, N. R., Crandall, C. S., & Wrightsman, L. S. (2008). Beyond prejudice: Toward a sociocultural psychology of racism and oppression. In G. Adams, M. Biernat, N. Branscombe, C. Crandall, & L. Wrightsman (Eds.), *Commemorating Brown: The social psychology of racism and discrimination* (pp. 215-246). American Psychological Association.
- Adams, G., Tormala, T. T., & O'Brien, L. T. (2006). The effect of self-affirmation on perception of racism. *Journal of Experimental Social Psychology, 42*(5), 616-626.
- Adler, N. E., & Newman, K. (2002). Socioeconomic disparities in health: pathways and policies. *Health Affairs, 21*(2), 60-76.
- Ahmadabadi, Z., Najman, J. M., Williams, G. M., Clavarino, A. M., d'Abbs, P., & Abajobir, A. A. (2018). Maternal intimate partner violence victimization and child maltreatment. *Child Abuse & Neglect, 82*, 23-33.
- Akaike, H. (1974). A new look at the statistical model identification. *IEEE transactions on automatic control, 19*(6), 716-723.
- Akee, R., Jones, M. R., & Porter, S. R. (2019). Race matters: Income shares, income inequality, and income mobility for all US races. *Demography, 56*(3), 999-1021.

Allison, P. D. (2012). *Handling Missing Data by Maximum Likelihood* (312-2012). Statistical Horizons.

An, S., & Choi, G.-Y. (2019). Is TANF truly accessible and helpful? Victims' experiences with domestic violence screening under the family violence option. *Affilia*, 34(4), 461-480.

Ando, H., Cousins, R., & Young, C. (2014). Achieving saturation in thematic analysis: Development and refinement of a codebook. *Comprehensive Psychology*, 3, 03. CP. 03.04.

Angermeyer, M. C., Matschinger, H., Link, B. G., & Schomerus, G. (2014). Public attitudes regarding individual and structural discrimination: Two sides of the same coin? *Soc Sci Med*, 103, 60-66.

Atkinson, M. P., Greenstein, T. N., & Lang, M. M. (2005). For women, breadwinning can be dangerous: Gendered resource theory and wife abuse. *Journal of Marriage and Family*, 67(5), 1137-1148.

Bacchus, L. J., Ranganathan, M., Watts, C., & Devries, K. (2018). Recent intimate partner violence against women and health: a systematic review and meta-analysis of cohort studies. *BMJ open*, 8(7), e019995.

- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *The Lancet*, *389*(10077), 1453-1463.
- Baker, C. K., Billhardt, K. A., Warren, J., Rollins, C., & Glass, N. E. (2010). Domestic violence, housing instability, and homelessness: A review of housing policies and program practices for meeting the needs of survivors. *Aggression and Violent Behavior*, *15*(6), 430-439.
- Barnett, M. A. (2008). Economic disadvantage in complex family systems: Expansion of family stress models. *Clinical Child and Family Psychology Review*, *11*(3), 145-161.
- Bazon, E., & Watts, T. (1999). Welfare Time Limits on the Ground: An Empirical Study of Connecticut's Jobs First Program. *Conn. L. Rev.*, *32*, 717.
- Belli, R. F. (1998). The structure of autobiographical memory and the event history calendar: Potential improvements in the quality of retrospective reports in surveys. *Memory*, *6*(4), 383-406.
- Belli, R. F., Shay, W. L., & Stafford, F. P. (2001). Event history calendars and question list surveys: A direct comparison of interviewing methods. *Public opinion quarterly*, *65*(1), 45-74.

Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis.

Psychological Bulletin, 114(3), 413-434. <https://doi.org/10.1037/0033-2909.114.3.413>

Bendheim-Thoman Center for Research on Child Wellbeing (CRCW). (2018). *User's Guide for the Fragile Families and Child Wellbeing Study Public Data, Year 1*.

Bentele, K. G., & Nicoli, L. T. (2012). Ending access as we know it: State welfare benefit coverage in the TANF era. *Social Service Review*, 86(2), 223-268.

Berger, L. M. (2004). Income, family structure, and child maltreatment risk. *Children and Youth Services Review*, 26(8), 725-748.

Berger, Lawrence M. (2007, 2007/09/01). Socioeconomic Factors and Substandard Parenting. *Social Service Review*, 81(3), 485-522.

Berger, L. M., Font, S. A., Slack, K. S., & Waldfogel, J. (2017). Income and child maltreatment in unmarried families: evidence from the earned income tax credit. *Review of Economics of the Household*, 15(4), 1345-1372.

Berlin, L. J., Ispa, J. M., Fine, M. A., Malone, P. S., Brooks-Gunn, J., Brady-Smith, C., Ayoub, C., & Bai, Y. (2009, Sep-Oct). Correlates and Consequences of Spanking and Verbal Punishment for Low-Income White, African American, and Mexican American Toddlers. *Child development*, 80(5), 1403-1420. <https://doi.org/10.1111/j.1467-8624.2009.01341.x>

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative health research*, 26(13), 1802-1811.

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). *The national intimate partner and sexual violence survey (NISVS): 2010 summary report*.

Bloom, D., Farrell, M., & Fink, B. (2002). *Welfare Time Limits: State Policies, Implementation, and Effects on Families*.

Bonds, M. (2006). The continuing significance of race: A case study of the impact of welfare reform. *Journal of African American Studies*, 9(4), 18-31.

Born, C. E., Caudill, P., & Cordero, M. (1999). *Life after welfare: A look at sanctioned families*. University of Maryland School of Social Work College Park, MD.

[Record #939 is using a reference type undefined in this output style.]

Brody, C., Hoop, T. d., Vojtkova, M., Warnock, R., Dunbar, M., Murthy, P., & Dworkin, S. L. (2017). Can self-help group programs improve women's empowerment? A systematic review. *Journal of Development Effectiveness*, 9(1), 15-40.

- Buller, A., Ranganathan, M., Bleile, A., Hidrobo, M., & Heise, L. (2018). A mixed-method review of cash transfers and intimate partner violence in low and middle-income countries.
- Bullock, H. E., Reppond, H. A., Truong, S. V., & Singh, M. R. (2020). An intersectional analysis of the feminization of homelessness and mothers' housing precarity. *Journal of social issues*.
- Burnside, A., & Floyd, I. (2019). *TANF Benefits Remain Low Despite Recent Increases in Some States* Center on Budget and Policy Priorities. Retrieved February 14 from <https://www.cbpp.org/research/family-income-support/tanf-benefits-remain-low-despite-recent-increases-in-some-states>
- Buzawa, E. S., & Buzawa, C. G. (2013). What does research suggest are the primary risk and protective factors for intimate partner violence (IPV) and what is the role of economic factors? *Journal of Policy Analysis and Management*, 32(1), 128-137.
- Caetano, R., Ramisetty-Mikler, S., & Field, C. A. (2005). Unidirectional and bidirectional intimate partner violence among White, Black, and Hispanic couples in the United States. *Violence and Victims*, 20(4), 393-406.

CalWORKs Annual Report 2015. (2015).

www.cdss.ca.gov/cdssweb/entres/pdf/CalWORKsAnnualSummary2015.pdf

Campbell, J. (2002, Apr 13). Health consequences of intimate partner violence. *Lancet*, 359(9314), 1331-1336.

Campbell, M., Thomson, H., Fenton, C., & Gibson, M. (2016). Lone parents, health, wellbeing and welfare to work: a systematic review of qualitative studies. *BMC Public Health*, 16(1), 188.

Camplain, R., Camplain, C., Trotter, R. T., Pro, G., Sabo, S., Eaves, E., Peoples, M., & Baldwin, J. A. (2020, 2020/01/01). Racial/Ethnic Differences in Drug- and Alcohol-Related Arrest Outcomes in a Southwest County From 2009 to 2018. *American Journal of Public Health*, 110(S1), S85-S92. <https://doi.org/10.2105/AJPH.2019.305409>

Cancian, M., Meyer, D. R., & Caspar, E. (2008). Welfare and child support: Complements, not substitutes. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, 27(2), 354-375.

Cancian, M., Yang, M.-Y., & Slack, K. S. (2013). The effect of additional child support income on the risk of child maltreatment. *Social Service Review*, 87(3), 417-437.

Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A Systematic Review of Risk Factors for Intimate Partner Violence. *Partner Abuse, 3*(2), 231-280.

<https://doi.org/10.1891/1946-6560.3.2.231>

Carter, E. R., & Murphy, M. C. (2015). Group-based differences in perceptions of racism: What counts, to whom, and why? *Social and Personality Psychology Compass, 9*(6), 269-280.

Casey, P., Goolsby, S., Berkowitz, C., Frank, D., Cook, J., Cutts, D., Black, M. M., Zaldivar, N., Levenson, S., & Heeren, T. (2004). Maternal depression, changing public assistance, food security, and child health status. *Pediatrics, 113*(2), 298-304.

Chen, X., & Wei, L. (2003). A comparison of recent methods for the analysis of small-sample cross-over studies. *Statistics in medicine, 22*(18), 2821-2833.

Cheng, T. C. (2007). Impact of work requirements on the psychological well-being of TANF recipients. *Health & social work, 32*(1), 41-48.

Cheng, T. C., & Lo, C. C. (2013). Racial disparity in risk factors for substantiation of child maltreatment. *Children and Youth Services Review, 35*(12), 1962-1969.

Cherlin, A., Burton, L., Francis, J., Henrici, J., Lein, L., Quane, J., & Bogen, K. (2001). *Sanctions and Case Closings for Noncompliance: Who Is Affected and Why* (Welfare, Children, and Families Study Policy Brief 01-1, Issue.

http://web.jhu.edu/threecitystudy/images/publications/09_18058_Welfare_Policy_Brief.pdf

Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R., & Narang, J. (2017). The fading American dream: Trends in absolute income mobility since 1940. *Science*, 356(6336), 398-406.

Child Welfare Information Gateway. (2016). *Definitions of Child Abuse and Neglect*.

<https://www.childwelfare.gov>

Clasen, J., & Clegg, D. (2007). Levels and levers of conditionality: measuring change within welfare states. In J. Clasen (Ed.), *Investigating Welfare State Change. The "Dependent Variable Problem" in Comparative Analysis* (pp. 166-197). Edward Elgar.

Cohen, P., Cohen, J., Aiken, L. S., & West, S. G. (1999). The problem of units and the circumstance for POMP. *Multivariate behavioral research*, 34(3), 315-346.

Conger, K. J., Rueter, M. A., & Conger, R. D. (2000a). The role of economic pressure in the lives of parents and their adolescents: The Family Stress Model. In L. J. Crockett & R. K. Silbereisen (Eds.), *Negotiating adolescence in times of social change* (pp. 201-223). Cambridge University Press.

- Conger, K. J., Rueter, M. A., & Conger, R. D. (2000b). The role of economic pressure in the lives of parents and their adolescents: The Family Stress Model.
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental psychology*, 38(2), 179.
- Conrad-Hiebner, A., & Byram, E. (2018). The Temporal Impact of Economic Insecurity on Child Maltreatment: A Systematic Review. *Trauma, Violence, & Abuse*, 1524838018756122. <https://doi.org/10.1177/1524838018756122>
- Conrad-Hiebner, A., & Byram, E. (2020). The temporal impact of economic insecurity on child maltreatment: a systematic review. *Trauma, Violence, & Abuse*, 21(1), 157-178.
- Cook, J. T., Frank, D. A., Berkowitz, C., Black, M. M., Casey, P. H., Cutts, D. B., Meyers, A. F., Zaldivar, N., Skalicky, A., Levenson, S., & Heeren, T. (2002). Welfare Reform and the Health of Young Children: A Sentinel Survey in 6 US Cities. *Archives of Pediatrics & Adolescent Medicine*, 156(7), 678-684. <https://doi.org/10.1001/archpedi.156.7.678>
- Cooper, D. (2015). Raising the minimum wage to \$12 by 2020 would lift wages for 35 million American workers. *Washington: Economic Policy Institute*.

- Corcoran, M., Danziger, S. K., & Tolman, R. (2004). Long term employment of African-American and white welfare recipients and the role of persistent health and mental health problems. *Women & Health, 39*(4), 21-40.
- Corman, H., Dave, D., Kalil, A., & Reichman, N. E. (2017, 2017/12/01/). Effects of maternal work incentives on youth crime. *Labour Economics, 49*, 128-144.
<https://doi.org/https://doi.org/10.1016/j.labeco.2017.09.005>
- Courtney, M. E., Dworsky, A., Piliavin, I., & Zinn, A. (2005). Involvement of TANF applicant families with child welfare services. *Social Service Review, 79*(1), 119-157.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. 139.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*, 1241.
- Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. SAGE Publications.
- Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health, 2013*, 541-545.

- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. Gilbert & S. Fiske (Eds.), *The handbook of social psychology* (pp. 504-553). McGraw-Hill.
- Cuesta, L., & Cancian, M. (2015). The effect of child support on the labor supply of custodial mothers participating in TANF. *Children and Youth Services Review, 54*, 49-56.
- Danziger, S. K., & Tolman, R. (2004). Long Term Employment of African-American and White Welfare Recipients and the Role of Persistent Health and Mental Health Problems AU - Corcoran, Mary. *Women & Health, 39*(4), 21-40. https://doi.org/10.1300/J013v39n04_02
- Davis, O. (2018). What is the Relationship between Benefit Conditionality and Mental Health? Evidence from the United States on TANF Policies. *Journal of Social Policy, 1*-21.
- De Jong, G. F., Roempke Graefe, D., Irving, S. K., & St. Pierre, T. (2005). *Welfare Dimensions Summary Score (WDSS) Documentation: Measuring State Welfare Policy Variations and Change, 1996-2003*. sodapop.pop.psu.edu/codebooks/wdss/wdss_documentation.pdf
- Decker, M. R., Holliday, C. N., Hameeduddin, Z., Shah, R., Miller, J., Dantzler, J., & Goodmark, L. (2019). “You do not think of me as a human being”: Race and gender inequities intersect to discourage police reporting of violence against women. *Journal of urban health, 96*(5), 772-783.

Deficit Reduction Act of 2005, Pub. L. No. 109–171, 120 (2006).

Dettlaff, A. J., Rivaux, S. L., Baumann, D. J., Fluke, J. D., Rycraft, J. R., & James, J. (2011).

Disentangling substantiation: The influence of race, income, and risk on the substantiation decision in child welfare. *Children and Youth Services Review*, 33(9), 1630-1637.

Dimick, J. B., & Ryan, A. M. (2014). Methods for evaluating changes in health care policy: the difference-in-differences approach. *JAMA*, 312(22), 2401-2402.

Dirth, T. P., & Branscombe, N. R. (2017). Disability models affect disability policy support through awareness of structural discrimination. *Journal of social issues*, 73(2), 413-442.

Dodge, K. A., Greenberg, M. T., Malone, P. S., & Group, C. P. P. R. (2008). Testing an idealized dynamic cascade model of the development of serious violence in adolescence. *Child development*, 79(6), 1907-1927.

Donnelly, L. (2015). *Fragile Families Labor Market and Macroeconomic Restricted Use Data Appendage*.

Drake, B., Jolley, J. M., Lanier, P., Fluke, J., Barth, R. P., & Jonson-Reid, M. (2011). Racial bias in child protection? A comparison of competing explanations using national data. *Pediatrics*, peds. 2010-1710.

- Drake, B., & Rank, M. R. (2009). The racial divide among American children in poverty: Reassessing the importance of neighborhood. *Children and Youth Services Review*, 31(12), 1264-1271.
- East, J. F., & Bussey, M. (2007, 2007/06/05). I Was Scared Every Day. *Journal of Policy Practice*, 6(3), 45-64. https://doi.org/10.1300/J508v06n03_04
- Fallon, B., Trocmé, N., Fluke, J., MacLaurin, B., Tonmyr, L., & Yuan, Y.-Y. (2010). Methodological challenges in measuring child maltreatment. *Child Abuse & Neglect*, 34(1), 70-79.
- Farrell, M., Rich, S., Turner, L., Seith, D., & Bloom, D. (2008). Welfare Time Limits: An Update on State Policies, Implementation, and Effects on Families. *MDRC*.
- Feagin, J. R., & Feagin, C. B. (1978). *Discrimination American style: Institutional racism and sexism* (Vol. 510). Prentice Hall.
- Fein, D. J., & Lee, W. S. (1999). The ABC evaluation: Carrying and using the stick: Financial sanctions in Delaware's A Better Chance program. *Prepared for Delaware Health and Social Services. Cambridge, MA: Abt Associates Inc.*

Fein, D. J., & Lee, W. S. (2003). The impacts of welfare reform on child maltreatment in Delaware. *Children and Youth Services Review*, 25(1), 83-111.

Floyd, I. (2020). *Cash Assistance Should Reach Millions More Families*.

<https://www.cbpp.org/research/family-income-support/cash-assistance-should-reach-millions-more-families>

Floyd, I., Pavetti, L., & Schott, L. (2017). *TANF Reaching Few Poor Families*.

<http://www.cbpp.org/research/family-income-support/tanf-reaching-few-poor-families>

Fong, K. (2017, 2017/01/01/). Child welfare involvement and contexts of poverty: The role of parental adversities, social networks, and social services. *Children and Youth Services Review*, 72, 5-13. <https://doi.org/https://doi.org/10.1016/j.chilyouth.2016.10.011>

Font, S. A., & Berger, L. M. (2015). Child maltreatment and children's developmental trajectories in early to middle childhood. *Child development*, 86(2), 536-556.

Font, S. A., & Maguire-Jack, K. (2015). Decision-making in child protective services: Influences at multiple levels of the social ecology. *Child Abuse & Neglect*, 47, 70-82.

Fording, Richard C., Soss, J., & Schram, Sanford F. (2007, 2007/06/01). Devolution, Discretion, and the Effect of Local Political Values on TANF Sanctioning. *Social Service Review*, 81(2), 285-316. <https://doi.org/10.1086/517974>

Fox, G. L., Benson, M. L., DeMaris, A. A., & Wyk, J. (2002). Economic distress and intimate violence: Testing family stress and resources theories. *Journal of Marriage and Family*, 64(3), 793-807.

Fraker, T. M. (1997). *Iowa's limited benefit plan*. Iowa Department of Human Services, Division of Economic Assistance.

Freedman, D., Thornton, A., Camburn, D., Alwin, D., & Young-DeMarco, L. (1988). The life history calendar: A technique for collecting retrospective data. *Sociological methodology*, 37-68.

Frequently Asked Questions. Fragile Families and Child Wellbeing Study. Retrieved July 15 from <https://fragilefamilies.princeton.edu/faq#PCG>

Friedman, L. M. (1975). *The legal system: A social science perspective*. Russell Sage Foundation.

Garrison, D. R., Cleveland-Innes, M., Koole, M., & Kappelman, J. (2006, 2006/01/01/). Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education*, 9(1), 1-8.

<https://doi.org/https://doi.org/10.1016/j.iheduc.2005.11.001>

- Gibbs, A., Jacobson, J., & Kerr Wilson, A. (2017). A global comprehensive review of economic interventions to prevent intimate partner violence and HIV risk behaviours. *Global Health Action*, 10(sup2), 1290427. <https://doi.org/10.1080/16549716.2017.1290427>
- Gibson-Davis, C. M., Magnuson, K., Gennetian, L. A., & Duncan, G. J. (2005). Employment and the risk of domestic abuse among low-income women. *Journal of Marriage and Family*, 67(5), 1149-1168.
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009, 2009/01/03/). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, 373(9657), 68-81. [https://doi.org/https://doi.org/10.1016/S0140-6736\(08\)61706-7](https://doi.org/https://doi.org/10.1016/S0140-6736(08)61706-7)
- Gillum, T. L. (2019). The intersection of intimate partner violence and poverty in Black communities. *Aggression and Violent Behavior*.
- Ginther, D. K., & Johnson-Motoyama, M. (2017). Do State TANF Policies Affect Child Abuse and Neglect? Paper Preseted at the APPAM 39th Annual Fall Research Conference,
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge.

- Glasner, T., & van der Vaart, W. (2009). Applications of calendar instruments in social surveys: a review. *Quality & quantity*, 43(3), 333-349. <https://doi.org/10.1007/s11135-007-9129-8>
- Gooden, S. T. (1998). All things not being equal: Differences in caseworker support toward black and white welfare clients. *Harvard Journal of African American Public Policy*, 4(1), 23-33.
- Gordon, L. (1994). *Pitied but not entitled: Single mothers and the history of welfare, 1890-1935*. Free Press New York.
- Groos, M., Wallace, M., Hardeman, R., & Theall, K. P. (2018). Measuring inequity: a systematic review of methods used to quantify structural racism. *Journal of Health Disparities Research and Practice*, 11(2), 13.
- Guest, G., Bunce, A., & Johnson, L. (2006, 2006/02/01). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59-82. <https://doi.org/10.1177/1525822X05279903>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2011). *Applied thematic analysis*. Sage.
- Hahn, H., Aron, L., Lou, C., Pratt, E., & Okoli, A. (2017). Why does cash welfare depend on where you live. *Washington, DC: Urban Institute*.

Halushka, J. M. (2020). The Runaround: Punishment, Welfare, and Poverty Survival after Prison. *Social Problems*, 67(2), 233-250. <https://doi.org/10.1093/socpro/spz018>

Hamilton, L., Wingrove, T., & Woodford, K. (2019, 2019/07/03). Does generous welfare policy encourage dependence? TANF asset limits and duration of program participation. *Journal of Children and Poverty*, 25(2), 101-113. <https://doi.org/10.1080/10796126.2019.1638731>

Hancock, A.-M. (2004). *The politics of disgust: The public identity of the welfare queen*. NYU Press.

Hartmann, M., & Krishnan, S. (2014). *Ethical and Safety Recommendations for Intervention Research on Violence Against Women*.

Hartmann, M., & Krishnan, S. (2016). *Ethical and safety recommendations for intervention research on violence against women. Building on lessons from the WHO publication. (Putting women first: ethical and safety recommendations for research on domestic violence against women., Issue.*

Heise, L. L., & Kotsadam, A. (2015). Cross-national and multilevel correlates of partner violence: an analysis of data from population-based surveys. *The Lancet Global Health*, 3(6), e332-e340.

Hendren, N., & Sprung-Keyser, B. (2020). A Unified Welfare Analysis of Government Policies*. *The Quarterly journal of economics*, 135(3), 1209-1318.

<https://doi.org/10.1093/qje/qjaa006>

Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative research methods*. Sage.

Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative Research Methods*. Sage.

Hetling, A. (2011). Welfare caseworker assessments and domestic violence services: Findings from administrative data and case narratives. *Violence against women*, 17(8), 1046-1066.

Hetling, A., Patterson, K., & Born, C. (2006a). *The TANF time limit: Comparing long-term and other welfare leavers*.

[Record #1358 is using a reference type undefined in this output style.]

Hoffman, S. (2007). *A Good Policy Gone Bad: The Strange Case of the Non-Refundable State*

EITC. <https://EconPapers.repec.org/RePEc:dlw:wpaper:07-06>.

Holcomb, S., Johnson, L., Hetling, A., Postmus, J. L., Steiner, J., Braasch, L., & Riordan, A.

(2017). Implementation of the Family Violence Option 20 years later: A review of state welfare rules for domestic violence survivors. *Journal of Policy Practice*, 16(4), 415-431.

- Holmes, S. C., Ciarleglio, M. M., Song, X., Clayton, A., & Smith, M. V. (2020). Testing the Family Stress Model among Black Women Receiving Temporary Assistance for Needy Families (TANF). *Journal of Child and Family Studies*, 29(10), 2667-2677.
- Hsu, L. C. (2017). The timing of welfare payments and intimate partner violence. *Economic Inquiry*, 55(2), 1017-1031.
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017, 2017/08/01/). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356-e366. [https://doi.org/https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/https://doi.org/10.1016/S2468-2667(17)30118-4)
- Hussey, J. M., Chang, J. J., & Kotch, J. B. (2006). Child maltreatment in the United States: prevalence, risk factors, and adolescent health consequences. *Pediatrics*, 118(3), 933-942.
- Johnson, V. D. (2010). Impact of race and welfare reform on African American single mothers' access to higher education. *Journal of Black Studies*, 40(6), 1041-1051.
- Jones, M. R. (2013). *Changes in EITC eligibility and participation, 2005–2009* (US Census Bureau, Issue. <https://www.irs.gov/pub/irs-soi/13resconchangeeitc.pdf>

Joo Lee, B., Slack, K. S., & Lewis, D. A. (2004). Are welfare sanctions working as intended?

Welfare receipt, work activity, and material hardship among TANF-recipient families.

Social Service Review, 78(3), 370-403.

Kalil, A., Seefeldt, Kristin S., & Wang, H. c. (2002, 2002/12/01). Sanctions and Material

Hardship under TANF. *Social Service Review*, 76(4), 642-662.

Kalmuss, D. S., & Straus, M. A. (1982). Wife's marital dependency and wife abuse. *Journal of*

Marriage and the Family, 277-286.

Katch, H., Wagner, J., & Aron-Dine, A. (2018). *Taking Medicaid Coverage Away From People*

Not Meeting Work Requirements Will Reduce Low-Income Families' Access to Care and

Worsen Health Outcomes [https://www.cbpp.org/research/health/taking-medicaid-](https://www.cbpp.org/research/health/taking-medicaid-coverage-away-from-people-not-meeting-work-requirements-will-reduce)

[coverage-away-from-people-not-meeting-work-requirements-will-reduce](https://www.cbpp.org/research/health/taking-medicaid-coverage-away-from-people-not-meeting-work-requirements-will-reduce)

Kaye, L., Nightingale, D., Sandfort, J., & Fender, L. (2001). Recent Changes in Massachusetts

Welfare and Work, Child Care, and Child Welfare Systems. State Update No. 5.

Assessing the New Federalism: An Urban Institute Program To Assess Changing Social

Policies.

Keiser, L. R., Mueser, P. R., & Choi, S. W. (2004). Race, bureaucratic discretion, and the

implementation of welfare reform. *American Journal of Political Science*, 48(2), 314-

327.

Kenward, M. G., & Roger, J. H. (1997). Small sample inference for fixed effects from restricted maximum likelihood. *Biometrics*, 983-997.

Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H. U. (1998). The world health organization composite international diagnostic interview short-form (CIDI-SF). *International journal of methods in psychiatric research*, 7(4), 171-185.

Kim, H., & Drake, B. (2017). Duration in poverty-related programs and number of child maltreatment reports: a multilevel negative binomial study. *Child maltreatment*, 22(1), 14-23.

Kim, H., & Drake, B. (2018). Child maltreatment risk as a function of poverty and race/ethnicity in the USA. *International journal of epidemiology*, 47(3), 780-787.

Knox, V., Miller, C., & Gennetian, L. S. (2000). *Reforming welfare and rewarding work: a summary of the final report on the Minnesota Family Investment Program*.

www.mdrc.org/publications/27/summary.html

Komro, K. A., Burris, S., & Wagenaar, A. C. (2014). Social determinants of child health: concepts and measures for future research. *Health Behavior and Policy Review*, 1(6), 432-445.

Ku, L., Brantley, E., & Pillai, D. (2019, 2019/10/01). The Effects of SNAP Work Requirements in Reducing Participation and Benefits From 2013 to 2017. *American Journal of Public Health, 109*(10), 1446-1451. <https://doi.org/10.2105/AJPH.2019.305232>

Kulkarni, S. (2019). Intersectional trauma-informed intimate partner violence (IPV) services: Narrowing the gap between IPV service delivery and survivor needs. *Journal of Family Violence, 34*(1), 55-64.

Langford, C. P. H., Bowsher, J., Maloney, J. P., & Lillis, P. P. (1997). Social support: a conceptual analysis. *Journal of advanced nursing, 25*(1), 95-100.

Langhinrichsen-Rohling, J., Misra, T. A., Selwyn, C., & Rohling, M. L. (2012). Rates of bidirectional versus unidirectional intimate partner violence across samples, sexual orientations, and race/ethnicities: A comprehensive review. *Partner Abuse, 3*(2), 199-230.

LeCompte, M. D. (2000). Analyzing qualitative data. *Theory into practice, 39*(3), 146-154.

Lee, K. H., & Yoon, D. P. (2012, 2012/07/16). A Comparison of Sanctions in African American and White TANF Leavers. *Journal of Evidence-Based Social Work, 9*(4), 396-413.

Leigh, J. P., Leigh, W. A., & Du, J. (2018). Minimum wages and public health: A literature review. *Preventive medicine.*

Leigh, J. P., Leigh, W. A., & Du, J. (2019). Minimum wages and public health: a literature review. *Preventive medicine, 118*, 122-134.

Lindhorst, T., & Mancoske, R. J. (2006). The Social and Economic Impact of Sanctions and Time Limits on Recipients of Temporary Assistance to Needy Families. *Journal of sociology and social welfare, 33*(1), 93-114.

Lindhorst, T., Meyers, M., & Casey, E. (2008). Screening for domestic violence in public welfare offices: An analysis of case manager and client interactions. *Violence against women, 14*(1), 5-28.

Livingston, M. D., Woods-Jaeger, B., Spencer, R. A., Lemon, E., & Komro, K. A. (under review). Association of State Minimum Wage Laws Increases with Child Maltreatment.

Lloyd, S. (1997). The effects of domestic violence on women's employment. *Law & Policy, 19*(2), 139-167.

Lowery, B. S., Knowles, E. D., & Unzueta, M. M. (2007). Framing inequity safely: Whites' motivated perceptions of racial privilege. *Personality and Social Psychology Bulletin, 33*(9), 1237-1250.

Lucero, J. L., Lim, S., & Santiago, A. M. (2016). Changes in economic hardship and intimate partner violence: A family stress framework. *Journal of family and economic issues*, 37(3), 395-406.

Lundberg, I. (2017). *Missing Data*. Princeton University. Retrieved May 29 from <http://www.fragilefamilieschallenge.org/missing-data/>

Luscombe, B. (2021). Congress Is Considering 2 Plans to Get More Money to Parents. Here's How Each Would Work. *Time*. <https://time.com/5937833/parents-cash-payments-biden-romney/>

Macmillan, R., & Gartner, R. (1999). When she brings home the bacon: Labor-force participation and the risk of spousal violence against women. *Journal of Marriage and the Family*, 947-958.

Marr, C., Cox, K., Hingtgen, S., Windham, K., & Sherman, A. (2021). *House COVID Relief Bill Includes Critical Expansions of Child Tax Credit and EITC*. <https://www.cbpp.org/research/federal-tax/house-covid-relief-bill-includes-critical-expansions-of-child-tax-credit-and>

Masarik, A. S., & Conger, R. D. (2017). Stress and child development: a review of the family stress model. *Current Opinion in Psychology*, 13, 85-90.

- Mayring, P. (2004). Qualitative content analysis. *A companion to qualitative research, 1*, 159-176.
- McCabe, S. E., Morales, M., Cranford, J. A., Delva, J., McPherson, M. D., & Boyd, C. J. (2007). Race/ethnicity and gender differences in drug use and abuse among college students. *Journal of ethnicity in substance abuse, 6*(2), 75-95.
- McDaniel, M., Woods, T., Pratt, E., & Simms, M. (2017). Identifying Racial and Ethnic Disparities in Human Services. *Urban Institute, Washington, DC. Accessed December, 22, 2017.*
- McGuire, T. G., & Miranda, J. (2008). New evidence regarding racial and ethnic disparities in mental health: Policy implications. *Health Affairs, 27*(2), 393-403.
- McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica: Biochemia medica, 22*(3), 276-282.
- McLanahan, S., Bryant-Davis, T., Holcombe, C., James, S., Adams, T., & Gray, A. (2014). *An Epidemiological Study of Children's Exposure to Violence in the Fragile Families Study.*
- McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child development, 61*(2), 311-346.

- Miles, M. B., & Huberman, A. M. (1984). Qualitative data analysis: A sourcebook of new methods. In *Qualitative data analysis: a sourcebook of new methods*. Sage publications.
- Miller, C., Farrell, M., Cancian, M., & Meyer, D. R. (2005). The interaction of child support and TANF: Evidence from samples of current and former welfare recipients. *Washington, DC: US Department of Health and Human Services, Assistant Secretary for Planning and Evaluation*. <http://aspe.hhs.gov/hsp/CP-TANF-Int04/index.htm>.
- Mistry, R. S., Lowe, E. D., Benner, A. D., & Chien, N. (2008). Expanding the family economic stress model: Insights from a mixed-methods approach. *Journal of Marriage and Family*, 70(1), 196-209.
- Moeller, J. (2015). A word on standardization in longitudinal studies: don't. *Frontiers in psychology*, 6, 1389.
- Moffit, R. A., & Garlow, S. (2018). Did Welfare Reform Increase Employment and Reduce Poverty? *Pathways*.
- Monnat, S. M. (2010). The color of welfare sanctioning: Exploring the individual and contextual roles of race on TANF case closures and benefit reductions. *The Sociological Quarterly*, 51(4), 678-707.

- Monnat, S. M., & Bunyan, L. A. (2008). Capitalism and welfare reform: Who really benefits from welfare-to-work policies? *Race, Gender & Class*, 115-133.
- Morris, P. A., & Hendra, R. (2009). Losing the safety net: how a time-limited welfare policy affects families at risk of reaching time limits. *Developmental psychology*, 45(2), 383-400. <https://doi.org/10.1037/a0014960>
- Morrison Gutman, L., McLoyd, V. C., & Tokoyawa, T. (2005). Financial strain, neighborhood stress, parenting behaviors, and adolescent adjustment in urban African American families. *Journal of Research on Adolescence*, 15(4), 425-449.
- Narain, K., & Ettner, S. (2017, 2017/10/03). The Impact of Exceeding TANF Time Limits on the Access to Healthcare of Low-Income Mothers. *Social Work in Public Health*, 32(7), 452-460. <https://doi.org/10.1080/19371918.2017.1360817>
- National Academies of Sciences, E., and Medicine,. (2019). *A Roadmap to Reducing Child Poverty*.
- National Conference of State Legislatures. (January 17, 2019). *State Minimum Wages 2019 Minimum Wage by State*. Retrieved November 5 from <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>

National Conference of State Legislatures. (2020). *Child Support Pass-Through and Disregard Policies for Public Assistance Recipients*. Retrieved January 31 from

<https://www.ncsl.org/research/human-services/state-policy-pass-through-disregard-child-support.aspx>

Neubeck, K. J., & Cazenave, N. A. (2002). *Welfare racism: Playing the race card against America's poor*. Routledge.

Nguyen, L. H. (2018). The Minimum Wage Increase: Will This Social Innovation Backfire? *Social Work, 63*(4), 367-369.

Nicklas, E., & Mackenzie, M. J. (2013). Intimate partner violence and risk for child neglect during early childhood in a community sample of fragile families. *Journal of Family Violence, 28*(1), 17-29.

Nicoll, K. L. (2015, 2015/10/02). Why Do Eligible Households Not Participate in Public Antipoverty Programs?: A Review. *Journal of Poverty, 19*(4), 445-465.

<https://doi.org/10.1080/10875549.2015.1015069>

Novick, G. (2008, Aug). Is there a bias against telephone interviews in qualitative research? *Research in Nursing & Health, 31*(4), 391-398. <Go to ISI>://000257901700010

Office of Family Assistance. (June 28, 2017). *About TANF*. Administration for Children and Families. Retrieved November 20 from <https://www.acf.hhs.gov/ofa/programs/tanf/about>

Office of Family Assistance. (2016). *Characteristics and Financial Circumstances of TANF Recipients, Fiscal Year 2015*. U.S. Department of Health & Human Services. Retrieved January 16 from <https://www.acf.hhs.gov/ofa/resource/characteristics-and-financial-circumstances-of-tanf-recipients-fiscal-year-2015>

Office of Family Assistance. (2018). *Characteristics and Financial Circumstances of TANF Recipients, Fiscal Year 2017*. <https://www.acf.hhs.gov/ofa/resource/characteristics-and-financial-circumstances-of-tanf-recipients-fiscal-year-2017>

Office of Family Assistance. (2019, June 28, 2017). *About TANF*. Administration for Children and Families. Retrieved November 20 from <https://www.acf.hhs.gov/ofa/programs/tanf/about>

Office of Family Assistance. (2020a). *Characteristics and Financial Circumstances of TANF Recipients, Fiscal Year 2019*. Retrieved January 7 from <https://www.acf.hhs.gov/ofa/data/characteristics-and-financial-circumstances-tanf-recipients-fiscal-year-2019>

Office of Family Assistance. (2020b). *TANF Caseload Data 2020*. Administration for Children & Families. Retrieved February 18 from <https://www.acf.hhs.gov/ofa/data/tanf-caseload-data-2020>

Office of Family Assistance. (n.d.). *Resource Library* <https://www.acf.hhs.gov/ofa/resource-library/search?area%5B2377%5D=2377&topic%5B2353%5D=2353>

Oggins, J., & Fleming, A. (2001). Welfare reform sanctions and financial strain in a food-pantry sample. *J. Soc. & Soc. Welfare*, 28, 101.

Orme, J. G., & Reis, J. (1991). Multiple regression with missing data. *Journal of Social Service Research*, 15(1-2), 61-91.

Osborne, C., Berger, L. M., & Magnuson, K. (2012). Family Structure Transitions and Changes in Maternal Resources and Well-being. *Demography*, 49(1), 23-47.
<http://www.jstor.org.proxy.library.emory.edu/stable/41408218>

Overstreet, N. M., & Quinn, D. M. (2013). The Intimate Partner Violence Stigmatization Model and Barriers to Help-Seeking. *Basic and Applied Social Psychology*, 35(1), 109-122.
<https://doi.org/10.1080/01973533.2012.746599>

- Ovwigbo, P. C., Leavitt, K. L., & Born, C. E. (2003). Risk factors for child abuse and neglect among former TANF families: Do later leavers experience greater risk? *Children and Youth Services Review, 25*(1), 139-163.
- Pager, D., & Shepherd, H. (2008). The sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annu. Rev. Sociol, 34*, 181-209.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533-544.
- Parisi, D., McLaughlin, D. K., Grice, S. M., & Taquino, M. (2006). Exiting TANF: Individual and local factors and their differential influence across racial groups. *Social Science Quarterly, 87*(1), 76-90.
- Parker, K., & Stepler, R. (2017). *As U.S. marriage rate hovers at 50%, education gap in marital status widens*. Pew Research Center. Retrieved April 23 from <https://www.pewresearch.org/fact-tank/2017/09/14/as-u-s-marriage-rate-hovers-at-50-education-gap-in-marital-status-widens/>
- Parolin, Z. (2019). Temporary Assistance for Needy Families and the Black–White child poverty gap in the United States. *Socio-Economic Review*. <https://doi.org/10.1093/ser/mwz025>

Parrott, S., & Schott, L. (2009). *Designing Solely State-Funded Programs*.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (Vol. 3rd). Sage Publications.

Pavao, J., Alvarez, J., Baumrind, N., Induni, M., & Kimerling, R. (2007). Intimate partner violence and housing instability. *American Journal of Preventive Medicine*, 32(2), 143-146.

Pavetti, L. (2018). *Evidence Doesn't Support Claims of Success of TANF Work Requirements*. <https://www.cbpp.org/research/family-income-support/evidence-doesnt-support-claims-of-success-of-tanf-work-requirements>

Pavetti, L., Derr, M. K., & Hesketh, H. (2003). Review of sanction policies and research studies. Washington, DC: US Department of Health and Human Services. <http://aspe.hhs.gov/hsp/TANF-sanctions03>.

Pavetti, L., Derr, M. K., Kirby, G., Wood, R. G., & Clark, M. A. (2004). The use of TANF work-oriented sanctions in Illinois, New Jersey, and South Carolina. Washington, DC: Mathematica Policy Research, Inc, 3600.

- Pavetti, L., & Kauff, J. (2006). *When five years is not enough: Identifying and addressing the needs of families nearing the TANF time limit in Ramsey County, Minnesota.*
- Pavetti, L. A., & Kauff, J. (2006). *When five years is not enough: Identifying and addressing the needs of families nearing the TANF time limit in Ramsey County, Minnesota.*
- Paxson, C., & Waldfogel, J. (2001). Welfare reform, family resources, and child maltreatment. In B. Mayer & G. Duncan (Eds.), *The incentives of government programs and the well-being of families*. Joint Center for Poverty Research.
- Paxson, C., & Waldfogel, J. (2001). Welfare reforms, family resources, and child maltreatment. In B. Meyer & G. Duncan (Eds.), *The Incentives of Government Programs and the Well-Being of Families* (pp. 1-47). Joint Center for Poverty Research.
- Paxson, C., & Waldfogel, J. (2002, 2002/07/01). Work, Welfare, and Child Maltreatment. *Journal of Labor Economics*, 20(3), 435-474. <https://doi.org/10.1086/339609>
- Pega, F., Carter, K., Blakely, T., & Lucas, P. J. (2013). In-work tax credits for families and their impact on health status in adults. *Cochrane Database Syst Rev*, 8.
- Pelton, L. H. (2015). The continuing role of material factors in child maltreatment and placement. *Child Abuse & Neglect*, 41, 30-39.

Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Pub. L. No. 104-193, 110 (1996).

Petersen, M. L., Porter, K. E., Gruber, S., Wang, Y., & van der Laan, M. J. (2012). Diagnosing and responding to violations in the positivity assumption. *Statistical methods in medical research, 21*(1), 31-54.

Petrosky, E., Blair, J. M., Betz, C. J., Fowler, K. A., Jack, S. P., & Lyons, B. H. (2017). Racial and ethnic differences in homicides of adult women and the role of intimate partner violence—United States, 2003–2014. *MMWR. Morbidity and mortality weekly report, 66*(28), 741.

Postmus, J. L., Hoge, G. L., Breckenridge, J., Sharp-Jeffs, N., & Chung, D. (2020). Economic abuse as an invisible form of domestic violence: A multicountry review. *Trauma, Violence, & Abuse, 21*(2), 261-283.

Postmus, J. L., Huang, C.-C., & Mathisen-Stylianou, A. (2012, 2012/09/01/). The impact of physical and economic abuse on maternal mental health and parenting. *Children and Youth Services Review, 34*(9), 1922-1928.

<https://doi.org/https://doi.org/10.1016/j.childyouth.2012.06.005>

- Putnam-Hornstein, E., Needell, B., King, B., & Johnson-Motoyama, M. (2013). Racial and ethnic disparities: A population-based examination of risk factors for involvement with child protective services. *Child Abuse & Neglect, 37*(1), 33-46.
- Quadagno, J. (1994). *The color of welfare: How racism undermined the war on poverty* (Vol. 3). Oxford University Press.
- Quillian, L., Pager, D., Hexel, O., & Midtbøen, A. H. (2017). Meta-analysis of field experiments shows no change in racial discrimination in hiring over time. *Proceedings of the National Academy of Sciences, 114*(41), 10870-10875.
- Raissian, K. M., & Bullinger, L. R. (2017). Money matters: Does the minimum wage affect child maltreatment rates? *Children and Youth Services Review, 72*(C), 60-70.
- Ratcliffe, C., McKernan, S.-M., Wheaton, L., & Kalish, E. C. (2016). The unintended consequences of SNAP asset limits. *Washington, DC: Urban Institute.*
- Reese, E. (2005). *Backlash against welfare mothers: Past and present*. Univ of California Press.
- Reichman, N. E., Teitler, J. O., Garfinkel, I., & McLanahan, S. S. (2001). Fragile families: Sample and design. *Children and Youth Services Review, 23*(4-5), 303-326.

- Renner, L. M., & Slack, K. S. (2006, 2006/06/01/). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse & Neglect*, 30(6), 599-617. <https://doi.org/https://doi.org/10.1016/j.chiabu.2005.12.005>
- Renzetti, C. M. (2009). Intimate partner violence and economic disadvantage. *Violence against Women in Families and Relationships [4 volumes]*.
- Richardson, L. D., & Norris, M. (2010, 2010/03/01). Access to Health and Health Care: How Race and Ethnicity Matter. *Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine*, 77(2), 166-177. <https://doi.org/10.1002/msj.20174>
- Riger, S., & Staggs, S. L. (2004, 2004/09/01). Welfare Reform, Domestic Violence, and Employment: What Do We Know and What Do We Need to Know? *Violence against women*, 10(9), 961-990. <https://doi.org/10.1177/1077801204267464>
- Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, 140(1), 140.
- Romero, D., Chavkin, W., Wise, P. H., Smith, L. A., & Wood, P. R. (2002). Welfare to work? Impact of maternal health on employment. *American Journal of Public Health*, 92(9), 1462-1468. <https://www.ncbi.nlm.nih.gov/pubmed/12197974>
<https://www.ncbi.nlm.nih.gov/pmc/PMC1447259/>

Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. John Wiley & Sons.

Safawi, A., & Floyd, I. (2020). *TANF Benefits Still Too Low to Help Families, Especially Black Families, Avoid Increased Hardship*. <https://www.cbpp.org/research/family-income-support/tanf-benefits-still-too-low-to-help-families-especially-black>

SAS. (2019). *Usage Note 61830: Estimating the difference in differences of means*. Retrieved April 15 from <http://support.sas.com/kb/61/830.html>

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant*, 52(4), 1893-1907. <https://doi.org/10.1007/s11135-017-0574-8>

Saunders, J. A., Morrow-Howell, N., Spitznagel, E., Doré, P., Proctor, E. K., & Pescarino, R. (2006). Imputing missing data: A comparison of methods for social work researchers. *Social Work Research*, 30(1), 19-31.

Scales Documentation and Question Sources for Three-Year Questionnaires. (2006).

Scales Documentation Navigator. (2019). Princeton University. Retrieved February 27 from <https://fragilefamilies.princeton.edu/data-and-documentation/scales-documentation-navigator>

- Schmit, S., & Walker, C. (2016). Disparate Access. *Center for Law and Social Policy, Inc.*
Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/Disparate-Access.pdf>.
- Schram, S. F., Soss, J., Fording, R. C., & Houser, L. (2009, 2009/06/01). Deciding to Discipline: Race, Choice, and Punishment at the Frontlines of Welfare Reform. *American Sociological Review*, 74(3), 398-422. <https://doi.org/10.1177/000312240907400304>
- Schwarz, N., & Sudman, S. (2012). *Autobiographical memory and the validity of retrospective reports*. Springer Science & Business Media.
- Sedlak, A. J., Mettenburg, J., Basena, M., Peta, I., McPherson, K., & Greene, A. (2010). Fourth national incidence study of child abuse and neglect (NIS-4). *Washington, DC: US Department of Health and Human Services*. Retrieved on July, 9, 2010.
- Semega, J. L., Fontenot, K. R., & Kollar, M. A. (2017). Income and poverty in the United States: 2016. *Current Population Reports*, 10-11.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton, Mifflin and Company.

- Shook, K. (1999). Does the loss of welfare income increase the risk of involvement with the child welfare system? *Children and Youth Services Review*, 21(9-10), 781-814.
- Showalter, K., Maguire-Jack, K., Yang, M.-Y., & Purtell, K. M. (2019). Work Outcomes for Mothers Experiencing Intimate Partner Violence: the Buffering Effect of Child Care Subsidy. *Journal of Family Violence*, 34(4), 299-308.
- Siegel, D. I., Green, J., Abbott, A., Mogul, M., & Patacsil, M. (2004, 2004/12/21). Barriers to Employment. *The Social Policy Journal*, 3(4), 19-37.
https://doi.org/10.1300/J185v03n04_03
- Singer, J. D., Willett, J. B., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford university press.
- Slack, K. S., Berger, L. M., DuMont, K., Yang, M.-Y., Kim, B., Ehrhard-Dietzel, S., & Holl, J. L. (2011, 8//). Risk and protective factors for child neglect during early childhood: A cross-study comparison. *Children and Youth Services Review*, 33(8), 1354-1363.
<https://doi.org/http://dx.doi.org/10.1016/j.childyouth.2011.04.024>
- Slack, K. S., Holl, J. L., Lee, B. J., McDaniel, M., Altenbernd, L., & Stevens, A. B. (2003). Child protective intervention in the context of welfare reform: The effects of work and welfare on maltreatment reports. *Journal of Policy Analysis and Management*, 22(4), 517-536.

- Slack, K. S., Lee, B. J., & Berger, L. M. (2007). Do welfare sanctions increase child protection system involvement? A cautious answer. *Social Service Review, 81*(2), 207-228.
- Smyth, K. F., Goodman, L., & Glenn, C. (2006). The full-frame approach: A new response to marginalized women left behind by specialized services. *American Journal of Orthopsychiatry, 76*(4), 489.
- Snow, J. (1855). *On the mode of communication of cholera*. John Churchill.
- Social Security Act, § 407(b)(3) 45 CFR 261.40 et seq. (1996).
- Soss, J., Condon, M., Holleque, M., & Wichowsky, A. (2006). The illusion of technique: How method-driven research leads welfare scholarship astray. *Social Science Quarterly, 87*(4), 798-807.
- Spencer, R. A., Livingston, M. D., Woods-Jaeger, B., Rentmeester, S. T., Sroczynski, N., & Komro, K. A. (2020). The Impact of Temporary Assistance for Needy Families, Minimum Wage, and Earned Income Tax Credit on Women's Well Being and Intimate Partner Violence Victimization. *Soc Sci Med, 266*.
- Stith, S. M., Liu, T., Davies, L. C., Boykin, E. L., Alder, M. C., Harris, J. M., Som, A., McPherson, M., & Dees, J. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behavior, 14*(1), 13-29.

Straus, M., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996, May 1, 1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues*, 17(3), 283-316.

<https://doi.org/10.1177/019251396017003001>

Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249-270.

Stromwall, L. K. (2001). Mental health needs of TANF recipients. *J. Soc. & Soc. Welfare*, 28, 129.

Stuber, J., & Kronebusch, K. (2004). Stigma and other determinants of participation in TANF and Medicaid. *Journal of Policy Analysis and Management*, 23(3), 509-530.

Stuber, J., & Schlesinger, M. (2006). Sources of stigma for means-tested government programs. *Soc Sci Med*, 63(4), 933-945.

Sturges, J. E., & Hanrahan, K. J. (2004). Comparing telephone and face-to-face qualitative interviewing: A research note. *Qualitative Research*, 4(1), 107-118.

<https://doi.org/10.1177/1468794104041110>

Swartout, K. M., Cook, S. L., & White, J. W. (2012). Trajectories of intimate partner violence victimization. *The western journal of emergency medicine, 13*(3), 272-277.

<https://doi.org/10.5811/westjem.2012.3.11788>

Swendsen, J., Burstein, M., Case, B., Conway, K. P., Dierker, L., He, J., & Merikangas, K. R. (2012). Use and abuse of alcohol and illicit drugs in US adolescents: Results of the National Comorbidity Survey–Adolescent Supplement. *Archives of general psychiatry, 69*(4), 390-398.

Sykes, J., Križ, K., Edin, K., & Halpern-Meekin, S. (2014, 2015/04/01). Dignity and Dreams: What the Earned Income Tax Credit (EITC) Means to Low-Income Families. *American Sociological Review, 80*(2), 243-267. <https://doi.org/10.1177/0003122414551552>

Tankard, M. E., & Iyengar, R. (2018, 2018/11/01). Economic Policies and Intimate Partner Violence Prevention: Emerging Complexities in the Literature. *Journal of Interpersonal Violence, 33*(21), 3367-3387. <https://doi.org/10.1177/0886260518798354>

Tax Policy Center. (2021). *The State of State (and Local) Tax Policy*. Urban Institute, Brookings Institution. Retrieved February 20 from

Taylor, M. J., & Barusch, A. S. (2004). Personal, family, and multiple barriers of long-term welfare recipients. *Social Work, 49*(2), 175-183.

- Thomas, J., Collier-Tenison, S., Maxwell, D., & Check, C. (2017). TANF Participation and Intimate Partner Violence: Exploring Barriers to Self-Sufficiency. *Int'l J. Soc. Sci. Stud.*, 5, 20.
- Tolman, R. M., & Raphael, J. (2000). A review of research on welfare and domestic violence. *Journal of social issues*, 56(4), 655-682.
- Tolman, R. M., & Rosen, D. (2001, 2001/02/01). Domestic Violence in the Lives of Women Receiving Welfare: Mental Health, Substance Dependence, and Economic Well-Being. *Violence against women*, 7(2), 141-158. <https://doi.org/10.1177/1077801201007002003>
- U.S. Bureau of Labor Statistics. (2018). *A profile of the working poor, 2016*. <https://www.bls.gov/opub/reports/working-poor/2016/home.htm#chart2>
- U.S. Bureau of Labor Statistics. (2020a). *Characteristics of minimum wage workers, 2019*. <https://www.bls.gov/opub/reports/minimum-wage/2019/home.htm>
- U.S. Bureau of Labor Statistics. (2020b). *Learn more, earn more: Education leads to higher wages, lower unemployment*. C. Outlook.
- U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth & Families, & Bureau of the Census. (2017). *Child Maltreatment 2015*.

<http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment>

U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth, & Families, & Bureau of the Census. (2020). *Child Maltreatment 2018*.
<https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment>

United States Census Bureau. (2019). *Historical Income Tables: Households*.
<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html>

United States Census Bureau. (2020a). *Quick Facts*. Retrieved February 20 from
<https://www.census.gov/quickfacts/fact/table/US/PST045219>

United States Census Bureau. (2020b). *Stats for Stories: National Single Parent Day: March 21, 2020*. Retrieved February 28 from
<https://www.census.gov/data/tables/2019/demo/families/cps-2019.html>

United States Department of Labor. (2021a). *Consolidated Minimum Wage Table*. Wage and Hour Division. Retrieved February 7 from <https://www.dol.gov/whd/minwage/mw-consolidated.htm>

United States Department of Labor. (2021b). *Temporary Assistance for Needy Families*.

Retrieved January 4 from www.benefits.gov

User's Guide for the Fragile Families and Child Wellbeing Study Public Data, Year 9. (2018).

<https://fragilefamilies.princeton.edu/data-and-documentation/scales-documentation-navigator>

Van den Broeck, J., Cunningham, S. A., Eeckels, R., & Herbst, K. (2005). Data cleaning:

detecting, diagnosing, and editing data abnormalities. *PLoS medicine*, 2(10), e267.

van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Coughlan, B., & Reijman, S. (2020).

Annual Research Review: Umbrella synthesis of meta-analyses on child maltreatment antecedents and interventions: differential susceptibility perspective on risk and resilience. *Journal of Child Psychology and Psychiatry*, 61(3), 272-290.

Venkataramani, A. S., O'Brien, R., Whitehorn, G. L., & Tsai, A. C. (2020). Economic influences

on population health in the United States: Toward policymaking driven by data and evidence. *PLoS medicine*, 17(9), e1003319.

W-2 Take-up Study. (2009). <https://dcf.wisconsin.gov/files/w2/studies/w2-takeup-study.pdf>

- Wagner, J., & Schubel, J. (2020). *States' Experiences Confirm Harmful Effects of Medicaid Work Requirements*. <https://www.cbpp.org/research/health/states-experiences-confirm-harmful-effects-of-medicaid-work-requirements>
- Warren, E. J., & Font, S. A. (2015). Housing insecurity, maternal stress, and child maltreatment: An application of the family stress model. *Social Service Review*, 89(1), 9-39.
- Wathen, C. N., & MacMillan, H. L. (2013). Children's exposure to intimate partner violence: impacts and interventions. *Paediatrics & child health*, 18(8), 419-422.
- Weinberg, B. A. (2001). An incentive model of the effect of parental income on children. *Journal of Political Economy*, 109(2), 266-280.
- Weinberger, A. H., Gbedemah, M., Martinez, A. M., Nash, D., Galea, S., & Goodwin, R. D. (2018). Trends in depression prevalence in the USA from 2005 to 2015: widening disparities in vulnerable groups. *Psychological medicine*, 48(8), 1308-1315. <https://doi.org/10.1017/S0033291717002781>
- Welfare Rules Database*. (2017). <http://wrd.urban.org/wrd/databook.cfm>
- Western, B., & Pettit, B. (2005). Black-white wage inequality, employment rates, and incarceration. *American Journal of Sociology*, 111(2), 553-578.

- Whittle, H. J., Palar, K., Ranadive, N. A., Turan, J. M., Kushel, M., & Weiser, S. D. (2017, 2017/10/01/). "The land of the sick and the land of the healthy": Disability, bureaucracy, and stigma among people living with poverty and chronic illness in the United States. *Soc Sci Med*, *190*, 181-189. <https://doi.org/https://doi.org/10.1016/j.socscimed.2017.08.031>
- Wildeman, C., Emanuel, N., Leventhal, J. M., Putnam-Hornstein, E., Waldfogel, J., & Lee, H. (2014). The prevalence of confirmed maltreatment among us children, 2004 to 2011. *JAMA Pediatrics*, *168*(8), 706-713. <https://doi.org/10.1001/jamapediatrics.2014.410>
- Wildeman, C., & Wang, E. A. (2017). Mass incarceration, public health, and widening inequality in the USA. *The Lancet*, *389*(10077), 1464-1474.
- Wilkinson, L. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American psychologist*, *54*(8), 594.
- Williams, D. R., & Collins, C. (2016). Racial residential segregation: a fundamental cause of racial disparities in health. *Public health reports*.
- Williams, D. R., González, H. M., Neighbors, H., Nesse, R., Abelson, J. M., Sweetman, J., & Jackson, J. S. (2007). Prevalence and Distribution of Major Depressive Disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results From the National Survey of American Life. *Archives of General Psychiatry*, *64*(3), 305-315. <https://doi.org/10.1001/archpsyc.64.3.305>

- Williams, E. (2016). *State Earned Income Tax Credits and Minimum Wages Work Best Together*. Center on Budget and Policy Priorities. Retrieved 29 June 2016 from <http://www.cbpp.org/research/state-budget-and-tax/state-earned-income-tax-credits-and-minimum-wages-work-best-together>
- Williams, E., & Waxman, S. (2019). *States Can Adopt or Expand Earned Income Tax Credits to Build a Stronger Future Economy*. <https://www.cbpp.org/research/state-budget-and-tax/states-can-adopt-or-expand-earned-income-tax-credits-to-build-a>
- Wing, C., Simon, K., & Bello-Gomez, R. A. (2018, 2018/04/01). Designing Difference in Difference Studies: Best Practices for Public Health Policy Research. *Annual Review of Public Health*, 39(1), 453-469. <https://doi.org/10.1146/annurev-publhealth-040617-013507>
- Wu, C.-F. (2008, 2008/01/01/). Severity, timing, and duration of welfare sanctions and the economic well-being of TANF families with children. *Children and Youth Services Review*, 30(1), 26-44. <https://doi.org/https://doi.org/10.1016/j.childyouth.2007.06.009>
- Wulczyn, F., Gibbons, R., Snowden, L., & Lery, B. (2013). Poverty, social disadvantage, and the black/white placement gap. *Children and Youth Services Review*, 35(1), 65-74.

Yoshihama, M., Gillespie, B., Hammock, A. C., Belli, R. F., & Tolman, R. M. (2005). Does the Life History Calendar Method Facilitate the Recall of Intimate Partner Violence? Comparison of Two Methods of Data Collection. *Social Work Research*, 29(3), 151-163.
<http://www.jstor.org/stable/42659595>