

September 2020

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Recommended Citation

Brunissen, L., Rapoport, E., Fruitman, K., Adesman, A. (2020). Parenting challenges of grandparents raising grandchildren: Discipline, child education, technology use, and outdated health beliefs.

GrandFamilies: The Contemporary Journal of Research, Practice and Policy, 6 (1).

Available at: <https://scholarworks.wmich.edu/grandfamilies/vol6/iss1/6>

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*Research Article***Parenting Challenges of Grandparents Raising Grandchildren: Disciplines, Child Education, Technology Use, and Outdated Health Beliefs**

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Abstract

BACKGROUND: As of 2015, approximately three million children in the United States were being raised primarily by their grandparents. This study aims to examine, in a large national sample, to what extent grandparents raising grandchildren (GRGs) have difficulty with discipline and meeting their grandchild's educational and social needs, find computers/other technology challenging, and subscribe to outdated health beliefs.

METHODS: An anonymous online parenting questionnaire was administered to GRGs recruited through state and local grandparent support groups and elderly service agencies.

RESULTS: 733 grandparents that self-identified as the primary caregiver of one or more grandchildren met inclusion criteria. 56.5% of GRGs reported difficulties with discipline, and 19.1% believed corporal punishment to be an appropriate method of discipline. Approximately a third of GRGs reported difficulties with their grandchild's education, social and recreational activities. Nearly a third of GRGs did not find using their grandchild's school website or portal to be easy; those who had difficulty were more likely to experience difficulties registering their grandchild for school ($\tau = -.127, p = .007$) and were less likely to feel that teachers maintained adequate contact ($\tau = .242, p < .001$). A large percentage of GRGs subscribed to outdated health beliefs, such as scrapes healing better if they are not covered with a bandage (64.0%) and ice baths being an appropriate treatment for a fever (39.8%).

CONCLUSION: GRGs encounter significant parenting challenges, owing to generational differences. Healthcare providers and other professionals should provide GRGs with anticipatory guidance to ensure grandchildren's needs are properly met.

Keywords: parenting, education, discipline, technology, health beliefs

In recent years, the number of children being raised by grandparents in the U.S. has increased substantially, from 2.5 million children in 2005 to 2.9 million children in 2015 (Wiltz, 2016). Moreover, from 1970 to 2012, the number of children living in grandparent-headed households nationwide has almost doubled (Ellis & Simmons, 2014), and, according to the U.S. Census Bureau, 6.1% of American children under the age of 18 lived in the home of their grandparents in 2019 (U.S. Census Bureau, 2019). The placement of children in non-parental care has recently begun to increase, driven partly by the opioid epidemic (Young, 2016), forcing grandparents to assume the full-time care of their grandchildren. Indeed, it is estimated that over a third of all children who were removed from their homes in 2014 due to parental drug and alcohol use were placed with relatives (Generations United, 2016) and recent increases in the number of grandfamilies and “skipped generation families” have been largely attributed to parental substance use (National Abandoned Infants Assistance Resource Center, 2004).

Challenges Facing Grandfamilies

Although grandparents raising grandchildren (GRG) often report an increased sense of purpose from assuming the care of their grandchildren (Lent & Otto, 2018), parenting a grandchild without adequate support can pose significant challenges to the well-being of elderly primary caregivers such as GRGs, including psychological and emotional distress (Caputo, 2000; Fuller-Thompson et al., 1997; Peterson, 2017), physical health problems (Neely-Barnes et al., 2010; Peterson, 2017; Yoo & Russell, 2020), and added financial burdens (Hayslip & Kaminski, 2008). In addition, children living in grandparent-headed households with parents present are also twice as likely to be living in poverty than children in parent-headed households with grandparents present (Fields, 2003). Researchers have also reported higher incidences of behavioral and emotional problems among adolescent grandchildren in custodial grandparent care relative to other low-income youths (Smith & Palmieri, 2007).

Despite a growing body of literature documenting challenges specific to GRGs and their grandchildren, few studies have focused on parenting challenges arising from generational differences which uniquely affect GRGs. A notable concern regarding GRGs is that some parenting practices, educational settings, and health beliefs may have changed since the time when grandparents raised their own children decades earlier. Specifically, GRGs may have difficulties with maintaining discipline, meeting their grandchildren’s educational and social needs, adapting to the extensive use of computers and other technology by schools, and safely caring for their grandchildren’s health.

Discipline and Limit-Setting

Although grandparents are traditionally allowed to “spoil” their grandchildren, effective limit-setting and discipline techniques are essential for grandparents assuming a primary parenting role. Based on qualitative reports, GRGs report showing greater leniency towards their grandchildren than they did towards their own children (Sampson & Hertlein, 2015) and tend to experience problems with discipline at home (Robinson & Wilks, 2006). Moreover, a quarter of GRGs identify discipline and/or emotional problems of their grandchildren as secondary stressors (Giarrusso et al., 2000). In addition, although corporal punishment has become less common in recent years, it was tacitly accepted and more widely practiced in the past (Zolotor et al., 2011), suggesting that older caregivers may be more likely to use corporal punishment in the household since older caregivers were more likely to have practiced corporal punishment when raising their own children. While custodial grandparents have not been shown to differ from parents regarding their belief in the use and value of corporal punishment (Hayslip & Kaminski, 2005), the extent to which endorsement

of corporal punishment and difficulties with discipline are associated with the ages of GRGs has yet to be evaluated.

Academic and Social Challenges

Educational settings and expectations have changed substantially in the past several decades, potentially precluding GRGs from meeting the complex educational and extracurricular demands of their grandchildren. Research has shown that children raised by custodial grandmothers lag behind their peers in the development of reading and quantitative skills (Pittman & Boswell, 2007). According to Strom & Strom (2000), most GRGs are unsure how to best support their grandchild's learning and feel alienated when attending parent-teacher association meetings with younger parents. Some GRGs may also encounter challenges when registering their grandchildren for school due to lack of legal guardianship status (Silverstein & Vehvilainen, 2000).

Multiple studies have suggested that GRGs may face unique social challenges. In particular, the demands of the parenting role may isolate GRGs socially from peers who do not have similar caregiving responsibilities (Ehrle & Day, 1994; Giarrusso et al., 2000). Additionally, GRGs often report that they have little in common with the parents of their grandchild's friends (Ehrle & Day, 1994), which may result in feelings of discomfort when meeting social needs of grandchildren, such as attending birthday parties and extracurricular activities. It remains unclear to what extent GRGs feel that they are meeting the educational and social needs of their grandchildren, and which specific challenges are most commonly encountered by GRGs. Additionally, even though the academic and social demands of children increase in complexity as children advance from primary to secondary education, it has yet to be evaluated whether the academic and social challenges of caregiving are different for grandparents raising grandchildren in primary school relative to those raising children in secondary school.

Computer and Other Technology Use

Although Internet use among older adults in America has steadily increased from 14% in the early 2000s to 67% in 2017 (Anderson & Perrin, 2017), lack of confidence in learning new technology and lack of trust in the Internet among older individuals often leads to apprehension of online activities (Gatto & Tak, 2008; Githens, 2007). Furthermore, older adults are more likely to need additional time and to make more mistakes when performing computer tasks (Lee et al., 2011). Additionally, the costs of owning a computer and purchasing Internet access have been cited as the key constraints limiting computer use in older adults (Carpenter & Buday, 2007; Lee et al. 2011), an issue which may disproportionately affect grandfamilies living below the poverty line (Baker & Mutchler, 2010). Even though many schools have embraced the use of computers for school registration, student learning, and teacher communication in recent years, it remains unclear the extent to which barriers related to technology use make it difficult for GRGs to effectively meet their grandchildren's educational needs; it is also unclear how strongly caregiver age is associated with barriers related to technology use which may preclude meeting grandchildren's education needs.

Health beliefs

Another parenting challenge subject to generational differences that GRGs may encounter is outdated health beliefs. Many health guidelines have evolved since GRGs were raising their own children several decades ago, such as proper sleeping positions for infants (Engelberts et al., 1991), so it is possible that older caregivers are more likely to follow outdated guidelines or practices. The extent to which GRGs subscribe to outdated health

beliefs, which may pose unnecessary risks to their grandchildren's well-being, is presently unknown.

In our study, using a national sample of GRGs in the U.S., we aimed to evaluate the extent to which GRGs endorse corporal punishment and report challenges with discipline, as well as difficulty meeting the educational and social needs of their grandchildren. We also examined whether GRGs tend to encounter obstacles in using school-related technology and whether they subscribe to outdated health beliefs. Based on previous research examining GRGs and older adults, we expected to identify substantial parenting challenges relating to each of these measures. Additionally, we aimed to assess the extent that some of these measures were associated with the age of the caregiver and grandchild educational setting (i.e., primary vs. secondary school). To the best of our knowledge, this study is the first to report on these parenting challenges among GRGs using a large national sample, and the first to assess whether parenting challenges among GRGs are more burdensome for older GRGs or for grandparents raising older grandchildren.

Methods

Survey Instrument

The GRG questionnaire (GRG-Q) is an anonymous online parenting questionnaire that was developed to assess attitudes towards discipline and limit setting, academic and social concerns, challenges with computers and technology, and persistence of outdated health beliefs in grandparents acting as the primary caregiver for their grandchildren. GRGs were recruited electronically for the study from December 2016 to July 2017 through state and local grandparent support groups and service agencies that support the elderly throughout the U.S., such as those noted in national and state-level grandfamily fact sheets (GrandFacts State Fact Sheets for Grandfamilies). For GRGs raising more than one grandchild, those with children in grade school (ages 5-12 years) were asked to answer questions with respect to their grade school-age child. GRGs raising multiple grade school-age grandchildren were asked to answer the GRG-Q with respect to their eldest grade school-age grandchild, and GRGs raising more than one grandchild where none were in grade school were instructed to answer with respect to their oldest grandchild under the age of 18. This research protocol was approved by the Institutional Review Board of Northwell Health.

GRG-Q items were divided into four subsections for analysis: 1) discipline and limit setting, 2) academic and social challenges, 3) computer and other technology use, and 4) health beliefs. In the discipline and limit-setting section, GRGs were asked if disciplining their grandchild had been more difficult than expected, if they were less strict with their grandchild before they began living in the same household, and if they viewed spanking (and other forms of physical punishment) as an appropriate method of discipline. In the academic and social challenges section, GRGs were asked the extent to which they agreed with a range of parenting statements pertaining to their grandchild's social life, such as if their grandchild has friends or is teased by other children. Additionally, they were asked if their grandchild's social and recreational activities were more difficult for them to handle than expected. GRGs were also asked about their grandchild's education, including the adequacy of teacher interactions (e.g., feeling welcomed and acknowledged by their grandchild's teacher), their ability to fulfill parenting responsibilities (e.g., attending Parent-Teacher conferences, school performances, sport games, etc.) and to help with homework, and adequacy of meeting their grandchild's educational needs (including difficulties with schooling and school registration). In the use of computers and other technology section, GRGs were asked about their own use of technology (including Internet, email, Facebook), if they had difficulty using their grandchild's school website or portal, if they were unable to help their grandchild with computers and other technology for school when needed, and if they felt less capable of

providing assistance with computer and other technology use relative to other parents. Lastly, in the health beliefs section, GRGs were asked to evaluate the validity of several health-related statements about which there are popular misconceptions (e.g., chocolate causes acne, ice baths may be used to bring down a high fever, and infants should be put to sleep on their back).

Inclusion Criteria

GRGs were included in the final sample for analysis if they consented to participate in the study and if they reported being a grandparent who is the primary caregiver of one or more of their grandchildren younger than 18 years of age.

Sample Characteristics

The GRG-Q was completed by 752 grandparents, of whom 733 met inclusion criteria. Of the 733 grandparents in the sample, 685 (93.5%) were grandmothers; 418 (57.0%) reference grandchildren were primary school-age (5-12 years old) and 153 (20.9%) were secondary school-age (13-17 years old); 162 (22.1%) reference grandchildren were under the age of 5.

Table 1

Sample Demographics of Grandparents and Grandchildren in Grandparent-Headed Households (n = 733)

Grandparents	n	(%)
Mean Participant Age ^a , y (<i>SD</i>)	57.2	(7.9)
Participant Gender (Female)	685	(93.5)
Participant Race ^b		
White	625	(85.3)
Black	71	(9.7)
Participant Ethnicity ^c		
Hispanic	50	(6.9)
Highest Level of Education		
High School Diploma	391	(53.3)
College Degree	233	(31.8)
Graduate Degree	73	(10.0)
Years Raising Grandchild ^d		
Less than 1 Year	65	(8.9)
1 to 2 Years	167	(22.8)
3 to 5 Years	186	(25.4)
More than 5 Years	314	(42.9)
Grandchildren	n	(%)
Mean Child Age, y (<i>SD</i>)	8.5	(4.3)
Gender of Child (Female)	357	(48.7)
Race of Child ^b		
White	464	(63.3)
Black	104	(14.2)
Ethnicity of Child ^e		
Hispanic	95	(16.1)

^a Missing response from 14 participants; ^b Participants could select more than one response option; ^c Eleven participants chose not to respond. ^d Missing response from one participant. ^e One participant chose not to respond. Missing response from 132 participants.

The final sample had a mean age of 57.2 (SD = 7.9), and the majority identified as white (n = 625, 85.3%). The highest level of educational attainment for approximately half of GRGs was a high school diploma (n = 391, 53.3%), while 31.8% (n = 233) had a college diploma, and 10.0% (n = 73) had a graduate degree. Almost half of GRGs had been raising their grandchild for more than five years (n = 314, 42.9%); a quarter (n = 186, 25.4%) had been raising their grandchild for three to five years, 22.8% (n = 167) for one to two years, and 8.9% (n = 65) had been raising their grandchild for less than one year. The average age of the reference grandchild was 8.5 years (SD = 4.3) and 57.0% of sampled children were between the ages of 5 and 12 years. Gender was evenly distributed (48.7% girls) and grandchildren were predominantly identified as white (n = 464, 63.3%). Additional demographic information of the sample is displayed in Table 1.

Statistical Analysis

An alpha of .05 was used for all statistical analyses in this study. All statistical analyses were performed using R, version 4.0.0.

Discipline and Limit Setting

For each parenting statement concerning discipline and limit setting, Kendall rank correlation coefficients were calculated to evaluate associations with grandparent age. Additionally, descriptive statistics were calculated for rates of grandparent agreement with discipline and limit setting statements, stratified by grandparent age.

Academic and Social Challenges

Chi-square tests of independence were performed to compare responses from grandparents of grandchildren in primary school (ages 5 – 12) and secondary school (ages 13 – 17) across questions in the academic and social challenges section of the GRG-Q to determine if the academic and social parenting challenges faced by grandfamilies differ as the educational and social demands of grandchildren change. Additionally, a composite measure for academic challenges was derived from individual items in the GRG-Q (Cronbach's alpha = 0.63); a t-test was used to compare this measure between grandfamilies with a reference child in primary school and those with a reference child in secondary school to evaluate overall differences in academic challenges. A composite measure for social challenges could not be derived due to poor internal consistency of the component measures (Cronbach's alpha = 0.48). For these analyses, children with Autism Spectrum Disorder and/or an intellectual disability were excluded from the sample. Additionally, children whose grandparents were not sure if their grandchild had an Autism Spectrum Disorder or intellectual disability were also excluded if they currently had an Individualized Education Program or were in a special education class in school. Similarly, children whose grandparents reported they were a slow learner or were unsure if they were a slow learner were excluded if they currently had an Individualized Education Program or were in a special education class in school. These exclusion criteria were intended to reduce the impact of including students with atypical academic challenges in our analyses.

Computer and Other Technology Use

Analyses of measures in the computer and other technology use section of the GRG-Q were restricted to grandparents of children ages 5 to 17 since many of the measures relate to school and education. Kendall rank correlation coefficients were calculated to evaluate associations between frequency of technology use and grandparent age. Additionally, a composite score was derived for the frequency of Internet-based technology use (Cronbach's alpha = 0.61); the association between this score and grandparent age was evaluated using Kendall rank correlation. Kendall rank correlation coefficients were also used to test associations between grandparents' ability to use their grandchildren's school website or portal and both adequacy of teacher contact and difficulties registering grandchildren for

school. Chi-square tests of independence were performed to compare responses to measures evaluating grandparent ability to assist with technology between grandparents of grandchildren in primary school (ages 5 – 12) and secondary school (ages 13 – 17) since the technological needs of children in primary school and secondary school are likely to differ in complexity.

Health Beliefs

Associations between correctness of responses to questions in the health beliefs section of the GRG-Q and grandparent age were evaluated using Kendall rank correlation coefficients.

Results

Discipline and Limit Setting

Approximately half of GRGs indicated that disciplining their grandchild was more difficult than expected, but no association was noted with grandparent age ($\tau = .025, p = .36$) (Table 2). Additionally, almost two-thirds of GRGs stated they were less strict with their grandchild prior to their grandchild living in their household and one-fifth of GRGs indicated that they believe corporal punishment to be an appropriate method of discipline. Endorsing physical punishment was negatively associated with grandparent age ($\tau = -.100, p < .001$).

Table 2

Grandparent Agreement by Age of Grandchild with Statements about Discipline and Limit-Setting (n = 733)

	Grandparents in Agreement with Statement, n (%)					Kendall Rank Correlation τ (p-value)
	Grandparent Age in Years ^a					
	32-40 (n=11)	41-50 (n=129)	51-65 (n=475)	66-81 (n=105)	All (n=733)	
<i>“I think spanking (and other forms of physical punishment) is an appropriate method of discipline.”</i>	5 (45.5)	28 (21.7)	88 (18.5)	18 (17.1)	140 (19.1)	-.100 (<.001)
<i>“Disciplining my grandchild has been more difficult than I expected.”</i>	5 (45.5)	68 (52.7)	276 (58.1)	58 (55.2)	414 (56.5)	.025 (.36)
<i>“I was less strict with my grandchild before we began living in same household.”^b</i>	5 (62.5)	62 (62.0)	214 (59.4)	58 (67.4)	344 (61.1)	-.011 (.73)

^a Fourteen participants did not provide their age.

^b “Not applicable” response selected by 170 grandparents for this item.

Academic Challenges

Overall, GRGs expressed generally positive beliefs regarding the educational needs of their school-age child (e.g., “my grandchild’s educational needs are well met;” “I am able to help my grandchild with homework when he or she needs it.”). GRGs raising children in primary school expressed positive beliefs for a significantly larger percent of the 10 statements concerning education needs of their child (80% vs. 70%, $t = 4.39, p < .001$). Grandparents raising grandchildren in primary school were more likely to feel that their

grandchild's education needs are well met than those raising grandchildren in secondary school (92.7% vs. 84.8%, $\chi^2 = 5.85, p = .02$). Significantly more grandparents of secondary school students reported that their grandchild's education (e.g., schooling, special education needs, etc.) had proven to be more difficult to handle than expected relative to grandparents of primary school students (49.1% vs. 33.0%, $\chi^2 = 9.00, p = .003$). Of note, assisting grandchildren with homework was shown to be an area of particular difficulty for

Table 3a

Grandparent Agreement with Parenting Statements Regarding Education Needs of School-Age Children (n = 493)

	Grandparents in Agreement with Statement, n (%)			Chi Square (p-value)
	All Children (n=493)	Grandchild Age in Years		
		Primary School (Ages 5 to 12) (n=368)	Secondary School (Ages 13 to 17) (n=125)	
Education				
<i>My grandchild's educational needs are well met.</i>	435 (90.6)	329 (92.7)	106 (84.8)	5.85 (.02)
<i>My grandchild's education (schooling, special education needs, etc.) has proven to be more difficult to handle than I expected.^{a,b}</i>	173 (37.0)	116 (33.0)	57 (49.1)	9.00 (.003)
<i>I am able to help my grandchild with homework when he or she needs it^b</i>	381 (80.7)	305 (86.4)	76 (63.9)	27.62 (<.001)
<i>Helping my grandchild with his/ her homework is easier than helping my own child/ children was.^b</i>	121 (26.1)	101 (29.1)	20 (17.1)	5.94 (.02)
<i>As a grandparent, I am equally or more capable of attending my grandchild's school performances, sports games, and recitals compared to the parents of his or her classmates.^b</i>	406 (85.7)	303 (85.6)	103 (85.8)	<0.001 (1.00)
<i>As a grandparent, I am equally or more capable of attending my grandchild's Parent-Teacher conferences compared to the parents of his or her classmates.^b</i>	455 (93.8)	345 (94.3)	110 (92.4)	0.25 (.62)
<i>As a grandparent, I feel welcomed and acknowledged by my grandchild's teachers.</i>	452 (91.7)	346 (94.0)	106 (84.8)	9.23 (.002)
<i>My grandchild's teacher understands the special circumstances of our family.^b</i>	379 (79.5)	304 (85.4)	75 (62.0)	28.90 (<.001)
<i>My grandchild's teacher maintains enough contact with me.</i>	428 (86.8)	330 (89.7)	98 (78.4)	9.40 (.002)
<i>As a grandparent, I have had difficulties registering my grandchild for school.^{a,b}</i>	66 (15.5)	48 (15.0)	18 (17.0)	0.11 (.74)

^a These items reflect difficulties, whereas all other items reflect positive statements.

^b Individuals who responded "not applicable" were excluded from these analyses.

grandparent raising older children. Whereas 86.4% of GRGs of primary school students indicated they were able to help their grandchild with homework, only 63.9% of grandparents raising secondary school students agreed with this statement ($\chi^2 = 27.62, p < .001$). Few GRGs (26.1%) felt that helping their grandchild with homework was easier than it had been with their own child/children; this was especially true for grandparents with grandchildren in secondary school (17.1% vs. 29.1%, $\chi^2 = 5.94, p = .02$).

The overwhelming majority of GRGs felt *equally* or *more capable* of attending their grandchild's school performances/sports/games/recitals and of attending Parent-Teacher conferences, respectively, relative to the parents of their grandchild's classmates. Most grandparents reported feeling welcomed and acknowledged by their grandchild's teacher; however, this was less likely of grandparents with secondary school grandchildren compared to primary school grandchildren (84.8% vs. 94.0%, $\chi^2 = 9.23, p = .002$). A similar disparity was noted with respect to grandparents feeling that their grandchild's teacher understands the special circumstances of their family (62.0% for secondary school-age children vs. 85.4% for primary school-age children, $\chi^2 = 28.90, p < .001$). A significant disparity was also noted with respect to grandparents' belief that their grandchild's teacher maintains enough contact with them (78.4% for secondary school-age children vs. 89.7% for primary school-age children, $\chi^2 = 9.40, p = .002$). Notably, 15.5% of all grandparents raising school-age children reported having difficulties registering their grandchild for school. Additional information regarding grandparent agreement with statements about their grandchildren's education is displayed in Table 3a.

Social Challenges

In terms of their grandchild's social and emotional needs, most GRGs reported that their grandchild has friends (86.4%) and is not teased by other children (79.8%). However, only 70.2% of GRGs reported feeling comfortable socializing with other parents at events like birthday parties or sporting events, and 38.3% of GRGs indicated that their grandchild's "social and recreational activities have been more difficult to handle than expected." No associations between type of school (primary vs. secondary) and measures evaluating the social and emotional needs of grandchildren were noted (Table 3b).

Table 3b

Grandparent Agreement with Parenting Statements Regarding Social Needs of School-Age Children (n = 493)

	Grandparents in Agreement with Statement, n (%)			Chi Square (p-value)
	All Children (n=493)	Grandchild Age in Years		
		Primary School (Ages 5 to 12) (n=368)	Secondary School (Ages 13 to 17) (n=125)	
Social				
<i>My grandchild has friends.</i>	425 (86.4)	319 (86.9)	106 (84.8)	0.20 (.66)
<i>My grandchild is teased by other children because of our family situation.^a</i>	87 (20.2)	69 (21.4)	18 (16.7)	0.84 (.36)

<i>When I attend events for my grandchild (such as birthday parties, sporting events, school meetings or events), I am comfortable socializing with the parents who are there.^b</i>	344 (70.2)	263 (71.7)	81 (65.9)	1.22 (.27)
<i>My grandchild's social and recreational activities have been more difficult to handle than I expected.^{a,b}</i>	182 (38.3)	136 (38.0)	46 (39.3)	0.02 (.88)

^a These items reflect difficulties, whereas all other items reflect positive statements.

^b Individuals who responded "not applicable" were excluded from these analyses.

Computer and Other Technology Use

The frequency of technology use by grandparent age is shown in Table 4. Overall, frequency of using Internet-related technology was found to be negatively associated with grandparent age ($\tau = -.085$, $p = .008$). Most (92.4%) GRGs reported that their grandchild's school has a website or portal, a characteristic which was more common among grandparents of secondary school-age children ($\chi^2 = 6.38$, $p = .01$) (Table 5). However, 10.7% of these GRGs reported being unable to use this website or portal and 37.1% reported difficulty using it.

Table 4

Technology Use by Grandparents of School-Age Children (n = 571)

	Grandparent Age in Years ^a					Kendall Rank Correlation τ (<i>p</i> -value)
	32-40 (n=5)	41-50 (n=72)	51-65 (n=392)	66-81 (n= 94)	All (n=563)	
	Mean Score (SD)					
Frequency of Internet Use ^b	4.0 (0.00)	3.88 (0.37)	3.78 (0.59)	3.67 (0.71)	3.78 (0.59)	-.096 (.005)
Frequency of Email Use ^b	4.0 (0.00)	3.58 (0.83)	3.69 (0.69)	3.61 (0.85)	3.66 (0.75)	-.004 (.92)
Frequency of Facebook Use ^b	3.2 (1.30)	3.36 (1.17)	3.21 (1.27)	2.81 (1.53)	3.16 (1.31)	-.121 (<.001)
Composite Score ^c	11.20 (1.30)	10.82 (1.72)	10.68 (2.05)	10.09 (2.54)	10.60 (2.11)	-.085 (.008)

^a Age was not known for eight grandparent caregivers of school-age children.

^b Rated on a 5-point Likert item, ranging from (0) = *Never* to (4) = *Several times a day*.

^c Composite scale ranges from 0 (minimal technology use) to 12 (maximal technology use).

Ability to help grandchildren with computers or other technology for school purposes was significantly more common among grandparents raising primary school-age children than those raising secondary school-age children ($\chi^2 = 19.24$, $p < .001$). Feeling less able to assist grandchildren with technology than other parents was associated with raising a secondary school-age child ($\chi^2 = 5.86$, $p = .02$). Lastly, ease of using the school's website or portal was directly correlated with adequacy of teacher contact ($\tau = .242$, $p < .001$) and inversely correlated with difficulty in registering their grandchild for school ($\tau = -.127$, $p = .007$).

Table 5
School-Related Technology Use by Grandparents of School-Age Children (n = 571)

	Grandparents in Agreement with Statement, n (%)			Chi Square (p-value)
	All (n=571)	Grandchild Age in Years		
		Primary School (Ages 5-12) (n=418)	Secondary School (Ages 13-17) (n=153)	
Child's school has a website or portal. ^a	488 (92.4)	341 (90.5)	147 (97.4)	6.38 (.01)
School website or portal is easy to use. ^b	324 (67.6)	233 (70.0)	91 (62.3)	2.37 (.12)
I can help grandchild with computers or other technology for school when needed.	429 (77.9)	331 (82.8)	98 (64.9)	19.24 (<.001)
I am equally or more capable of assisting my grandchild with technology relative to other parents.	402 (73.0)	305 (75.9)	97 (65.1)	5.86 (.02)

^a Thirty-one grandparents were unsure if such a website/portal exists.

^b Limited to children whose school have an online portal.

Health Beliefs

When asked whether health statements relating to outdated medical beliefs were true or false, GRGs, on average, were able to correctly identify 3.36 (SD = 1.36) of the seven statements as true or false (Table 6). The majority of GRGs correctly identified that butter is not a good first-aid remedy for minor burns and that “infants should be put to sleep on their back, not their stomach or side,” and two-thirds knew that chocolate does not cause acne. However, over half of GRGs mistakenly believed that “putting ice on a minor burn is a good first-aid remedy,” two-thirds did not correctly identify that “scrapes and cuts heal better if they remain covered with a bandage,” and most GRGs incorrectly believed that it is not acceptable to “give children milk and other dairy products if they have diarrhea.” Older grandparents were less likely to know that butter is not a good first-aid remedy for minor burns ($\tau = -.067, p = .030$) or that it is acceptable to give dairy products to a child with diarrhea ($\tau = -.107, p < .001$).

Table 6
Grandparent Response to Parenting Health Beliefs (n = 733)

	Responses, n (%)			Kendall Rank Correlation _a τ_b (p-value)
	Correct	Incorrect	Don't Know	
“Chocolate causes acne” [False]	491 (67.0)	88 (12.0)	154 (21.0)	-.012 (.694)
“Putting ice on a minor burn is a good first-aid remedy”. [False]	213 (29.1)	416 (56.8)	104 (14.2)	-.005 (.869)
“Butter is a good first-aid remedy for minor burns.” [False]	587 (80.1)	98 (13.4)	48 (6.5)	-.067 (.030)

<i>“Scrapes and cuts heal better if they remain covered with a bandage.” [True]</i>	219 (29.9)	469 (64.0)	45 (6.1)	-.023 (.465)
<i>“Ice baths can be used to bring down a very high fever.” [False]</i>	323 (44.1)	292 (39.8)	118 (16.1)	-.059 (.057)
<i>“It is OK to give children milk and other dairy products if they have diarrhea.” [True]</i>	56 (7.6)	601 (82.0)	76 (10.4)	-.107 ($<.001$)
<i>“Infants should be put to sleep on their back, not their stomach or side.” [True]</i>	571 (77.9)	101 (13.8)	61 (8.3)	-.027 (.381)

^a Correlations were assessed between grandparent age and correctness regarding the health belief.

^b Positive τ corresponds with higher likelihood to answer question correctly with increasing age.

Discussion

Given the substantial increase in grandfamilies in recent years, it is increasingly important to identify the unique parenting challenges of GRGs such that childcare professionals can provide effective anticipatory guidance and resources, not only for grandparents providing full-time care for their grandchildren, but also for the millions of grandparents providing daytime or after-school care for grandchildren. This is the first study of its kind to report GRGs' difficulties with discipline, education, technology use, and health beliefs in a large national cohort.

Discipline and Limit-Setting

The majority of GRGs reported difficulties with discipline, in line with previous studies (Giarrusso et al., 2000; Robinson & Wilks, 2006). Interestingly, older GRGs in our sample were less likely to view corporal punishment as appropriate than younger GRGs, which is seemingly contrary to generational trends (Zolotor et al., 2011). It is possible that this finding can be explained by differences in the ages of grandchildren being raised by younger and older GRGs. The prevalence of corporal punishment is lower for older children (Straus & Stewart, 1999); since older grandparents are more likely to be raising older grandchildren, it is not surprising that they are less likely to endorse corporal punishment. Corporal punishment has been shown to be associated with a range of behavioral and emotional problems in children, adolescents, and adults (Eron et al, 1991; Farrington & Hawkins, 1991), and children who experienced corporal punishment have been shown to be at an increased risk of physical abuse (Crouch & Behl, 2001; Fréchette et al., 2015; Straus, 2000), underscoring the need for anticipatory guidance regarding discipline tailored to GRGs.

The majority of GRGs in our sample reported being stricter with their grandchild when he/she entered their custodial care. GRGs may struggle to strike the right balance in their parenting style when transitioning from their role as a grandparent, which is typically marked by greater permissiveness, to a less permissive caregiving role. The stress of parenting may be especially magnified in GRGs caring for grandchildren with behavioral and emotional problems arising from prior dysfunctional family environments (Billing et al., 2002; Leder et al., 2007), and they would greatly benefit from parenting guidance by mental health professionals.

Educational and Social Challenges

In addition, even though almost all GRGs felt that they are meeting their grandchild's educational needs, a third of GRGs reported that their grandchild's education and social/recreational activities had proven more difficult than expected, with more grandparents of secondary school students struggling to meet their grandchild's educational needs, to successfully help with homework, and to maintain adequate contact with their grandchild's

teacher. Secondary school grandchildren's increasingly complex school routines and extracurricular demands may prevent GRGs from effectively supporting their grandchildren's educational and social needs, in turn leading to greater academic struggles. This may, in part, explain the findings of the Welfare, Children and Families study, which noted that children raised by custodial grandmothers lagged behind their peers in the development of reading skills and quantitative skills (Pittman & Boswell, 2007), stressing the need for individualized attention from teachers and school counselors. Teachers of secondary school students in particular should pay special attention to the unique family circumstances of children being raised by their grandparents and strive to maintain regular contact with GRGs through appropriate means.

Computer and Other Technology Use

As expected, GRGs in our sample encountered significant challenges with computer and other technology use, and older GRGs were less likely to use Internet-related technology than younger GRGs. In line with previous reports of declining Internet use (Madden & Savage, 2000) and level of Internet skill (Teo, 2001) with user age, almost half of GRGs in our sample were either unable to use or had difficulty using their grandchild's school website or portal, potentially precluding them from maintaining adequate teacher contact and registering their grandchild for school. Grandparent difficulties with use of school-related technology may once again disproportionately affect secondary school-age grandchildren, who are more likely to have an online school portal. These findings point to an elevated need for support in using computers and other technology for grandparents raising secondary school-age grandchildren, especially among older GRGs.

Health Beliefs

Lastly, a large percentage of GRGs subscribed to outdated and potentially harmful health beliefs, and older GRGs were more likely to endorse incorrect health beliefs. Of particular importance, putting infants to sleep on their stomach, or the prone position, has been identified as the most significant risk factor for Sudden Infant Death Syndrome (Sperhake et al., 2018). However, the prone position was still widely endorsed when some GRGs were raising their own children several decades ago (Gilbert et al., 2005). Today, most, if not all, parents know to place infants to sleep on their back, or the supine position. Comparatively, 14% of GRGs still believed that infants should be put to sleep on their stomach or side, highlighting a need for anticipatory health guidance. Similarly, whereas ice baths were previously recommended to treat a high fever, they are now contraindicated as they introduce heat-producing mechanisms such as shivering, which can ultimately worsen a child's fever (Fruthaler, 1985). The strikingly high rate of incorrect health beliefs among grandparents in this study highlights that even though grandparents have already raised children in the past, they may need as much, if not greater, anticipatory guidance regarding current childcare approaches that may have evolved over the years. Even though GRGs as a whole are in need of anticipatory guidance, it appears that older GRGs are particularly likely to subscribe to inaccurate health beliefs, suggesting that greater support and educational outreach may be needed for these individuals.

Implications for GRGs

Our study has identified additional key parenting issues where GRGs may experience difficulties: discipline, meeting educational and social needs, comfort with technology, and outdated health beliefs. It is undoubtedly true that grandparent caregivers can provide strong emotional, social and academic support for their grandchildren if given access to adequate resources. Compared to children in foster care with non-relatives, children living with

relatives have better behavioral and mental health outcomes, experience fewer school changes, are more likely to have a permanent home, and maintain a deeper connection to their family and community (Lent & Otto, 2018). However, for grandparents to optimally care for their grandchildren in the future, it is imperative that social support be provided through accessible and affordable resources.

It is crucial for GRGs to be aware of changes in caregiver demands and parenting practices since they raised their own children. Many GRGs would likely benefit from counseling regarding behavior management strategies in order to promote alternative forms of discipline to corporal punishment. Behavioral parent training (BPT) and cognitive-behavioral therapy (CBT) have been shown to be more effective than information-only control conditions at lessening distress and improving parenting practices for custodial grandmothers (Smith et al., 2018). Instead of relying solely on support groups, researchers recommend interventions that combine support and education about contemporary parenting practices (Hayslip & Kaminski, 2005; Strom and Strom, 2000; Kirby, 2015), such as the Parental Skills/Psychosocial Skills Training Program (Hayslip & Patrick, 2003) and the Grandparent Triple P (Kirby & Sanders, 2014), which have been shown to decrease child behavior problems.

Tutoring or homework support for grandchildren being raised by older guardians would also likely be of value, especially for secondary school-age grandchildren. These recommendations are consistent with findings from the Healthy Grandfamilies Project, where 42.6% of GRGs identified “help with homework” as a service they would like to receive for their grandchild (Dunn & Wamsley, 2018). GRGs would also likely benefit from adult education programs focused on technology use (e.g., Center on Research and Education for Aging and Technology Enhancement, CREATE) (Czaja et al., 2001). Indeed, Kautzmann (1990) showed that a one-time instructional session on computer use led by students increased feelings of self-esteem and mastery among elderly persons. Lastly, pediatricians and health care providers should be especially mindful of potential outdated health beliefs when evaluating children raised by grandparents and advising GRGs. Organizations such as Generations United (www.gu.org) and the American Association of Retired Persons (www.AARP.org) provide considerable resources tailored to GRGs to help them embrace up-to-date parenting practices.

Limitations

Methodologically, this study has several strengths and weaknesses. Since recruitment of GRGs was conducted electronically, GRGs who do not use email could not have been recruited, thus limiting our sample to participants with at least some proficiency with computers. As such, our sample of GRGs is likely to be disproportionately younger and more likely to be able to assist their grandchildren with technology than the national population of GRGs. Thus, our findings may underestimate the scope and severity of problems GRGs face regarding the use of computers and other technology. Furthermore, since the GRG-Q is a self-report questionnaire, response bias with respect to social desirability is also possible. Additionally, the measures examined in this study were subjective and could not be externally validated due to the structure of the study. Further research is essential regarding associations between these measures and objective measures, such as caregiver stress and child well-being, academic performance, and behavioral difficulties. Moreover, additional studies concerning parent caregiver perspectives regarding discipline, academic and social challenges of parenting, technology use, and outdated health beliefs would provide valuable normative baselines for identifying disparities in the challenges faced by parent and grandparent caregivers.

Despite these limitations, this is the first study to investigate approach to discipline and corporal punishment, ability to meet grandchild educational and social needs, facility with computers and other technology, as well as endorsement of outdated health beliefs in a single cohort of GRGs. Moreover, whereas most prior studies have relied on small or regional samples, GRG recruitment in this study was nationwide, resulting in one of the largest and most diverse samples to date. However, although our national sample of GRGs is relatively diverse, it is important to note that it is not a nationally representative sample. Thus, our findings may not be generalizable to the entire population of GRGs in the United States.

Conclusion

Our findings from a large, national sample of GRGs provide evidence of GRGs' struggles with discipline, difficulty managing their grandchildren's educational and social needs (including helping with school-related technology), and endorsement of outdated, potentially harmful health beliefs. The unique parenting challenges of GRGs call for resources to help grandparents embrace up-to-date parenting practices, as well as special attention from educators and healthcare providers. Academic support for children raised by their grandparents should also be considered, especially for secondary school-age students. Future research examining the burdens and challenges encountered by GRGs would be greatly enhanced by nationally representative data. Additionally, investigation of the association between the challenges faced by grandchildren being raised by grandparents and their grandparents' parenting practices would shed light on the potential developmental consequences of being raised in a skipped-generation household. It is our hope that findings from this study will be utilized to develop evidence-based parenting programs for GRGs tailored to their unique challenges and needs.

References

- Anderson, M., & Perrin A. (2017). *Tech Adoption Climbs Among Older Adults*. Pew Research Center. <https://www.pewresearch.org/internet/2017/05/17/technology-use-among-seniors/>.
- Baker, L. A., & Mutchler, J. E. (2010). Poverty and material hardship in grandparent-headed households. *Journal of Marriage and Family*, 72(4), 947-962.
- Billing, A., Ehrle, J., & Kortenkamp, K. (2002). *Children cared for by relatives: What do we know about their well-being?* Washington, DC: Urban Institute.
- Caputo, R. K. (2000). Second-generation parenthood: A panel study of grandmother and grandchild coresidency among low-income families, 1967-1992. *The Journal of Sociology & Social Welfare*, 27(3), 3-20.
- Carpenter, B. D., & Buday, S. (2007). Computer use among older adults in a naturally occurring retirement community. *Computers in Human Behavior*, 23(6), 3012-3024.
- Crouch, J. L., & Behl, L. E. (2001). Relationships among parental beliefs in corporal punishment, reported stress, and physical child abuse potential. *Child Abuse & Neglect*, 25(3), 413-419. doi:10.1016/s0145-2134(00)00256-8.
- Czaja, S. J., Sharit, J., Charness, N., Fisk, A., D., & Rogers, W. (2001). The Center for Research and Education on Aging and Technology Enhancement (CREATE): A program to enhance technology for older adults. *Gerontechnology*, 1(1), 50-59.
- Dunn, B., & Wamsley, B. (2018). Grandfamilies: Characteristics and Needs of Grandparents Raising Grandchildren. *Journal of Extension*, 56(5), v56-5rb2, <https://joe.org/joe/2018september/rb2.php>.

- Ehrle, G. M., & Day, H. D. (1994). Adjustment and family functioning of grandmothers rearing their grandchildren. *Contemporary Family Therapy, 16*(1), 67-82.
- Ellis, R. R., & Simmons T. (2014). Coresident grandparents and their grandchildren: 2012. United States Census Bureau, <https://census.gov/content/dam/Census/library/publications/2014/demo/p20-576.pdf>.
- Engelberts, A. C., De Jonge, G. A., & Kostense, P. J. (1991). An analysis of trends in the incidence of sudden infant death in The Netherlands 1969–89. *Journal of Paediatrics and Child Health, 27*(6), 329-333.
- Eron, L., Huesmann, L., & Zelli, A. (1991). The role of parental variables in the learning of aggression. In D. Pepler & K. Rubin (Eds.), *The Development and Treatment of Childhood Aggression* (pp. 169–188). Erlbaum.
- Farrington, D., & Hawkins, J. (1991). Predicting participation, early onset and later persistence in officially recorded offending. *Criminal Behavior and Mental Health, 1*(1), 1-33.
- Fields, J. (2003). Children's Living Arrangements and Characteristics: March 2002. Current Population Reports.
- Fréchette, S., Zoratti, M., & Romano, E. (2015). What is the link between corporal punishment and child physical abuse? *Journal of Family Violence, 30*(2), 135-148.
- Fruthaler, G. J. (1985). Fever in children: phobia vs facts. *Hospital Practice (Office Ed.), 20*(11A), 49-53.
- Fuller-Thomson, E., Minkler, M., & Driver, D. (1997). A profile of grandparents raising grandchildren in the United States. *The Gerontologist, 37*(3), 406-411.
- Gatto, S. L., & Tak, S. H. (2008). Computer, Internet, and e-mail use among older adults: Benefits and barriers. *Educational Gerontology, 34*(9), 800-811.
- Generations United (2016). State of Grandfamilies 2016. Raising the Children of the Opioid Epidemic: Solutions and Support for Grandfamilies. <https://www.gu.org/app/uploads/2018/09/Grandfamilies-Report-SOGF-Updated.pdf>
- Giarrusso, R., Feng, D., Silverstein, M., & Marenco, A. (2000). Primary and secondary stressors of grandparents raising grandchildren: Evidence from a national survey. *Journal of Mental Health and Aging, 6*(4), 291-310.
- Gilbert, R., Salanti, G., Harden, M., & See, S. (2005). Infant sleeping position and the sudden infant death syndrome: systematic review of observational studies and historical review of recommendations from 1940 to 2002. *International Journal of Epidemiology, 34*(4), 874-887. <https://doi.org/10.1093/ije/dyi088>
- Githens, R. P. (2007). Older adults and e-learning: Opportunities and barriers. *Quarterly Review of Distance Education, 8*(4), 329.
- GrandFacts State Fact Sheets for Grandfamilies. Retrieved December 2016 from <https://www.grandfactsheets.org>.
- Hayslip, B., & Patrick, J. H. (2003). *Working with custodial grandparents*. Springer.
- Hayslip Jr, B., & Kaminski, P. (Eds.). (2008). *Parenting the custodial grandchild: Implications for clinical practice*. Springer.
- Hayslip Jr, B., & Kaminski, P. L. (2005). Grandparents raising their grandchildren: A review of the literature and suggestions for practice. *The Gerontologist, 45*(2), 262-269.
- Kautzmann, L. (1990). Introducing computers to the elderly. *Physical & Occupational Therapy in Geriatrics, 9*(1), 27-36.
- Kirby, J. N., & Sanders, M. R. (2014). A randomized controlled trial evaluating a parenting program designed specifically for grandparents. *Behaviour Research and Therapy, 52C*(1), 35-44. https://www.researchgate.net/publication/259205052_A_randomized_controlled_trial_evaluating_a_parenting_program_designed_specifically_for_grandparents

- Kirby, J. N. (2015). The potential benefits of parenting programs for grandparents: Recommendations and clinical implications. *Journal of Child and Family Studies*, 24(11), 3200-3212.
- Leder, S., Grinstead, L. N., & Torres, E. (2007). Grandparents raising grandchildren: Stressors, social support, and health outcomes. *Journal of Family Nursing*, 13(3), 333-352.
- Lee, B., Chen, Y., & Hewitt, L. (2011). Age differences in constraints encountered by seniors in their use of computers and the internet. *Computers in Human Behavior*, 27(3), 1231-1237.
- Lent, J. P., & Otto, A. (2018). Grandparents, Grandchildren, and Caregiving: The Impacts of America's Substance Use Crisis. *Generations*, 42(3), 15-22.
- Madden, G., & Savage, S. (2000). Some economic and social aspects of residential Internet use in Australia. *Journal of Media Economics*, 13(3), 171-185.
- National Abandoned Infants Assistance Resource Center. (2004). Kinship care fact sheet. Berkeley: University of California, Berkeley. Retrieved July 20, 2016, from http://aia.berkeley.edu/media/pdf/kinship_care_factsheet_2004.pdf.
- Neely-Barnes, S. L., Carolyn Graff, J., & Washington, G. (2010). The health-related quality of life of custodial grandparents. *Health & Social Work*, 35(2), 87-97.
- Peterson, T. L. (2017). Changes in health perceptions among older grandparents raising adolescent grandchildren. *Social Work in Public Health*, 32(6), 394-406.
- Pittman, L., & Boswell, M. (2007). The Role of Grandmothers in the Lives of Preschoolers Growing Up in Urban Poverty. *Applied Developmental Science*, 11(1), 20-42.
- Robinson, M. M., & Wilks, S. E. (2006). "Older But Not Wiser": What Custodial Grandparents Want to Tell Social Workers About Raising Grandchildren. *Social Work & Christianity*, 33(3), 164-177.
- Sampson, D., & Hertlein, K. (2015). The experience of grandparents raising grandchildren. *Grandfamilies: The Contemporary Journal of Research, Practice and Policy*, 2(1), 4.
- Silverstein, N. M., & Vehvilainen, L. (2000). Grandparents and schools: Issues and potential. In Cox, C.B. (Ed.) *To Grandmother's House We Go and Stay: Perspectives on Custodial Grandparents* (pp. 268-282).
- Smith, G. C., & Palmieri, P. A. (2007). Risk of psychological difficulties among children raised by custodial grandparents. *Psychiatric Services*, 58(10), 1303-1310. <https://doi.org/10.1176/ps.2007.58.10.1303>
- Smith, G. C., Hayslip, B., Hancock, G. R., Strieder, F. H., & Montoro-Rodriguez, J. (2018). A randomized clinical trial of interventions for improving well-being in custodial grandfamilies. *Journal of Family Psychology*, 32(6), 816-827. <https://doi.org/10.1037/fam0000457>.
- Sperhake, J., Jorch, G., & Bajanowski, T. (2018). The prone sleeping position and SIDS. Historical aspects and possible pathomechanisms. *International Journal of Legal Medicine*, 132(1), 181-185. <https://doi.org/10.1007/s00414-017-1749-5>
- Straus, M. A. (2000). Corporal punishment and primary prevention of physical abuse. *Child Abuse & Neglect*, 24(9), 1109-1114. [https://doi.org/10.1016/S0145-2134\(00\)00180-0](https://doi.org/10.1016/S0145-2134(00)00180-0)
- Straus, M. A., & Stewart, J. H. (1999). Corporal punishment by American parents: national data on prevalence, chronicity, severity, and duration, in relation to child and family characteristics. *Clinical Child & Family Psychology Review*, 2(2), 55-70. <https://doi.org/10.1023/A:1021891529770>
- Strom, R. D., & Strom, S. K. (2000). Meeting the challenge of raising grandchildren. *The International Journal of Aging and Human Development*, 51(3), 183-198.

- Teo, T. S. (2001). Demographic and motivation variables associated with Internet usage activities. *Internet Research-Electronic Networking Applications and Policy*, 11(2), 125-137.
- U.S. Census Bureau. (2019). Current Population Survey, 2019 Annual Social and Economic Supplement Internet. Table C4. Children with Grandparents by Presence of Parents, Sex, and Selected Characteristics: 2019. Retrieved from: <https://www.census.gov/data/tables/2019/demo/families/cps-2019.html>.
- Wiltz, T. (2016, November 2). *Why more grandparents are raising children*. *The Pew Charitable Trusts*. <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/11/02/why-more-grandparents-are-raising-children>.
- Yoo, J., & Russell, D. W. (2020). Caring for Grandchildren and Grandparents' Physical and Mental Health Changes. *Journal of Child and Family Studies*, 29(3), 845-854.
- Young, N. K. (2016, February 23). Examining the Opioid Epidemic: Challenges and Opportunities: Hearing Before the *United States Senate Committee on Finance*. US Government Publishing Office.
- Zolotor, A. J., Theodore, A. D., Runyan, D. K., Chang, J. J., & Laskey, A. L. (2011). Corporal punishment and physical abuse: population-based trends for three-to-11-year-old children in the United States. *Child Abuse Review*, 20(1), 57-66.