Child & Family Social Work

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ORIGINAL ARTICLE OPEN ACCESS

Children's Behavioural Issues and Kinship Caregiver Depression: The Roles of Self-Care and Formal Support

Wenjing Shao | Fei Sun | Gretchen Sheneman | Michele Brock

School of Social Work, Michigan State University, East Lansing, Michigan, USA

Correspondence: Wenjing Shao (shaowenj@msu.edu)

Received: 9 April 2023 | **Revised:** 6 December 2023 | **Accepted:** 13 February 2024

Keywords: children behavioural issues | kinship care service navigator programme | kinship caregiver depression | self-care practice

ABSTRACT

The purpose of this study was to examine two intervening variables, self-care and formal support that affect the relationship between children with behavioural issues and caregiver depression. Specifically, this study examines whether self-care can mediate the relationship between children's behavioural issues and caregivers' depression levels and whether formal support can moderate the relationship between children's behavioural issues and caregivers' depression levels. Data from this study were collected from Qualtrics survey in 2020. A total of 136 participated in the survey, and 16 of them did not complete the survey. Two duplicates were removed, so the final sample size in the survey is 118 kinship caregivers in Michigan. Children's problem behaviours, depression level of caregivers, self-care practices and kinship care navigator programme were measured. Results suggested that more frequently children showed behavioural issues, the more their behaviours are significantly associated with higher caregiver depression levels ($B = 0.253$, $p = 0.004$). The amount of caregiver self-care practice showed a significant mediation effect between caregivers' depression level and children's behavioural issues ($B = -0.314$, $p < 0.001$), meaning more behavioural issues resulted in less self-care practice of caregivers, and this less frequent self-care could also result in a higher level of depression of caregivers. The moderation effect of kinship care programmes showed a disparity when caregivers were caring for children with different levels of behavioural issues. This study uncovered the differential roles of two intervening variables between children with behavioural issues and caregiver depression levels. Our findings affirmed the need to assist caregivers with children's behavioural issues in finding ways to engage in self-care.

1 | Introduction

Kinship care involves children being looked after by relatives or, in certain jurisdictions, close family friends (often referred to as fictive kin) (Child Welfare Information Gateway n.d.). Data from the Kids Count Data Center (n.d.) show that, between 2017 and 2022, approximately 3% to 4% of children in the United States was in kinship care. In the period from 2020 to 2022, 2 529 000 children in this care arrangement lived in the United States. Kinship care demands comprehensive knowledge in various childcare domains, such as child development and behaviour management, beyond mere presence (Lawrence-Webb, Okundaye, and Hafner 2003). A significant challenge for kinship caregivers is the heightened likelihood of experiencing and sustaining depression, more so than non-relative foster caregivers (Garcia et al. 2015). The dual challenge they often face is supporting their own mental health while managing the children's behavioural issues (Sheehan et al. 2014), highlighting the need for long-term, multifaceted support from social work practitioners.

This study acknowledges intervening variables like the caregivers' self-care practices and the existence of formal kinship support programmes, which can lessen the adverse effects of children's behavioural challenges on the mental health of kinship caregivers (Child Welfare Information Gateway n.d.).

Initially, our study first examined the association between children's behavioural issues and their kinship care depression level and then examined the impact of self-care practice and a formal kinship support programme on the relationship between children's behavioural issues and caregivers' depression levels.

The transactional stress/coping model proposed by Lazarus and Folkman (1984) serves as the framework for this study. This model suggests that how individuals assess situations influences their stress responses and coping strategies. People will adapt their cognitive and behavioural efforts to handle demanding external or internal conditions. For instance, a benign view of a situation might lead to a belief that no intervention is required for a favourable outcome. Conversely, when a situation is perceived as stressful and challenging, more resources might be deemed necessary for coping (Lazarus and Folkman 1984). In Figure 1, self-care practice and formal support are considered necessary resources for caregivers to cope with stressful and challenging situations, especially when facing depression as a new or long-term caregiver.

Therefore, this study aims to determine if the implementation of self-care practice and external formal support programmes can mitigate caregiver depression associated with children's behavioural issues. It also examines the mediated and moderated roles of these two variables—self-care and formal support—in the dynamics between children's behavioural challenges and caregiver depression.

2 | Background

The relationship between children's behavioural issues and caregiver depression has been well studied. Most evidence suggests that children's behavioural issues and caregiver depression levels are positively related, which means more children's behavioural issues would result in a higher level of caregiver depression (Caruso, 2017; Sheehan et al. 2014). An intriguing facet of the literature focused on caregivers' negative response behaviours giving the close relationship between children's behavioural issues and caregivers' depression levels. For example, McPherson et al. (2009) found that caregivers tended to exhibit abusive behaviours when their children's misbehaviours contributed to their depression. However, not all caregivers exerted abusive or neglectful responses when dealing with challenging behaviours of children. This study instead explored self-care and formal support as intermediate factors between children's behavioural issues and caregivers' depression.

2.1 | The Role of Self-Care

The intervening variables between children's behavioural issues and caregivers' depression levels have gained research interest (e.g., caregiver parenting skills, caregiver–child relationship). One understudied factor is caregiver self-care practices. One of the aims of this study is to uncover the potential impact of self-care practice on children with behavioural issues and the outcome of caregivers' depression. The concept of self-care, as defined by National Institute of Mental Health (n.d.), involves the purposeful allocation of time to activities that aims at enhancing both physical and mental well-being.

Due to scarce literature on the self-care practice of kinship caregivers as a mediator between children's behavioural issues and caregivers' depression level, researchers also cited other caregivers' experiences, such as foster parents, non-foster parents and parents with autistic children as references to see how self-care practice can ease their difficult situations (stress, depression and other mental well-being). Though self-care practices may manifest differently among caregivers, the underlying benefit to their overall well-being (physical and mental) reveals the affirmative role that self-care plays (Miller, Green, and Lambros 2019). For non-foster parents, Barkin and Wisner (2013) found that women who enjoyed the break due to help from husbands found more positive feelings toward their children and had more relaxation time for themselves. After mothers returned to their children, they felt more relaxed. They also mentioned that each self-care practice had varied effects on different women as they all had different relaxation techniques. The positive connection between self-care and caregivers' mental well-being is echoed in a study focused on parents of children with autism (Bozkurt, Uysal, and Düzkaya 2019). In a more recent study, Washington et al. (2023) emphasized the importance of self-care practices, such as listening to gospel music and attending religious activities. These activities might assist African American kinship caregivers in overcoming adversities when taking care of their children and obtaining better mental health outcomes.

For foster parents, Miller, Green, and Lambros (2019) found that foster parents engaged in a moderate amount of self-care practices; however, many factors, such as gender, relationship status, health and financial status, generated the group differences on practicing self-care between foster parents and non-foster parents. This study highlighted the intricate interplay between self-care practice and caregiver mental health.

Kinship caregivers participating in professional self-care interventions can also positively impact their mental well-being (Pope et al. 2017). For example, a self-care programme such as a positive writing intervention could be a good vehicle for parents with behavioural issues of children to increase parental emotional well-being (Kim-Godwin, Kim, and Gil 2020). Another recent example is that kinship caregivers who participated in RCT clinical trial aimed at improving caregiver compassion such as the Time for Me programme might improve their care knowledge and self-compassion (Carter et al. 2023).

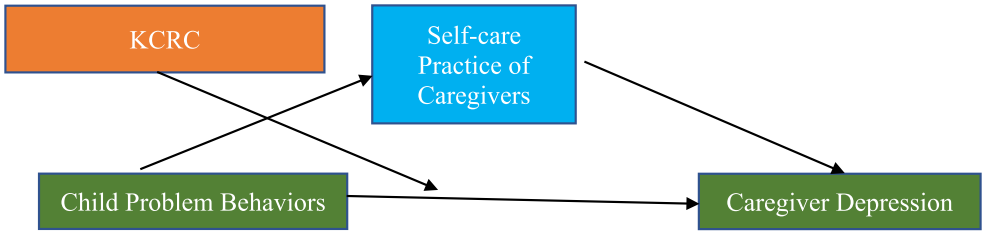

FIGURE 1 | The conceptual model. The figure was recreated based on Lazarus and Folkman (1984).

Navigating the intricate interplay between caregivers' self-care practices and their experiences of depression is a multifaceted endeavour influenced by various factors (Bussing et al. 2006). Balancing caregiving tasks with self-care routines is often a challenge, with the employment status of caregivers also playing a determining role. Caregivers of older children may allocate more time to work responsibilities (Kalil and Mayer, 2016; Waldfogel 2016). Yet, the relationship between caregivers' self-care and child outcomes is not universally uniform; the successful implementation of self-care practices is not guaranteed for every caregiver managing child behavioural issues. Gray (2003) highlights that parents of children with autism may find themselves suppressing their own emotions to fulfil their caregiving obligations.

2.2 | The Role of Kinship Care Support

Besides self-care, kinship caregivers may rely on formal support from community service agencies to resolve their taxing situations such as feeling depressed/stressed. The most common support for kinship caregivers is assistance with service navigation and referrals. We are interested in examining whether a kinship care navigator programme could moderate the relationship between children's behavioural issues and caregiver depression levels. Kinship caregivers and their children face many challenges, and help is needed from kinship care services to mitigate their difficulties, such as financial hardship and public service accessibility (Ehrle and Geen 2002). James Bell Associates, an evaluator of kinship care programmes found that some kinship care programmes have enhanced caregiver ability to care for the children and access services. However, the programme did not significantly ease parental stress and focus on caregiver health (James Bell Associates 2022). Minnesota Kinship Navigator Project (Wilder Foundation 2018) showed positive results in caregivers and children. Caregivers felt supported, having more services accessible (e.g., legal custody). More importantly, both the child's mental health and the relationship of the child with their parent improved after participating in the Navigator programme (Wilder Foundation 2018).

Besides the navigator assistance programme, some kinship care support programmes may provide financial assistance, emotional support, education and skills training. These programme features have, in general, led to positive results in caregiver social support (Strozier 2012), caregiver knowledge of permanency planning (Denby 2011), parenting skills and knowledge of child development (Lin 2014).

2.3 | The Present Study

Overall, studies examining the roles of self-care practice and kinship navigator support are limited. Few have examined the moderation effect of the use of kinship navigator services between children's behavioural issues and caregiver depression. In sum, our first hypothesis is that the self-care practice of caregivers would serve as a mediator between children's behavioural issues and the depression level of caregivers. Our second hypothesis is that using a kinship care navigator support programme moderates children's behavioural issues and caregiver depression levels.

3 | Method

3.1 | Data and Sample

Data from this study are from a survey study collected in 2020 through Qualtrics. A total of 136 participated in the survey, and 16 did not complete it. A total of 120 participants completed the survey with two duplicates removed, and the final sample size in the survey is 118 kinship caregivers in Michigan. Participants have been compensated $25 for their participation in the study. This study was approved for human subjects' research by a University Institutional Review Board.

3.2 | Measures

We adapted some existing scales mainly by using fewer and more relevant questions. We adapted these items mostly in relation to the language use. We have revised the wording of these questions to ensure they are less instructive and more acceptable.

We also consider it might be more feasible to ask fewer questions to ensure the quality of their response rather than asking participants to complete a lengthy survey. Also, based on our previous experience, participants prefer a less complicated survey. Although using a short survey, the validity of each scale was not compromised. The items chosen in the study were most relevant to our theoretical construct and represented in an operational measure.

3.2.1 | Dependent Variables

The dependent variable is the caregiver's depression level, measured by items adapted from the Center for Epidemiologic Studies Depression (CES-D) (Radloff, 1977). With a 5-point Likert scale (1 = *Never* to 5 = *All the time*), five questions are provided to measure the caregiver's depression level, including 'I could not seem to experience any positive feelings at all', 'I found it difficult to work up the motivation to do things', 'I felt that I had nothing to look forward to', 'I felt that I wasn't worth much as a person' and 'I was unable to become enthusiastic about anything'. We further computed a mean score of the summed items and used it in the analysis. The Cronbach's alpha of this scale in the study was 0.83.

3.2.2 | Independent Variable

The independent variable is the behavioural issues of children. The measurements are adapted from Child Welfare Information Gateway (n.d.). We assessed the behavioural issues of children by asking caregivers whether their child has the following five problems: smoking or drinking, truancy or skipping school, violent behaviours, depression (depression here means that children might experience some traumas) and drug use, and measures were from 1 = *Never* to 4 = *Often*. We computed a mean score and created a composite variable. The Cronbach's alpha of this scale in the study was 0.61.

3.2.3 | Moderator

The moderator is the use of kinship care navigator service (0 = No and 1 = Yes) provided by the University Kinship Care Resource Center (KCRC). This information was obtained from the administrative data of the KCRC. We have administrative

data recorded by staff on whether this participant had previously used KCRC services. Using administrative data is often more accurate than asking the same question to participants several times when responses may be less consistent.

3.2.4 | Mediator

Self-perceived self-care practices of caregivers were measured using the adapted Mindful Self-Care Scale (Mindful Self-Care Assessment, 2022). Two questions were selected and asked to measure the self-care practice of caregivers in the past 12 months: 'How often do you feel that you can take time for yourself when you need it' and 'How often do you feel that you have time to do things you enjoy?' These two questions used a 5-point Likert-type scale for answers from 1 = *Never* to 5 = *All the time*. An average score was computed for this variable, indicating that the higher the score participants had, the better self-care practice they had in the past 12 months.

3.2.5 | Control Variables

Caregiver demographic characteristics were selected as control variables. Categorical control variables included their race (1 = White/Caucasian, 2 = Black/African American, 3 = Asian/Pacific islander/Hispanic/Latino/Native American/Alaska Native) and gender (1 = Female and 2 = Non-female). The education level of caregivers was measured by asking what the highest level of education they had achieved (1 = high school and below; 2 = college and above). The continuous variables are the caregiver's age, years of care, physical health, income inadequacy and the relationship between family members. Specifically, the relationship between family members was a recreated composite variable using the question 'how often do you lose your temper toward the children in your care?' 'How often is the relationship with your children tense?' and 'How often do you feel that your family is cohesive?' The answers are selected following a 5-point Likert scale (1 = *Never* to 5 = *All the time*). Physical health was self-rated in the past 12 months and answered in a 5-Likert point where 1 = *Poor*, 2 = *Fair*, 3 = *Good*, 4 = *Very good* and 5 = *Excellent*. The higher score in physical health indicated that they perceived themselves as having better health conditions from 1 to 4. Income inadequacy was measured by asking how difficult it is to afford their family's basic monthly living expenses (for example: rent/mortgage, groceries or other bills). Participants answered 1 = *Not difficult*, 2 = *A little difficult*, 3 = *Somewhat difficult* and 4 = *Very difficult* to evaluate their income adequacy. The higher score indicated that they consider themselves to be more income-inadequate from 1 to 4.

3.3 | Data Analyses

Descriptive analyses were conducted to examine caregivers' characteristics. The correlation test was performed to see the relationship between all the variables used in the study. The linear regression was conducted to examine the relationship between caregivers' depression and the behavioural issues of children with KCRC as a moderator and the self-care practice of caregivers as a mediator. Model 1 was built by only adding KCRC with children's behavioural issues and depression levels of caregivers. Model 2 added caregivers' self-care practice and an interaction term between KCRC and children's behavioural issues with all independent and dependent variables. All analyses were performed using SPSS Version 28.0 and STATA 17.0. The model building was using PROCESS Version 4.1 (Hayes, 2012). We also took care of the missing data using expectation maximization in SPSS and found the same results as our study.

4 | Results

4.1 | Participant Characteristics

Table 1 provides the descriptive results of the sample ($N = 118$). Caregivers had a mean age of 54.33 ($SD = 12.22$), and their average year as a caregiver is 3.92 years (SD = 4.93). Most were female (94.9%) caregivers and non-Hispanic White (66.90%). Also, their average physical health score is 3.1 out of 5 (SD = 1.01), and income adequacy score is 2.01 out of 4 (SD = 1.01). Among all caregivers, 76.3% had a high school degree or below. Regarding self-care practice, the average score is 2.66 (SD = 0.85). Regarding the KCRC navigator programme, 50.4% had used it before, meaning they used the support offered by the navigator programme staff before completing the survey. The average score for caregivers' depression was 1.57 out of 4 (SD = 0.60). Children had an average score on behavioural issues of 1.65 out of 4 (SD = 0.61).

Table 2 presents correlation results between all study variables. We found that the children's behavioural issues are positively related to the caregivers' depression ($r = 0.262$, $p < 0.01$) and negatively related to the self-care practice of caregivers ($r = -0.232$, $p < 0.05$). Also, the caregivers' depression is negatively related to their self-care practice ($r = -0.550$, $p < 0.01$).

TABLE 1 | Participant characteristics.

Variables	M (SD)/%	*N*
Caregivers' depression	1.57 (0.60)	118
Child's problem behaviours	1.65 (0.61)	118
Caregiver's age	54.33 (12.22)	118
Caregiver's race		118
White	66.90%	79
Black/African American	27.10%	32
Asian/Pacific/Hispanic/Native American/Alaska	5.9%	7
Caregiver's gender		118
Female	94.90%	112
Non-female	5.1%	6
Caregiver's education		114
High school and below	76.30%	90
College and above	20.30%	24
Caregiver's physical health	3.1 (1.01)	118
Caregiver's income inadequacy	2.01 (1.01)	118
Years as a caregiver (year)	3.92 (4.93)	116
Caregivers' self-care practice	2.66 (0.85)	118
Caregivers family relationship	1.55 (0.87)	115
KCRC users		118
Yes	50.4%	60
No	49.6%	57

TABLE 2 | Correlations of studied variables in the study.

Correlations												
	1 = CG depression	2 = Selfcare	3 = CPB	4 = Race	5 = Age	6 = Gender	7 = Education	8 = Income inadequacy	9 = Health	10 = FR	11 = Years of care	12 = KCRC user
2	−0.550**	1										
3	0.262**	−0.232*	1									
4	−0.106	0.047	−0.046	1								
5	0.063	0.092	−0.173	−0.043	1							
6	−0.041	0.093	−0.008	−0.081	−0.019	1						
7	0.214*	−0.125	0.044	0.112	0.110	−0.025	1					
8	0.129	−0.215*	0.020	0.172	0.017	−0.040	−0.067	1				
9	−0.393**	0.291**	−0.054	−0.125	−0.094	0.053	−0.071	−0.401**	1			
10	0.063	−0.117	0.118	0.123	0.015	0.258**	−0.131	−0.094	−0.072	1		
11	0.235*	−0.157	−0.024	−0.015	0.290**	−0.012	0.042	0.181	−0.178	0.044	1	
12	−0.089	0.127	−0.150	0.006	−0.047	−0.004	−0.095	0.176	−0.002	−0.065	−0.209*	1
N	118	118	118	118	118	118	114	118	118	115	116	118

Abbreviations: CG = caregivers; CPB = children's problem behaviours; FR = family relationship.
*Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

4.2 | Multivariate Results

4.2.1 | Children's Behavioural Issues and Caregivers' Depression

Table 3 presents linear regression models predicting caregivers' depression. Model 1 shows the relationship between children's behavioural issues and caregivers' depression levels without a mediator or moderator. Results suggested that the more frequently that children have problem behaviours, the more likely caregivers are to have higher depression levels (B = 0.253, $p = 0.004$). Moreover, we found that caregivers' physical health is also significantly associated with their depression level (B = −0.180, $p = 0.003$). With poor physical health, caregivers have a higher level of depression. Caregivers with more years of caregiving experience have a higher level of depression (B = 0.026, $p = 0.024$). Caregivers' education is also positively associated with caregiver's depression level (B = 0.306, $p = 0.025$).

With a mediator (caregivers' self-care) added in Model 2, results indicate that the association between children's behavioural issues and caregivers' depression is weaker and fully mediated by the self-care of caregivers (B = −0.314, $p < 0.001$). In Model 2, some control variables are also significantly associated with the caregiver's depression level. For example, caregivers' physical health is significantly associated with the caregiver's depression level (B = −0.148, $p = 0.004$), indicating that if caregivers are not in good health condition when they take of care children, they might be more depressed. African American caregivers are worse off compared to White caregivers on depression scores (B = −0.229, $p = 0.038$).

4.2.2 | Interactions Between Children's Behavioural Issues and KCRC Navigator Programme Use

Model 2 also presents interactions between KCRC use and caregivers' depression levels. The interaction term between KCRC use and children's behavioural issues shows a significant association with the caregiver's depression level (B = 0.337, $p = 0.02$), and we found interesting results after plotting. Figure 2 indicates the level of children's behavioural issues where they have three different starting points. These starting points were generated based on whether caregivers had used KCRC services and the caregiver's depression level. Originally, children's behavioural issues ranged from 1 to 4. With hundreds of mean scores produced, this could make the graph too chaotic. Thus, at the beginning, people who had not utilized KCRC had three levels of depression according to three levels of children's behavioural issues. Caregivers who had depression scores that were below 0 (regression's beta) had children with lower level behavioural issues. Caregivers who had depression scores that were above 0 but did not exceed 0.25 (regression's beta) had children with a median-level of behavioural issues. The last group is caregivers with the highest depression levels, and this group also had the most behavioural issues of their children. When people had used the KCRC, their depression level changed with the type of behavioural issues of children they had. First, the lower level depressed caregivers became less depressed, and their children's behavioural issues were also less frequent. Second, the median-level depression caregivers did not change much on their depression level, and the same applies to their children's

TABLE 3 | Regression models predicting caregiver's depression level ($N = 118$).

	Caregiver's depression level					
	Model 1			Model 2		
Characteristics	**B**	***p* value**	**CI**	**B**	***p* value**	**CI**
Child's problem behaviours	**0.253**	**0.004**	**[0.081, 0.426]**	0.0384	0.690	[1.691, 3.470]
Caregiver's age	−0.001	0.743	[−0.100,0.007]	0.001	0.749	[−0.006, 0.009]
Caregiver's race						
White	Reference			Reference		
Black	−0.235	0.065	[−0.485,0.014]	**−0.2288**	**0.038**	**[−0.445, −0.0124]**
Other	−0.085	0.755	[−0.628,0.457]	0.004	0.987	[−0.467, 0.476]
Caregiver's gender						
Female	Reference			Reference		
Non-female	−0.114	0.623	[−0.573, 0.345]	0.0024	0.990	[−0.340, 0.404]
Caregiver's physical health	**−0.180**	**0.003**	**[−0.295, −0.065]**	**−0.148**	**0.004**	**[−0.248, −0.048]**
Income inadequacy	−0.004	0.946	[−0.118, 0.110]	−0.056	0.270	[−0.156, 0.044]
Caregiver's education	**0.306**	**0.025**	**[0.038, 0.573]**	0.186	0.121	[−0.050, 0.421]
Years as kinship caregivers	**0.026**	**0.024**	**[0.004, 0.049]**	0.0214	0.038	[0.001, 0.041]
Caregiver's family relationship	0.046	0.477	[−0.081, 0.173]	−0.009	0.878	[−0.1204, 0.103]
KCRC user	0.019	0.865	[−0.198, 0.235]	−0.526	0.050	[−1.051, −0.001]
Caregiver self-care practice				**−0.314**	**0.000**	**[−0.431, −0.196]**
Interaction between KCRC users and child's problem behaviours				**0.337**	**0.02**	**[0.006, 0.672]**
R-squared	0.313			0.4971		

Note: Other = Asian/Pacific islander/Hispanic/Latino/Native American/Alaska Native. *p*-values below 0.05 (statistically significant) are presented in bold.

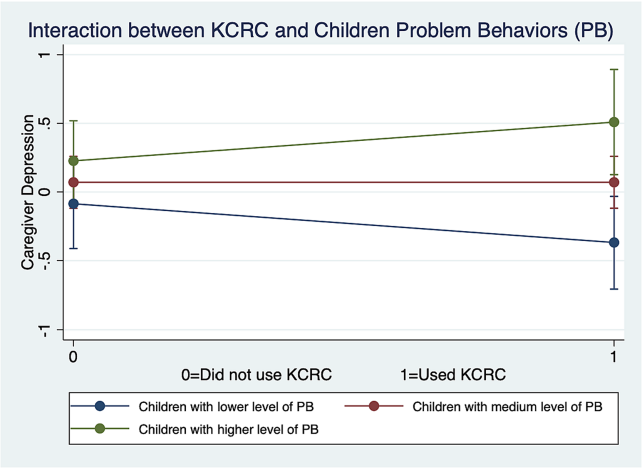

FIGURE 2 | Interaction between children's problem behaviours and the use of KCRC on caregivers' depression.

behaviours. However, we found that caregivers with the highest level of depression reported more depression and more frequent children's behavioural issues after using KCRC. The differences in depression among caregivers who were taking care of children with different levels of behavioural issues tended to widen when they received navigator services from the KCRC. More specifically, the depressive symptoms of kinship caregivers whose children had low or medium levels of behavioural issues tended to reduce after they received the navigator programme. However, such benefits to caregiver depression tended to disappear when their children had higher levels of behavioural issues.

5 | Discussion

5.1 | Children's Behavioural Issues and Caregivers' Depression

This study sheds light on the intervening variables that affect the relationship between children's behavioural issues and caregivers' depression. Our first finding is that children's behavioural issues were positively related to caregivers' depression levels. This finding is consistent with previous literature that parents with children who display behavioural issues reported more depression, anxiety and stress symptoms (Sheehan et al. 2014). The reasons behind the higher level of depression for caregivers might be how we measured the children's behavioural issues. For example, some behaviours in the behavioural issues measurement were quite deviant. Therefore, children with that level of behaviour (i.e., such as using drugs) were more likely to cause higher depression levels in caregivers. Also, caregivers who have not cared for young children for a long time might be anxious about the new role in their lives. The indirect reason for this higher level of depression in caregivers might depend on what self-care strategies they use after becoming aware of their children's behavioural issues. Caregivers who utilized positive strategies might see fewer behavioural issues in their children, whereas those who used negative strategies might report more

children's behavioural issues and have more depression signs (Sheehan et al. 2014).

5.2 | The Self-Care Practice of Caregivers

Children's behavioural issues indeed exert a negative influence on caregiver self-care, therefore, leading to caregivers' depression. The frequency of children's behavioural issues might lead to less 'me' time for caregivers. This outcome was similar to Bussing et al. (2006), which found an association between family-initiated self-care intervention and children with deficit/hyperactivity disorder (ADHD). Also, less self-care practice by caregivers leads to more depression. This finding aligned with previous findings that having self-care practice or intervention positively affects parental emotional outcomes (Barkin and Wisner 2013; Kim-Godwin, Kim, and Gil 2020; Pope et al. 2017). The other possible explanation for the impact of self-care is that our kinship caregivers were less knowledgeable about self-care opportunities and practices. Therefore, when examining their self-care practice, they reported based on their feelings more rather than their actual practices. With the lower accessibility of professional self-care interventions, even a few self-reported practices could make many changes. Our finding also resonates the study from Carter et al. (2023) that self-care practice might improve caregiver's outcomes, although we emphasize more on mental health outcome of caregivers. However, this study indeed provides insights that we have not considered. For example, we mainly rely on self-care scale to assess self-care practices whereas they create toolkit for participants to practice.

Our findings emphasized that self-care fully mediated the relationship between children's behavioural issues and caregivers' depression, indicating that if caregivers frequently do self-care, their depression level induced by behavioural issues of children might be alleviated. However, previous literature presents a relationship between either children's behavioural issues and self-care or self-care and caregivers' depression. Not many of them depict the connected role of self-care.

5.3 | The Impact of KCRC Services

This study found that KCRC services have a moderation effect on children's behavioural issues and caregiver depression. When children's problem behaviours are not severe, such services have a pronounced positive effect on caregiver depression. However, when caregivers have children with a higher level of behavioural issues, the navigator services are not sufficient to reduce the depression level of caregivers. In contrast, caregivers in this group reported a higher level of depression. This is because KCRC primarily provides a peer navigator support group. Peer navigators are responsible for linking or referring to services, which means that they only provide information to access services to caregivers who come to seek help. Therefore, children's behavioural issues and caregivers' mental health might not be specifically targeted because this requires more specialized services such as mental health services and paediatric psychiatric counsellors for children's behavioural issues.

Our findings about the self-care of kinship caregivers and KCRC resonate with our study model at the beginning. People would use resources and strategies to resolve their challenges based on the level of their stress. However, how their stressful situation could be eased might depend on many other factors. For example, how long have these kinship caregivers used KCRC or self-care practice? How accessible are KCRC services for kinship caregivers in their community? How much knowledge do kinship caregivers have to deal with children's behavioural issues? Based on these thoughts, there are many we could consider in implication.

5.4 | Implications

For new or long-term kinship caregivers, community interventions could consider implementing more self-care practices for those caregivers. Those self-care practices should be easy to apply in their home. Community interventions need to consider the professionalism of the self-care courses they provide and the feasibility of those practices. On a community level, social workers can also increase the frequency of navigating services for kinship caregivers. Moreover, kinship care resources should expand beyond service navigator programmes by building a new model for those in high-need groups, such as children with special needs and counselling for caregivers who need mental health services.

To achieve the goal of improving caregiver mental health conditions, social workers can conduct home visits with registered nurses to assess caregiver physical health. Our study found that caregivers with suboptimal physical health tended to exhibit higher levels of depression. Monitoring physical health such as blood pressure, weight, cholesterol, diabetes and vision screening could be conducted at home (Project Healthy Grandparents, n.d.) before delving into mental health needs.

Following the completion of the physical health assessment, social workers can proceed to assess the caregiver's mental health needs. Based on their level of needs, social workers and agencies can decide the appropriate types of mental health services to provide. For example, caregivers who need high levels of mental health support and strategies to deal with children with behavioural issues could be referred to a case manager for individual counselling. Those with lower levels of need could be encouraged to attend support groups to learn from other kinship caregivers experiencing similar challenges. In light of the above discussion, it is essential to advocate for government funding for kinship care to be easily accessible to service agencies to develop self-care interventions and foster caregiver support.

Other than providing service, social workers need to learn as well. Therefore, it is also beneficial for the community to provide professional training to social workers. These professional trainings could include the following: how to help caregivers adapt to new roles; how to help caregivers use knowledge or tools to take care of children with behavioural issues; how to help caregivers ease their mental stress; and how to ask for help when having depressive symptoms. Policies need to be in place to support programmes promoting self-care and caregivers' mental health. Therefore, more federal and state programmes need to provide funding to state statutes such as placement of children with relatives, educational support for youth in foster care and determining the child's best interests to support kinship caregivers.

6 | Limitations

A few limitations need to be noted. First, despite the efforts to recruit participants from diverse sources, the convenience sample has limited the generalizability of findings in this study. Second, our study is cross-sectional and non-experimental, which prevents us from determining a cause-effect relationship between children's behavioural issues and caregivers' depression. It is highly possible that caregivers' depression can also impact children's behavioural issues. For instance, according to Marçal (2021), both children's internalizing and externalizing behavioural issues were influenced by caregiver depression. Children in late childhood were more easily impacted by caregiver depression. Second, our limitation could also result from the limited number of questions on assessing self-care and children's behavioural issues. For self-care questions, they are self-perceived report. This means caregivers think they had time to do self-care practice, but self-care practices might not be done due to lack of time. Some of the questions used in children's behavioural issues are extreme, and it could be rare for young children to have those habits. Third, another limitation could be the small differences observed in caregivers' depression levels across caregivers with children with behavioural issues. The difference between each group (caregivers with low/medium/high levels of behavioural issues in children) is quite small, though statistically significant. We expect future studies using a large sample size design or an experimental design that would illuminate the effect of KCRC services on depression among caregivers facing different levels of behavioural issues in children. Further, because our study is a one-time survey, we did not have the opportunity to see the depression changes among caregivers. Future studies need to use a longitudinal design to examine the dynamics between the two concepts and utilize more comprehensive scales.

7 | Conclusion

This study revealed a new mechanism in the relationship between children's behavioural issues and caregivers' depression levels. We emphasized the important mediated role of self-care practices of caregivers and the necessary need for kinship care programmes to relieve caregivers' depression. This study contributes to our current kinship care system that navigation services are an insufficient level of services and need improvement. We need to focus more on caregivers' mental health to improve navigation services further. For example, more accessible support through the promotion of self-care or prolonged case management services that address the behavioural issues of children should be made available to kinship caregivers.

Acknowledgements

The authors wish to thank the Michigan State University Kinship Care Resource Center (KCRC) for providing data for this study. We would also like to thank kinship caregivers, caseworkers, and staff in KCRC who devoted their time and wisdom to this study.

Conflicts of Interest

The authors declare no conflicts of interest.

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