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ORIGINAL PAPER

Testing the Family Stress Model among Black Women Receiving Temporary Assistance for Needy Families (TANF)

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Abstract

Black female primary caregivers who receive Temporary Assistance for Needy Families (TANF) are burdened not only by economic pressure but also by a disproportionate prevalence of psychological disorders. This is particularly pernicious given that poverty and maternal mental health impact child outcomes and may decrease the economic mobility of families. Consequently, it is imperative to understand the mechanisms that explain the association between economic pressure and child outcomes. The current study addressed this gap by testing an application of the Family Stress Model (FSM), which describes how economic pressure results in parental psychological distress, particularly depression, and in turn impacts parenting quality and child outcomes. Additionally, social support was assessed as a potential culturally-salient protective factor within the model. Four hundred sixteen Black female primary caregivers who receive TANF were administered a series of measures assessing mental health and family wellbeing. Structural equation modeling was utilized to test a single model that incorporated all hypotheses. Maternal depression and quality of parenting serially mediated the relationship between economic pressure and school performance. The relationship between economic pressure and adverse child outcomes, however, was mediated only by maternal depression. Social support did not significantly moderate the relationship between economic pressure and maternal depression; however, it did demonstrate a significant direct effect on maternal depression. The current study corroborates the application of FSM to another population. Further, it demonstrates the importance of interventions that target maternal mental health, parenting, social support, and family economic mobility as well as system-level policy interventions to address poverty.

Keywords Economic pressure · Maternal depression · Social support · Family stress · Black female primary caregivers · Temporary Assistance for Needy Families

Highlights

- The FSM is applicable to Black female primary caregivers who receive TANF.
- Depression and parenting quality mediate economic pressure → school performance.
- Depression mediates economic pressure → adverse child outcomes.
- Social support was associated with lower levels of maternal depression.
- Social support did not buffer the economic pressure → depression association.

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Most families who qualify for and receive cash assistance, now called Temporary Assistance for Needy Families (TANF), are burdened by financial and psychological stress. Women, more specifically, Black mothers who are the heads of households, are especially impacted given that they experience some of the highest rates of poverty (38.8%; Tucker and Lowell 2016). Further, single mothers receiving TANF demonstrate higher rates of psychological disorders than the general population (Bassuk et al. 1998). It has been estimated that lifetime prevalence of psychological disorders and substance use disorders, among women who receive TANF, is 53.2 and 29.1%, respectively (Cook et al. 2009). There is evidence to suggest that poverty and maternal psychological distress, particularly in combination with one another, may predict poorer child outcomes (Petterson and Albers 2001; Riley et al. 2009) which may, in turn, decrease mobility out of poverty (Duncan et al. 2011; Holzer and Baum 2017).

Just as adversity may indirectly impact children through a multi-generation link (Petterson and Albers 2001; Riley et al. 2009), healing and resilience may also occur in a multi-generation manner. Indeed, multiple studies have demonstrated that addressing maternal depression not only improves maternal mental health but also improves child outcomes (e.g., Coiro et al. 2012; Swartz et al. 2016). Individuals who receive TANF also receive additional services and frequently attend workshops, programs, and job training services provided by TANF, providing a unique opportunity to engage these mothers in additional interventions such as mental health care. Thus, it would be important to investigate whether embedding mental health interventions in programs targeting intergenerational poverty has the potential to reduce pernicious outcomes for children and their caregivers and improve economic mobility for families. In order for such interventions to be as effective and efficient as possible, however, it is imperative to understand the mechanisms that link economic pressure, maternal depression, and child outcomes. Although not specific to Black female primary caregivers or individuals receiving TANF, one framework that may prove helpful is the Family Stress Model (FSM; Conger and Elder 1994). FSM posits that economic pressure results in parental psychological distress, particularly depression. Symptoms of depression (e.g., sadness, fatigue, anhedonia) may, understandably, make it difficult for parents to engage with their children in an attentive and effective manner which may negatively impact child development and functioning (Barnett 2008). While this represents a primary pathway posited by FSM, recent applications of FSM also demonstrate a direct link between caregiver depression and child outcomes (e.g., Landers-Potts et al. 2015). The overall FSM model, as well as the specific links therein, have been well supported across a number of studies (e.g., Conger et al. 1992, 1994, 2002; Iruka et al. 2012; Landers-Potts et al. 2015) and for a wide variety of child outcomes, including internalizing and externalizing symptoms, conduct problems, and academic outcomes, including math performance and literacy (Masarik and Conger 2017 for a review).

Initially, FSM was predominantly applied to rural White two-parent families (e.g., Conger et al. 1992, 1994). While recent studies have successfully applied the model to diverse racial and ethnic minority samples and family structures (e.g., Conger et al. 2002; Iruka et al. 2012; Landers-Potts et al. 2015) there is a continued need for further application of this model to minority populations and exploration of risk and protective factors that impact these relationships (Barnett 2008; Conger et al. 2010). To this point, Barnett (2008) highlights how simply replicating FSM among racial and ethnic minority populations may inadvertently disguise culturally-relevant strengths, resources, or vulnerabilities. Social support is one protective factor that warrants attention in the application and adaptation of the FSM for Black women, as it is widely considered a culturally-relevant protective factor for this population. One reason for the relative importance of social support for Black women is that it may be a preferable form of help-seeking compared to formal supports, such as psychological treatment (Fowler and Hill 2004 for a review; Short et al. 2000). Given the long history of medical exploitation of the Black community (Gamble 1997; Washington 2006) and the potential for experiencing institutional and interpersonal racism when formal supports are sought out, Black women may experience cultural mistrust as a barrier to treatment seeking (Fowler and Hill 2004, for a review). Thus, despite experiencing a disproportionate degree of adversity, in the form of high rates of poverty, racism and sexism (see Bryant-Davis et al. 2010; Tucker and Lowell 2016), Black women may be less likely to seek treatment. Social support may also be preferable for Black women given cultural values of interdependence and collectivism (Sue and Sue 2008) and an adaptive use of extended kinship networks (Lyles and Carter 1982).

Social support has repeatedly been demonstrated to be beneficial for the mental health of low-income mothers (Radey 2018). The specific way social support is protective may be multi-faceted. In their review on social support and mental health, Turner and Brown (2010) conclude that social support may be protective both through a direct effect on mental health and through its ability to buffer the impact of stress. Indeed, among a sample of low-income Black female primary caregivers, emotional support was negatively associated with depression, whereas instrumental support buffered the relationship between moderate levels (but not high levels) of discrimination and depression (Ajrouch et al. 2010). Although discrimination is a different form of adversity than the focus of the FSM, economic

pressure, both constitute forms of oppression frequently experienced by low-income Black female primary caregivers. Consequently, social support is an important construct to test in FSM models among Black female primary caregivers who receive TANF, both as a potential direct correlate of maternal depression and as a potential moderator of the relationship between economic pressure and maternal depression. Notably, McConnell et al. (2010) did test the potential moderating impact of social support in an FSM model but found that it did not attenuate the relationship between financial and parenting stress, albeit in a predominantly White sample. However, there is reason to believe that the moderating effect of social support may vary by race. Ennis et al. (2000) found that while social support had a direct association with depression among low-income women, regardless of race, social support only moderated the association between acute economic stress and depression for Black women, and not White women. Thus, assessing the role of social support within the context of FSM, in a sample of Black female primary caregivers who receive TANF, remains an important, yet untested, inquiry.

Current Study and Hypotheses

The current study tested an application of FSM among a sample of Black female primary caregivers who receive TANF, which to our knowledge has not been done. Doing so is an important step, as elucidating mechanisms that may explain the relationship between economic pressure and maternal and child wellbeing is vital for the development of empirically-supported interventions for this population. Specifically, high rates of mental health needs including maternal depression have been documented among Black women receiving TANF (Corcoran et al. 2004; Hastings and Snowden 2019). As maternal depression can be treated, it is a potentially modifiable risk factor for poor economic outcomes for Black women and children. Given that FSM has demonstrated utility in explicating a broad range of child outcomes (Masarik and Conger 2017), the current study focused on two distinct aspects of child wellbeing, school performance and adverse child outcomes.

Additionally, the current study addressed a vital question identified by previous research (e.g., Barnett 2008)—namely, going beyond merely applying FSM to a racial minority population by assessing a potential culturally-salient protective factor for the current population (i.e., social support). Specifically, we examined whether there was a direct association between social support and maternal depression and also whether social support buffered the relationship between economic pressure and maternal depression. Examining these two potential roles of social support (i.e., as a potential independent variable and potential moderator) is consistent with research that has demonstrated social support to directly contribute to mental health and also buffer the effects of stress on mental health (Ajrouch et al. 2010; Ennis et al. 2000; Turner and Brown 2010, for a review).

Our overarching goal was to test a model representing FSM, including the potential protective effects of social support (see Fig. 1). Specifically, we hypothesized that:

H1a. Consistent with the pathway posited by the FSM and the results of previous empirical studies on FSM (Barnett 2008; Masarik and Conger 2017) there would be an indirect effect of economic pressure on adverse child outcomes via maternal depression and quality of parenting, serially.

H1b. Consistent with the results of a previous study applying FSM to a Black population, which also demonstrated a direct association between caregiver depression and child outcomes (i.e., rather than an indirect association via parenting; Landers-Potts et al. 2015), there may also be an indirect effect of economic pressure on adverse child outcomes via maternal depression alone.

H2a. Consistent with the pathway posited by the FSM and the results of previous empirical studies on FSM, (Barnett 2008; Masarik and Conger 2017) there would be an indirect effect of economic pressure on school performance via maternal depression and quality of parenting, serially.

H2b. Consistent with the results of a previous study applying FSM to a Black population, which also demonstrated a direct association between caregiver depression and child outcomes (i.e., rather than an indirect association via parenting; Landers-Potts et al. 2015), there may also be an indirect effect of economic pressure on school performance via maternal depression alone. H3a. Consistent with literature demonstrating the direct association between social support and depression, generally, and for Black women, specifically (Ajrouch et al. 2010; Ennis et al. 2000; Turner and Brown 2010), there would be a direct effect of social support on maternal depression. H3b. Consistent with literature demonstrating the buffering role of social support on the relationship between adversity and depression, generally, and for Black women, specifically (Ajrouch et al. 2010; Ennis et al., 2000; Turner and Brown 2010), social support would moderate the relationship between economic pressure and maternal depression.

Method

A government agency (“Agency”) responsible for the administration of TANF benefits in a large, U.S. urban area partnered with researchers from Yale University to conduct a survey examining the health, mental health and family

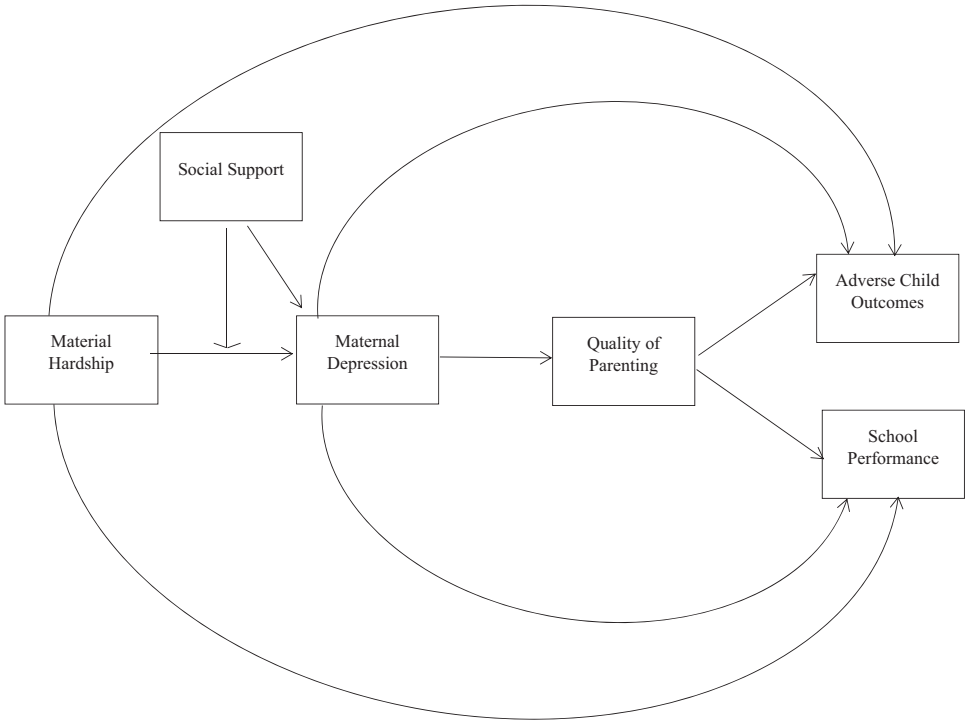

Fig. 1 Hypothesized relationships among FSM variables, including hypothesized moderation or direct effect by social support. Because H3b was not supported, the social support/material hardship interaction term was removed from the final model

wellbeing of its customers. The survey took place over six weeks in 2018. No identifying information was shared with the University researchers. The survey was the first phase of a larger community-based participatory research study focused on mental health service delivery for women in the context of TANF. As such, data presented herein are limited in scope as they were collected primarily to inform the design and delivery of the mental health intervention for Black women in partnership with the TANF agency and not collected specifically to address the research questions of the current study.

Participants & Procedures

Participants were adult women, who were the primary caregiver of a child 18 years or younger and received TANF cash assistance in 2018.

The TANF Agency created a static list of eligible customers ($N = 8507$) and pulled a random selection of customers to participate in the survey. Survey administrators employed by the Agency called selected customers. A convenience sampling strategy was also utilized to ensure customers without a reliable phone number could participate, such that Government workers surveyed customers at TANF Employment Program provider sites and TANF Service Centers during their normal course of business. Interview responses were recorded in an online database system by agency workers. Five hundred and sixty-five interviews were completed, 71% ($n = 401$) of which were randomly recruited via phone call. All participants provided verbal informed consent and received a $40 gift card for their participation.

For the purposes of this study, the analytic dataset was further restricted to include only women who self-identified as Black or African American and had a child in school. Additionally, one participant was missing data on all primary variables and was removed, yielding a final sample size of 416. The mean age of participants was 33.57 years ($SD = 8.53$) and participants had a mean of 2.55 ($SD = 1.57$) children (see Table 1 for additional demographic information).

Measures

Economic pressure

A count variable was created utilizing five questions that assess economic pressure in several domains (i.e., going without things due to being short on money, not having money left at the end of the month, running out of food without money to get more, moving due to inability to afford rent, not having one's own place to stay). Sample items include, "Have you or your family gone without things you really needed in the past year because you were short of money?" and "Was there ever a time during the past year when you did not have your own place to stay?". Responses were dichotomized (0 = denied the item, 1 = endorsed the item). Items were summed such that scores

Table 1 Demographic characteristics of participants

Race/ethnicity	
Black non-hispanic	94% (391)
Black hispanic	5.8% (24)
Level of education	
<HS diploma or GED completion	20.8% (86)
Graduated HS or GED completion	43.8% (181)
Attended some college or vocational school	31.0% (128)
Graduated college and beyond	4.4% (18)
Length of TANF receipt	
<60 months	43.2% (171)
>60 months	56.8% (225)
Level of school for youngest child	
Daycare	24.4% (98)
Pre-school	14.5% (58)
Kindergarten	10.0% (40)
Elementary school	31.7% (127)
Middle school	9.2% (37)
High school	10.2% (41)

Values reported as %(*n*); *n's* do not always add up to 416 due to missing data

ranged from 0 to 5 with higher scores indicating higher levels of economic pressure.

Social support

A composite score of social support, incorporating both emotional and instrumental support, was computed using a modified version of four items measuring the availability of support (Jackson et al. 2000). Sample items include, "If I need a ride to get my child to the doctor, there are friends or relatives I could call to help", and "If I am feeling exhausted, sad, or depressed, like at the end of a long day, I have to cope alone". Participants responded to items on a 3-point Likert scale ranging from 0 (*never true*) to 2 (*true all of the time*). Items were summed, with some items reverse coded, and higher scores represented higher levels of support. Internal consistency reliability in this sample was 0.66.

Maternal depression

The Center for Epidemiological Studies Depression Scale (CES-D; Radloff 1977) consists of 20 items using a 4-point Likert scale ranging from 0 (*rarely or none of the time [less than one day]*) to 3 (*most or all of the time [5–7 days]*). Sample items include, "I was bothered by things that usually don't bother me", and "I had crying spells". Items were summed, with some items reverse coded, with higher scores indicating greater depressive symptom severity. Psychometric properties of the CES-D are well-established (Knight et al. 1997; Radloff 1977; Rozario and Menon 2010) and internal consistency reliability was 0.88 in this sample.

Quality of parenting

The Involvement subscale of the Parent Child Relationship Inventory (Gerard 1994) consists of 14 items that assess the degree to which a parent knows and interacts with their child. Participants were prompted to answer items with their youngest child in mind. Sample items include, "My feelings about being a parent change from day to day", and "I spend a great deal of time with my child". They responded to items on a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). Items were summed, with some items reverse coded, and higher scores indicated more involved parenting. In this sample, internal consistency reliability was 0.85.

Adverse child outcomes

A count variable, similar to that which is utilized in the ACEs literature (Anda et al. 2006), was created using items that assess experiences indicating possible adversity in participants' youngest child (i.e., unexcused school absences, school suspensions, emergency room visits, child protective services involvement). Sample items include, "In the past year, has your child had to go to the Emergency Room for any reason (physical, surgical, emotional, or substance use)?" and "During the current school year, has your youngest child had any unexcused absences?". Responses to each item were dichotomized (0 = denial of the item, 1 = endorsement of the item). All items were summed such that higher scores indicated more adverse child experiences.

School performance

School performance was assessed using a single item, "Based on your knowledge of your child's schoolwork, including report cards, how has he or she been doing in school overall?" Participants responded using a 5-point Likert scale that ranged from 1 (*not well at all*) to 5 (*very well*). Higher scores represented higher performance.

Data Analytic Plan

To examine all direct and indirect effects of economic pressure on the outcome variables (i.e., adverse child outcomes (H1), school performance (H2) and the potential direct (H3a) or moderating effect (H3b) of social support, a single path analysis model was tested. All variables were mean centered. The hypothesized moderating effect was explored using an interaction term that is the product of the

social support variable with the economic pressure variable. When the hypothesis of effect moderation was not supported, the interaction term was subsequently removed from the final model, and the direct effect of social support on maternal depression was tested. Prior to interpreting the specific proposed relationships, the model fit was tested in structural equation modeling (SEM) using five fit indices: chi-square p value ($p > 0.05$ indicates good fit), standardized root mean square error (SRMR < 0.05 indicates good fit), adjusted goodness-of-fit index (AGFI ≥ 0.90 indicates good fit), root mean square error of approximation (RMSEA < 0.05 indicates good fit), and Bentler comparative fit index (CFI ≥ 0.90 indicates good fit). Full information maximum likelihood estimation (FIML) was used to address missing data and to allow for the use of all available data in estimation within the maximum likelihood framework. Analyses were performed using SAS software, Version 9.4 (SAS Institute Inc., Cary, NC, USA).

Results

Descriptive statistics and Pearson correlation coefficients are in Table 2. The model (see Fig. 2) provided a good fit to the data, $\chi^2(5) = 9.16$, $p = 0.103$, SRMR = 0.04, AGFI = 0.95, RMSEA = 0.04, Bentler CFI = 0.97. Consequently, we interpreted the specific hypothesized relationships. Hypothesis 1 was supported in that there was a significant indirect effect of economic pressure on adverse child outcomes. Specifically, it was mediated by maternal depression alone (H1a; $B = 0.05$, 95% CI = 0.02, 0.09, $p = 0.006$) but not maternal depression and quality of parenting serially

Table 2 Means, standard deviations, and correlations among measured variables

Variable	1	2	3	4	5	6	*Mean (SD)*
1. Economic pressure	–	−0.31***	0.41***	0.01	0.12	−0.02	2.28 (1.33)
2. Social support		–	0.32***	0.05	−0.11	0.15*	4.46 (2.12)
3. Maternal depression			–	−0.15**	0.22**	−0.12	14.68 (10.97)
4. Quality of parenting				–	0.06	0.26***	51.33 (5.12)
5. Adverse child outcomes					–	−0.07	0.79 (0.85)
6. School performance						–	3.94 (0.98)

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

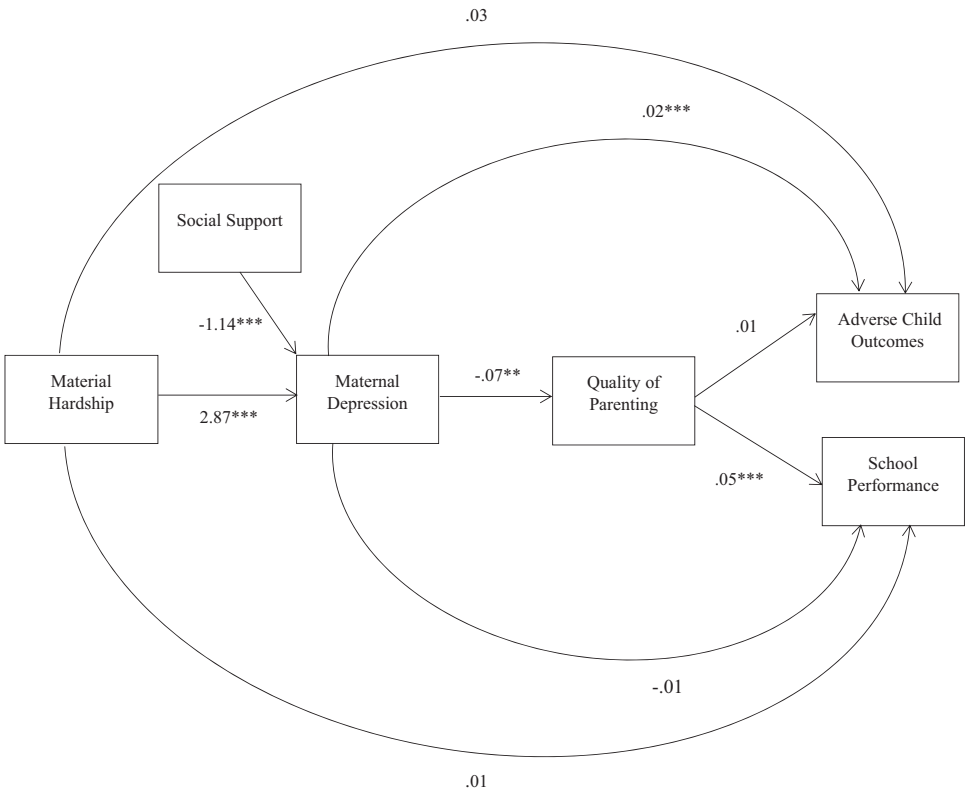

Fig. 2 Estimated relationships among FSM variables, including social support. All estimates are unstandardized. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

(H1b; $B = -0.002$, 95% CI $= -0.01$, 0.0002, $p = 0.308$). Hypothesis 2 was also supported in that there was a significant indirect relationship of economic pressure on school performance. Although there was not an indirect effect of economic pressure through maternal depression alone (H2a; $B = -0.03$, 95% CI $= -0.06$, 0.01, $p = 0.190$), there was a significant indirect relationship via maternal depression and quality of parenting, serially (H2b; $B = -0.01$, 95% CI $= -0.02$, -0.001, $p = 0.033$).[1] There was not a direct effect of economic pressure on either outcome (child outcomes: $B = 0.03$, 95% CI $= -0.06$, 0.12, $p = 0.518$; school performance: $B = 0.01$, 95% CI $= -0.09$, 0.11, $p = 0.839$). Finally, when the interaction term between economic pressure and social support was added, it did not significantly predict maternal depression (H3b; $B = -0.03$, 95% CI $= -0.13$, 0.07, $p = 0.528$), and thus was removed from the final model. However, there was a significant direct effect of social support on maternal depression (H3a; $B = -1.14$, 95% CI $= -1.66$, -0.61, $p < 0.001$). Overall, there was support for the application of FSM to this sample of Black female primary caregivers and preliminary evidence that social support may be an important addition to the model, in this population.

Discussion

To our knowledge, this study is the first to apply FSM to Black female primary caregivers receiving TANF. Overall, the current results support this application in that economic pressure was indirectly related to both adverse child outcomes and school performance. Furthermore, the mediating variables explained all the variance between economic pressure and these child wellbeing outcomes. However, the specific indirect paths varied. Economic pressure was associated with school performance through maternal depression and quality of parenting, serially, which is consistent with the original conceptualization of FSM (Conger and Elder 1994) and the results of previous studies (Masarik and Conger 2017). The literature would suggest, and our research supports, that economic pressure is a considerable psychosocial stressor that contributes to maternal depression. Symptoms of maternal depression may, understandably, interfere with effective parenting which may result in a home environment that is less conducive to children excelling academically (Barnett 2008). By comparison, the indirect effect of economic pressure on adverse child outcomes occurred through maternal depression alone and is consistent with more recent FSM applications that allowed for this potential indirect path that did not include quality of parenting (e.g., Landers-Potts et al. 2015). Research into the cognitive and neural mechanisms that may underlie adverse childhood outcomes has highlighted the higher order processes associated with the prefrontal cortex that underpin flexible goal-directed action, collectively known as executive function (Hughes and Ensor 2011). Specifically, research posits that executive functioning might be particularly susceptible to environmental factors such as maternal depression (e.g., Mezzacappa 2004).

To our knowledge, there is no aspect of the FSM that may explain these nuanced differences in pathways from economic pressure to child-specific wellbeing indicators, and thus, future research should attempt to replicate these results and explore potential explanations for the variation. However, if replicated, these differences may provide important information regarding mechanistic targets for intervention. For example, while providing resources to facilitate and support quality parenting may be vital, particularly for children's school performance, the current results suggest that it may not be as effective in addressing other child outcomes (i.e., school attendance and suspensions, CPS involvement, ER visits). Rather, these results suggest that interventions should address not only parenting skills and supports, but also maternal mental health, in the larger context of supporting family economic stability.

The current study also tested the potential protective role of social support on maternal depression. Social support did not dampen the deleterious relationship between economic pressure and maternal depression. This finding is consistent with the results of a previous study that explored the potential moderating role of social support in the context of FSM (i.e., McConnell et al. 2010) but diverges from the results of previous research that has found social support to moderate the relationship between adversity and depression for Black women (i.e., Ajrouch et al. 2010; Ennis et al. 2000). There are several potential explanations for this finding. It is possible that the severity of economic pressure experienced by women in the current sample may have been too great for social support to have a meaningful impact. This possibility is supported by the results of Ajrouch et al. (2010), in which instrumental social support buffered the impact of moderate frequency discrimination on maternal depression but did not buffer the impact of high frequency discrimination on maternal depression. Relatedly, the current sample endorsed moderate levels of social support on average—it may be that only high levels of social support would have been sufficient to buffer the adverse impact of economic pressure. Further, the results of a systematic review on social support and low-income mothers found that those who were most in need (e.g., those burdened most

[1] When multiple imputation was used along with robust maximum likelihood estimation, the results agreed with those presented using FIML to estimate the model parameters. There was no evidence to reject the MCAR assumption ($p = 0.659$) to perform multiple imputation.

by poverty) reported the lowest levels of social support (Radey 2018). The current study demonstrated the same phenomenon in that higher levels of economic pressure were associated with lower levels of social support. Thus, social support may not buffer the impact of economic pressure on depression because women experiencing the greatest economic pressure may also have insufficient social support. Finally, the lack of moderation may be a function of the way in which social support was measured. Ajrouch et al. (2010) found that instrumental support moderated the relationship between discrimination and maternal depression, but emotional support did not. The current study utilized a single measure of social support that incorporated both components. Future research should examine emotional and instrumental support distinctly as potential protective factors in relation to the FSM.

There was, however, a significant direct relationship between social support and maternal depression, which is consistent with previous research (e.g., Ajrouch et al. 2010; Ennis et al. 2000). This suggests that social support may still be an important protective factor and relevant mechanistic target for interventions. While it is likely that working with women to increase their access to social support would be beneficial and even necessary, it is unlikely to be sufficient to address their depression and their children's wellbeing. Rather, interventions should target social support concurrently with the aforementioned relevant mechanisms (i.e., maternal health, parenting, family economic stability). Even if interventions are designed to target these mechanisms, however, there remains the question of treatment access and utilization. For individuals living in poverty, including recipients of TANF, there are a number of potential barriers to mental health treatment enrollment and attendance (e.g., lack of insurance, childcare, reliable transportation; DeCarlo Santiago et al. 2012 for a review). Furthermore, cultural mistrust may also pose a barrier to treatment utilization specifically for Black women (Fowler and Hill 2004 for a review). Consequently, it is imperative for clinicians to collaboratively identify and mitigate treatment utilization barriers when working with low income Black women. Additionally, it is crucial that clinicians work to address sources of cultural mistrust, by both increasing their cultural sensitivity as well as tailoring treatment, as necessary, and engaging in culturally-informed care (Williams et al. 2019). Although specific treatment adaptations may depend on the presenting concerns or preferences of the client, they may include allowing for extra sessions to overcome mistrust and strengthen the therapeutic alliance, addressing cultural differences between clinician and client, explicitly identifying poverty, racism, and sexism as sources of distress, utilizing clients' extended support networks, and assessing for and capitalizing on other client strengths (Williams et al. 2014).

It is important to note that while the current study may inform individual psychological interventions for this population, this type of intervention, alone, is insufficient. Focusing exclusively on individual-level change places the disorder within the individual which constitutes an alignment "with the conservative view of causation…join[ing] the forces that perpetuate social injustice" (Albee 2000, p. 248). Rather, it would be important to acknowledge that experiencing distress in response to oppression may constitute a normative reaction. Thus, while psychological interventions can provide support, facilitate psychosocial acquisition, and generally improve one's ability to cope with adversity, system-level change is required to decrease the burden of that adversity, namely oppression and poverty. Additional intervention opportunities that have been explored as pilot projects in the U.S. include cash transfer programs. These programs provide financial support to low-income households and savings accounts provided to infants and children from low-income racial and ethnic monitory backgrounds that may assist in reducing the racial wealth gap (Hamilton and Darity 2017; Rojas et al. 2020). Preliminary results suggest cash transfer programs including the Earned Income Tax program (a program providing tax relief to low-income parents), may improve maternal mental wellbeing (Bastagli et al. 2016; Boyd-Swan et al. 2016). While results of studies of the effect of cash transfers on maternal psychological wellbeing are limited in the USA, the large majority of such studies globally, including one of the largest and earliest conditional cash transfer programs, *Oportunidades* in Mexico, was associated with a reduction in maternal depression (Ozer et al. 2011).

The current study's results should be interpreted within the context of its strengths and limitations. Regarding the former, the focus on Black female primary caregivers receiving TANF is important given that: (a) Black women who receive TANF demonstrate a disproportionately high prevalence of psychological disorders, including depression (Cook et al. 2009; Corcoran et al. 2004; Hastings and Snowden 2019), (b) maternal psychological disorders and poverty predict poorer child outcomes (Petterson and Albers 2001; Riley et al. 2009), and (c) women's involvement with TANF may provide opportunities for additional interventions such as mental health care. Additionally, the current study allowed for heterogeneity of the sample. For example, unlike much of the initial research conducted on FSM, children of the participants could be any age. Although we do not have information on child age, we do know there was considerable range given that they were enrolled in all levels of school from daycare through high school. Additionally, the inclusion criteria did not require participants to be mothers but rather female primary caregivers which allowed for greater diversity of relationships (i.e., grandmothers, aunts, etc.). A limitation to the current study,

however, is that we do not have data on the specific relationship between the female primary caregivers and the children. Additionally, the current study utilized cross-sectional self-report data which does not allow for causal conclusions. Finally, some applications of FSM account for interparental relationship problems and its potentially reciprocal relationship with disrupted parenting (Barnett 2008; Masarik and Conger 2017); however, this was not assessed in the current study. There were also limitations to the measures used. Both economic pressure and adverse child outcomes were not previously used measures but rather created from items in the survey and the internal consistency reliability for the social support measure was low. Specific to adverse child outcomes, there is evidence that childhood adversities are experienced differently by race with non Latinx Black and Latinx children having higher exposure than White children (Maguire-Jack et al. 2019). Additionally, children who live in poverty, or who are ethnic/racial minorities, face additional adversities outside and inside the home that were not measured in our study. An expanded definition of adverse child outcomes that includes social and cultural experiences of adversity such as discrimination and community violence (Cronholm et al. 2015; Karatekin and Hill 2019) would be important to measure in future research. School performance was assessed through a single caregiver-reported question. Although not ideal, previous research has shown that parental report of their children's school performance suggests adequate validity for most purposes (Gilger 1992), and parental-report of school performance has been utilized in similar studies (Secret and Peck-Heath 2004). As previously noted, the data utilized in the current study were collected as part of the first phase of a larger study and, thus, the data were not collected specifically to address the research questions of the current study. Consequently, future research should utilize a prospective, repeated measures, longitudinal design, use semi-structured interviews and/or psychometrically strong measures, and assess additional demographic variables of interest (i.e., specific relationship between female primary caregiver and child) and other constructs relevant to FSM (i.e., interparental relationship quality, as is applicable).

In conclusion, this study supports the application of FSM to Black female primary caregivers who receive TANF. Results demonstrate differing indirect effects of economic pressure based on the type of child-specific wellbeing indicator. Additionally, social support was not found to buffer the relationship between economic pressure and maternal depression, but it did act as a direct protective factor on maternal depression. These findings indicate the importance of developing and implementing interventions that target maternal depression, social support, parenting, and family economic stability, in this overburdened and under-resourced population, as well as system-level policy interventions to address poverty and oppression.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval It was determined by the Yale University Human Research Protection Program that the study qualified as Quality Improvement and, thus, it did not need to be submitted to the Institutional Review Board.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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