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Does Employment-Related Resilience Affect the Relationship between Childhood Adversity, Community Violence, and Depression?

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Abstract Depression is a barrier to employment among low-income caregivers receiving Temporary Assistance for Needy Families (TANF), and adverse childhood experiences (ACEs) and exposure to community violence (ECV) are often associated with depression. Using baseline data of 103 TANF caregivers of young children of the Building Wealth and Health Network Randomized Controlled Trial Pilot, this study investigated associations of two forms of employment-related resilience—self-efficacy and employment hope—with exposure to adversity/violence and depression, measured by the Center for Epidemiologic Studies Depression (CES-D) short form. Using contingency table analysis and regression analysis, we identified associations between ACEs and depression [OR = 1.70 (1.25–2.32), $p = 0.0008$] and having high levels of ECV with a 6.9-fold increased risk for depression when compared with those without ECV [OR = 6.86 (1.43–33.01), $p = 0.02$]. While self-efficacy and employment hope were significantly associated with depression, neither resilience factor impacted the association of ACE level and depression, whereas self-efficacy and employment hope modestly reduced the associations between ECV and depression, 13 and 16%, respectively. Results suggest that self-efficacy and employment hope may not have an impact on the strong associations between adversity, violence, and depression.

Keywords Depression · Temporary Assistance for Needy Families (TANF) · Adverse childhood experiences (ACEs) · Exposure to community violence (ECV) · Employment hope · Self-efficacy · Resilience

Background

Parents receiving cash assistance through Temporary Assistance for Needy Families (TANF) are required to engage in work-related activities and are limited to a maximum lifetime participation of 5 years. However, many TANF recipients struggle to find and maintain employment and may return to TANF within months of leaving the program [1]. Two decades of research demonstrates participants have significant barriers to employment, including behavioral and physical health barriers and limited education and work skills [2, 3]. Additionally, depression is not only a commonly reported barrier to employment [4, 5] but is also significantly associated with poor child health, development, and well-being, which, in turn, creates even more challenges to economic security and stable employment [6–8].

Depression is exacerbated by toxic environments in both neighborhood and home. A high percentage of low-income families live in areas of concentrated poverty, where there are elevated rates of violent crime and a

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large proportion of adults living in poverty reporting exposures to childhood adversity [9, 10]. Both community violence exposure (ECV), which includes witnessing violence and being directly threatened or assaulted, and adverse childhood experiences (ACEs), which includes experiencing abuse, neglect, and household dysfunction, are known correlates of depression [11–13]. However, little research on ACEs and ECV and their relationship to depression has been carried out among TANF families. These barriers to work demand more investigation to ensure families reach self-sufficiency.

ACEs are negative events that occur before age 18. Experiences include physical, emotional, and sexual abuse; physical and emotional neglect; and household instability that includes witnessing domestic violence, having a parent spend time in prison, and being in a household where someone attempted suicide or suffered from depression. ACEs are associated with health risk behaviors including smoking and sexual risk behavior [14], alcohol and substance abuse [15, 16], physical health conditions including congestive heart failure, obesity, and diabetes [17–19], and mental health conditions including adult depression and attempted suicide [20]. Additionally, ACEs are linked with lower educational attainment, poor employment outcomes, and economic instability [13, 21].

Although few studies have examined the co-occurrence of ACEs and ECV, some have indicated that experiencing physical abuse is more common among children who describe high levels of community violence [22]. Among youth in the juvenile justice system, growing up in a neighborhood with concentrated economic disadvantage is also associated with a higher ACE score [23]. Violence exposure is commonly reported in neighborhoods with high rates of poverty [24, 25], and the rates of exposure to community-level violence for young children and their caregivers are quite high [26]. For example, one study of 160 young children found that 42% of children and 81% of their mothers had witnessed a violent incident such as a shooting, with 21% of the children witnessing three or more incidents and 12% witnessing eight or more incidents [27]. One study of low-income women found that a third of the sample had witnessed someone being killed, and one quarter had been beaten or robbed [28]. Community violence exposure is associated with physical and mental health disorders [29, 30]. In turn, depression is a known barrier to employment, impacting it *directly* through increased absenteeism and job loss [31] and *indirectly* through impacting skills and resources needed to find and maintain employment [32, 33].

Since violence and adversity are strongly related to depression, workforce training programs for low-income caregivers must identify ways to mitigate the effects of violence and adversity on depression. Two areas of promise are enhancing self-efficacy and employment hope. Self-efficacy is one's belief in the ability to draw on motivation, cognitive resources, and action plans to meet demands in a given situation [34]. Self-efficacy is negatively correlated with depression and mediates its relationship with stressful life events and various stressors such as pain [35, 36]. Self-efficacy has not been extensively studied in relation to employment among disadvantaged job seekers [37], nor has it been studied in relation to exposure to family or community violence.

Self-efficacy specific to seeking employment can be characterized as "employment hope." Employment hope has four components: psychological empowerment, future-oriented motivation, skills and resources, and goal orientation [38, 39]. Employment hope mediates the relationship between self-esteem and self-sufficiency among people returning from prison [40]. Employment hope is also a mediator between spirituality and self-sufficiency among low-income jobseekers [41]. It is possible that improving employment hope might help caregivers to improve their success in the labor force.

Because depression and exposure to childhood adversity and community violence are rarely considered in employment and training programs despite the well-known relationship between depression and poor employment outcomes, our study had two aims: (1) to identify the relationship between exposure to adverse childhood experiences and community violence with depression among people who are deemed to be "work-mandatory" through TANF and (2) to identify how work-related resilience factors, these potential mediators, may impact the relationships between such exposures and depression. Better understanding of the relationships between adversity, violence exposure, depression, and possible resilience factors can help point to areas for intervention that may reduce depression among TANF recipients and, thus, improve their employability.

Methods

Participants and Procedures

This analysis utilized baseline data from 103 participants in The Building Wealth and Health Network, a randomized controlled trial pilot (Network RCT) of a trauma-informed peer support and asset building intervention with caregivers of young children receiving TANF. Network RCT participants were recruited from three West Philadelphia county assistance offices. Eligibility included TANF benefits receipt for 4 years or less, at least one child under 6, and being deemed "work-mandatory," meaning that participants were required to participate in at least 20 h of "work participation" per week in order to receive TANF benefits. For more details of the Network RCT design and methods, see our previous publication [42]. Surveys were conducted using Audio Computer-Assisted Self-Interview (ACASI) software from the Nova Research Corporation. The ACASI methodology has been shown to be an effective method to collect sensitive information [43].

Measures

Basic demographic data were collected, including age of mothers, race/ethnicity (Black, White, Hispanic, or other), and highest level of education (some grade school or high school, high school graduate, or some college). Barriers to employment considered for this analysis were depression, ACEs, and exposure to community violence. Putative resilience factors evaluated were level of self-efficacy and employment hope.

Depressive symptoms were measured with the Center for Epidemiologic Studies Depression (CES-D) short form [44], which is reliable and consistent with the original version [45]. The 13-item abbreviated scale was summed; summary scores ≥10 were considered consistent with having clinical depression. The Adverse Childhood Experiences (ACEs) scale is a retrospective ten-item survey of adult reports of experiences before age 18, including physical, emotional, and sexual abuse; physical and emotional neglect; and household instability, such as parental separation or divorce, exposure to domestic violence, or mental health conditions, substance abuse, and incarceration of a household member [46]. The ACEs measure has been validated and shown to have good test–retest reliability [47]. We measured community violence exposure using the validated [48] Survey of Exposure to Community Violence—Self-Report (SECV) [49], which consists of 14 items including both witnessing and victimization. Questions assess different types of violence, including: "How many times have you yourself actually been shot with a gun?", "How often have you seen someone else get shot with a gun?," and "How many times have you actually seen someone being killed by another person?" Each question is answered on an eight-point Likert scale ranging from "never" (0) to "almost every day (8), where a higher score indicates higher exposure. Most researchers studying adult violence exposure use modified versions of children's scales; SECV-SR is currently the most widely used survey for measuring adult violence exposure and has acceptable to excellent internal consistency in diverse samples, including with African-American single mothers [50, 51].

For resilience factors, we utilized the Generalized Self-Efficacy Scale [52] because we expect our intervention to have broad impact on this construct. The questions include four-point Likert scale responses ranging from not true at all (1) to always true (4) to questions such as "I can always manage to solve difficult problems if I try hard enough," "Thanks to my resourcefulness, I know how to handle situations that I don't expect," and "If I am in trouble, I can usually think of a solution." The higher the score, the higher the self-efficacy. The Employment Hope Scale, developed and validated by Hong et al. among a similar low-income population, contains 14 items scored on a ten-point Likert scale ranging from strongly disagree (0) to strongly agree (10), where a higher score indicates higher employment hope. Questions include "When working or looking for a job, I am respectful of who I am," "I am worthy of working in a good job," and "I am capable of working in a good job."

Data Analysis

We have complete data on almost all study participants; we were missing data on depressive symptoms for only three participants. Therefore, we present complete case analysis for 100 participants. Descriptive statistics were summarized and categorized by differences in depressive symptoms consistent with clinical depression (≥10, CES-D) in Table 1. For ACEs, scale items were summed with lack of any exposure used as the referent group. Participants with any exposure were scored as having 1, 2, 3, or ≥4 ACEs. For ECV, events were summed and

Table 1 Baseline characteristics related to depression

Characteristics	Total ($N = 103$)	Depression ($N = 59$)	No depression ($N = 44$)	p value
Caregiver's mean age (SD)	25.4 (5.2)	26.2 (6.0)	24.3 (3.6)	0.06*
Caregiver's gender (%)				1.0
Male	6 (5.8)	4 (6.8)	2 (4.6)	
Female	97 (94.2)	55 (93.2)	42 (95.4)	
Sexuality (%)				0.85
Heterosexual/straight	86 (83.5)	70 (83.3)	16 (84.2)	
Gay or lesbian	3 (2.9)	3 (3.6)	0 (0)	
Bisexual	14 (13.6)	11 (13.1)	3 (15.8)	
Race/ethnicity (%)				0.87
Asian	4 (3.8)	3 (5.1)	1 (2.3)	
Black/African-American	94 (91.3)	53 (89.8)	41 (93.2)	
White	5 (4.9)	3 (5.1)	2 (4.5)	
Ethnicity (%)				0.39
Hispanic	5 (4.9)	4 (6.8)	1 (2.3)	
Non-Hispanic	98 (95.1)	55 (93.2)	41 (97.7)	
Education (%)				0.84
Some high school or grade school	30 (29.1)	16 (27.1)	14 (31.8)	
High school graduate or GED	35 (34.0)	20 (23.9)	15 (34.1)	
Technical school/some college	38 (36.9)	23 (39.0)	15 (34.1)	
Marital status (%)				0.82
Married	1 (1.0)	1 (1.7)	0 (0)	
Separated	4 (3.9)	3 (5.1)	1 (2.3)	
Never married	86 (83.5)	49 (83.1)	37 (84.1)	
Living with partner	12 (11.6)	6 (10.1)	6 (13.6)	
Employment (%)				1.0
Unemployed	97 (94.2)	56 (94.9)	41 (93.2)	
Employed	6 (5.8)	3 (5.1)	3 (6.8)	
ACEs score (%)				0.0006*
0	15 (14.6)	4 (6.8)	11 (25.0)	
1	27 (26.2)	11 (18.6)	16 (36.4)	
2	10 (9.7)	4 (6.8)	6 (13.6)	
3	11 (10.7)	8 (13.6)	3 (6.8)	
≥4	40 (38.8)	32 (54.2)	8 (18.2)	
Median exposure to community violence (25–75% interquartile range)	10.0 (6.0–14.0)	11.0 (7.0–15.0)	8.0 (6.0–11.0)	0.0004*
Exposure to community violence (%)				0.003*
Quartile 1 (scale total 0–3)	26 (26.0)	11 (19.0)	15 (35.7)	
2 (scale total 4–6)	22 (22.0)	13 (22.4)	9 (21.4)	
3 (scale total 7–9)	30 (30.0)	14 (24.1)	16 (38.1)	
4 (scale total 10+)	22 (22.0)	20 (34.5)	2 (4.8)	

Cut point of ≥10 (CES-D) is consistent with depression diagnosis

*$p < 0.05$

categorized into quartiles ranging from highest to lowest (referent) quartiles. Scale items for self-efficacy and employment hope were summed, then summary scores were categorized as quartiles from highest to lowest.

Upon inspection of associations of self-efficacy with depression, self-efficacy scores were analyzed as both quartiles and further aggregated as highest quartile versus all lowest quartile scores (two groups). Employment hope scores were similarly categorized as quartiles and, upon inspection of associations of employment hope with depression, were categorized as above or below the median score.

Initial evaluations of association were conducted using contingency table analysis, comparing median scores (for age of mothers and level of ECV) or quartile distributions between caregivers with or without depression. For these analyses, median values with associated 25–75% interquartile ranges are presented, as are quartile distributions for each group (see Table 2). Tests of associations were conducted using Pearson's chi-square tests or Fisher's exact tests (for sparse data), with associated p values. As per convention, p value <0.05 was considered to indicate significant differences between subgroups.

Simple and multiple regression models were constructed to measure associations of scale items with reports of depression. Independent variables

Table 2 Unadjusted associations of demographics, experiences with abuse and violence, and psychosocial factors with having elevated level of depression

Characteristic/psychosocial factors	Association with depression[a], odds ratio (95% confidence interval)	p value
Age, per 5 years	1.40 (0.95–1.85)	0.09
Education level		
Some grade school or high school	0.75 (0.28–1.96)	0.55
Graduated high school or GED	0.887 (0.34–2.21)	0.77
Technical school or college courses	1.0 (referent)	
ACEs (per event)	1.83 (1.37–2.45)	<0.0001*
Exposure to community violence		
Quartile 4 (highest)	13.64 (2.62–70.91)	0.002*
Quartile 3	1.19 (0.41–3.44)	0.74
Quartile 2	1.97 (0.62–6.24)	0.25
Quartile 1 (lowest)	1.0 (referent)	
Self-efficacy quartiles		
Quartile 4 (highest)	0.21 (0.07–0.70)	0.01*
Quartile 3	0.55 (0.18–1.69)	0.29
Quartile 2	0.64 (0.21–2.00)	0.44
Quartile 1 (lowest)	1.0 (referent)	
Self-efficacy (highest quartile)		
Quartile 4	0.30 (0.11–0.80)	0.02*
Other quartiles combined	1.0 (referent)	
Employment hope		
Quartile 4 (highest)	0.23 (0.07–0.78)	0.02*
Quartile 3	0.16 (0.04–0.61)	0.007*
Quartile 2	0.46 (0.13–1.56)	0.21
Quartile 1 (lowest)	1.0 (referent)	
Employment hope median		0.006*
Above median	0.32 (0.14–0.71)	
Below median	1.0 (referent)	

Cut point of ≥10 (CES-D) is consistent with depression diagnosis

*$p < 0.05$

[a] Estimates are adjusted for covariates included in the regression analysis table. Demographics did not confound the associations of ACES, community violence exposure, or other psychosocial factors with depression

demonstrated as being associated with depression were assessed for their magnitude of association with depression (dependent variable) followed by construction of multiple regression models that initially included all factors found by simple regression to be associated with depression. Final models were produced using standard backward elimination, providing estimates of association (odds ratios) with associated 95% confidence intervals, and *p* values are presented for all associations.

Mediation of associations of ACEs and ECV with depression by self-efficacy and employment hope was assessed using standard statistical methods [53]. Final adjusted regression models for associations of ACEs and ECV were adjusted for self-efficacy and employment hope (either individually or jointly) as potential mediators. Data were analyzed using SAS 9.3® software.

Results

Basic demographics of participants in our study can be found in a previous publication [42]. Study participants were mainly young (mean, 25.4 years), never married (84.1%), heterosexual (83.5%), women (94.2%), Black/African-American (91.3%), and non-Hispanic (95.1%). Approximately 71% of participants had completed high school, technical or college courses, or graduated college, yet 94.2% were unemployed. Table 1 presents the demographics and variables of interest in aggregate and by level of depressive symptoms consistent with being clinically depressed (57.3% of study participants reported CES-D scale summary score ≥10). There were no significant differences in these characteristics between participants reporting depression ($n = 59$, 57.3%) and no depression ($n = 44$, 42.7%). Age differences approached significance, where those reporting depression had a slightly higher mean age than those without depression ($p = 0.06$).

We observed large differences of frequency of ACEs and level of exposure to community violence vis-a-vis contingency table analysis between depressed and non-depressed participants. More than 54% of depressed participants reported four or more ACEs and approximately 25% reported one or no ACES compared with 18% of non-depressed participants reporting four or more ACEs and approximately 61% reporting one or no ACES ($p = 0.0006$). Similarly, participants with depression reported significantly higher levels of ECV than those who were not depressed ($p = 0.003$). Approximately 35% of depressed study participants had levels of exposure to violence in the upper quartile of scale values compared with only 5% of their non-depressed counterparts. Conversely, 19% of participants with depression reported scale values of exposure to violence in the lowest quartile compared with 36% of participants without depression.

Simple logistic regression was used to estimate the magnitude of crude, unadjusted associations of demographics, experiences with ACEs and ECV, and psychosocial factors with having elevated level of depressive symptoms (Table 2). Based on findings from contingency table analysis, age was the only demographic evaluated for its association with depression: each 5-year increase in age was associated with a 40% increase in risk of depression (odds ratio = 1.40, 95% CI = 0.95–1.85, $p = 0.09$). However, this association was not statistically significant.

Exposure to ACEs and community violence were both strongly associated with depression. Each ACE was associated with an 83% increase in risk of depression [OR = 1.83 (1.37–2.45), $p < 0.0001$], and participants in the highest quartile of ECV had a 13.6-fold risk of depression compared with participants in the lowest quartile of exposure [OR = 13.64 (2.62–70.91), $p = 0.002$]. Conversely, participants with ECV in the second and third highest quartiles of exposure did not have increased depression risk.

Self-efficacy and employment hope were each significantly associated with depression. Having self-efficacy scores in the highest quartile was associated with a 70% reduced risk of depression when compared with participants with lower scores [OR = 0.30 (0.11–0.80), $p = 0.02$]. Similarly, having high levels of employment hope was associated with lower depression risk: participants with employment hope scores greater than the median level have a 68% reduction in risk for depression [OR = 0.32 (0.14–0.71), $p = 0.006$].

The associations of ACEs and ECV with depression were not confounded by age, although because of their strong correlation, they mutually confounded their relationship with depression (Table 3). After mutual adjustment, each ACE was associated with a 70% increase in depression risk [OR = 1.70 (1.25–2.32), $p = 0.0008$], and having levels of ECV in the upper quartile was associated with a 6.9-fold increase in risk when compared with those with no exposure to violence [OR = 6.86 (1.43–33.01), $p = 0.02$].

Table 3 Independent effects/associations of ACES and exposure to community violence with depression

Barriers to employment	Association with depression[a], odds ratio (95% confidence interval)	*p* value
ACEs (per category, 5 categories)	1.70 (1.25–2.32)	0.0008*
Exposure to community violence		
Quartile 4 (highest)	6.86 (1.43–33.01)	0.02*
Other quartiles combined	1.0 (referent)	

Cut point of ≥10 (CES-D) is consistent with depression diagnosis

*$p < 0.05$

[a] Estimates are adjusted for covariates included in the regression analysis table. Demographics did not confound the associations of ACES, community violence exposure, or other psychosocial factors with depression

We did not observe evidence of significant levels of mediation of the association of ACEs and ECV by self-efficacy or employment hope (Table 4). Multiple regression models indicated that inclusion of either potential mediator does not impact the magnitude of association of ACEs with depression; estimates of association remain essentially unchanged, with each ACE associated with a 69% increase in the risk for depression ($p = 0.001$). For associations of ECV with depression risk, inclusion of self-efficacy or employment hope slightly reduces the observed magnitude of association of ECV with depression by 13.3 and 16.2%, respectively. Thus, while self-efficacy demonstrated no capacity to mediate the association of ACEs on depression, level of employment hope may slightly reduce the observed association, acting as either a mediator or confounding variable.

Discussion

Our study evaluates the relationship between major barriers to employment associated with depression, specifically ACEs and ECV, as well as resilience factors of self-efficacy and employment hope. Baseline findings show very high rates of depression and exposure to violence compared to national prevalence rates among similar caregivers, and they are similar in comparable surveys of women who have low income and are Black and Hispanic [54–56]. Our results similarly demonstrate that families with young children on TANF have many challenges that may negatively impact their ability to succeed in the job market. Our findings corroborate other studies that identify strong associations between ACEs and depression, ECV and depression, and ACEs and ECV as described in the background. Threshold effects seen in our data for those exposed to high levels

Table 4 Adjusted associations of ACES and community violence with depression by self-efficacy and employment hope

Resilience and barriers to employment	Association with depression[a], odds ratio (95% confidence interval)	*p* value
Self-efficacy		
ACEs (per category, 5 categories)	1.69 (1.23–2.31)	0.001*
Exposure to community violence		
Quartile 4 (highest)	5.95 (1.23–28.81)	0.03*
Other quartiles combined	1.0 (referent)	
Self-efficacy (highest quartile)		
Quartile 4	0.41 (0.13–1.24)	0.11
Other quartiles combined	1.0 (referent)	
Employment hope		
ACES (per category, 5 categories)	1.69 (1.23–2.33)	0.001*
Exposure to community violence		
Quartile 4 (highest)	5.75 (1.19–27.83)	0.03*
Other quartiles combined	1.0 (referent)	
Employment hope median		
Above median	0.41 (0.16–1.05)	0.06
Below median	1.0 (referent)	

*$p < 0.05$

[a] Estimates are adjusted for covariates included in the regression analysis table. Demographics did not confound the associations of ACES, community violence exposure, or other psychosocial factors with depression

of community violence and childhood adversity indicate that violence and adversity are important areas for intervention.

While our findings on violence exposure and depressive symptoms among participants are distressing, we did find relatively high levels of self-efficacy and employment hope at baseline. Knowing these resilience factors may potentially buffer families from depression [57], we expected to identify some indication that improvements in self-efficacy and employment hope might mediate the strong relationship between ACEs, ECV, and depression. We found no mediating effects of self-efficacy and employment hope in the relationship between ACEs and depression and only mild effects in the relationship of ECV and depression. While ACEs and ECV strongly effect depression, ACEs are not mediated by employment-related resilience factors, and the differences in ECV and depression are not enough to warrant significant investment. Such employment-related resilience factors so heavily emphasized by state and federal policy may not be effective intervention targets for reducing depression. Without improvements in depression, workplace success will be quite limited.

While high rates of depression are known to exist among caregivers participating in TANF, it is quite rare for TANF providers to inquire about depression, exposure to childhood adversity, and community violence. Employment training programs focus on ensuring access to employment and on building self-efficacy and employment readiness. Most welfare-to-work programs are not equipped to directly address depression among participants, yet are often faced with participants struggling with adversity, violence exposure, and depression. When exposure to violence and adversity are so prevalent, and their impact on depression so deep, our analysis of these baseline characteristics suggests that both self-efficacy and employment hope may not be as instrumental in building success toward self-sufficiency.

Despite experiencing high rates of depression, Network participants still report high self-efficacy and employment hope. This demonstrates that those who are receiving TANF support, while struggling, are motivated and committed to seeking employment. But this does not indicate that promoting such resilience will have significant effects on reducing depression. Though employment hope is a relatively new measure, the fact that it may not be a mediator between ACEs, community violence, and depression suggests that it may be more fruitful to integrate intensive interventions that seek to directly reduce violence- and adversity-related depression. Some may suggest that focus on building "community resilience" such as building social capital or community cohesion may be important avenues for future interventions [58]. However, the concept of community resilience still remains abstract and does not explicitly address community disinvestment in housing, education, and infrastructure [59, 60]. Taking such a holistic approach to addressing community initiatives that are so dependent on national, regional, and local policy changes outside the TANF laser-focus on employment may never align with the original intent of the TANF program.

Findings support the need for integrating trauma-informed approaches into TANF in addition to standard employment-focused resilience-building activities. The Agency for Children and Families has introduced the importance of exposure to trauma among TANF participants and foster care systems and is currently building technical capacity for education and training providers [61]. Most of the innovations in trauma-informed care in public assistance programs come from administrators addressing child welfare and substance abuse and not administrators focused on employment and self-sufficiency [62, 63]. Furthermore, some government agencies have begun to adopt a two-generation framework, recognizing that childhood experiences shape adult behavior, health, and income, as well as the direct impact that caregivers' success has on the health and well-being of their young children [64, 65]. The Building Wealth and Health Network (The Network) is one approach that includes trauma-informed peer support groups using the SELF tool from the Sanctuary Model [66]. SELF (an acronym for Safety, Emotions, Loss, and Future) is a psycho-educational curriculum designed to address the impacts of past trauma on current interpersonal violence and vocational functioning. This program does not directly attend to employment hope or self-efficacy, but rather works through the lens of social support and group work focused on helping caregivers address exposure to violence and emotional well-being. Other programs have begun to adopt similar approaches that address the health challenges of caregivers through referral, home visiting, and some group work; [3, 67, 68] however, these programs do not utilize a specific trauma-informed approach and are not directly associated with work-mandatory families on TANF.

Our study has several limitations. Data are cross-sectional, so we cannot address causation. However, both ACEs and ECV scales are retrospective, so can capture some aspect of longitudinal impacts of adversity and violence exposure. All data are based on self-report and therefore are subject to recall bias. Additionally, the non-specific nature of the self-efficacy measure prevents us from effectively measuring areas for growth and is known to already be associated with depression [52]. Finally, our baseline analysis of 100 participants is limited in sample size, and as such, it reduces our ability to evaluate the subtle relationships between risk determinants or protective factors and depression. Additionally, to prevent the omission of risk factors that were associated with depression but which were not significant at a level of $p < 0.05$, we included risk factors in final regression models that were trending toward statistical significance—ones which could be well associated based on previous research and a priori causal models.

Our study further evidences that childhood adversity and exposure to community violence are quite prevalent among caregivers participating in TANF and that these exposures are strongly associated with depression. We also identified high rates of self-efficacy and employment hope as potential resilience factors. Due to the very strong associations between ACEs, ECV, and depression, it seems likely, however, that employment-focused resilience building may not have an impact on depression. Focusing directly on violence prevention and behavioral health, rather than on work-related resilience, may provide more profound and meaningful results for families participating in TANF.

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Compliance with Ethical Standards

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