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Psychological distress among low-income mothers: the role of public and private safety nets

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Abstract

Poverty is linked with a host of negative outcomes. Approximately one-third of unmarried mothers and their children live in poverty in the United States. Public and private supports have the potential to mitigate the adverse effects of poverty; however, these supports may be unstable over time. The purpose of this study was to determine public and private safety net configurations of low-income mothers longitudinally and test linkages between safety net configurations and maternal psychological distress. Using longitudinal data from the Welfare, Children, Families project conducted in 1999, 2001, and 2005 ($n = 1,987$), results of multilevel models of change indicated that less than one-half of low-income mothers used public assistance and had private support at any one point. Safety net configurations and psychological distress levels changed over time with deterioration occurring more than improvement, and private safety net availability offered protection from psychological distress. These findings can be used to inform family support services and highlight the need to augment public assistance programs with services aimed to also address maternal psychological well-being and social support. Doing so can be a means of improving the public and private safety nets and outcomes of vulnerable families.

Keywords

Anxiety; depressive symptoms; mental health; motherhood; social support; socioeconomic status

Introduction

Approximately one-third of unmarried mothers in the United States and their children live in poverty (Berlan and Harwood 2018). Living in poverty has been associated with poor outcomes in multiple domains, including education, employment, and health (Duncan, Kalil, and Ziol-Guest 2018). Maternal psychological wellbeing is one central mechanism through which poverty transmits ill effects (e.g., Silva, Loureiro, and Cardoso 2016), and lower psychological functioning predicts less competent parenting and ultimately poorer child outcomes (e.g., Lee et al. 2009). Public safety nets in the United States, or government

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programs to support families in poverty, are in place. In attempts to mitigate the adverse effects of poverty, mothers may turn to these formal sources of support. Yet, private safety nets, or emotional, practical, child care, and financial support from family or friends, may shape public safety net use (Wu and Eamon 2010). Most research, however, has examined either public or private safety nets cross-sectionally without considering the interplay between the two or safety net instability over time (Gazso, McDaniel, and Waldron 2016). The purpose of this study was to determine public and private safety net configurations of low-income mothers over time and test linkages between safety net configurations and maternal symptoms of psychological distress.

Conceptual framework

The study's conceptual framework draws on epidemiologic theories of the social production of disease and protection from it. Within this life course framework, social and economic environments that mothers experience shape their mental health through an accumulation of positive and negative influences on well-being (World Health Organization [WHO] 2014). This study focused on mothers' public and private safety nets as buffers to poverty's stressful conditions because of the importance of safety nets, coupled with their malleability, for maternal mental health (Gupta and Huston 2009; WHO 2014). The conditions of poverty and public benefit receipt may endanger health and create psychological distress. The social production of disease and protection framework offers several potential mechanisms that may explain this relationship. For example, US society stigmatizes welfare use, creating feelings of self-blame and failure among recipients (Hansen, Bourgois, and Drucker 2014). Welfare income requirements also may produce a selection effect such that the conditions of poverty necessary for receiving such support increase psychological distress (Chase-Lansdale et al. 2011). Alternatively, receiving welfare support may provide mothers with necessary resources alleviating psychological distress countering negative effects of poverty, hardship, and potential stigma (Duncan, Kalil, and Ziol-Guest 2018; Kalil and Ryan 2010).

Effects of public safety net usage

Research findings have been mixed regarding the effects of public safety nets on maternal psychological distress, particularly when the effects of living in poverty were considered. Several studies have suggested that public assistance receipt predicted higher levels of maternal psychological distress (Davidson and Singelmann 2010; Shahidi et al. 2019). In a systematic review of the impact of social assistance programs in high-income countries including the United States, Shahidi et al. (2019) found that net of poverty level social assistance receipt consistently related to higher psychological distress symptoms. Other evidence suggested, however, that low-income mothers experienced similar levels of distress regardless of welfare receipt (Edin and Shaefer 2015).

Disparate findings in part may reflect variation in the timing of data collection as public assistance benefits have changed over time. Public assistance receipt occurs within current social, economic, and cultural environments. Over the last 25 years, the idea of self-sufficiency and limited expenditures gained priority over public safety net provision. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104–193), commonly known as welfare reform, removed low-income mothers' entitlement to cash

benefits for their minor children. Within the welfare reform law, Temporary Assistance to Needy Families (TANF) replaced unconditional aid with time-limited, work-contingent cash assistance. Following, the use of TANF decreased from 68% of eligible families in 1996 to 23% in 2016 (Floyd, Pavetti, and Schott 2017). Notably, most data for studies examining safety nets and distress were collected prior to welfare reform. Although other forms of assistance (e.g., food stamps, Supplemental Nutrition Assistance Program for Women, Infants, Children (WIC)) did not follow the same decline, participation in public benefit programs is not automatic, and often conditional on employment or bureaucratic hassle (CBPP 2018; Gabe 2014).

Effects of private safety nets

The public safety nets' increased emphasis on employment amplifies attention to mothers' survival strategies outside of public aid. Private safety nets offer a second mechanism, with or without public support, to alleviate poverty. Mothers with private safety nets experience less poverty and have improved well-being (Harknett and Hartnett 2011). Their children experience increased cognitive growth (e.g., Choi and Pyun 2014) and improved socioemotional wellbeing (Ryan, Kalil, and Leininger 2009). In addition, a Survey of Income and Program Participation analysis indicated that mothers with private safety nets perceived less need for public assistance (Wu and Eamon 2010).

Social capital theory explains why private safety nets may contribute to psychological wellbeing. Social capital, or the aggregate of potential resources available from one's network of relationships (Bourdieu 1986), influences mothers' functionality, including physical and mental health (Pinxten and Lievens 2014). Access to social support, such as availability of others for favors, money, or child care, reduces mothers' vulnerability to psychological distress (e.g., Meadows 2009). In contrast to detrimental conditions that can create distress, individual and social factors can prevent distress (Kingston 2013). Substantial evidence supports the value of social capital, or private safety nets, for low-income families. Mothers with private nets or informal support experienced better mental health (e.g., Meadows 2009; Wilmot and Dauner 2017) than those without such support. Among a national sample of unmarried mothers in the Fragile Families and Child Well-Being Study, those with instrumental support, including access to \$200, a place to live, and childcare in an emergency, had decreased odds of a depressive episode approximately two years later (Meadows 2009; Wilmot and Dauner 2017), and maternal wellbeing also has been linked with positive child outcomes (e.g., Lee et al. 2009).

The positive effects of private safety nets, however, may not be enough for low-income mothers. For example, although private safety nets were associated with lower levels of distress among low-income mothers, support did little to buffer the negative effects of stress (Sampson, Villarreal, and Padilla 2015). Further, the benefits of support may also be limited in scope. Although support provided some protection from stress for low-income mothers, it did little for the most vulnerable mothers under acute stress, including those experiencing high food insecurity and neighborhood safety concerns (Ajrouch et al. 2010), and poor maternal health negatively influences child behavior problems, emotional problems, and cognitive impairments (Sanger et al. 2015).

Study contribution

The importance of maternal psychological wellbeing to maternal and child functioning for low-income families, coupled with the potential protection offered through public and private safety nets, led to the current study. We examined three research questions: (a) what are the safety net configurations and psychological distress levels of low-income mothers? (b) how do they change over time? and (c) how do public and private safety net configurations affect maternal psychological distress? To answer these questions, we used data from the Welfare, Children, Families project, a longitudinal study of low-income mothers. The study's longitudinal nature allowed us to incorporate instability in psychological distress levels, safety nets, or covariates that often occurs among low-income families (Hardy and Ziliak 2014; Romich and Hill 2017). In addition, longitudinal models reduce the possibility that unmeasured factors account for the relationship between safety nets and distress (Gupta and Huston 2009). The current study is conceptually unique in examining how mothers' public and private safety nets work in combination to influence psychological distress levels over time.

Method

Data

This study used longitudinal data from the Welfare, Children, Families (WCF) project, a study of children (ages 0–4 or 10–14 years) and their female caregivers ($n = 2,402$) from low-income families at the time of baseline collection in 1999 (Angel et al. 2009). The WCF project was intended to provide insight into the wellbeing of low-income families living in Boston, Chicago, and San Antonio in the post-welfare reform era. It used a stratified, random sample of Black, Hispanic, and White households living in high-poverty neighborhoods (<200% of the poverty line per the 1990 Census). Eligibility criteria included respondents that spoke English or Spanish and lived below 200% of the poverty line. The project oversampled those living below 100% of the poverty line and those receiving TANF. All respondents consented to study participation. Suitable institutional review boards, including the one at the authors' institution, approved study protocol. Face-to-face in-home interviews yielded high response rates with 75% of caregivers responding at baseline (Wave 1), 88% of respondents participating in Wave 2 18 months later in 2000–01, and 84% participating in Wave 3 five years later in 2005–06 (Angel et al. n.d.).

We capitalized on all study waves to examine whether safety nets contributed to maternal psychological well-being. Because non-parental caregivers may have access to distinct safety nets, we limited the sample to biological and adoptive mothers who did not relinquish caregiving responsibilities during any wave ($n = 2,142$; 89% of sample). We excluded a few mothers who were of races or ethnicities other than Black, Hispanic, or White because of the small number ($n = 41$). Excluding cases with missing data at baseline ($n = 114$; 5%) resulted in a final sample of 1,987 mothers and 4,971 observations across the three waves. Analysis indicated that mothers in the final sample were similar to those not included on all study variables, except that focal children were slightly older (Mean = 9.2 years vs. Mean = 8.5 years) than those not included.

Measures

Psychological distress—Psychological distress was measured from the 18-item Brief Symptom Inventory (BSI-18, Derogatis 2000), including the depressive symptoms, anxiety, and somatization subscales. The scale's range was from 0 to 72, with higher scores indicative of higher levels of distress. Scores were imputed for missing items with the mean by WCF investigators when the mother provided valid data on at least four of six subscale items and on at least 12 items (Angel et al. n.d.). The scale reliability was high ($\alpha = 0.92$). The BSI-18 has clinical relevance because it is a psychometrically sound assessment of significantly problematic levels of psychological distress among samples with high levels of stress (Franke et al. 2017). Because this measure distinguishes clinical distress among highly stressed samples, the prevalence of clinically significant scores is generally low (Meijer, de Vries, and van Bruggen 2011).

Safety nets—Four categories measuring safety net configuration were created: private safety net only, public safety net only, neither, and both. To measure *private safety net*, mothers reported if they had “enough, someone, or no one” for emotional (i.e., listen to your problems when you are feeling low), practical (i.e., help with small favors), child care (i.e., take care of your children during an errand), and financial support (i.e., loan you money in an emergency). Following the convention of other researchers (e.g., Harknett and Knab 2007; Meadows 2009), a dichotomous variable was created distinguishing between those who had someone in at least one of the above four areas and those who did not have someone in all areas. To measure *public safety net*, mothers indicated whether they participated in TANF, food stamps, WIC, or SSI. From these, we constructed dichotomous variables, distinguishing between mothers who used at least one program from those who did not. Because safety nets can change over time, safety net time-varying variables were created to capture changes from one wave to the next.

Time-varying covariates—The analysis included four time-varying covariates associated with safety nets and psychological distress: marital status, employment status, poverty level, and financial strain (Chase-Lansdale et al. 2011). To consider *marital status*, mothers who were married were coded as 1; all others, regardless of whether they were partnered or single, were coded as 0. *Maternal education level* was a dichotomous indicator, distinguishing mothers who had a high school diploma or GED (1), from those who did not (0). *Employment status* was measured dichotomously by whether mothers worked for pay in the previous week (1) or not (0). To measure financial need, poverty level and financial strain were assessed. *Poverty level*, or the percentage of poverty in which a mother lived at each time point, was based on the poverty standards for the year of the interview calculated from household income and size. Household income was based on combined income from all sources, including earnings, public programs, and private sources. We used the income variable including imputations from the WCF investigators. When income from a source was missing, the mean was imputed. Analyses included a measure to indicate respondents whose income, and, subsequently, poverty level was imputed. To examine change of poverty over time, we created a dichotomized variable distinguishing those living at or below the poverty line (1) from those living above it (0). *Financial strain*, or hardship, was measured with a 5-item financial strain index (e.g., difficulty paying bills; inadequate housing, food,

clothing) created by WCF investigators through a principal components analysis. Higher scores equated to higher financial strain. To examine strain over time, we dichotomized each of the five strain indicators. Mothers who experienced “quite a bit” or “frequent” amounts in at least one area received a 1, 0 otherwise.

Time-invariant covariates—The analysis also included race and ethnicity, maternal age, child age, and prior welfare exposure, additional time-invariant covariates associated with safety nets and psychological distress (Davidson and Singelmann 2010; Gavin et al. 2010). Using US Census categories, mothers indicated their race and whether they were of Hispanic ethnicity. We created a three-category variable to measure *race and ethnicity*, distinguishing among non-Hispanic Black (1), Hispanic (2), and non-Hispanic White (0, reference) mothers. *Mothers’ age* was measured in years, and *child age* was measured in months at the baseline survey. To consider mother’s economic well-being as a child and subsequent *welfare exposure*, analyses included an indicator as to whether mothers received public assistance prior to age 16.

Analytic strategy

First, we used descriptive statistics to describe maternal psychological distress and safety net configurations among low-income mothers in the sample. We used survey weights that adjusted for the clustered sampling design and made the sample generalizable to mothers living below 200% of the poverty line at the time of data collection (Winston et al. 1999). Second, we used multilevel models of change (Singer and Willett 2003) that included both fixed and random components. Multilevel models had two central advantages over other longitudinal analytic strategies. First, they included all mothers who provided at least one wave of data and maximized data usage. Second, they accounted for variations in the timing of interviews.

To conduct the multi-level analyses, we first converted the data to “person-years” such that mothers with complete data contributed three records to the analysis, one for each wave. The multilevel model of change used two levels of equations. Level-1 equations considered within-mother change (e.g., how does maternal psychological distress change over time?). Level-2 equations considered between-mother differences in change (e.g., how does distress vary across mothers?) and used the variation in individuals’ change trajectories conditional on their safety net configuration and covariate values to model individual growth trajectories. Level-2 equations provided the opportunity to consider whether safety net configurations and covariates were related to psychological distress at baseline as well as whether they were related to the rate of change in distress over time. Included covariates were demographic and socioeconomic characteristics significantly associated with psychological distress in bivariate analyses at Wave 1 and other characteristics (i.e., maternal age, maternal education level) that may be important in the analysis of safety net configurations (e.g., Purtell, Gershoff, and Aber 2012). We assessed model fit through three goodness of fit statistics (i.e., Deviance, Akaike Information Criterion (AIC); Bayesian Information Criterion (BIC); Singer and Willett 2003). We also tested interactions between all covariates and time. Including interactions did not provide a better fit for the data,

indicating that the relation of factors to psychological distress did not change over the survey period (results not shown). We performed all analyses in Stata 13.0 (StataCorp 2013).

Results

Descriptive results

Percentage distributions were used to address the first research question which examined safety net configurations and psychological distress levels of low-income mothers. Approximately 7% of mothers scored above the cutoff for clinically significant psychological distress. In terms of safety net configurations, almost 50% of mothers relied on public support and had access to private support (i.e., both public and private support; Table 1). Approximately one-quarter perceived access to private support only and 19.2% used public support without private support availability. The remaining 9.1% of mothers did not use public support or perceive access to private support. In terms of private safety net, almost 72% perceived a full safety net, with more than 90% reporting access to emotional, practical, and child care support, and almost 82% reported access to financial support. In terms of public safety net usage, two-thirds of mothers used at least one program at baseline (Wave 1). Two-fifths used food stamps or WIC, the most common programs. Fewer mothers used TANF (26.6%) and SSI (11.9%).

For the second research question (changes in safety nets and distress levels change over time), vulnerability in low-income mothers' lives was examined and often coincided with high levels of instability, particularly economic (Table 2). In terms of the outcome variable, 13.5% of mothers fluctuated in their psychological distress with concerning levels at least in one wave, but not all waves. Instability was reported more often than stability in terms of safety net configurations. A full 65.4% of mothers changed from one type of safety net to another over the study period.

In terms of safety net components, approximately two-fifths of mothers experienced instability in private safety nets (41.2%) or public assistance (39.6%). The instability of mothers' safety nets reflected the instability of their economic lives. The majority of mothers experienced employment instability (52.8%), entered or exited poverty (55.5%), and experienced intermittent exposure to financial strain (57.4%). About one quarter of the sample (25.8%) began or ended a marriage, and 13.5% acquired a high school diploma or GED. Inconsistency and deterioration were more frequently reported than improvement (Table 2). For example, of mothers with instability in psychological distress, 67.3% became psychologically distressed or fluctuated over time compared to only 32.7% who exited distress without a later return. Public assistance and poverty were notable exceptions in which 51.8% and 55.4% of mothers, respectively, with instability left public assistance and poverty without return. These findings pointed to the great vulnerability and instability low-income mothers experienced and the importance of considering how these characteristics influence psychological distress in a multivariate context.

Empirical results

We used multilevel models to address the relation of public and private safety net configurations to maternal psychological distress, the third research question. Model A was an unconditional means model, a model without covariates at any level (Table 3). Its purpose was to partition the variance of the dependent variable. The one fixed effect estimated psychological distress across all data points and individuals (Singer and Willett 2003) and confirmed that the average level of psychological distress was non-zero. The significant estimated within-person (0.663) and between-person (0.612) variances suggested that residual outcome variation could be explained by other predictors. The interclass correlation coefficient calculated by dividing the initial status variance by the sum of the total variance was 0.48, indicating that (a) differences between mothers accounted for approximately one-half of the total variation in psychological distress, and that (b) the average correlation between any pair of composite residuals (e.g., between Wave 1 and Wave 2, between Wave 2 and Wave 3) was also 0.48, indicating high residual autocorrelation and the importance of using multilevel models to account for it.

The unconditional growth model, Model B, introduced time into the Level-1 sub-model and allowed mothers to differ in their initial levels of psychological distress and in their probability of change over time (-0.003 , $p < .001$). The significant difference in deviance values (χ^2 of 974.0, $df = 3$, $p < .001$), and the decreases in AIC and BIC statistics, indicated including time improved model fit. Results in Models A and B suggested that mothers varied in their levels of psychological distress and rates of change in distress over time, supporting the introduction of additional variables to explain this variation. Model C introduced safety net configuration as well as covariates. As with models A and B, model fit statistics (i.e., AIC, BIC, and Deviance) suggested that Model C improved model fit. Model coefficients suggested that safety net configurations were associated with the levels of psychological well-being, holding other model predictors constant. Compared to no support, receiving public support only was significantly related to increased psychological distress (0.119, $p < .05$) while private support with (i.e., both public and private support, -0.177 , $p < .001$) or without public support (i.e., private support only, -0.268 , $p < .001$) was related to decreased psychological distress over time.

For time-constant covariates, Black mothers, and Hispanic mothers to a lesser degree, reported lower levels of psychological distress than White mothers. Older mothers generally experienced less psychological distress than younger mothers. Mothers with older children experienced more psychological distress. Mothers who received welfare as a child had higher levels of distress than those who did not. Economic time-varying covariates also contributed to distress levels. Mothers who were employed experienced lower levels of distress than those not employed. In addition, mothers with high financial strain experienced higher levels of distress.

Discussion

Poverty and access to resources influence low-income mothers' levels of psychological distress (Duncan, Kalil, and Ziol-Guest 2018). Public safety net deterioration post-welfare reform, coupled with increasing instability of low-income mothers' lives (Hardy and Ziliak

2014), increases the salience of the evolution of maternal public and private safety nets and their contribution to levels of distress. Using data collected post-welfare reform, we described and tested the stability of public and private safety configurations and psychological distress in a sample of low-income mothers. Findings provide three central contributions to the literature about low-income mothers' safety nets and psychological distress: (a) safety net configurations were diverse: less than one-half of low-income mothers used public assistance and had available private support at any one point and 9% lacked both public and private safety nets; (b) safety net configurations, socioeconomic covariates, and psychological distress levels changed over time with deterioration occurring more often than improvement; and (c) private safety net availability, not public safety net receipt in isolation, offered protection from psychological distress.

Complimenting Harknett and Hartnett (2011), low-income mothers' safety nets revealed disadvantage and instability. Despite 70% of mothers living below the poverty level at baseline, a minority (e.g., 12% used SSI, 41% used food stamps) used public safety net programs, and one-fifth had no financial private net. In addition, most mothers experienced changes in their safety nets over time. Similar to an earlier study of private safety nets (Radey and Brewster 2013), loss or inconsistency was more common than gain. Although poverty exits likely accounted for a decline in receiving public assistance, a majority of the sample entered or experienced financial strain, highlighting the need for support among low-income mothers.

Congruent with the epidemiologic theories of the social production of disease and the importance of social capital in protection, safety net configurations influenced low-income mothers' psychological distress. As with earlier studies (e.g., Duncan, Kalil, and Ziol-Guest 2018), vulnerability (e.g., being single, experiencing hardship) was generally related to higher levels of psychological distress. Further, safety nets mattered even when including marital status, employment status, education level, poverty level, and hardship, suggesting that they affect distress above and beyond conditions of poverty. Moreover, in the absence of a private safety net, public assistance receipt increased psychological distress. Prior literature supports the negative relationship between public assistance and psychological distress (e.g., Chase-Lansdale et al. 2011), and findings point to the importance of assessing both public and private safety nets when considering the impact of insufficient social and economic environments on individual and family outcomes. In addition to direct benefits to maternal and child wellbeing (see author, in press for a review), our findings suggest private safety nets buffer the negative effects of receiving public assistance on psychological distress.

Study implications

The high levels of hardship and instability in mothers' lives endorse the importance of a reliant safety net. Yet, few mothers used public assistance and perceived access to family or friends to meet basic necessities consistently. To increase welfare participation and income stability among vulnerable families, public assistance program eligibility and benefit processes could approach families more holistically by considering eligibility across public programs to provide the best fit for a household's circumstances (Romich and Hill 2017). Changes in benefits due to small or temporary income changes and time-consuming

recertification processes deter participation and increase administrative burden. Based on this study's findings and the increasing evidence on the importance of stability for well-being among low-income families (Sandstrom and Huerta 2013), welfare benefit practices can assist families by assessing stability and providing benefits until families consistently increase their incomes (Romich and Hill 2017).

Results also contribute to the accumulating evidence indicating the importance of private safety nets in lessening maternal psychological distress (Meadows 2009; Wilmot and Dauner 2017). Despite facing socioeconomic adversity, mothers with private safety nets experienced less distress than those without such nets. The malleability of both safety nets and distress suggests the importance of cultivating environments, particularly in low-income areas, to address mothers' high levels of psychological distress. As Taylor and Conger (2017) noted, providing low-income mothers with interpersonal group sessions and a platform to form social networks can offer cost-effective peer support and mentorship (e.g., Freeman and Dodson 2014).

Public family support provisions could be bolstered to address both economic concerns and mental health needs. With the public's support for providing services instead of cash (Schram et al. 2010), programs designed to address mothers' economic and mental health barriers to economic stability may garner more support than cash safety net programs. Several US states offer wellness programs to address employment and mental health jointly among TANF recipients (Bloom, Loprest, and Zedlewski 2011). The finding that program receipt (i.e., TANF, food stamps, WIC, or SSI) without a private safety net increased distress highlights the need for support services that consider family needs more comprehensively.

Study limitations

This study had strengths and weaknesses important to consider when interpreting its findings. First, using longitudinal data and multilevel modeling reduced the possibility of omitted variable bias, or unmeasured factors accounting for the relationship between safety nets and psychological distress (Gupta and Huston 2009; Singer and Willett 2003). However, reverse causation was possible. Psychological distress could have influenced safety net configuration rather than the presented model, and evidence suggests bidirectionality (Gupta and Huston 2009). Second, mothers self-reported public safety net use and perceptions of private safety nets. Although fear of stigma may be linked with recipients underreporting public assistance use, parents can be reliable reporters of public support receipt (Johnson and Herbst 2013). In addition, private safety net perceptions are generally a better predictor of psychological health than private safety net use (Wethington and Kessler 1986). Third, WCF data contained only three time points. It is possible that mothers experienced instability during times not captured by the study.

Conclusion

Public safety nets exist to aid families in poverty; however, these supports are often time-limited and conditional. The present study findings suggest that private safety nets can buffer the negative impact of public support receipt on psychological distress. The high levels of poverty and instability among low-income mothers suggest that they can benefit from both

public and private supports. Given the instability of public support for families, welfare benefit practices may be better able to assist families by providing support until income gains are consistent. Further, augmenting public support programs to include attention to maternal well-being and social support may be a means of improving the safety nets and outcomes of vulnerable families.

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Table 1.

Percentage distribution of mothers at Wave 1: Welfare, children, families project.

Variable	Mean (SD) or %
Outcome - Psychological Distress	
Mean Brief Symptom Inventory Score	6.7 (0.29)
% Above cutoff for concern (67+)	6.9
Main Factors - Public and Private Net Configuration	
No public or private safety net	9.1
Public safety net only	19.2
Private safety net only	24.0
Both public and private safety nets	47.8
Complete private safety net	
Emotional support	90.1
Practical support	90.3
Child care support	90.3
Financial support	81.6
Any public assistance	
TANF	26.6
Food stamps	40.8
WIC	40.5
SSI	11.9
Maternal Covariates	
Race and ethnicity	
Non-Hispanic, Black	37.3
Hispanic	57.2
Non-Hispanic, White	5.5
Age (in years)	31.8 (0.32)
Received welfare as a child (yes)	33.4
Married (yes)	33.4
Has a high school diploma/GED (yes)	59.2
Employed (yes)	42.5
Mean % of poverty level	0.77 (0.02)
% below poverty level	69.8
Level of financial strain	-0.12 (0.03)
% experiencing major financial strain in 1+ area	46.0
Focal child age	
Total	7.44 (0.20)
Ages 0-4	2.53 (0.08)
Ages 10-14	12.51 (0.08)

Table 2.

Percentage distribution of low-income mothers who reported at least one change between Wave 1 and Wave 3 follow-up: Welfare, children, families project.

Variable	Percent with Change	Percent Lost	Percent Inconsistent	Percent Entered
Outcome				
Psychological distress (clinical level)	13.5	32.7	24.2	43.1
Time-varying predictors and covariates				
Safety net configuration	65.4	-	-	-
Private safety net	41.2	38.6	25.1	36.3
Public assistance	39.6	51.8	23.0	25.2
Maternal characteristics				
Married	25.8	42.4	25.4	32.3
High School diploma/GED or more	13.5	-	-	100.0
Employment	52.8	23.9	24.9	51.2
At or below poverty level	55.5	55.4	27.1	17.5
Significant financial strain	57.4	37.5	33.6	28.9

“Percent Lost” includes those who answered “yes” at Baseline, answered “no” at a later time, and never answered “yes” again. “Percent Inconsistent” includes those who experienced more than one change. “Percent Entered” includes those who answered “no” at Baseline, answered “yes” at a later time, and never answered “no” again.

Table 3.

Mixed effects linear regression models of psychological distress: Welfare, children, families project, Waves 1–3.

Variables	Model A b (SE)	Model B b (SE)	Model C b (SE)
Fixed Effects			
Between-mother constant (initial status)	1.536 ^{***} (0.021)	1.632 ^{***} (0.024)	1.862 ^{***} (0.089)
Safety Net Configuration (no support as reference)			
Public support only			0.119 [*] (0.055)
Private support only			-0.268 ^{***} (0.054)
Both public and private support			-0.177 ^{***} (0.052)
Time-Invariant Covariates			
Race and ethnicity (Non-Hispanic White as reference)			
Non-Hispanic Black			-0.240 ^{***} (0.071)
Hispanic			-0.139 [*] (0.070)
Mother's age (mean centered)			-0.008 ^{**} (0.003)
Child age			0.020 ^{***} (0.005)
Mother received welfare as a child			0.178 ^{***} (0.040)
Time-varying Covariates			
Married			-0.036 (0.041)
Mother has a HS diploma/GED			-0.028 (0.037)
Employed			-0.131 ^{***} (0.031)
Percent of poverty level			-0.052 [*] (0.023)
Level of financial strain			-0.350 ^{***} (0.021)
Within-mother constant (rate of change)		-0.003 ^{***} (0.000)	-0.003 ^{***} (0.0004)
Random Effects			
Variance Components			
Variance: initial status	0.612 ^{***} (0.029)	0.711 ^{***} (0.041)	0.543 ^{***} (0.036)
Variance: annual change	0.663 ^{***} (0.017)	0.553 ^{**} (0.019)	0.557 ^{***} (0.020)
Covariance		-0.002 [*] (0.019)	-0.002 ^{***} (0.001)
Model Statistics			
Rho	0.480	0.562	0.494
Goodness-of-fit			
Deviance	14640.50	14533.47	14033.67
AIC	14646.50	14545.47	14071.67
BIC	14666.09	14584.65	14195.72

N = 1987; 4,791 observations

* $p < .05$.

** $p < .01$.

 $p < .001$

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