J Autism Dev Disord (2016) 46:812–824
DOI 10.1007/s10803-015-2618-z

ORIGINAL PAPER

Respite Care for Single Mothers of Children with Autism Spectrum Disorders

Tina Taylor Dyches[1] · **Ruthann Christensen**[2] · **James M. Harper**[3] · **Barbara Mandleco**[4] · **Susanne Olsen Roper**[5]

Abstract Single mothers of children with autism spectrum disorders are rarely studied, yet they may experience unique stressors. Researchers asked 122 single mothers to complete questionnaires concerning respite care, daily hassles/uplifts, depression, and caregiver burden. More than half (59.8 %) accessed respite care, which was provided for 1 h per day, often by multiple sources (41 %), such as grandparents and community agencies; most were satisfied with this care. Most mothers (77 %) were at risk for clinical depression. While uplifts were negatively correlated with depression, hassles and caregiver burden were positively correlated with depression. Respite care was positively related to daily uplifts, and uplifts mediated the relationship between respite care and depression. Recommendations for researchers, policymakers, and school personnel are offered.

Keywords Autism · Caregiver burden · Depression · Single mothers · Respite care · Stress · Uplifts

Introduction

Mothers face a wide range of challenges rearing a child with an autism spectrum disorder (ASD). Research indicates they have significantly higher levels of stress than mothers of typically developing children, with child-related stress factors falling in the 99th percentile for mothers of children with ASD, compared to the 40th percentile experienced by mothers of typically developing children (Hoffman et al. 2009). Mothers who raise these children alone face all of the challenges and stress experienced by any mother of a child with ASD, compounded by the additional problems and stress of single parenthood.

Difficult as their situation may be, single mothers are not well represented in research literature that discusses parenting children with ASD. Because single mother households comprise an increasing proportion of the population in the US (Grall 2013), it is important to study and understand the stressors and problems these mothers face in caring for a child with ASD alone. The dearth of research prevents the customary review and exploration of existing literature that typically sets the context for research studies. In this introductory section, context for the article will be suggested by exploring aspects of the two interactive sources of stress shared by these mothers: the challenges of parenting a child or youth with ASD and difficulties faced by single mothers.

Parenting a Child with ASD

Parenting a child or youth with a disability may present many obstacles, particularly when the disability significantly

---

✉ Tina Taylor Dyches
Tina_dyches@byu.edu

[1] McKay School of Education, 301 McKay Building, Brigham Young University, Provo, UT 84602, USA

[2] Department of Counseling Psychology and Special Education, 340 McKay Building, Brigham Young University, Provo, UT 84602, USA

[3] Couple and Family Therapy, 273 Comprehensive Clinic, School of Family Life, Brigham Young University, Provo, UT 84602, USA

[4] College of Nursing, 500 SWKT, Brigham Young University, Provo, UT 84602, USA

[5] School of Family Life, 2089 JFSB, Brigham Young University, Provo, UT 84602, USA

impacts family functioning, as do autism spectrum disorders (Davis and Carter 2008). Challenges and stresses can negatively affect families emotionally (Ekas and Whitman 2010), socially, and financially (Lee et al. 2008; Montes and Halterman 2008). Some difficulties mothers experience when raising a child with ASD include the child's challenging behaviors, caregiver burden, and maternal depression.

Parental stress has been shown to increase due to a child's problematic behavior (Baker et al. 2002, 2003; Benson and Kersh 2011; Kersh et al. 2006; Lecavalier et al. 2006). Children with developmental disabilities exhibit more problem behaviors than typically developing children (Baker et al. 2002, 2003, 2005), and children with ASD exhibit more challenging behaviors than children with Down syndrome and mixed-etiology intellectual disabilities (Griffith et al. 2010). The maladaptive behaviors of children with ASD are factors that lead to increased stress in their mothers (Griffith et al. 2010) and increased burdens placed on caregivers. This stress is often greater in families raising children with ASD than other families (Rao and Beidel 2009; Schieve et al. 2007).

Caregiver burden is a multifaceted response to perceived stressors and negative appraisals resulting from caring for an individual with chronic health or disabling conditions (Kim et al. 2012). Some research indicates caregivers of children with ASD experience high levels of caregiver burden following the child's diagnosis (Stuart and McGrew 2009), and this burden tends to last as individuals with ASD transition to adolescence and eventually adulthood. Also, parents of children with ASD experience caregiver burden at significantly higher rates than parents of children with less pervasive difficulties (Cadman et al. 2012).

In addition to experiencing caregiver burden, mothers of children with ASD are at increased risk for maternal depression. For instance, Smith et al. (2008) studied 153 mothers of toddlers with ASD and 201 mothers of adolescents with ASD and found over one-third of both groups were at high risk for clinical depression based on scores on the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977). The similarity of scores perhaps indicates that length of time since diagnosis had not reduced the mothers' depressive symptoms.

The effect of parental stress on maternal depression may be buffered by several different factors. Social support has been associated with better mental health for caregivers of children with ASD (Khanna et al. 2011) and with reduced familial stress (Dale et al. 2006) as parents feel more sense of control in their lives (Siman-Tov 2011). Social support may even mediate the impact of behavioral problems on quality of life in these families (Khanna et al. 2011). Tragically, low social supports in addition to ineffective coping styles are associated with severity of depression in mothers of children with ASD, putting many at risk for clinical depression (Carter et al. 2009).

Parenting as a Single Mother

Over the past few decades the composition of U.S. households has changed dramatically, with fewer married-couple households and more people raising children alone. For example, in 1970, approximately 40 % of all households were comprised of married couples with children and in 2012 there were only 20 % of such families, with approximately 9 % of all households being headed by one parent, most of whom are mothers (Grall 2013; Vespa et al. 2013).

Single mothers face many dimensions of stress that co-parenting couples do not experience. Single-parent families, particularly single mothers, face a higher rate of economic disadvantage than married couples. They are less likely to be college educated and not as likely to be homeowners (Vespa et al. 2013). While 9 % of married-couple families live below the poverty level, mother-only families live below the poverty level at four times that rate. They are more likely to lack health insurance and to receive food stamps and public assistance (Vespa et al. 2013).

In addition to economic disadvantages, single mothers face psychological issues such as increased stress and depression. First-time single mothers of typically developing children have reported significantly higher levels of stress than married mothers within the first six to eight weeks after giving birth (Copeland 2005). Single mothers report symptoms of depression (Atkins 2010) up to twice the rate of married mothers, often due to their high levels of stress and low levels of social support (Cairney et al. 2003; Teitler et al. 2004). Also, mothers who exit cohabiting or marital relationships within the first 5 years from the child's birth are more likely to experience increased parenting stress and material hardships (Osborne et al. 2012).

Receiving Respite Care

With heightened levels of stress due to parenting a child with ASD alone, single mothers may find that a break from parenting responsibilities can help in reducing stress. One type of a break is respite care, which is temporary care provided for individuals with disabilities with the primary goal of providing relief to the individual's primary caregiver (Mullins et al. 2002; Strunk 2010).

Over the past decade respite care has been studied in relation to parental mental health. Even married parents of children with disabilities, who do not have the added strain of single parenthood, have experienced reduced stress after receiving respite care. For example, giving parents of children with disabilities a break from parenting demands significantly reduces their stress levels (Cowen and Reed 2002). Respite care is also associated with lower psychological distress in parents of children with developmental disabilities (Mullins et al. 2002). While research indicates such care can be beneficial to married parents of children with ASD (Harper et al. 2013), there is little to no research quantifying the amount of respite care single mothers of children with ASD are receiving and whether it is associated with self-perceptions of their depression, stress, uplifts, and the relationships among these factors.

This study is an extension of Harper et al.'s (2013) study that examined married parents' experiences of raising children with ASD and focused on the relationships involving respite care, marital quality, and stress. It is based upon the theoretical framework of family adaptation wherein a family member reacts to a buildup of stressors (e.g., the children's behavior, daily caregiver burdens, single parent status, lack of family support, financial strain), that may be mitigated by external resources (e.g., respite care) and internal resources (e.g., positive appraisal), potentially leading to successful adaptation (McCubbin and Patterson 1983). We chose daily stressors and daily uplifts to represent maternal appraisal of their childrearing situation. Daily stressors represent those experiences perceived as bothersome, frustrating, or distressing, whereas daily uplifts represent experiences perceived as positive or pleasurable (Lazarus 1984). This daily experiences approach differs from the traditional major life events approach because it is more closely related to psychological symptoms due to the persistent nature of these strains, and it may have greater potential for recommending practical interventions. Furthermore, a focus on daily uplifts is often neglected in the literature, which tends to focus on stressors, symptoms, and challenges faced by families (Barrett and Heubeck 2000).

The purpose of the current study was twofold: (a) to investigate the perceptions of single mothers of children with ASD regarding their daily stress (as measured by daily hassles and caregiver burden), daily uplifts, depression, and respite care, and (b) to examine the relationship between respite care and depression with stress and uplifts as mediators. Figure 1 shows the measurement and structural model for this study.

Hypotheses

Based on trends from the current literature, we predicted the following for single mothers of children with ASD:

1. The amount of respite care would be positively associated with daily uplifts.
2. The amount of respite care would be negatively associated with stress (as measured by daily hassles and caregiver burden).
3. The amount of respite care would be negatively associated with depressive symptoms.
4. The relationship between respite care and depression would be significantly mediated by stress (as measured by daily hassles and caregiver burden).
5. The relationship between respite care and depression would be significantly mediated by daily uplifts.

Methods

After receiving approval from the university's institutional review board, researchers recruited participants through electronic social media (i.e., Facebook), newsletters, distribution lists, and organizations related to ASD (e.g., Autism Speaks). Organizations were invited to advertise the study on their websites and through their social networking outlets. If they agreed to advertise the study, a link was made available through their correspondence (e.g., electronic newsletter, website), taking potential participants to the consent form and questionnaire or to a phone number/email address to request a hard copy of the questionnaire.

Informed consent was obtained from all participants included in the study. On average, the survey took between 15 and 20 min to complete. After completing the survey, participants were directed to a separate survey to provide a mailing address to receive a $25 gift card. Using two different surveys kept the responses anonymous. The gift cards were mailed with thank you notes inviting the participants to tell their eligible friends about the study.

Participants and Settings

Although 169 surveys were submitted online, only 122 contained useable responses. The researchers had to exclude 47 surveys that were not fully completed or contained responses identical to another survey. The final sample was comprised of 122 non-cohabiting single mothers of children diagnosed by a medical professional as having an autism spectrum disorder or classified by the child's school as having autism.

The average age of the 122 single mothers was 36.66 (*SD* = 6.96). Some had never married (23.8 %; *n* = 29); others were divorced, widowed, or separated (76.2 %; *n* = 93). Each had at least one child with ASD living in the home. Of these respondents 71.3 % (*n* = 87) identified themselves as non-Hispanic White, and 53.3 % (*n* = 65) lived in the western area of the United States. All

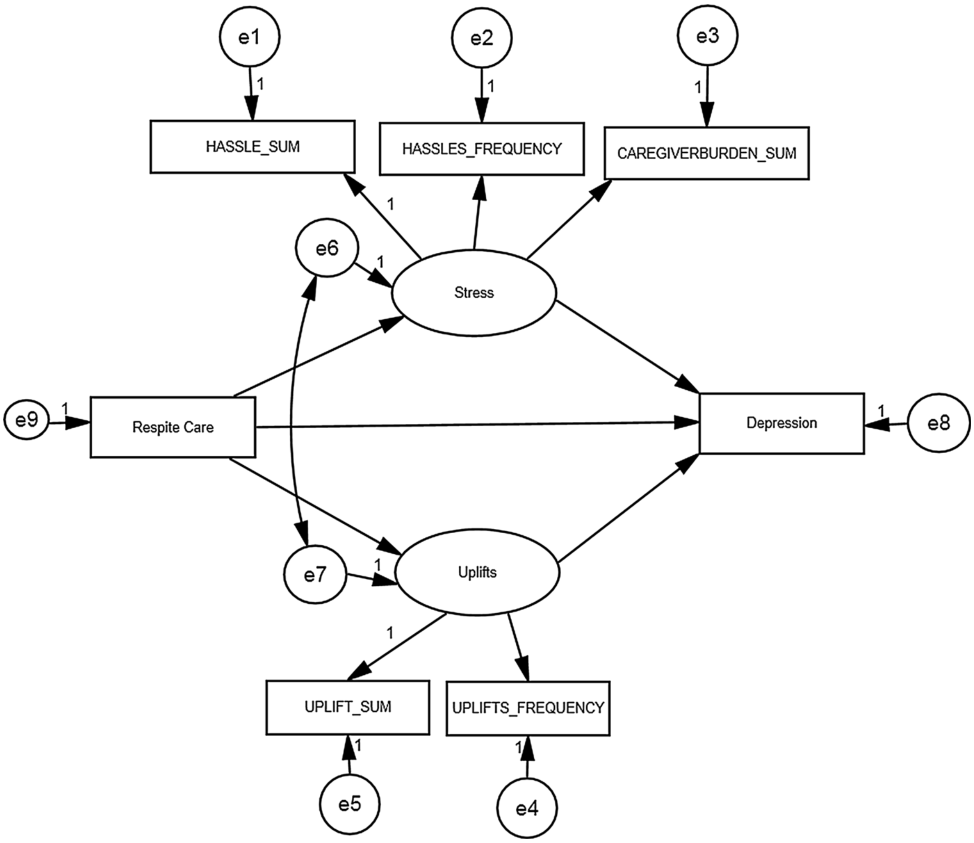


Fig. 1 Measurement and hypothesized structural equation model

participants had graduated from high school, and 43.4 % ($n = 53$) had earned a bachelor's degree. For 49.2 % of participants ($n = 60$) annual income was $25,000 or less, and 79 % earned $50,000 or less. Approximately 42 % ($n = 51$) of the participants received no child support from the parent of their child, with 67.2 % ($n = 82$) receiving other financial support such as medical expenses. Of those children attending schools where government subsidized lunch was provided ($n = 113$), 63.7 % ($n = 72$) qualified for either free or reduced lunch.

Among the 122 participants, 21 mothers (17.2 %) reported having more than one child with ASD; 18 (14.8 %) reported having two children with ASD, and three (2.5 %) reported having three children with ASD. The total number of children with ASD was 146; however, important demographic data from four of those reported children were missing (e.g., gender, age, or medical diagnosis); thus they were not included in the study. Therefore, the total number of children with ASD for which data were calculated was 142.

The mean number of children per family, including those without disabilities, was 2.14 (*SD* = 1.09). Of the 142 children (112 males) with ASD, 84.5 % ($n = 120$) had medical diagnoses of ASD (e.g., autism, Asperger, pervasive developmental disorder-not otherwise specified), and the remaining 15.5 % ($n = 22$) were categorized by their schools' educational teams as having autism.

Measures

Four measures were used in this study, including the Center for Epidemiological Studies Depression Scale (CES-D; Radloff 1977), the Caregiver Burden Instrument, an adaptation from Robinson (1983), the Hassles and Uplifts Scale (HUS; Lazarus and Folkman 1984), and the Respite Care Questionnaire. The latent variable *stress* was created using three indicators: the intensity scores and frequency scores from the Daily Hassles subscale of the HUS and the amount of caregiver burden from the Caregiver Burden Instrument. The latent variable called *uplifts* was created with two indicators: the intensity scores and frequency scores from the Daily Uplifts subscale of the HUS.

Depression

Depression was assessed with the Center for Epidemiological Studies Depression Scale (CES-D; Radloff 1977), a 20-item self-report scale of depressive symptoms (sum range 0–60); scores of 16 or above are considered at risk for clinical depression, with higher scores indicating higher likelihood of a major depressive episode. Sample statements include “I had trouble keeping my mind on what I was doing” and “I felt that I could not shake off the blues even with help from my family and friends.” The CES-D has high internal consistency ($\alpha = .85$–$.90$) in both psychiatric and community populations and moderate test–retest reliability ($\alpha = .40$ and above; Radloff 1977). The reliability for the current sample was $\alpha = .82$. The sum of the items answered was used in the model.

Caregiver Burden

The Caregiver Burden Instrument, adapted from the Caregiver Strain Index (Robinson 1983), measured major factors influencing caregiver burden and identified caregivers at risk for burden. In the current study the sum of the scale was one indicator of the latent variable stress. The original Caregiver Strain Index assessed the caregiver burden of someone caring for an older adult, but it was adapted to assess the caregiver burden of parents of children with disabilities and chronic conditions. Reliability for this measure is acceptable for samples of families of children with disabilities and diabetes, ranging from Cronbach’s α .86–.88 (Jubber et al. 2013; Platt et al. 2014). The reliability for the current study is .92. This measure consists of 20 items, 13 related to burdens (e.g., “feeling physically or emotionally drained by caring for my children,” “feeling financial strain involved in caring for my children,”) and 7 focused on beneficial aspects of caring for children (e.g., “feeling that my children provide stimulation and learning for me,” “feeling that my children teach me wonderful and worthwhile things”). Mothers were asked to rate themselves on how frequently they experienced those feelings (1 = *rarely*; 4 = *constantly*; sum range = 20–80). The factor loading for the measure on the latent variable stress was .85.

Daily Hassles and Uplifts

The Hassles and Uplifts Scale (HUS; Lazarus and Folkman 1984) contains two subscales, Hassles and Uplifts, including 53 descriptions of daily events such as work, children, relationships, and money (e.g., “nature of your work,” “your work load,” “your children,” “time spent with family,” “social commitments,” “enough money for necessities such as food, clothing, housing, health care, taxes, insurance”). Participants indicated how much of a daily hassle (annoyance or bother) and how much of a daily uplift (satisfaction, gladness) they experienced from each item, using a Likert scale from 0 (*not at all*) to 4 (*extreme*). Item frequency is determined by counting the number of items with a score greater than zero (range 0–53), while intensity is determined by summing the scores of all items (range 0–212). The HUS correlates with illness and distress and has good test–retest reliability for hassles and uplifts (Touliatos et al. 1990). The reliability for the current study was $\alpha = .96$ for hassles, and $\alpha = .95$ for uplifts. An additional item, *dating partner*, was added to this study as a single mother may be dating. This addition makes the sum of items range from 0 to 54 and intensity or the sum of all scores range from 0 to 216. The intensity and frequency scores from the hassles subscale were used along with the Caregiver Burden Instrument scores discussed above as indicators of the latent variable, *stress*. The intensity and frequency scores from the uplifts subscale were also used as two indicators of the other latent variable, *uplifts*. The factor loadings of hassles intensity and hassles frequency were .96 and .91, respectively. The factor loadings of uplifts intensity and uplifts frequency were .95 and .94.

Respite Care

The Respite Care Questionnaire was developed by Harper et al. (2013) to measure several variables related to receiving respite care (e.g., amount, providers, satisfaction). In this questionnaire, respite care refers to “planned care for the child with ASD to provide relief to the permanent caregiver.” Aspects of respite care were measured with four questions. First, mothers indicated if they received respite care from (a) grandparents, (b) extended family member, (c) babysitter, (d) community agency, and/or (e) other (indicate). If the mother responded that any of these sources provided respite care, the second question asked her to indicate the amount of time each source provided respite care in a typical week during the school year. The amounts given for each source were combined to determine the total amount of respite care provided. If mothers had more than one child receiving respite care, we included only the hours that the children’s respite care time did not overlap. If one or more children were receiving respite care at the same time, those hours were counted only once rather than adding hours for shared respite; however, if the children were receiving respite care at different times, hours were added to the final count. The third question asked mothers to indicate their levels of satisfaction with respite care provided by each source. Finally, mothers answered an open-ended question describing how they usually spent their time while their children were receiving respite care.

Demographic Questionnaire

Demographic information was collected regarding age, gender, marital status, annual household income, education level, race, amount of child support received, and number of children, as well as age, gender, and medical diagnoses/

educational classification of their children with ASD. The variables used in the analysis were age of child, annual household income, educational level, race, and number of children.

Research Design and Data Analysis

Structural Equation Modeling (SEM; Kline 2010) was used because it controlled for measurement error, allowed multiple measures for variables, and enabled simultaneous examination of both indirect and direct paths between variables. The independent variable in this study was respite care, the dependent variable was depression, and the two mediating variables were (a) stress as measured by caregiver burden and daily hassles and (b) daily uplifts.

After calculating descriptive statistics, we used Mplus Version 6 (Muthén and Muthén 2007) to test the relationships between respite care and depression, with stress and uplifts as mediating variables. Unstandardized and standardized beta coefficients were calculated to determine the strength of the relationships (direct and indirect paths) between the variables in the structural model. We used bias-corrected bootstrapping with 2000 draws to estimate if stress and uplifts mediated the relationship between respite care and depression (Preacher and Hayes 2008).

Results

Respite Care

Of the 122 participant mothers, 73 (59.8 %) accessed some form of respite care. Most of the care was provided by a combination of providers (41.1 %, $n = 30$), followed by grandparents (24.7 %, $n = 18$), community agencies (13.7 %, $n = 10$), extended family (11 %, $n = 8$), babysitters (6.9 %, $n = 5$), and unspecified others (2.7 %, $n = 2$). Of mothers receiving care, 71 % were satisfied or highly satisfied with the respite care they received, and 29 % were neutral or dissatisfied with the respite care.

In responding to the open-ended question regarding how they spent their time while others were caring for their child(ren), 24 (32.9 %) mentioned working during this time; 15 (20.6 %) said they ran errands. Other mothers reported taking naps, going to dinner with friends, going on walks, or doing housework. One participant noted, "[While my child is receiving respite care], I'm usually catching up on house work [or] yard work, getting car repairs done, [having] doctor appointments for myself. Rarely have time to relax."

Correlations and Means

On average mothers reported receiving 6.98 h of respite care per week ($SD = 10.70$). Their mean hassles frequency score (average number of times items indicated as stressful) was 33.14 ($SD = 10.76$), suggesting slightly over 60 % of the 54 listed items were annoyances or bothers. In contrast, mothers' mean uplift frequency score (average number of items indicated as uplifts) was 26.84 ($SD = 12.06$), suggesting 49.7 % of the 54 items brought some degree of joy or uplift. The hassles sum of intensity scores were relatively high, with a mean of 117.83 ($SD = 31.14$), while the uplifts sum of intensity scores was lower, with a mean of 99.83 ($SD = 26.35$) out of a sum total of 212 for each measure. See Table 1 for a report of the correlations and means of all study variables.

Reports of daily uplift intensity scores were negatively correlated with reports of depression ($r = -.17$, $p < .05$), indicating that mothers who reported more daily uplifts on average reported fewer symptoms of depression. Intensity of daily hassles was significantly positively correlated with depression ($r = .66$, $p < .001$), indicating that as daily hassles increased, mothers reported more depressive symptoms. Similarly, there was a significant positive relationship between caregiver burden and depression ($r = .61$, $p < .001$).

Structural Model Results

Figure 2 shows the relationship between variables in the SEM, with standardized beta coefficients for each path. In order for the hypothesized model to be considered a good fit to the data, χ^2 values need to be nonsignificant; the comparative fit index (CFI) needs to be above .95; the root mean square error of approximation (RMSEA) needs to be less than .05; and the standardized root mean square residual (RMSR) needs to be less than .08 (Kline 2010). The overall fit indices showed the model was a good fit to the data ($\chi^2 = 3.61$, $df = 8$, $p = .11$, $CFI = .981$, $RMSEA = .041$, $RMSR = .044$).

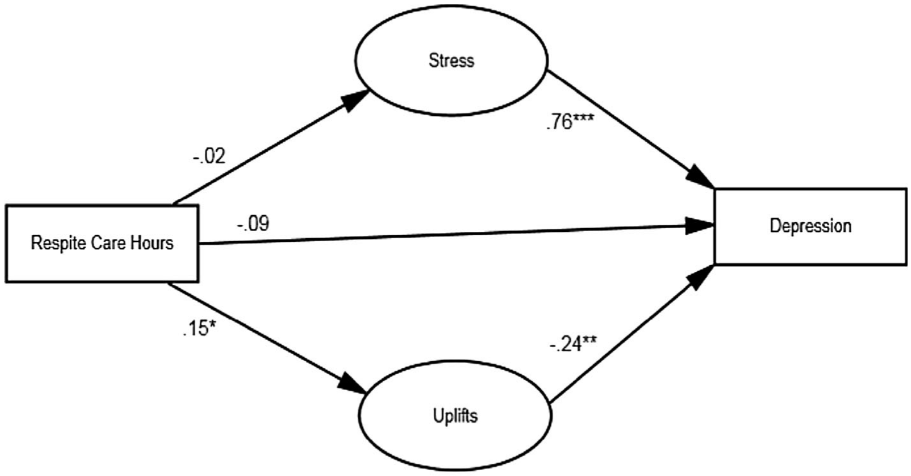
Hypothesis 1 Results: Amount of Respite Care and Depressive Symptoms

Hypothesis 1 stated that for single mothers of children with ASD there would be a significant negative relationship between the amount of respite care and depressive symptoms. Figure 2 shows a nonsignificant negative relationship between the amount of respite care and depression ($\beta = -.09$). Therefore, hypothesis 1 was not supported.

Table 1 Correlations, means, and standard deviations for all variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Respite	1.0												
2. Hassles intensity	−.07	1.0											
3. Hassles frequency	−.01	.86***	1.0										
4. Caregiver burden	−.01	.73***	.59***	1.0									
5. Uplifts intensity	.15*	.10	.23**	.10	1.0								
6. Uplifts frequency	.16*	.12	.28***	−.01	.91***	1.0							
7. Depression	.07	.66***	.50***	.61***	−.17*	−.21**	1.0						
8. Age of mother	−.08	.05	.02	.06	.03	.01	.05	1.0					
9. Race (White/ other)	.05	.07	.06	.05	.12	.11	.03	−.06	1.0				
10. Income	−.01	−.09	.09	−.12	.11	.10	−.06	.12	.18*	1.0			
11. Region	.04	−.04	.04	.06	.07	.04	.05	.10	−.22**	.04	1.0		
12. Day care	−.09	.04	.08	.05	.07	.11	.05	−.38*	−.02	.22**	−.06	1.0	
13. Education	.10	−.11	−.11	−.10	.09	.12	−.06	.29***	.01	.44***	.02	.01	1.0
Mean	6.98	117.83	33.14	99.04	99.83	26.84	46.31	36.67	–	–	–	8.86	–
SD	10.70	31.14	10.76	20.49	26.35	12.06	9.38	6.96	–	–	–	13.28	–

* $p < .05$; ** $p < .01$; *** $p < .001$



X^2=3.61, *df*=8, *p*=.11
CFI=.981, *RMSEA*=.041, *RMSR*=.044

Fig. 2 Structural equation model results with respite care hours predicting depression with stress and uplifts as mediators. Age of mother, race of mother, education, income, region, and daycare hours were control variables, but since none of them was a statistically significant predictor, they are not included in this figure. *$p < .05$; **$p < .01$; ***$p < .001$

Hypothesis 2 Results: Amount of Respite Care and Stress

Hypothesis 2 stated that for single mothers of children with ASD there would be a significant negative relationship between the amount of respite care and stress as measured by daily hassles and caregiver burden. Figure 2 shows that there was not a statistically significant relationship between the amount of respite care and stress ($\beta = -.02$). Therefore, Hypothesis 2 was not supported.

Hypothesis 3 Results: Amount of Respite Care and Daily Uplifts

Hypothesis 3 stated that there would be a significant positive relationship between the amount of respite care and daily uplifts. Figure 2 shows a positive relationship between the amount of respite care and daily uplifts ($\beta = .15$, $p < .05$); thus as respite care increased, daily uplifts increased. Therefore, Hypothesis 3 was supported.

Hypothesis 4 Results: Stress as a Mediator Between Respite Care and Depression

Hypothesis 4 stated that stress, measured by daily hassles and caregiver burden, would mediate the relationship between the amount of respite care and depression. Bootstrap results showed the size of the indirect effect (−.11, *SE* = .048, *95 % CI* [−.312 to −.183] *p* = .24) was nonsignificant, suggesting stress did not mediate the relationship between respite care and depression. Therefore, Hypothesis 4 was not supported.

Hypothesis 5 Results: Uplifts as a Mediator Between Respite Care and Depression

Hypothesis 5 stated that daily uplifts would mediate the relationship between the amount of respite care and depression. The size of the indirect effect (−.23, *SE* = .04, *95 % CI* [−.425 to −.012], $p < .01$) was significant, meaning uplifts significantly mediated the relationship between respite care and depression, and Hypothesis 5 was supported: ($\beta = .15$, $p < .05$ between respite care and uplifts; $\beta = -.24$, $p < .01$ between uplifts and depression).

Discussion

This study was an extension of Harper et al.'s (2013) study examining married parents' experiences raising children with ASD, which focused on relationships among respite care, daily stress/uplifts, and marital quality. The purpose of the current study was similar to the married couple study in that we focused on the same predictor variables; however, in the current study, instead of studying marital quality in the couples as the outcome variable, we examined single mothers' depression. Analyses of the data indicated these single mothers were at high risk for depression and poverty. Furthermore, data analyses provided support for two of our hypotheses: amount of respite care is related to daily uplifts, and uplifts is a mediating variable between respite care and depression.

Profile of Single Mothers of Children with ASD

A typical single mother of a child with ASD from the present study was about 36 years old and had on average 2 children, including at least one child without a disability. She was likely living in poverty (<$25,000 annually) and was at risk for clinical depression (see U.S. Department of Health and Human Services 2013). If she received respite care, she received it from a combination of sources for an average of 1 h per day of assistance. As she received respite care, her stress levels did not decrease, but her uplifts were likely to significantly increase ($\beta = .15$, $p < .05$). She appeared to spend her respite care time working or running errands, with limited relaxation.

Respite Care and Daily Stress/Uplifts

For single mothers in this study, as their amount of respite increased, their levels of stress did not decrease. This is in contrast to Cowen and Reed's study (2002) wherein they found providing both married and single parents of children with disabilities a break from the demands of parenting significantly reduced stress. Our results may be explained by other variables not examined, such as the financial and job stress of being a single parent in addition to lack of consistent parenting support from a spouse. Or, possibly, because single mothers experience more chronic stress and depression than married mothers (Cairney et al. 2003; Thompson 1989; Wang 2004), they may experience what Cairney et al. (2003) referred to as a *saturation effect*. As single mothers become more accustomed to stressful life events, they may be less reactive to them because of high levels of chronic stress. Perhaps single mothers who are saturated with stress and less reactive to specific stressful life events cannot be as impacted by respite care as those whose conditions are less intense.

On the other hand, for the single mothers in our study, the higher the amount of respite care, the more daily uplifts they experienced. It may be that mothers who received increased respite care were able to receive short breaks from their stressful situations, sustain their coping efforts, and have time to restore their depleted resources, consistent with the psychological functions of positively toned emotions, or uplifts, identified by Lazarus et al. (1980). Contrary to other research (see Barrett and Heubeck 2000), these mothers' uplifts did not appear to adequately buffer the adverse effects of their hassles on their psychological difficulties.

Some empirical evidence indicates that stress and positive perceptions may be independent constructs (Hastings and Taunt 2002), while other research indicates that they may be related constructs for fathers of children with ASD but not for mothers (Hastings et al. 2005). In this study, the Hassles and Uplifts scale required mothers to rate each item as either a hassle or an uplift (e.g., some mothers may have indicated the items "your children" or "your free time" as hassles while other mothers may have indicated these same items as uplifts); therefore, it is the mothers' perceptions of these daily experiences that determines her positive or negative appraisal. Receiving respite care was associated with positive, and not negative perceptions of daily experiences.

Some research indicates mothers of children with ASD spend more time in childcare activities and less time in recreational activities than other mothers (Crowe and Florez 2006). Perhaps receiving more than an average of 1 h per day of respite care is needed for single mothers of children with ASD to make a direct impact on their daily stressors, depending on how they use their freed-up time. More than half of the single mothers in this study indicated they were either working or running errands while someone else was caring for their child. Attending to these daily tasks might be considered hassles, and therefore, may not significantly alleviate their stressors.

Single mothers in this study were non-cohabitating, which may contribute to experiencing more stress than married mothers or cohabiting single mothers. Even without the factor of disability, parenting stress levels are higher in mothers who remain single than in those who cohabit with the biological father (Cooper et al. 2009). Having a live-in partner may help mothers with financial resources, as well as with emotional support for coping with stress, particularly stress related to burdens associated with providing care to a child with ASD (Bromley et al. 2004).

Respite Care and Depression Mediated by Uplifts

In our sample, 77 % of the single mothers of children with ASD were at risk for clinical depression. This is in stark contrast to other research where considerably fewer mothers of children with disabilities express depressive symptoms. For example, meta-analytic research has indicated that 29 % of mothers of children with disabilities have elevated depressive symptoms (Singer 2006), and that same percentage of mothers of children with ASD met the CES-D clinical risk cutoff for depression (Weitlauf et al. 2012). Other review research has found that mothers of children with developmental disabilities exhibit higher rates of depressive symptoms and are more at risk for clinical depression than other mothers, with child behavior challenges, maternal stress, coping style, and support being associated with depressive symptoms (Bailey et al. 2007; Jeans et al. 2013). The high rate of depressive symptoms in our sample is notable and warrants further research attention to samples of single mothers.

Previous research has indicated respite care is associated with lower psychological distress of primary caregivers of children with developmental disabilities and ASD (Ekas and Whitman 2010; Mullins et al. 2002). One of the most notable findings in our study was that uplifts were a process through which respite care was indirectly related to depressive symptoms. Increased amount of respite may contribute to positive perceptions of daily events (uplifts), which may, in turn, help explain decreased depressive symptoms.

McCubbin's model of family adaptation suggests positive appraisals of a crisis (e.g., how one views being a poor, single parent of a child with ASD) are related to fewer negative outcomes, meaning if parents are able to view the crisis event as nonthreatening, they are less likely to experience negative outcomes, such as depressive symptoms (McCubbin and Patterson 1983; Pakenham et al. 2005).

Limitations

Several limitations to this study must be considered. It was limited by the small sample size. If the sample had been larger, other correlational relationships might have been statistically significant. Another limitation of the sample was that most participants were non-Hispanic White, fairly well educated, had internet access, and were living in the Western region of the United States. Thus, we cannot generalize findings to other populations.

Features of study design were also limiting. With a cross-sectional study such as this one, researchers are not able to make conclusions about the directions of effects between variables. For example, we could not conclude whether uplifts affect depressive symptoms or depressive symptoms affect uplifts. A longitudinal study could confirm the order of variables. This study was also limited due to self-report. There was no way for researchers to confirm reported information.

Implications for Future Research

To the best of our knowledge, this is the first study to quantify respite care received by single mothers of children with ASD. The literature discusses increased parenting stress for single mothers and more specifically for single mothers of children with ASD; however, there is no research focused specifically on the impact of respite care on single mothers' perceptions of depression, stress, and uplifts. Therefore, this study raises many questions: Would single mothers' levels of depression, stress, and uplifts be different if they had more respite care? Is there a certain amount of respite care needed in order to make a positive difference for these single mothers? What are the specific sources of stress experienced by single mothers and how can family members and service providers alleviate these stressors? How can service providers make respite care more accessible to single mothers of children with ASD? Also, although previous researchers have had difficulty gathering data from fathers of children with disabilities, it would be important to understand single fathers' perceptions as well.

Implications for Policymakers and Practitioners

Since rearing a child with ASD as a single parent involves many burdens and creates barriers to economic self-sufficiency, policies should be created to provide sufficient support for these families (Huang et al. 2012), particularly because some research suggests caregivers of children with ASD are more likely than caregivers of children with other developmental disabilities to access services and to find sources of care (Vohra et al. 2014). Much like campaigns to raise awareness about autistic symptoms, campaigns to inform parents of respite care and other services are warranted.

Single mothers caring for children with disabilities are less likely to exit the US welfare system and are more likely to re-enter the system if they have left it than those who have children without disabilities (Huang et al. 2012). Offering supportive family-friendly policies that include providing respite care may help single mothers of children with ASD who struggle to support their families financially.

Policies that have already been established to help single parents should be enforced. For example, although most of the single mothers in the current study were fairly well educated, with almost 88 % having at least some college education, approximately one-third were living below the poverty level while supporting an average of 2.14 children (see U.S. Department of Health and Human Services 2013). The participants in this sample are similar to the general US population of single mothers, with a median income in 2012 of $25,493, approximately one-third of the $81,455 median income for two parent families (U.S. Census Bureau 2014). However, in the current study, only 58 % of mothers received child support, compared to other research indicating 74 % of custodial parents who are due child support receive either partial or full payments (Grall 2013). Receiving these payments might increase the ability of some single mothers of children with ASD to afford high quality respite care.

School personnel, such as teachers, school social workers, and school psychologists, should consider innovative practices that enable schools and organizations to fund and support respite care for single mothers of children with disabilities, particularly youth with ASD. Providing caregiver interventions may decrease caregiver burden and depression and improve caregiver well-being, knowledge, and ability (Sorensen et al. 2002). Since single parents may struggle to attend school or community sponsored events such as parent training classes, parent-teacher conferences, and individualized education program meetings, education professionals would do well to provide respite care so parents can be engaged in these important activities.

Parent training and information support could include information to encourage single mothers to view their circumstances in more positive ways and teach them strategies for reducing depressive symptoms. Professionals should be aware of such symptoms and be able to provide referrals to appropriate psychological providers. However, providing information and training may not be sufficient if respite care is not provided to the single parents: they may not be able to attend parent meetings in the first place, and secondly, if they can find the time to attend, they may experience too many stressors to experience beneficial results.

School social workers and psychologists should learn about informal and formal organizations in their communities that provide respite care services and should share that information with single mothers of children with ASD. A referral system in the school system linking single mothers to respite care service providers would be beneficial. Finally, respite care service providers could be invited to attend individualized education program meetings in the school, and options for mental health services for the family (not just for the student with ASD) could be addressed during these meetings, as appropriate.

Conclusions

Single mothers of children with ASD are rarely represented in research concerned with parenting children with ASD. As the number of single-parent families increases along with the prevalence of children diagnosed with ASD, it is important to understand these mothers' experiences so that supportive policies and practices can be developed and implemented to support this population with unique needs.

Findings from this study provide evidence that these single mothers of children with ASD were fairly educated, yet likely to be living in poverty, be at risk for clinical depression, experience more daily stressors than uplifts, and receive approximately 1 h per day of respite care from multiple sources. The more stress they experience, the more they exhibit depressive symptoms. Conversely, the more uplifts they perceive, the fewer their depressive symptoms. As they received respite care, their stress levels did not decrease, but their uplifts were likely to significantly increase. Finally, as respite care is associated with their positive appraisal of daily events, they have fewer symptoms of depression.

Acknowledgments We would like to thank the single mothers who participated in this study as well as Brigham Young University's Women's Research Initiative and McKay School of Education for supporting and funding this research. The views expressed in this publication are those of the authors and not necessarily those of BYU.

Author Contributions TTD obtained grant funding to conduct the study, conceived of the study, coordinated all procedures, participated in the design of the data collection system, participated in data collection, participated in the statistical analysis and interpretation of the data, and drafted the final manuscript. RC participated in the development of the research methods, designed the data collection system, collected the data, participated in the statistical analysis and interpretation of the data, and drafted the initial manuscript. JH coordinated the statistical design, conducted the statistical analysis and interpretation of the data, and helped to draft the manuscript. BM participated in the development of the research methods and statistical design, and helped to draft the manuscript. SOR participated in the statistical design, participated in the interpretation of the data, and helped to draft the manuscript. All authors read and approved the final manuscript.

Compliance with Ethical Standards

Conflict of interest The authors declare that we have no conflict of interest.

Ethical Standard Institutional Review Board approval was granted prior to conducting this study and all procedures were performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

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

References

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

Bailey, D. B., Golden, R. N., Roberts, J., & Ford, A. (2007). Maternal depression and developmental disability: Research critique. *Mental Retardation and Developmental Disabilities Research Reviews, 13*, 321–329.

Baker, B. L., Blacher, J., Crnic, K. A., & Edelbrock, C. (2002). Behavior problems and parenting stress in families of three-year-old children with and without developmental delays. *American Journal on Mental Retardation, 107*, 433–444. doi:10.1352/0895-8017(2002)107<0433:BPAPSI>2.0.CO;2.

Baker, B., Blacher, J., & Olsson, M. B. (2005). Preschool children with and without developmental delay: Behaviour problems, parents' optimism, and well-being. *Journal of Intellectual Disability Research, 49*, 575–590. doi:10.1111/j.1365-2788.2005.00691.x.

Baker, B. L., McIntyre, L. L., Blacher, J., Crnic, K. A., Edelbrock, C., & Low, C. (2003). Preschool children with and without developmental delay: Behavior problems and parenting stress over time. *Journal of Intellectual Disability Research, 47*, 217–230. doi:10.1046/j.1365-2788.2003.00484.x.

Barrett, S., & Heubeck, B. G. (2000). Relationships between school hassles and uplifts and anxiety and conduct problems in grades 3 and 4. *Journal of Applied Developmental Psychology, 21*, 537–554.

Benson, P. R., & Kersh, J. (2011). Marital quality and psychological adjustment among mothers of children with ASD: Cross-sectional and longitudinal adjustment. *Journal of Autism and Developmental Disorders, 41*, 1675–1685. doi:10.1007/s10803-011-1198-9.

Bromley, J., Hare, D. J., Davison, K., & Emerson, E. (2004). Mothers supporting children with autistic spectrum disorders: Social support, mental health status and satisfaction with services. *Autism: The International Journal of Research and Practice, 8*, 409–423. doi:10.1177/1362361304047224.

Cadman, T., Eklund, H., Howley, D., Hayward, H., Clarke, H., Findon, J., & Glaser, K. (2012). Caregiver burden as people with autism spectrum disorder and attention-deficit/hyperactivity disorder transition into adolescence and adulthood in the United Kingdom. *Journal of the American Academy of Child and Adolescent Psychiatry, 51*, 879–888. doi:10.1016/j.jaac.2012.06.017.

Cairney, J., Boyle, M., Offord, D., & Racine, Y. (2003). Stress, social support and depression in single and married mothers. *Social Psychiatry and Psychiatric Epidemiology, 38*, 442–449. doi:10.1007/s00127-003-0661-0.

Carter, A. S., Martínez-Pedraza, F. D., & Gray, S. A. (2009). Stability and individual change in depressive symptoms among mothers raising young children with ASD: Maternal and child correlates. *Journal of Clinical Psychology, 65*, 1270–1280. doi:10.1002/jclp.20634.

Cooper, C. E., McLanahan, S. S., Meadows, S. O., & Brooks-Gunn, J. (2009). Family structure transitions and maternal parenting stress. *Journal of Marriage and Family, 71*, 558–574. doi:10.1111/j.1741-3737/2009.00619.x.

Copeland, D. (2005). Differences in parenting stress between married and single first time mothers at six to eight weeks after birth. *Issues in Comprehensive Pediatric Nursing, 28*, 139–152. doi:10.1080/01460860500227556.

Cowen, P. S., & Reed, D. A. (2002). Effects of respite care for children with developmental disabilities: Evaluation of an intervention for at risk families. *Public Health Nursing, 19*, 272–283. doi:10.1046/j.1525-1446.2002.19407.x.

Crowe, T. K., & Florez, S. I. (2006). Time use of mothers with school-age children: A continuing impact of a child's disability. *American Journal of Occupational Therapy, 60*, 194–203. doi:10.1111/j.1469-8749.1993.tb11700.x.

Dale, E., Jahoda, A., & Knott, F. (2006). Mothers' attributions following their child's diagnosis of autistic spectrum disorder: Exploring links with maternal levels of stress, depression and expectations about their child's future. *Autism: The International Journal of Research and Practice, 10*, 463–479. doi:10.1177/1362361306066600.

Davis, N. O., & Carter, A. S. (2008). Parenting stress in mothers and fathers of toddlers with autism spectrum disorders: Associations with child characteristics. *Journal of Autism and Developmental Disorders, 38*, 1278–1291. doi:10.1007/s10803-007-0512-z.

Ekas, N., & Whitman, T. L. (2010). Autism symptom topography and maternal socioemotional functioning. *American Journal on Intellectual and Developmental Disabilities, 115*, 234–249. doi:10.1352/1944-7558-115.3.234.

Grall, T. (2013). *Custodial mothers and fathers and their child support: 2011*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. Retrieved from www.census.gov/prod/2013pubs/p60-246.pdf.

Griffith, G. M., Hastings, R. P., Nash, S., & Hill, C. (2010). Using matched groups to explore child behavior problems and maternal well-being in children with down syndrome and autism. *Journal of Autism and Developmental Disorders, 40*, 610–619. doi:10.1007/s10803-009-0906-1.

Harper, A., Dyches, T. T., Harper, J., Roper, S. O., & South, M. (2013). Respite care, marital quality, and stress in parents of children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 43*, 2604–2616. doi:10.1007/s10803-013-1812-0.

Hastings, R. P., Kovshoff, H., Ward, N. J., degli Espinosa, F., Brown, T., & Remington, B. (2005). Systems analysis of stress and positive perceptions in mothers and fathers of pre-school children with autism. *Journal of Autism and Developmental Disorders, 35*, 635–644. doi:10.1007/s10803-005-0007-8.

Hastings, R. P., & Taunt, H. M. (2002). Positive perceptions in families of children with developmental disabilities. *American Journal on Mental Retardation, 107*, 116–127. doi:10.1177/1744629505053930.

Hoffman, C. D., Sweeney, D. P., Hodge, D., Lopez-Wagner, M. C., & Looney, L. (2009). Parenting stress and closeness: Mothers of typically developing children and mothers of children with autism. *Focus on Autism and Other Developmental Disabilities, 24*, 178–187. doi:10.1177/1088357609338715.

Huang, J., Porterfield, S., Jonson-Reid, M., & Drake, B. (2012). AFDC/TANF exits and re-entries for families raising children with educational disabilities. *Children and Youth Services Review, 34*, 1756–1761. doi:10.1016/j.childyouth.2012.05.011.

Jeans, L. M., Santos, R. M., Laxman, D. J., McBride, B. A., & Dyer, W. J. (2013). Examining ECLS-B: Maternal stress and depressive symptoms when raising children with ASD. *Topics in Early Childhood Special Education, 33*, 162–171. doi:10.1177/0271121413481680.

Jubber, A. P., Olsen Roper, S., Yorgason, J. B., Poulsen, F. O., & Mandleco, B. L. (2013). Individual and family predictors of psychological control in parents raising children with type 1 diabetes. *Families, Systems, and Health, 31*, 142–155. doi:10.1037/a0032498.

Kersh, J., Hedvat, T., Hauser-Cram, P., & Warfield, M. (2006). The contribution of marital quality to the well-being of parents of children with developmental disabilities. *Journal of Intellectual Disability Research, 50*, 883–893. doi:10.1111/j.1365-2788.2006.00906.x.

Khanna, R., Madhavan, S. S., Smith, M. J., Patrick, J. H., Tworek, C., & Becker-Cottrill, B. (2011). Assessment of health-related quality of life among primary caregivers of children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 41*, 1214–1227. doi:10.1007/s10803-010-1140-6.

Kim, H., Chang, M., Rose, K., & Kim, S. (2012). Predictors of caregiver burden in caregivers of individuals with dementia. *Journal of Advanced Nursing, 68*, 846–855. doi:10.1111/j.1365-2648.2011.05787.x.

Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford.

Lazarus, R. S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioural Medicine, 7*, 375–389. doi:10.1007/BF00845271.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.

Lazarus, R. S., Kanner, A. D., & Folkman, S. (1980). Emotions: A cognitive-phenomenological analysis. In R. Plutchik & H. Kellerman (Eds.), *Theories of emotions* (pp. 189–217). New York, NY: Academic Press.

Lecavalier, L., Leone, S., & Wiltz, J. (2006). The impact of behaviour problems on caregiver stress in young people with autism spectrum disorders. *Journal of Intellectual Disability Research, 50*, 172–183. doi:10.1111/j.1365-2788.2005.00732.x.

Lee, L. C., Harrington, R. A., Louie, B. B., & Newschaffer, C. J. (2008). Children with autism: Quality of life and parental concerns. *Journal of Autism and Developmental Disorders, 38*, 1147–1160. doi:10.1007/s10803-007-0491-0.

McCubbin, H. I., & Patterson, J. M. (1983). The family stress process. *Marriage and Family Review, 6*(1–2), 7–37. doi:10.1300/J002v06n01_02.

Montes, G., & Halterman, J. (2008). Child care problems and employment among families with preschool-aged children with autism in the United States. *Pediatrics, 122*, e202–e208. doi:10.1542/peds.2007-3037.

Mullins, L. L., Aniol, K., Boyd, M. L., Page, M. C., & Chaney, J. M. (2002). The influence of respite care on psychological distress in parents of children with developmental disabilities: A longitudinal study. *Children's Services: Social Policy, Research, and Practice, 5*, 123–138.

Muthén, L. K., & Muthén, B. O. (2007). *Mplus user's guide* (5th ed.). Los Angeles, CA: Muthén & Muthén.

Osborne, C., Berger, L., & Magnuson, K. (2012). Family structure transitions and changes in maternal resources and well-being. *Demography, 49*(1), 23–47. doi:10.1007/s13524-011-0080-x.

Pakenham, K. I., Samios, C., & Sofronoff, K. (2005). Adjustment in mothers of children with Asperger syndrome: An application of the double ABCX model of family adjustment. *Autism: The International Journal of Research and Practice, 9*, 191–212. doi:10.1177/1362361305049033.

Platt, C., Roper, S., Mandleco, B., & Freeborn, D. (2014). Sibling cooperative and externalizing behaviors in families raising children with disabilities. *Nursing Research, 63*, 235–242. doi:10.1097/NNR.0000000000000046.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879–891. doi:10.3758/BRM.40.3.879.

Radloff, L. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401. doi:10.1177/014662167700100306.

Rao, P., & Beidel, D. (2009). The impact of children with high-functioning autism on parental stress, sibling adjustment, and family functioning. *Behavior Modification, 33*, 437–451. doi:10.1177/0145445509336427.

Robinson, B. C. (1983). Validation of a caregiver strain index. *Journal of Gerontology, 38*, 344–348. doi:10.1093/geronj/38.3.344.

Schieve, L. A., Blumberg, S. J., Rice, C., Visser, S. N., & Boyle, C. (2007). The relationship between autism and parenting stress. *Pediatrics, 119*, 114–121. doi:10.1542/peds.2006-2089Q.

Siman-Tov, A. (2011). Stress and personal resource as predictors of the adjustment of parents to autistic children: A multivariate model. *Journal of Autism and Developmental Disorders, 41*, 879–890. doi:10.1007/s10803-010-1112-x.

Singer, G. H. S. (2006). Meta-analysis of comparative studies of depression in mothers of children with and without developmental disabilities. *American Journal of Mental Retardation, 111*, 155–169.

Smith, L. E., Seltzer, M. M., Tager-Flusberg, H., Greenberg, J. S., & Carter, A. S. (2008). A comparative analysis of well-being and coping among mothers of toddlers and mothers of adolescents with ASD. *Journal of Autism and Developmental Disorders, 38*, 876–889. doi:10.1007/s10803-007-0461-6.

Sorensen, S., Pinquart, M., & Duberstein, P. (2002). How effective are interventions with caregivers? An updated meta-analysis. *The Gerontologist, 42*, 356–372. doi:10.1093/geront/42.3.356.

Strunk, J. (2010). Respite care for families of special needs children: A systematic review. *Journal of Developmental and Physical Disabilities, 22*, 615–630. doi:10.1007/s10882-010-9190-4.

Stuart, M., & McGrew, J. H. (2009). Caregiver burden after receiving a diagnosis of an autism spectrum disorder. *Research in Autism Spectrum Disorders, 3*, 86–89. doi:10.1016/j.rasd.2008.04.006.

Teitler, J. O., Reichman, N. E., & Nepomnyaschy, L. (2004). Sources of support, child care, and hardship among unwed mothers, 1999–2001. *Social Service Review, 78*, 125–148. doi:10.1086/380770.

Thompson, M. E. (1989). Psychological well-being among mothers with school age children: Evolving family structures. *Social Forces, 67*, 715–730. doi:10.2307/2579539.

Touliatos, J., Perlmutter, B. F., & Straus, M. A. (Eds.). (1990). *Handbook of family measurement techniques*. Newbury Park, CA: Sage.

U.S. Census Bureau, Table F-10. (2014). *Presence of children under 18 years old all families by median and mean income: 1974 to 2013*. Retrieved from http://www.census.gov/hhes/www/income/data/historical/families/.

U.S. Department of Health and Human Services. (2013). *2013 Poverty guidelines*. Retrieved from http://aspe.hhs.gov/poverty/13poverty.cfm#thresholds.

Vespa, J., Lewis, J. M., & Kreider, R. M. (2013). *America's families and living arrangements: 2012*. Washington, DC: U.S. Census Bureau. Retrieved from http://www.census.gov/library/publications/2013/demo/p20-570.html.

Vohra, R., Madhavan, S., Sambamoorthi, U., & St. Peter, C. (2014). Access to services, quality of care, and family impact for children with autism, other developmental disabilities, and other mental health conditions. *Autism: The International Journal of Research and Practice, 18*, 815–826. doi:10.1177/1362361313512902.

Wang, J. (2004). The difference between single and married mothers in the 12-month prevalence of major depressive syndrome, associated factors and mental health service utilization. *Social Psychiatry and Psychiatric Epidemiology, 39*, 26–32. doi:10.1007/s00127-004-0699-7.

Weitlauf, A. S., Vehorn, A. C., Taylor, J. L., & Warren, Z. E. (2012). Relationship satisfaction, parenting stress, and depression in mothers of children with autism. *Autism, 18*, 194–198. doi:10.1177/1362361312458039.