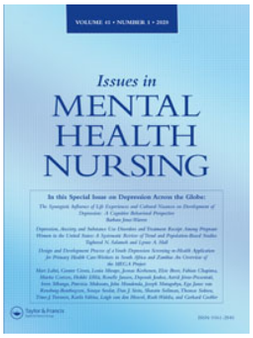

Issues in Mental Health Nursing

ISSN: 0161-2840 (Print) 1096-4673 (Online) Journal homepage: https://www.tandfonline.com/loi/imhn20

Contributors to Depressed Mood in Black Single Mothers

Rahshida Atkins, Rufan Luo, Mary Wunnenberg, Cynthia Ayres, Terri H. Lipman, Victoria Pena-Cardinali, Latisha Hayes & Janet A. Deatrick

To cite this article: Rahshida Atkins, Rufan Luo, Mary Wunnenberg, Cynthia Ayres, Terri H. Lipman, Victoria Pena-Cardinali, Latisha Hayes & Janet A. Deatrick (2020) Contributors to Depressed Mood in Black Single Mothers, Issues in Mental Health Nursing, 41:1, 38-48, DOI: 10.1080/01612840.2019.1631414

To link to this article: https://doi.org/10.1080/01612840.2019.1631414

Published online: 19 Aug 2019.

ISSUES IN MENTAL HEALTH NURSING
2020, VOL. 41, NO. 1, 38–48
https://doi.org/10.1080/01612840.2019.1631414

Contributors to Depressed Mood in Black Single Mothers

Rahshida Atkins, Phd, APN-C, FNP-BC[a], Rufan Luo, Phd[b], Mary Wunnenberg, EdD, MSN, RN[a], Cynthia Ayres, PhD, RN, FNAP[a], Terri H. Lipman, PhD, CRNP, FAAN[c], Victoria Pena-Cardinali, MSW, LCSW[d], Latisha Hayes, DNP, RN[a], and Janet A. Deatrick, PhD, FAAN[c]

[a]School of Nursing-Camden, Rutgers The State University, Camden, New Jersey, USA; [b]Department of Psychology, Rutgers, The State University of New Jersey-Camden, Camden, New Jersey, USA; [c]School of Nursing, University of Pennsylvania , Philadelphia, Pennsylvania, USA; [d]Capital Health Systems, Pennington, New Jersey, USA

ABSTRACT

Participants: A convenience sample of 210 community dwelling Black single mothers ages 18 to 45, who reside in U.S. urban communities.

Methods: A descriptive, cross-sectional design was employed. Participants responded to an open-ended question that asked about reasons for depressed mood. A directed approach to content analysis was used to categorize the responses based on existing theoretical formulations and empirical findings about the causes of depression in women. Percentages and frequencies were used to describe the results of the analysis.

Findings: A total of 319 usable responses were provided. Collectively and individually the most frequent responses were consistent with Social/Environmental factors such as lack of financial resources ($n = 115$; 36.05%), followed by Psychological factors such as general cognitive/emotional feelings of stress (n = 60; 18.81%), and parenting stressors or daily hassles ($n = 40$; 12.54%). Physiologic factors such as a having physiologic or medical conditions were reported less often ($n = 14$; 4.39%).

Conclusions/Implications: Social/Environmental and Psychological factors contribute to depressed mood more often than Physiological factors in Black single mothers. Depression prevention efforts should target the social determinants of mental health in Black single mothers who should be connected with appropriate financial, psychological, educational and social service resources in the community.

Introduction

Clinical depression is a serious mental illness and disorder that affects 16.1 million Americans (National Institutes of Mental Health [NIMH], 2016a) and produces negative psychosocial and physical health consequences in mothers and their children (Atkins, 2010, 2017). Depressed mothers have poorer health and are less likely to engage in healthy behaviors (Roshanaei-Moghaddam, Katon, & Russo, 2009; Yu, Parker, & Dummer, 2014). Maternal depression subsequently produces deleterious developmental, mental, and physical health consequences in offspring who are directly impacted by their mother's health, health behaviors, and parenting practices (Brown et al., 2015; Center on the Developing Child, 2009; Schmit, Golden, & Beardslee, 2014). Maternal depression, therefore, negatively impacts families across the United States making the prevention of depression in at risk women a critical public health priority (NIH 2010a, 2010b; National Institutes of Health [NIH], 2016).

While depression disproportionately affects women (NIMH, 2016b), low-income single mothers and particularly low-income Black single mothers are a sub-group of Black women who are particularly at risk. Data show that up to 73% of low-income, single mothers report elevated levels of depressive symptoms that warrant referral to determine whether clinical depression is present (Peden, Rayens, Hall, & Grant, 2004; Samuels-Dennis, 2006). In these published studies, half of these samples contain Black single mothers, up to 63% of whom consistently report elevated levels of depressive symptoms when sampled alone (Atkins, 2014, 2016; Hatcher, Rayens, Peden, & Hall, 2008). These numbers are staggering since the prevalence of depression is only 6.7% in the general population of U.S. adults (NIMH, 2017), 8.5% in women (NIMH, 2017). These numbers are also up to double the levels of depressive symptoms reported by aggregate samples of Black women (24% to 39%; Abel, Crane, & McCoy 2014; Bronder Speight, Witherspoon & Thomas, 2014). To compound matters, Black mothers are less likely to seek or accept professional medical treatment for their depressive symptoms (Bodnar-Deren, Benn, Balbierz, & Howell, 2017; Ertel, Rich-Edwards, & Koenen, 2011; Huang, Wong, Ronzio, & Yu, 2007).

Disparities in the prevalence of mental health illnesses and disorders among women stem from their diverse social

CONTACT Rahshida Atkins rlatkins@camden.rutgers.edu Rutgers The State University School of Nursing-Camden, 530 Federal Street, Room 436, Camden, NJ, 08102, USA.

contexts, environments, behaviors, stressors, and coping resources that contribute to individual differences in their risk and resilience (Healthy People, 2020, 2018; Mental Health America, 2018; NIH, 2010b). The National Institute of Nursing Research (NINR, 2018) and the U.S. Office of Research on Women's Health emphasize focusing on preventing illness, disability, and psychiatric disorders in underserved and minority populations particularly among women and girls who have limited access to healthcare (NIH, 2010a; NIH, 2016; NINR, 2018). To answer this call, researchers must first identify existing disparities in mental health disorder prevalence and the specific etiologic factors more likely to interact with genetic predispositions and increase risk for psychiatric disorders in different segments of the population. Researchers can then test for interactions in diverse underserved sub-groups of women. Depressed mood and thinking often precedes the development of clinical depression in mothers (Atkins, 2017; Hutto, Kim-Godwin, Pollard, & Kemppainen, 2011). Clearly then, to institute preventive efforts prior to the onset of clinical depression, researchers need to gain knowledge of the specific factors that contribute to depressed mood in community samples of Black single mothers not yet diagnosed with clinical depression. This personalized approach will ultimately lead to more accurate strategies for diagnosing and preventing psychiatric disorders and more appropriate personalized therapeutic interventions for the treatment of these disorders (NIH, 2010b).

Prior published studies have identified the coping responses and feelings associated with depressed mood in Black single mothers (Atkins, 2016; Atkins et al., 2018). The purpose of this analysis was to identify perceived contributors to depressed mood to determine the specific types of determinants that contribute to the risk for clinical depression from the sole perspective of 210 Black, single, community-dwelling, urban, non-pregnant Black single mothers (Hutto et al., 2011; deJonge et al., 2017). The specific aims were twofold: (1) to identify the most prevalent perceived contributors to depressive mood by individual women and (2) to identify the categories of contributors more likely to influence depressed mood collectively in this sample.

Background/literature review

Several researchers have used quantitative methods to examine existing socio-demographic correlates in Black women (Gavin, Chae, & Takeuchi, 2009; Messer, Maxson, & Miranda, 2013; Smith-Mckeever, Rowe, & Gao, 2012) and the relative contribution of researcher identified general psychosocial predictors of depressive symptoms in Black mothers (Hatcher et al., 2008; Mitchell & Ronzio, 2011; Siefert, Williams, Finlayson, Delve, & Ismail, 2007). Few researchers, however, have asked large samples of urban-dwelling Black single mothers about specific contributors to depressed mood from their unique perspective (Amankwaa, 2003; Cadigan & Skinner, 2015). Black women exhibit cultural variations with respect to experience and manifestations of depressive symptoms (Atkins et al., 2018; Kirmayer, 2001). Unique beliefs about causes of illness effects treatment decisions and responses (Chaudhry, Mani, Ming, & Khan, 2016). An understanding of the beliefs about causes of depression from the unique perspective of Black single mothers will aid with targeted preventive efforts tailored for this unique sub-group of Black women. This tailored approach is also more closely aligned with government recommendations for personalized prevention that focuses on recognizing individual differences in risk for psychiatric disorders in women (NIH, 2010a, 2010b) and focusing on prevention (NINR, 2018).

In search of risk factors for depression, researchers have found significant correlations between depressive symptoms and socioeconomic status (Lara-Cinisomo & Griffin, 2007; Smith-Mckeever et al., 2012; Waerden, Hoefnagels, Hosman, & Jansen, 2014), race/ethnicity (Smith-Mckeever et al., 2012), single parent status (Gavin et al., 2009; Lara-Cinisomo & Griffin, 2007) and employment status (Samuels-Dennis, 2007) in low income, and/or ethnic/minority mothers. The use of quantitative methods has also helped researchers to determine the relative influence of psychosocial predictors of depression in Black mothers such as types of stressors (Hatcher et al., 2008; Kneipp et al., 2007; Samuels-Dennis, 2007); social support (Mitchell & Ronzio, 2011; Silver, Heneghan, Bauman, & Stein, 2006); self-esteem (Hatcher et al., 2008; Peden et al., 2004); negative thinking (Atkins, 2017; Hatcher et al., 2008; Silver, Heneghan, Bauman, & Stein, 2006); history of abuse (Mitchell & Ronzio, 2011); substance abuse (Smith-Mckeever et al., 2012); child behavior problems (Smith-Mckeever et al., 2012); and the built environment (i.e. deteriorating housing, Messer et al., 2013). Urban dwelling African-American women have a higher lifetime and 12-month prevalence of major depression than rural dwelling African-American women (Weaver, Himle, Taylor, Matusko, & Abelson, 2015). In these reports, however, mothers responded to self-report scales of established variables preselected by researchers with predetermined responses resulting in a value that captures the quantitative level of the correlate as a whole. This approach does not allow for the freedom of expression necessary for sub-groups of mothers to provide free unbiased responses about causes of depressed mood that reflect the complex, dynamic, and diverse context of their lives (Cresswell, 2013; Patton, 2015).

Black women have been queried about the reasons for their depression in a few qualitative studies in which they expressed developmental and historical sentiments. Traumatic experiences in childhood, stressful life circumstances, the stress of managing chronic health problems, and ineffective styles of coping with stress were described in a clinical sample of 14 depressed, low-income, single, and married/partnered urban, African-American women during focus group interviews (M_{age}=40) (Waite & Killian, 2009). Some of these women were married (14.3%), and the parenting status of individual women was not reported. In addition, the responses were collective sentiments of the women as a whole, not allowing for quantification to determine the most prevalent responses by individual women.

Physical limitations, lack of individual strength, recalling lost opportunities, loneliness, poor relationships, and early grief experiences were described as causes of depression by a sample of 20 community-dwelling, elderly, Black women (Black, White, & Hannum, 2007). These studies are dated, and the causes closely reflected their ages and the historical experiences of their generation that may not reflect the experiences of today's Black single mothers without a depression diagnosis. The small sample sizes in these reports also limit generalizability to large populations of Black single mothers.

A recent literature review revealed two studies that used qualitative methods to examine contributors to depression in Black mothers with clinical conditions. During individual interviews, relationship problems, lack of finances, and family and parenting stressors were included in the findings from a community dwelling sample of 15 low-income African-American and White, pregnant, rural-dwelling mothers (age $<$ 40 years old) who were single and partnered/married ($n = 3$) (Cadigan & Skinner, 2015). Physical stressors associated with childbirth, the stress of caring for children, feeling alone, lack of support, colicky baby, and worry about finances were described as influencing the development of post-partum depression in a small sample of 12 middle-class, well-educated Black mothers (age $<$ 40 years old) (Amankwaa, 2003). These sample sizes were also small thus limiting generalizability. In addition, the causes of depression in these mothers were a direct result of pregnancy and issues associated with the post-partum period, a context that does not apply to community-dwelling, non-pregnant, urban Black single mothers without a depression diagnosis. Therefore, while we have some knowledge about specific contributors to depressive illness in small clinical samples of Black mothers diagnosed with depression, a gap exists regarding the perspectives of subgroups, namely low income, single, community-dwelling Black mothers who are at risk for depression.

Theoretical framework

This study draws from theories that explain the etiology of clinical depression as context to the perspectives of women about their own depression, including theories based on biology, psychology, and family science/sociology (Baum, Garofalo, & Yali, 1999; Boyd, 2018; Kasper et al., 2008; Price, Bush, & Price, 2017; Slavich & Irwin, 2014). Biologic theories are physiologic focused and describe physiologic processes such as genetic, hormonal, neurobiolgoic, and psychoneuroimmunologic etiologies. Psychological theories discuss the influence of psychodynamic (e.g. loss of love), behavioral (e.g. positive activity restrictions), cognitive (e.g. negative thinking about the self, self-criticism, irrational beliefs), and developmental factors (e.g. absent or poor parenting). Social theories implicate dysfunctional family factors and depression that results from the interactions of environmental stressors (e.g. traumatic events, financial deprivation social rejection/isolation, interpersonal loss), with the biological (e.g. immune processes, genes), and psychological (e.g. personality characteristics) makeup of the individual (Boyd, 2018; Slavich & Irwin, 2014). These stressors can be acute, such as the experience of a traumatic life event (i.e. death of a parent) or chronic experiences such as the state and resulting sequelae of living in persistent poverty (Baum et al., 1999; Kasper et al., 2008). These stressors also impact entire family units and either promote family resilience via adaptive coping or generate more family stress via maladaptive coping (Price, Bush, & Price, 2017). Cultural beliefs about the etiology of mental illness are also included as they affect health seeking behaviors and response to mental health treatment (Boyd, 2018; Chaudhry, Mani, Ming, & Khan, 2016; Pender, Murdaugh & Parsons, 2015). A person's individual beliefs regarding the aforementioned diverse causes and frameworks for understanding the etiology of depression influences depression severity and the forms of and responses to treatment sought (Boyd, 2018; Chaudhry et al., 2016). Content analysis of participants' responses and the organization of the resulting themes were based on these aforementioned etiologic factors.

Methods

Design

These data were obtained as part of a larger project that employed a descriptive cross-sectional design to test a theoretical model of depression via structural equation modeling in Black single mothers (Atkins, 2014). This model revealed that perceived stress, perceived racism, and anger were significant predictors of depressive symptoms in Black single mothers, yet the model only accounted for 22% of the variability in depressive symptoms in this group (Atkins, 2014). The specific types and context of stressors and racism perceived, or the aspects of anger that contribute toward depressed mood were not revealed by that quantitative analysis. This qualitative analysis will reveal this specific knowledge and thereby more closely support personalized prevention and treatment approaches in similar groups of mothers.

Sample

A convenience sample of 210 Black single mothers was included in this study. Mothers met the following inclusion criteria: (a) between 18 and 45 years of age; (b) have children living with them (c) widowed, divorced, separated, or never married; (d) self-identified as Black; (e) physically and mentally able to participate in the study; and (f) able to read and comprehend the English language. Since the focus of the original analysis was prevention and prediction of general clinical depression, mothers without a diagnosis of depression were sought. Mothers were excluded if they (a) had a diagnosis of depression, (b) were currently receiving psychiatric care or counseling, (c) had children less than 1 year of age, (d) were pregnant, or (e) were taking antidepressant medications. Post-partum depression was not

being examined. The sample size determination for testing the proposed model is described elsewhere (Atkins, 2016).

The present study sought to identify the most prevalent perceived contributors to depressed mood in Black single mothers by answering two research questions.

Research Question 1: What are the most prevalent contributors of depressed mood reported collectively and individually by Black single mothers in this sample?

Research Question 2: Are the stressors that contribute to depressed mood more likely to be chronic or acute?

Procedure

Community-dwelling Black single mothers were recruited from 10 different recruitment sites over a 3-month period from June 2012 to September 2012 after approval was received from the University's Institutional Review Board. Participants were recruited from three social service agencies, four community sites, and three private pediatric practices in three different inner-city communities in New Jersey and Pennsylvania. Women were recruited in person and asked to participate. In the original study, exactly 210 Black single mothers completed the survey packets, yet only 173 of these mothers provided usable answers to the study questions for this analysis. After completing instruments relevant to this larger study (Atkins, 2016), the women responded to the study question for this analysis. Participants responded to an open-ended question that asked, "*What are two reasons that you get 'down in the dumps*? with "*down in the dumps*" being a culturally acceptable phrase used to describe depressive symptoms by Black women (Waite & Killian, 2007). Two spaces were given so that the women were given the opportunity to provide at least two or more responses to the study question.

Data management

To organize the data for the first research question, a 7 by 210 column dimension table was constructed and labeled from 1 to 210, corresponding to each participant in the study. The responses to the study questions were placed in the table within the box (es) next to the number corresponding to each respective participant. The columns were labeled with the number of the participant, the first response answer, the first code label, a box for a chronicity label (chronic or acute), the second response category, a second code label box, and a second final box for a chronicity label. Responses were initially labeled with start codes representing theoretically known causes of depression and a chronicity label for the nature of stressors (chronic or acute). The final labels and categories were determined based on the primary and secondary coding procedures discussed below under data analysis.

Data analysis

To describe demographic characteristics, descriptive statistics were generated via an SPSS 21 (IBM, 2017) computer program. For analysis of participant responses, a directed approach to content analysis (Hsieh & Shannon, 2005) was used based on existing theoretical formulations and empirical research about the causes of depression in women. Both inductive (Mayring, 2000) and deductive (Potter & Levine-Donnerstein, 1999) approaches were used to analyze the responses with attention to a systematic process that strengthened the rigor of the analysis (Guba, 1981; Wu, Thompson, Aroian, Mcquaid, & Deatrick, 2016).

For primary coding of the data, six researchers reviewed the responses and coded the data based on 10 start codes deductively derived from the aforementioned existing theoretical formulations and empirical research outlining common causes of depression in women. Primary coding involved labeling responses with the start-code and coming to consensus regarding final larger categories via regular discussions online and in person by four doctorally (PhD) prepared researchers (three nurses and a psychologist) and two master's prepared professionals (one nurse and a social worker). All had prior experience conducting research with low-income minority women.

Subsequent analysis took place via secondary coding where coders identified additional subcategories for broader codes and collapsed similar codes into a singular category. For example, two initially separate codes titled "General Feelings of Stress" and "Cognitive/Mental Factors" were collapsed into one category titled "Cognitive/Mental Stressors" since both were the result of the same thinking processes. An additional category titled, "Parenting Stressors," was added upon review of responses that consistently referenced contributors associated with difficulties parenting children. An additional category titled Unstable Housing was also added for statements that referenced temporary and permanent living conditions as causes of depressed mood. It was additionally noted that relationship stressors involved distinct family processes, and hence, Family Stressors was added as a distinct category. An inductive approach was used as similar categories were organized into larger categories and then themes that also reflected existing theoretical formulations about the etiology of depression. Coders met regularly in person and online to discuss descriptions for each code that were written, revised, and organized as the agreement upon codes and categories were finalized. This coding was supervised and reviewed by a senior investigative expert in qualitative analysis who also suggested minor revisions and agreed with the final codes, categories, and themes. In addition to content analysis, frequencies and percentages were generated to quantify responses as they were compiled and organized into categories and emerging themes.

Results

Of the 210 mothers who completed the survey packets, only 173 mothers provided a total of 319 responses that were usable for this analysis. The majority of the women gave one or two responses and nine women gave three responses. There were 11 responses that were not used because they

Table 1. Frequency distribution of selected demographic variables ($N = 173$).

Characteristic	*n*	*Percentage*
Ages	171	
Mean	30.77	
Stand Dev	6.97	
Range	18–45	
18–19	6	3.51%
20–29	75	43.86%
30–39	64	37.43%
40–45	26	15.20%
Marital Status	173	100.00%
Single/Never Married	151	87.28%
Separated	8	4.62%
Divorced	13	7.51%
Widowed	1	.59%
Head of Household	173	100.00%
Yes	155	89.60%
No	18	10.40%
Number of Children	173	100.00%
2 or fewer	106	61.27%
3–4 children	59	34.10%
5–6 children	6	3.47%
7 or more children	2	1.16%
Education	172	99.42%
Eighth Grade	7	4.06%
High School	104	60.47%
Technical School	31	18.02%
Two-Year College	22	12.79%
Four-Year College	4	2.33%
Master's Program	4	2.33%
Employment	171	98.84%
Full-Time	66	38.60%
Part-Time	25	14.62%
Unemployed	67	39.18%
Disabled	4	2.34%
Student	8	4.68%
Other	1	.58%
Income	168	97.11%
Less than $5,000	71	42.26%
Between $5,000 and $20,000	46	27.38%
Between $20,000 and $30,000	23	13.70%
Between $30,000 and $40,000	14	8.33%
Between $40,000 and $50,000	8	4.76%
Between $50,000 and $60,000	4	2.38%
Between $60,000 and $70,000	0	0
Greater than $70,000	2	1.19%

did not provide a reason for the question posed (i.e. "I don't know," "Don't get down," "not," "none") indicating a lack of current or frequent "down" moods. Other women chose not to answer the question leaving it blank or writing "n/a." There were no statistically significant differences in age, income and educational level, the number of children, employment status, and marital status between women who provided usable responses and women who did not. The women responded to the study question after providing answers to 5 rating scales for the larger study (Atkins, 2015). Exactly 54.9% of the mothers who provided responses scored $\geq$16 on the CES-D scale indicating the possibility of clinically significant levels of depressive symptoms warranting referral for further evaluation (Radloff, 1977).

The participants were Black single mothers of diverse cultural backgrounds who self-identified as Black on the demographic data sheet in the original study. The mothers were mostly young adults between the ages of 18 to 45 ($M = 30.77$, SD = 6.97). Most of the mothers were of low-income or lived below the poverty line (69.64% less than $20,00/year) (US Department of Health and Senior Services, 2012), and reported being single or having never been married (87.28%), and had less than two children (61.27%). Additional demographic information can be found in Table 1.

Four themes emerged representing the collective and individual reasons for depressed mood from the perspective of the mothers in this sample. The majority of the collective responses reflected inadequate financial resources as reasons for depressed mood ($n = 115$; 36.05%). Over half of the mothers individually reported responses associated with financial inadequacies ($n = 97$; 56.07%). Other emerging themes representing the collective and individual responses are presented below.

Research questions 1

Social/environmental factors

Theme 1: Mothers reflected on inadequate resources and inability to secure and sustain basic needs for themselves or family members and racism stressors when providing reasons for depressed mood.

Financial stress: Collectively, the most frequent responses referenced financial stressors ($n = 115$; 36.05%). Mothers made direct statements about inadequate financial resources to supply basic needs or inadequate or no employment to improve financial status; for example "when I can't provide for my family," and "financial problems." Financial stressors were mentioned individually by more than half of the mothers in this sample ($n = 97/173$; 56.07%).

Unstable housing/living conditions: Mothers also referenced inadequate housing or lack of housing or dissatisfaction with current housing/living situation or conditions ($n = 15$; 4.70%); for example, "My current living situation" and "homeless." These responses were given by 14/173 mothers (8.09%) individually.

Racism stress: Only one statement referenced stressors associated with racism/discrimination. One mother wrote, "Oppression of my race" ($n = 1$; .31%), representing .58% of mothers. No other responses referenced this type of stress.

The responses under this theme account for 41.32% ($n = 131$) of all responses offered. Additional statements representing all categories can be found in Table 2.

Theme 2: Mothers reflected on conflictual, inadequate, and/or lost relationships and lack of support when providing reasons for depressed mood.

Interpersonal Relationship Stress: Mothers referenced interpersonal relationship conflicts ($n = 21$; 6.58%) involving friends, former spouses, and people in general some with references to violence; for example, "When people want to fight me," and "Arguing with my friends." These responses were given by 18/173 mothers (10.40%) individually.

Interpersonal Losses: Mothers referenced losses of human relationships ($n = 20$; 6.27%); for example, "Death when it happens to my love ones and closest friends." These responses were given by 19/173 mothers (10.98%) individually.

Lack of Social Support: Mothers' responses referenced lack of social support from people and their children's father

Table 2. Social/environmental contributors to depressed mood ($n = 173$).

Theme 1	Samples of Responses	Number 319 (%)	# Mothers (%)
Financial Stressors	*"no money," "tired of working hard and always broke," "can't afford to have my own place," "I wish I can go back to school but I don't have the money to do so," "finances," "bills," "getting money," "no job," "when I can't pay bills,""Don't receive enough hours," "finding a paying job," "student loans," "financial problems."*	115 (36.05)	97 (56.07)
Unstable Housing	*"living conditions," "homelessness," "because my son and I are homeless," "stress from not able to control my household situation."*	15 (4.70)	14 (8.09)
Racism Stress	*"Oppression of my race."*	1 (.31)	1 (.58)
Theme 2			
Interpersonal Losses	*"parents death not even a year past from each other,""I've recently experienced the death of my son," "being without my child," "my husband passed away," "the recent loss of my family members" "thinking of the passing of my youngest son."*	20 (6.27)	19 (10.98)
Interpersonal Relationships	*"people, "relationships," "if any one messes with my kids," "someone make me mad or lie on me," "going to custody court," "someone's lack of respect," "sometimes people," "co-parenting,"*	21 (6.58)	18 (10.40)
Lack of Social Support	*"and not getting help by kids dad," "no family around," "no help from other parent," "kids dad won't help."*	16 (5.02)	16 (9.25)
Family Stress	*"family," "discouragement from family,"*	9 (2.82)	9 (5.20)
Loneliness/Social Isolation	*"feeling lonely" "being single can be lonely and depression," "being alone," "because I am always alone."*	7 (2.20)	7 (4.05)

Table 3. Psychological contributors to depressed mood ($n = 173$).

Theme 3	Samples of Responses	Number (%)	#Mothers (%)
Cognitive/Mental Stressors	*"stress," "when things aren't moving according to my time," "having a bad day," "Not having my (me) time," "overwhelmed," "I'm tired of doing but going nowhere," "everybody depends on me," "crazy things," "getting back into school when I wanted to," "I need better degrees," "ever thinking of having nothing," "feel like I'm not where I need to be in life," "trying to do better but something unfortunate takes place," "sometimes when I want I don't get."*	60 (18.81)	52 (30.06)
Parenting Stressors Daily Hassles	*"full time parenting," "Stressful situations at home alone with children," "take care of four kids," "messing with my kids," "working and not being able to spend enough time with daughter."*	40 (12.54)	38 (21.97)
Abuse	*"because my mother is mentally and verbally abusive to me."*	1 (.31)	1 (.58)

($n = 16$; 5.02%); for example, "Not getting help by kid's dad." These responses were given by 16/173 mothers (9.25%) individually.

Family Stress: Mothers' responses also directly referenced family stressors ($n = 9$; 2.82%); for example, "Feeling overwhelmed with family issues," "dysfunctional family members," "extended family issues," "my family." These responses were given by 9/173 mothers (5.20%) individually.

Loneliness and Social/Isolation: Mothers' responses additionally referenced distressing feelings associated with inadequate relationships ($n = 7$; 2.20%); for example, "Because I'm always alone," and "Feeling lonely," and "Lack of relationship." These responses were given by 7/173 mothers (4.05%) individually.

The categories representing this theme accounted for 22.88% ($n = 73$) of all responses offered. Social/environmental factors collectively accounted for 63.95% ($n = 204$) of all responses offered. Additional statements representing each category can be found in Table 2.

Psychological factors

Theme 3: Mothers reflected on general internal feelings of stress and negative thoughts and feelings caused by lack of perceived control, perceived inadequacies, excessive obligations, and abuse when providing reasons for depressed mood.

Cognitive/Emotional Stress: Mothers' responses referenced general feelings of stress associated with lack of control, negative thinking and emotions, inadequacies, and excessive obligation ($n = 60$: 18.81%). These were the second most frequently offered responses; for example, "Feeling overwhelmed," and "Not being able to control the uncontrollable," "When I'm feeling bad," "When I am not productive," and "Work, … education." These responses were given by 52/173 mothers (30.06%) individually.

Parenting Stress/Daily Hassles: Mother's responses referenced perceived inadequacies, and excessive responsibilities related to typical everyday events involving parenting, parent–child interactions (Crnic & Greenberg, 1990), and providing for children ($n = 40$; 12.54%). These were the third most frequent types of stressors referenced by these mothers; for example, "When my children argue," "Sometimes when I cannot get my kids what they want," and "No childcare." These responses were given by 38/173 mothers (21.97%) individually.

Abuse: Only one statement referenced abuse ($n = 1$; .31%) representing .58% of mothers. One mom stated, "Because my mother is mentally and verbally abusive to me." No other responses referenced any other form of abuse.

These psychological factors under this theme accounted for 31.97% ($n = 102$) of all responses offered. Additional statements representing each category can be found in Table 3.

Table 4. Physiologic contributors to depressed mood ($n = 173$).

Theme 4	Samples of Responses	Number (%)	#Mothers (%)
Physiologic or Medical Condition	*"health," "a lot of pain," "sick (not feeling good) cold," "I had thyroid cancer," "my illness I receive in Oct. took a toll on me,"*	14 (4.39)	13 (7.51)

Physiological factors

Theme 4: Mothers recalled chronic or acute illnesses and/or physical health conditions when providing reasons for depressed mood.

Physiologic or Medical Conditions: Mothers' responses referenced physiologic conditions or chronic or acute illnesses or medical conditions ($n = 14$; 4.39%). Examples of these statements include, "being sick," "chronic pain," "my sickness," "my menstrual," "not feeling well," "health issues," "sleep." These responses were given by 13/173 mothers (7.51%) individually. These physiologic factors account for 4.39% ($n = 14$) of all responses offered. Additional statements representing this category can be found in Table 4.

Research question 2

Exactly 263/319 (82.45%) responses were classified as chronic everyday stressors, while the rest were classified as acute. A chi-square analysis further suggested that different contributors to depressed mood varied in their likelihoods of being classified as acute or chronic, $2(11)=195.94$, $p<.001$. Most interpersonal loss (80.0%) and unstable housing stressors (100%) were acute. In contrast, the majority of stressors related to financial factors (100%), racism (100%), interpersonal relationships (90.5%), lack of social support (100%), family stress (100%), loneliness/social isolation (100%), cognitive/mental factors (86.7%), parenting or daily hassles (97.5%), abuse (100%), and physiological or medical condition (85.7%) were chronic.

Discussion

This study revealed the most frequent reasons for depressed mood in a sample of urban, community-dwelling, young adult, Black single mothers at-risk for clinical depression. Collectively and individually, the most frequent responses were consistent lack of financial resources (56.07% of mothers), followed by general cognitive/emotional feelings of stress (29.48% of mothers), and parenting stressors or daily hassles (29.48% of mothers). In a prior sample of Black rural mothers, relationship problems were reported by most women individually 54.54% (6/11) (Cadigan & Skinner, 2015). In a study by Amankwaa (2003), major stressors for African-American postpartum mothers (10 out of 12) were those associated with the immediate post-partum period such as recover from childbirth such as pain, surgery, infection, complications, delivery, and health problems. In other published studies, depressed Black women in general primarily implicate traumatic childhood experiences (Waite & Killian, 2009) and health problems (Black et al., 2007; Waite & Killian, 2009) as contributors to depression. This study provides new knowledge indicating that for the urban, community-dwelling, non-pregnant single mothers in this study who do not have a depression diagnosis, financial difficulties are more likely to affect mood and place them at risk for clinical depression, rather than relationship, physical health, or parenting stressors.

Cognitive/mental and emotional stressors, namely general feelings of stress and negative feelings and thoughts, were the second most frequent responses collectively and individually. This is not surprising since evidence shows that low socioeconomic status (inadequate income, unemployment) affects cognitive functioning (Shih et al., 2011), increases stress exposure, affects daily affect, contributes to fewer positive experiences in everyday life, decreases perceived control, and leads to greater social strain in women (Gallo, Laura, Vranceanu, & Matthews, 2005; Shih et al., 2011). The pressure of living in poverty and experiencing deprivation contributes to depressed mood that consequently generates more stress that may impact the thinking and emotions of these women (Alloy, Liu, & Bender, 2010; Hammen, 2006). This study provides new knowledge that psychological stressors, many of which involve parenting stressors of a chronic nature, are second more likely to contribute to depressed mood in this sample of Black, single, community-dwelling mothers.

As a whole, the majority of the responses referenced social/environmental factors accounting for 63.95% ($n = 204$) of all responses offered, followed by psychologic factors 31.97% ($n = 101$), and physiologic factors 4.39% ($n = 14$). Social determinants of mental health are social and environmental factors known to impact mental health outcomes at the individual and societal level (Compton & Shim, 2015). These determinants include poverty/income inequality, housing insecurity, underemployment, food insecurity, discrimination, social exclusion, poor education, and poor built environment (Compton & Shim, 2015). These findings add to the body of knowledge regarding the impact of these social determinants on the mental health of Black, single, community dwelling mothers whose responses matched many of these social determinants.

Perceived discrimination and traumatic or abusive experiences were not frequently mentioned as reasons for depressed mood in this sample. These findings are consistent with theoretical propositions (Feagin & McKinney, 2003; Fernando, 1984; Paradies, 2006) and empirical studies that propose and have found evidence for only an indirect link between perceived racism/discrimination and depressive symptoms in Black single mothers, respectively (Atkins, 2016). When providing answers, these mothers were more likely to recall the most salient contributors to depressed mood rather than indirect contributors. In addition, evidence shows that abuse has negative impacts on mental health for women of higher income levels when compared to women with no income and incomes below poverty (Gilroy et al., 2015). Nearly 70% of the women in this sample were below the poverty line and thus, their mental health may not be significantly impacted by abuse

experiences. In addition, there is evidence that childhood abuse and sexual violence is often normalized by women who live in the inner city (Dunlab, Golub Johnson, & Benoit, 2009; Hlavka, 2014). Thus, women in this sample of urban residing mothers rarely reported experiences of abuse or perceived racism/discrimination when providing reasons for depressed mood, but it should not be concluded that they did not suffer from abuse or racism.

Implications for practice

This new knowledge can be used to guide targeted depression preventive efforts for Black, single, urban-dwelling mothers at risk for depression. At the individual level, primary care pediatric, family, and social service professionals should collaborate to connect Black single mothers with existing financial, and social service resources available in their communities. These may include nonprofit organizations and government agencies who service families in need by providing financial resources for childcare, housing and utility support, employment assistance, respite services for sick or disabled family members, and food. Exactly 60.47% of the women had only a high school education, and only 38.60% were working full time. At the societal level, the socioeconomic status of select populations of Black single mothers can be increased by strengthening the capacity of existing agencies that are providing technical training for job skills and career development. Support for institutions that facilitate educational advancement should be provided, particularly those who are providing financial and informational support for gaining access to a university education for residents of under-served urban communities.

This new knowledge can also be used to guide depression preventive efforts that target prompt management of psychosocial stressors to prevent their persistence and reoccurrence in the lives of Black single urban-dwelling mothers. At the individual level, health care and social service practitioners can connect Black single mothers with existing agencies that provide low-cost or free mental health services and strategies to cope with the everyday stressors produced by poverty and parenting demands. Mothers can be connected with agencies that service families and offer written and verbal parenting education. Additionally, a comprehensive approach to prevention would emphasize upstream efforts to diminish financial stressors by the aforementioned efforts to increase the SES of Black single mothers. Consequently, the impact of general cognitive/mental and emotional stressors that contribute to depressed mood in these mothers may also be reduced.

As primary caretakers of their children, the diverse types of stressors that single mothers experience subsequently impact the entire family unit. Families experience stress as a unit and all of the aforementioned reasons for depressed mood have the potential to create pressures, tensions, and disturbances that disrupt the steady state of the family (Boss, 2002; Price et al., 2017). If the level of stress in the family causes disruption, and family resources and coping mechanisms are not adequate to meet the challenges associated with the stressor event, members become dissatisfied or display physical emotional symptoms such as depressive symptoms (Price et al., 2017). Black single mothers often utilize maladaptive techniques to cope with depressed mood (Atkins, 2016b). Hence, family-level interventions are needed for single mother families that focus on the development of effective ways to cope with stressors. Mothers can be taught coping strategies that involve problem solving to manage financial and parenting stressors that can be practiced via role play with other family members and case examples. When problems are resolved, feelings of cognitive/emotional distress are reduced, mood is enhanced, and subsequently the risk for clinical depression can be reduced. At the societal level, additional programs to promote upward socioeconomic mobility for single mother families can be developed.

Medical treatment for depressed mood is not often sought by Black single mothers (Atkins, 2016b). Although more than half of the mothers scored high enough on the depression scale to warrant referral for further mental health evaluation, none were diagnosed with or being treated for depression. At the individual and family levels, nurses can encourage and assist Black single mothers and their families to get help for depressed feelings and to access community-based programs that incorporate self-help stress management and emotion regulation strategies to prevent the detrimental effects of a variety of adverse environmental conditions and stressors on the mental health of the entire family. These programs may incorporate mindfulness strategies that have been shown to have beneficial effects on psychological functioning in disadvantaged Black women (Gallegos, Lytle, Moynihan, & Talbot, 2015; Burnett-Zeigler et al., 2016) and reduce symptoms of depression in parents (Alexander, 2018; Martin, Goliijani-Moghaddam, & dasNair, 2018). Nurses who are aware of the importance of movement for managing mental health symptoms (American Nurses Association, 2018) can assist their patients to access programs that also incorporate a component that involves regular participation in physical activity that has been shown to lower depressive symptoms in US adults (Physical Activity Guidelines for Americans, 2008; Stanton & Happell, 2014), including Black women (Torres, Sampselle, Gretebeck, Ronis, & Neighbors, 2010). Nurse researchers can develop and test programs that combine mindfulness strategies with physical activity that may prove beneficial for managing depressive symptoms in this vulnerable sub-group of Black women (Tsang, 2008).

The majority of the contributors to depressed mood revealed by these mothers can be addressed on the societal level via public policies that support mental health promotion efforts and actions to improve conditions of daily life by reducing unequal distribution of resources across the life course during working age and family building. This is the stage of development for most single mothers (Compton & Shim, 2015; World Health Organization [WHO], 2014).

Recommendations for future research

Future research that examines gene–environment interactions in Black single mothers should give priority to examining the impact of socioeconomic status indicators such as total family

income, occupation/job title, highest grade completed, family size, unmet needs, perceived social status and emotional and cognitive stress processes on gene expression (Diemer, Mistry, Wadsworth, Lopez, & Reimers, 2013; American Psychological Association [APA], 2018). Nurse researchers who develop interventions aimed at mental health promotion and depression prevention should collaborate with institutions from a variety of sectors including political, health, and community organizations who are interested in examining these factors and who have stake in mental health promotion initiatives at the community and societal level.

Limitations of the study

This study utilized a sample of convenience, which is inherently biased. In addition, 37 women did not respond to the study question and some women provided only one response. It is not known whether other reasons for depressed mood may have been withheld. Subjectivity was involved with placing responses into larger categories potentially resulting in some researcher bias. The generalizability of the results may be limited to low-income, Black single mothers who reside in urban communities, excluding those who live in suburban or rural communities.

Acknowledgments

The author would like to acknowledge the assistance of Adela Yarcheski, PhD, FAAN, Elsie E. Gulick, PhD, FAAN, Maureen Esteves, PhD, RN (Posthumously), and Noreen E. Mahon, PhD, FAAN in the conduct of this study.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This study was supported by the Robert Wood Johnson Foundation/ New Jersey Nursing Initiative, the Dorothy J. DeMaio Research Award, and the Kirby Foundation Scholarship Award. These organizations provided financial support for my doctoral education but did not provide direct financial support for this study. These sources did not offer any financial support for the study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication.

ORCID

Rahshida Atkins https://orcid.org/0000-0003-3713-9711
Rufan Luo http://orcid.org/0000-0002-3518-9953

References

Abel, W. M., Crane, P. B., & McCoy, T. (2014). Predictors of depression in black women with hypertension. *Issues in Mental Health Nursing*, *35*(3), 165–174.

Alexander, K. (2018). Integrative review of the relationship between mindfulness-based parenting interventions and depression symptoms in parents. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *47*, 184–190.

Alloy, L. B., Liu, R. T., & Bender, R. E. (2010). Stress generation research in depression. A commentary. *International Journal of Cognitive Therapy*, *3*(4), 380–388.

Amankwaa, L. C. (2003). Postpartum depression among African-American women. *Issues in Mental Health Nursing*, *24*(3), 297–316.

American Nurses Association. (2018). Mental health awareness. Retrieved from https://www.nursingworld.org/practice-policy/hnhn/2017-year-of-the-healthy-nurse/mental-health-wellness/

American Psychological Association (APA). (2018). Measuring socioeconomic status and subjective social status. Retrieved from https://www.apa.org/pi/ses/resources/class/measuring-status.aspx

Atkins, R. (2010). Self-efficacy and the promotion of health for depressed single mothers. *Journal of Mental Health in Family Medicine*, *7*, 155–168.

Atkins, R., Gage, G., Kelly, T., Joseph, P. W., Johnson, S., Ojo, K., & Williams, W. (2018). Exploring expressions of depression in Black single mothers. *Issues in Mental Health Nursing*, *39*(11), 1–11. https://doi.org/10.1080/01612840.2018.1466942

Atkins, R. (2014). Depression in Black single mothers: A test of a theoretical model. *Western Journal of Nursing Research*, *37*, 12–830.

Atkins, R. (2016). Coping with depression in single Black mothers. *Issues in Mental Health Nursing*, *37*(3), 172–181.

Atkins, R. (2017). Outcomes of depression in Black single mothers. *Clinical Nursing Research*, *26*(4), 1–2.

Baum, A., Garofalo, J. P., & Yali, A. M. (1999). Socioeconomic status and chronic stress. Does stress account for SES effects on health? *Annals of the New York Academy of Science*, *896*(1), 131–144.

Black, H. K., White, T., & Hannum, S. M. (2007). The lived experience of depression in elderly African-American women. *Journal of Gerontology: Social Sciences*, *62B*, S392–S398.

Bodnar-Deren, S., Benn, E. K. T., Balbierz, A., & Howell, E. A. (2017). Stigma and postpartum depression treatment acceptability among Black and White women in the first six-months postpartum. *Maternal Child Health Journal*, *2*, 1457–1468.

Boss, P. G. (2002). *Family stress management: A contextual approach* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Boyd, M. A. (2018). *Psychiatric nursing* (6th ed.). Philadelphia, PA: Wolters Kluwer.

Brown, R. C., Clark, S. L., Dahne, J., Stratton, K. J., Macpherson, L., Lejuez, C. W., & Amstadter, A. B. (2015). Testing the temporal relationship between maternal and adolescent depressive and anxiety symptoms in a community sample. *Journal of Clinical Child and Adolescent Psychology*, *44*(4), 566–579.

Bronder, E. C., Speight, S. L., Witherspoon, K. M., & Thomas, A. J. (2014). John Henryism, depression and perceived social support in black women. *Journal of Black Psychology*, *40*(2), 115–137. doi:10.1177/0095798412474466

Burnett-Zeigler, I. E., Satyshur, M. D., Hong, S., Yang, A., T. Moskowitz, J., & Wisner, K. L. (2016). Mindfulness based stress reduction adapted for depressed disadvantaged women in an urban Federally Qualified Health Center. *Complementary Therapies in Clinical Practice*, *25*, 59–67. doi:10.1016/j.ctcp.2016.08.007

Cadigan, R. J., & Skinner, D. (2015). Symptoms of depression and their management among low-income, African American and White mothers in the rural South. *Ethnicity & Heath*, *20*, 293–308. doi:10.1016/S1045-1056(05)80050-8

Center on the Developing Child. (2009). Maternal depression can undermine the development of young children. Retrieved from http://46y5eh11fhgw3ve3ytpwxt9r.wpengine.netdna-Cdn,com/wp-content/uploads/2009)/05/Maternal-Depression-Can-Undermine-Development.pdf

Chaudhry, F. R., Mani, V., Ming, L. C., & Khan, T. M. (2016). Beliefs and perception about mental health issues: A meta-synthesis. *Neuropsychiatric Disease and Treatment*, *12*, 2807–2818. doi:10.2147/NDT.S111543

Compton, M. T., & Shim, R. S. (2015). The social determinants of mental health. *Clinical Synthesis*, *13*, 419–425.

Cresswell, J. W. (2013). *Qualitative inquiry & research design.* Los Angeles, CA: Sage.

Crnic, K. A., & Greenberg, M. T. (1990). Minor parenting stresses with young children. *Child Development*, *61*(5), 1628–1637.

deJonge, M., Dekker, J. J. M., Kikkert, M. J. M., Peen, J., vanRijsbergen, G. D., & Bockting, C. L. (2017). The role of affect in predicting depressive symptomatology in remitted recurrently depressed patients. *Journal of Affective Disorders*, *210*, 66–71.

Diemer, M. A., Mistry, R. S., Wadsworth, M. E., López, I., & Reimers, F. (2013). Best practices in conceptualizing and measuring social class in psychological research. *Analyses of Social Issues and Public Policy (ASAP)*, *13*(1), 77–113. doi:10.1111/asap.12001

Dunlab, E., Golub, A., Johnson, B. D., & Benoit, E. (2009). Normalization of Violence: Experiences of childhood abuse by inner-city crack users. *Journal of Ethnicity in Substance Abuse*, *8*, 15–34. doi:10.1080/15332640802683359

Ertel, K. A., Rich-Edwards, J. W., & Koenen, K. C. (2011). Maternal depression in the United States: Nationally representative rates and risks. *Journal of Women's Health*, *20*(11), 1609–1615. doi:10.1089/jwh.2010.2657

Fernando, S. (1984). Racism as a cause of depression. *International Journal of Social Psychiatry*, *30*(1-2), 41–49. doi:10.1177/002076408403000107

Feagin, J. R., & McKinney, K. D. (2003). *The many costs of racism.* New York, NY: Rowman & Littlefield publishers, Inc.

Gallo, L., Laura, B., Vranceanu, A., & Matthews, K. (2005). Socioeconomic status, resources, psychological experiences, and emotional responses. A test of the reserve capacity model. *Journal of Personality and Social Psychology*, *88*(2), 386–399.

Gallegos, A. M., Lytle, M. C., Moynihan, J. A., & Talbot, N. L. (2015). Mindfulness-based stress reduction to enhance psychological functioning and improve inflammatory biomarkers in trauma-exposed women: A pilot study. *Psychological Trauma*, *7*(6), 525–532.

Gavin, A. R., Chae, D. H., & Takeuchi, D. (2009). Association between family structure in childhood and lifetime depressive disorder in adulthood among a nationally representative sample of Blacks. *General Hospital Psychiatry*, *31*(5), 484–493.

Gilroy, H., Nava, A., Maddoux, J., McFarlane, J., Symes, L., Koci, A., & Fredland, N. (2015). Poverty, partner abuse, and women's mental health: New knowledge for better practice. *Journal of Social Service Research*, *41*(2), 145–157.

Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, *29*(2), 75–91.

Hammen, C. (2006). Stress generation in depression: Reflection on origins, research, and future directions. *Journal of Clinical Psychology*, *62*(9), 1065–1082.

Hatcher, J., Rayens, M. K., Peden, A. R., & Hall, L. A. (2008). Predictors of depression for low-income African American single mothers. *Journal of Health Disparities Research and Practice*, *2*, 89–105.

Healthy People, 2020. (2018). Mental health. Retrieved from https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Mental-Health/determinants

Hlavka, H. (2014). Normalizing sexual violence: Young women account for harassment and abuse. *Gender and Society*, *3*, 337–358.

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. doi:10.1177/1049732305276687

Huang, Z. J., Wong, F. Y., Ronzio, C. R., & Yu, S. M. (2007). Depressive symptomatology and mental health help-seeking patterns of U.S.–and foreign-born mothers. *Maternal Child Health Journal*, *11*, 257–267.

Hutto, H. F., Kim-Godwin, Y., Pollard, D., & Kemppainen, J. (2011). Postpartum depression among White, African American, and Hispanic low-income mothers in rural Southeastern North Carolina. *Journal of Community Health Nursing*, *28*(1), 41–53.

Kasper, J. D., Ensminger, M. E., Green, K. M., Fothergill, K. E., Juon, H.-S., Robertson, J., & Thorpe, R. J. (2008). Effects of poverty and family stress over three decades on the functional status of older African American women. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *63*(4), S201–S210.

Kirmayer, L. J. (2001). Cultural variations in the clinical presentation of depression and anxiety: Implications for diagnosis and treatment. *Journal of Clinical Psychiatry*, *62*, 22–30.

Kneipp, S. M., Welch, D. P., Wood, C. E., Yucha, C. B., & Yarandi, H. (2007). Psychosocial and physiological stress among women leaving welfare. *Western Journal of Nursing Research*, *29*(7), 864–883.

Lara-Cinisomo, S., & Griffin, B. A. (2007). Factors associated with major depression among mothers in Los Angeles. *Women's Health Issues*, *17*(5), 316–324.

Mayring, P. (2000). Qualitative content analysis: Forum: Qualitative social research, 1. Retrieved from http://www.qualitativeresearch.net/index.php/fqs/article/view/1089/2385

Martin, K., Goliijani-Moghaddam, N., & dasNair, R. (2018). Mindfulness self-help interventions for symptoms of depression, anxiety and stress: Review and meta-analysis. *Journal of Therapy & Rehabilitation*, *25*, 82–95.

Mental Health America. (2018). Social determinants of health. Retrieved from http://www.mentalhealthamerica.net/conditions/social-determinants-health

Messer, L. C., Maxson, P., & Miranda, M. L. (2013). The urban built environment and assocations with women's psychosocial health. *Journal of Urban Health*, *90*(5), 857–871.

Mitchell, S. J., & Ronzio, C. R. (2011). Violence and other stressful life events as triggers of depression and anxiety: What psychosocial resources protect African American mothers? *Maternal and Child Health Journal*, *15*(8), 1272–1281. doi:10.1007/s10995-010-0668-6

National Institutes of Health. (2010a). Moving into the future with new dimensions and strategies: A vision for 2020 for women's health research, Volume II Regional Scientific Reports. Retrieved from https://orwh.od.nih.gov/sites/orwh/files/docs/ORWH_StrategicPlan2020_Vol2.pdf

National Institutes of Health. (2010b). Moving into the future with new dimensions and strategies: A vision for 2020 for women's health research, Strategic Plan. Retrieved from https://orwh.od.nih.gov/sites/orwh/files/docs/ORWH_StrategicPlan2020_Vol1.pdf

National Institutes of Health. (2016). Prevention research at the NIH. Retrieved from https://prevention.nih.gov/prevention-research

National Institute of Nursing Research (NINR). (2018). Wellness: Promoting health and preventing illness. Retrieved from https://www.ninr.nih.gov/newsandinformation/iq/wellness-workshop#.VaZO9IsdKlI

National Institute of Mental Health (NIMH). (2016a). Major depression. Retrieved from https://www.nimh.nih.gov/health/statistics/major-depression.shtml

National Institute of Mental Health (NIMH). (2016b). Depression basics. Retrieved from https://www.nimh.nih.gov/health/publications/depression/index.shtml

National Institutes of Mental Health (NIMH). (2017). Major depression. Retrieved from https://www.nimh.nih.gov/health/statistics/major-depression.shtml

Paradies, Y. C. (2006). Defining, conceptualizing and characterizing racism in health research. *Critical Public Health*, *16*(2), 143–157.

Patton, M. Q. (2015). *Qualitative research & evaluation methods.* Thousand Oaks, CA: Sage Publications.

Peden, A. R., Rayens, M. K., Hall, L. A., & Grant, E. (2004). Negative thinking and the mental health of low-income single mothers. *Journal of Nursing Scholarship*, *36*(4), 337–344.

Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (2015). *Health promotion in nursing practice.* Upper Saddle River, NJ: Pearson Education Inc.

Physical Activity Guidelines for Americans. (2008). Physical activity guidelines for Americans. Retrieved from www.health.gov/paguidelines

Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, *27*(3), 258–284.

Price, C. A., Bush, K., R., & Price, S. J. (2017). *Families & change: Coping with stressful events and transitions* (5th ed.). Thousand Oaks, CA: Sage.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401.

Roshanaei-Moghaddam, B., Katon, W. J., & Russo, J. (2009). The longitudinal effects of depression on physical activity. *General Hospital Psychiatry*, *31*(4), 306–315. doi:10.1016/j.genhosppsych.2009.04.002

Samuels-Dennis, J. (2006). Relationship among employment status, stressful life events, and depression in single mothers. *The Canadian Journal of Nursing Research*, *38*, 58–80.

Samuels-Dennis, J. (2007). Employment status, depressive symptoms, and the mediating/moderating effects of single mothers' coping repertoire. *Public Health Nursing*, *24*(6), 491–502.

Schmit, S., Golden, O., Beardslee, W. (2014). Maternal depression: Why it matters to an anti-poverty agenda for parents and children. Retrieved from https://www.clasp.org/ … /Maternal-Depression-and-Poverty-Brief-1.pdf

Shih, R. A., Ghosh-Dastidar, B., Margolis, K. L., Slaughter, M. E., Jewell, A., Bird, C. E., … Espeland, M. A. (2011). Neighborhood socioeconomic status and cognitive function in women. *American Journal of Public Health*, *101*(9), 1721–1728. doi:10.2105/AJPH.2011.300169

Siefert, K., Williams, D. R., Finlayson, T. L., Delve, J., & Ismail, A. I. (2007). Modifiable risk and protective factors for depressive symptoms in low-income African American mothers. *American Journal of Orthopsychiatry*, *1*, 113–123.

Silver, E. J., Heneghan, A. M., Bauman, L. J., & Stein, R. E. K. (2006). The relationship of depressive symptoms to parenting competence and social support in inner-city mothers of young children. *Maternal and Child Health Journal*, *10*(1), 105–112.

Slavich, G. M., & Irwin, M. R. (2014). From stress to inflammation and major depressive disorder: A social signal transduction theory of depression. *Psychological Bulletin*, *140*(3), 774–815.

Smith-Mckeever, T. C., Rowe, D. M., & Gao, W. (2012). Socieconomic and other factors influencing depression: A comparison of Black and White mothers. *Journal of Ethnic & Cultural Diversity in Social Work*, *21*, 1–19.

Stanton, R., & Happell, B. (2014). Exercise for mental illness: A systematic review of inpatient studies. *International Journal of Mental Health Nursing*, *23*(3), 232–242. doi:10.1111/inm.12045

Torres, E., R., Sampselle, C. M., Gretebeck, K. A., Ronis, D. L., & Neighbors, H. W. (2010). Physical activity effects on depressive symptoms in black adults. *Journal of Health Disparities Research and Practice*, *4*, 70–87.

Tsang, C., C. (2008). Effects of mindful and non-mindful exercises on people with depression: A systematic review. *The British Psychological Society*, *47*, 303–322.

US Department of Health and Senior Services. (2012). 2012 HHS poverty guidelines. Retrieved from https://aspe.hhs.gov/2012-hhs-poverty-guidelines

Waite, R., & Killian, P. (2007). Exploring depression among a cohort of African American women. *Journal of the American Psychiatric Nurses Association*, *13*(3), 161–169.

Waite, R., & Killian, P. (2009). Perspectives about depression: Explanatory models among African-American women. *Archives of Psychiatric Nursing*, *23*(4), 323–333.

Waerden, F., Hoefnagels, C., Hosman, C. M., & Jansen, M. W. (2014). Defining subgroups of low socioeconomic status women at risk for depressive symptoms: The importance of perceived stress and cumulative risks. *International Journal of Psychiatry*, *60*, 772–782.

Weaver, A., Himle, J. A., Taylor, R. J., Matusko, N. N., & Abelson, J. M. (2015). Urban vs rural residence and the prevalence of depression and mood disorder among African American women and non-Hispanic White women. *Journal of the American Medical Association*, *72*, 576–583. doi:10.1001/jamapsychiatry.2015.10

World Health Organization. (2014). Social determinants of mental health. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf;jsessionid=C30EB52A947234F06E28CE0AFB24FD64?sequence=1

Wu, Y. P., Thompson, D., Aroian, K. J., McQuaid, E. L., & Deatrick, J. (2016). Writing and evaluating qualitative research reports. *Journal of Pediatric Psychology*, *41*(5), 493–505. doi:10.1093/jpepsy/jsw032

Yu, Z. M., Parker, L., & Dummer, T. J. B. (2014). Depressive symptoms, diet quality, physical activity, and body composition among populations in Nova Scotia, Canada: Report from the Atlantic Partnership for Tomorrow's Health. *Preventive Medicine*, *61*, 106–113. doi:10.1016/j.ypmed.2013.12.022