OBSERVED PARENTING ASPECTS OF CHILD COMPLIANCE
IN CUSTODIAL GRANDFAMILIES

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Custodial grandmothers and grandchild (aged 4 to 12) dyads \((N = 170)\) completed self-report, other-report, and an observational task that captured child HI, expressive social support, and custodial grandmother-grandchild compliance variables. A multivariate analysis of covariance tested differences between high and low hyperactivity-inattention on observed parenting variables while controlling for child age. While overall results were not significant, there were significant differences between child age and observed parenting variables. A hierarchical regression model revealed that, when controlling for age, child hyperactivity-inattention does not moderate the relationship between commands given by a custodial grandmother and child compliance, but revealed that direct commands from the grandmother predicted compliance. A second hierarchical regression model suggested that encouragement and praise (versus criticism and discouragement) from a grandmother moderated the relationship between grandmother commands and child compliance, when controlling for child age. It appeared that when grandmothers gave indirect commands more frequently, encouragement and praise instead of criticism was associated with greater compliance. In dyads with frequent direct commands given, compliance was high, however dyads who scored high in direct commands with criticism and discouragement were most likely to comply. This study adds to the literature by providing insight into the challenges and strengths for this unique, growing population.
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In recent decades in the United States, there has been a surge of grandparents who become the primary caregiver for their grandchildren (Keene & Batson, 2010). In 2011, an estimated 2.7 million grandparents reported being the primary caregivers of at least one grandchild under the age of 18. In the same census, 5.5 million children were reportedly under the care of their grandparent (U.S. Census Bureau, American Community Survey, 2011). As with any other parent, there are many complicating factors to caring for a small child, for instance: financial issues, scheduling demands, and discipline. There are also added struggles of parenting as a single parent or negotiating parenting as a couple (Hayslip et al., 1998; Kaminski & Murrell, 2008; Whitley, Kelley, & Sipe, 2001). While many grandparents report joy and meaning in caring for their grandchildren (Gattai & Musatti, 1999), adjusting to parenting, in unexpected circumstances is an undeniably stressful time. Custodial grandchildren are also typically exposed to many risk factors associated with behavioral and adjustment difficulties and tend have an overrepresentation of behavioral, mood, and anxiety disturbances (Hayslip et al., 1998; Kaminski & Murrell, 2008; Kelley, Whitley, & Campos, 2011; Shlafer & Poehlmann, 2010; Smith, Savage-Stevens, & Fabian, 2002; Smith & Palmieri, 2007). Of these behavioral difficulties, hyperactivity-inattention (HI) is one of the most commonly reported in custodial grandchildren (Grant & Kucera, 1998; Hayslip et al., 1998; Smith & Palmieri, 2007) and can be quite difficult to manage given the frequency of noncompliance and overall mental and emotional demand required of a caregiver (Barkley, Anastopoulos, Guevremont, & Fletcher, 1992; Barkley, 2006).
Most research on custodial grandfamilies focuses on grandparents’ stress and wellbeing due to their numerous lifestyle changes and increased psychological, physical, and emotional demands (see Hayslip & Kaminski, 2005). These demands can follow a systemic cycle in which parenting stress affects child behavior, and increased problematic child behavior affects overall parenting stress (Goodman & Hayslip, 2008; Hayslip & Shore, 2000; Healey, Flory, Miller, & Halperin, 2011; Kaminski, Hayslip, Wilson, & Castro, 2008; Kelley, Whitley, & Campos, 2013; Modesto-Lowe, Danforth, & Brooks, 2008; Smith & Hancock, 2010; Young & Dawson, 2003). While these are important factors in understanding custodial grandfamilies, few studies explore parenting methods present in custodial grandparent-grandchild relationships (Dolbin-MacNab, 2006; Kaminski et al, 2008; Smith & Richardson, 2008; Smith, Palmieri, Hancock, & Richardson, 2008) and even fewer employ observational information about the dyads. In traditionally structured homes, parenting methods, particularly parental empathy, acceptance, positivity, and the way in which parents give directives are related to child compliance (Gardner, Burton, & Klimes, 2006; Owen, Slep, & Heyman, 2012). Conversely, parental criticism, rejection, and negativity are characteristic of poor parenting practices and are associated with child hyperactivity (Lila, Garcia, & Garcia, 2007; Woodward, Taylor, & Dowdney, 1998). These practices, along with frequent commands by a parent, are related to noncompliance (Anderson, Hinshaw, & Simmel, 1994; Cunningham & Barkley, 1979; Heller & Baker, 2000; Kim, Hetherington, & Reis, 1999).

Thus, the purpose of this study was to first employ rare observational data of custodial grandmother-grandchild relationships to explore parenting methods used with children high in HI symptoms and then compare them to the methods used with a low symptom comparison group. Furthermore, the study explored the utility of type of commands and positive parenting
practices by custodial grandparents as enhancing child compliance. The study also examined demographic variables of interest to help further a descriptive picture of the custodial grandfamily. A review of the literature is presented, including an overview of custodial grandfamilies, child HI, and parenting methods associated with greater child HI. When existing research allowed, implications and findings from custodial grandfamilies are incorporated into the discussion of HI and parenting methods associated with these symptoms. Finally, the present study is discussed, including statement of the problem, hypotheses, method, results, and discussion of findings.

Custodial Grandfamilies

Grandparent Adjustment

Among feelings of joy and purpose (Gattai & Musatti, 1999), many grandparents experience complications that are specific to parenting after one has already raised their own children to adulthood. Some grandparents report greater difficulty than other parents with practical matters, such as saving for retirement and navigating the legal system regarding custody issues (Hipple & Hipple, 2008). Custodial grandparents in later life also express added burden related to health concerns, physical stamina, retirement, and end of life decision-making (Hayslip, Blumenthal, & Garner, 2014; Hipple & Hipple, 2008).

In addition to these concerns, grandparents must negotiate how they will fulfill a parental role with their grandchild and grieve their inability to be the kind of grandparent they imagined they would be (Weber & Waldrop, 2000). Making this distinction can contribute to role strain and identity struggles, particularly while navigating parenting in a different generation (Dolbin-MacNab, 2006). Furthermore, many grandparent caregivers report added difficulty in revisiting their former parenting from a “hind sight” perspective, and describe struggles to change their
former parenting style now that they are raising their grandchildren (Edwards, 2003).

Grandparents must also decide how to communicate with their grandchildren about the absence of the child’s parents (Dolbin-MacNab, 2006) while coping with and adjusting to their personal loss of the child’s biological parents (Baird, 2003).

Considering all of these struggles, many grandparents continue to report feelings of joy and describe parenting their grandchildren as a rewarding experience. Many explain the positive experience of being able to have a second chance at parenting and mend those “hind sight” mistakes (Gattai & Musatti, 1999). Some report feeling wiser, more involved, and more relaxed parenting a second time around (Dolbin-MacNab, 2006). Moreover, many grandparents describe feelings of happiness from being able to spend more time with their grandchildren. Many also report a sense of purpose and life meaning from unexpectedly caring for another and contributing to the family’s overall wellbeing (Giarrusso, Silverstein, & Feng, 2000).

Custodial Grandchildren as an At-Risk Sample

Children being raised by a custodial grandparent(s) are at a higher risk of behavioral and emotional difficulties than their counterparts who were raised in traditional, two-parent homes (Kaminski & Murrell, 2008; Smith & Palmieri, 2007). Many factors may contribute to emotional and behavioral problems among custodial grandchildren, including: early child care prior to being placed with their grandparents, separation from their primary caregiver, and the challenges that grandparents face when becoming caregivers of their grandchildren (Campbell, Hu, & Oberle, 2006; Edwards, 1998; Edwards, 2006; Edwards, 2009; Kaminski & Murrell, 2008; Kelley et al., 2011; Smith & Palmieri, 2007). Typically, custodial grandchildren are placed in their grandparent’s custody because of difficult circumstances in their parents’ lives. Substance abuse, incarceration, child abuse or neglect, and teenage pregnancy are common
circumstances in which a parent is unable to care effectively for their child. Other situations include death, divorce, active military involvement, or HIV-AIDS (Hayslip et al., 1998; Kaminski & Murrell, 2008; Kelley, Whitley, Sipe, & Yorker, 2000; Smith & Richardson, 2008; Smith et al., 2008; Weber & Waldrop, 2000).

These circumstances are often related to known risk factors such as exposure to prenatal toxins, early childhood trauma, uncertainty about the future, and attachment trauma (Kaminski & Murrell, 2008; Smith & Palmieri, 2007). Attachment trauma at the loss of the child’s primary caregiver can be the most emotionally painful of the custodial grandchild’s experience and, unfortunately, is thought to be the most common custodial grandchild experience. Custodial grandchildren experience considerable parental bereavement. Depending on the circumstances surrounding the loss of their parent, custodial grandchildren may struggle to seek support for their grief from their grandparents (Kaminski & Murrell, 2008). In some situations, the expectations of communication about their parent can be quite unclear, especially since the custodial grandparents are experiencing their own challenging emotions regarding their child (Baird, 2003; Kaminski & Murrell, 2008). It is also quite common for a custodial grandchild to change schools or school systems when placed with their grandparent (Scanlon & Devine, 2001), which can contribute to further feelings of instability and loss. Additional risk factors associated with these disruptions in the family system include inconsistent parenting, family conflict, and stigma (Hayslip et al., 1998; Kaminski & Murrell, 2008; Kelley et al., 2011; Shlafer & Poehlmann, 2010; Smith et al., 2002; Smith & Palmieri, 2007). Custodial grandchildren are more likely than other children to have experienced at least one if not more of these risk factors and, as such, are at a higher risk of developing cognitive, emotional, and behavioral difficulties (Kaminski & Murrell, 2008).
Typically, grandparents take on the role of primary caregiver under unplanned, ambiguous circumstances (Edwards, 1998; Landry-Meyer & Newman, 2004; Weber & Waldrop, 2000) and can be quite unprepared both emotionally and economically for the demands of caring for their grandchild (Kaminski & Murrell, 2008). The act of unexpectedly parenting after raising children to adulthood often disrupts the custodial grandparent’s developmental timeline and may be difficult to adjust to (Edwards, 1998; Landry-Meyer & Newman, 2004; Weber & Waldrop, 2000). Adjustment is especially challenging when combined with the other difficulties custodial grandparents might face, including: lack of support, social stigma, isolation from same-age peers, and disrupted leisure and retirement plans (Smith & Palmieri, 2007). Furthermore, many custodial grandparents are unaware of their qualifications for public assistance or do not utilize other services that might provide support. For instance, 90% of custodial grandparents do not receive social security benefits and 85% do not receive any other type of public assistance (Landry-Meyer, 2000; Kaminski & Murrell, 2008). Additionally, many custodial grandparents do not utilize resources available under foster care status, which could allow for tutoring, monetary support, and childcare (Dellmann-Jenkins, Blankemeyer, & Olesh, 2002; Kaminski & Murrell, 2008). Compared to other families with children, the percentage of custodial grandparents living at the poverty line is higher (19% compared to 14% in other families) (U.S. Census Bureau, 2000). Adding to this financial burden is the need in some custodial grandfamilies for one caregiver to reduce their work hours or quit their job in order to supervise the child or children (Musil, Scrader, & Mutakani, 2000).

Grandparents who face these struggles score high on factors (i.e., anxiety, irritability, anger, and guilt) that are widely known to influence parenting stress (Burnette, 1999; Healey et al., 2011; Jooste, Hayslip, & Smith, 2008; Kelley et al., 2011; Smith & Palmieri, 2007).
Parenting stress, in turn, is strongly associated with dysfunctional parenting (Elgar, McGrath, Waschbusch, Stewart, & Curtis, 2004; Healey et al., 2011; Kaminski et al., 2008; Modesto-Lowe et al., 2008). Parenting stress and dysfunctional parenting are related to low childhood psychological well being for children in general as well as for custodial grandchildren (Elgar et al., 2004; Emick & Hayslip, 1999; Healey et al., 2011; Kaminski et al., 2008; Kelley et al., 2011; Smith, Richardson, & Palmieri, 2006). Psychological distress is more prevalent in custodial grandparents, and serves as another risk factor for custodial grandchildren.

Smith and Palmieri (2007) demonstrate the prevalence of behavioral and mental health symptoms in custodial grandchildren and show that they are at greater risk for experiencing these difficulties than control populations (Hayslip & Shore, 2000; Kaminski & Murrell, 2008). These findings are supported by a study of 230 custodial grandfamilies, in which one-third of the sample demonstrated clinically significant behavior problems, with those parented by a distressed custodial grandmother scoring highest on behavior problems (Kelley et al., 2011). In another study, 29 reoffending youth raised by grandparents were compared to 37 reoffending youth raised by their parents. Results revealed that youth in grandparent-headed homes were more likely to have mental health problems (44% of the sample vs. 11%) and were also more likely to encounter risk factors (i.e., poor supervision, school problems, deviant peer relationships, and substance abuse) associated with later incarceration (Campbell et al., 2006). Compared to children who lived with their parents, teachers described children raised by custodial grandparents as experiencing significantly more emotional and behavioral difficulties at school (Edwards, 2006; Edwards, 2009). Although teachers reported more behavioral difficulties in school, there was no significant difference in referrals of custodial grandchildren to the principal’s office than of children raised by their parents. However, there were significantly
more referrals to support networks in the school, such as guidance counselors and other school administrators (Edwards, 2006).

While there are increased rates of general cognitive, emotional, and behavioral difficulties in samples of custodial grandchildren (Edwards, 1998; Hayslip & Shore, 2000), few studies look at custodial grandchildren’s specific diagnoses. Many studies categorize custodial grandchildren’s difficulties as externalizing difficulties, internalizing difficulties, and/or “behavior problems.” The limited studies specifically addressing hyperactivity in custodial grandchildren find a high prevalence of hyperactivity in custodial grandchildren (Doucette-Dudman & LaCure, 1996), making it the most commonly reported problem behavior of grandchildren raised by grandparents (Grant & Kucera, 1998; Hayslip et al., 1998; Smith & Palmieri, 2007).

One explanation for the dearth of research regarding specific diagnoses is that many custodial grandchildren are misdiagnosed with severe psychopathology when their symptoms may simply represent appropriate adjustment difficulties, particularly in light of the aforementioned stressors and risk factors. Children have not necessarily developed effective coping skills, thus, their symptoms may appear more chronic and pervasive than their counterparts who are living in traditional, stable homes (Kaminski & Murrell, 2008). Kaminski and Murrell (2008) give the example of a child whose anxiety is expressed in the form of hyperactivity (or distractibility and poor concentration). For this reason, it appears appropriate that much research has focused on symptomology rather than strict diagnoses in custodial grandchildren (Kaminski & Murrell, 2008).

Even fewer studies focus on the way in which custodial grandparents parent their grandchildren (Dolbin-MacNab, 2006; Kaminski et al, 2008; Smith & Richardson, 2008; Smith
et al., 2008). Most research typically explores parenting burden and the impact of grandchildren’s difficulties on custodial grandparent wellbeing. While these topics are important to understanding custodial grandparent’s experience and planning necessary intervention, it is equally important to better understand the specific methods of parenting that occur in custodial grandparent-grandchild relationships. Due to the scarcity of research on parenting practices in custodial grandparents, traditional parent populations are used as a guide to understand parenting methods of children high in hyperactivity. Although these parenting methods are assumed to be representative of the custodial grandparent population, they may differ significantly, pending further research. With a better informed understanding of the custodial grandparent household, practitioners can treat custodial grandparents as a distinct group with differences from the traditional parent population, and can better understand their valuable within group differences.

Hyperactivity-Inattention

Overview of Childhood Hyperactivity-Inattention and ADHD

Hyperactivity, poor sustained attention, and impulsivity are hallmark symptoms of ADHD (APA, 2000; Barkley, 1981). Hyperactivity is defined as fidgeting, excessive talking, and extreme restlessness (Barkley, 2006; Goodman, Metzler, & Bailey, 1998). Children who experience hyperactivity fidget in their seats and leave their seat in situations in which they are expected to remain seated. They frequently run about and climb when it is inappropriate. They also have difficulty playing or engaging in restful or quiet activities, act as if “driven by a motor,” and talk excessively (APA, 2000, p. 92).

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1 Children in this study were not formally diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD) but were high in HI defined by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). That is, they demonstrate many characteristics commonly associated with ADHD (i.e., restlessness, fidgeting, excessive talking, and difficulty sustaining attention) (APA, 2000). Therefore, while HI is the focus of the current study, some literature is incorporated that describes populations formally diagnosed with ADHD and are identified as such.
Children with chronic inattention fail to attend to details and make careless mistakes. They often have difficulty sustaining attention to tasks or while playing with peers or family. Many times, inattentive children do not appear to listen when spoken to directly and have difficulty following through on instructions and completing chores (APA, 2000). They tend to have difficulty organizing tasks and activities, and avoid or become disruptive when engaging in tasks that require sustained mental effort. Many children who struggle with inattention lose essential items and belongings, are distracted by extraneous stimuli, and forget to complete daily activities (APA, 2000). Children with both hyperactivity and inattention are generally described by teachers and parents as “always on the go” and appear to make frequent verbalizations and running commentary (APA, 2000; Barkley, 1990).

Impulsivity is also a symptom of ADHD. Children who are highly impulsive often blurt out answers before questions are complete and have difficulty waiting their turn. They also interrupt or intrude on others in conversations, instruction, or in games (APA, 2000).

In order for a child or adult to be diagnosed with ADHD, these deficits must be present before the age of 7 and for at least six months. They also must be consistent through development. The symptoms should be more frequent and severe than what other children at the same developmental level exhibit. Symptoms must also interfere significantly with social, academic functioning, and activities of daily living (APA, 2000; Barkley, 1990). In order to be diagnosed with ADHD, there must be evidence that children exhibit these symptoms in at least two settings (e.g., home and school) (APA, 2000).

There are three subtypes of ADHD to best capture an individual’s presentation of symptoms. The first subtype, ADHD, Combined Type, is the most common presentation of ADHD symptoms. Six or more of the symptoms for both inattention and hyperactivity are
required to meet this diagnosis. The second subtype of ADHD is ADHD, Predominantly
Inattentive Type. Six or more inattentive symptoms must be present to be considered
predominantly inattentive. While hyperactivity may still be present in children who are
predominantly inattentive, fewer than six hyperactivity symptoms can be present in order to meet
criteria for this subtype. Likewise, in the third subtype, ADHD, Predominantly Hyperactive-
Impulsive Type, six or more hyperactivity-impulsivity symptoms are present while fewer than
six inattentive symptoms are present (APA, 2000). Thus, children in the present study might
meet criteria for any of the three subtypes given observer-reported symptoms and those with high
scores of HI certainly exhibit behaviors associated with ADHD.

ADHD occurs in approximately 3 to 12% of the general childhood population and is
diagnosed more frequently in boys than girls (APA, 2000; Getahun, Jacobsen, Fassett, Chen,
Demissie, & Rhoads, 2013). Externalizing behaviors among custodial grandchildren tend to be
higher in boys than in girls (Smith et al., 2008). Among custodial grandchildren, this is true as
well, with White grandparents reporting higher scores of HI than Black grandparents (Smith &
Palmieri, 2007). There is a significant disparity among ethnicity and diagnosis of ADHD in that
5.65% of White children are diagnosed with ADHD while 4.1% of African American and 2.5%
of Latino children with ADHD (Getahun et al., 2013). In a study of 634 families in Head Start
programs, there were significant differences between Caucasian children and Hispanic children
in externalizing behaviors reported by mothers using the Child Behavior Checklist (CBCL;
Achenbach, 1991). The mothers of Caucasian children reported significantly more externalizing
behaviors than did mothers of Hispanic children (Reid, Webster-Stratton, & Beauchaine, 2001).
However, among custodial grandchildren aged 6 to 12, Pruchno and McKenney (2002) found
that there was no difference between White and Black children on measures of hyperactivity
using the CBCL. Goodman and Silverstein (2006) later supported this finding when they found no significant difference between ethnic groups regarding custodial grandchild behavior problems using the Behavior Rating Index for Children (Stiffman, Orme, Evans, Feldman, & Keeney, 1984).

Age is also a factor when considering behaviors associated with ADHD. Behaviors exhibited by children with ADHD are largely developmental and impacted by age (Barkley et al., 1985; Danforth, Barkley, & Stokes, 1991; Hart, Lahey, Loeber, Applegate, & Frick, 1995; Mash & Johnston, 1982; Smith et al., 2008). Although difficulties with ADHD are present across a range of ages, studies support that externalizing behaviors, overactivity and impulsiveness lessen with age (Hart et al., 1995; Smith et al., 2008). In a study of boys diagnosed with ADHD, the 2 to 6 year old group displayed higher rates of parent-child negative behavior than the older group of boys aged 7 to 9 (Mash & Johnston, 1982). Older children diagnosed with ADHD tend to be less negative and noncompliant and tend to be able to sustain their compliance for longer periods of time than younger children diagnosed with ADHD (Barkley et al., 1985; Mash & Johnston, 1982). Thus, many measures of ADHD include age-based norms (Achenbach, 1991).

Many studies seek to identify the etiology of ADHD and produce mixed findings as to a social cause versus biological factors. Most theorized hypotheses link neuropsychological contributions, genetic factors, exposure en utero to toxins, and prenatal trauma to the presence of ADHD (APA, 2000; Barkley, 2006; Getahun et al., 2013). Although there is no clearly identified social cause of ADHD, there are many social and familial factors that may contribute to or maintain ADHD symptoms in childhood (APA, 2000; Barkley, 2006, Getahun et al., 2013). Examples include family conflict, minimal parental social support, and parenting methods.
Hyperactivity-Inattention and Child Adjustment

Children with ADHD can experience low academic achievement, conduct problems, risk-taking behavior, and subsequent physical injury. Many children with ADHD are also likely to experience increased anxiety, depression, and to develop substance abuse and dependency difficulties. It is also common for children with ADHD to experience low frustration tolerance, have temper outbursts, and exhibit bossiness and stubbornness. Other findings show mood lability, demoralization, dysphoria, and low self-esteem (APA, 2000). Children with ADHD also tend to have greater difficulty with interpersonal and conversation skills (Gizzo, 2001; Greene et al., 2001).

Relative to these symptoms, children with ADHD are at risk for strained relationships with peers and family members (Barkley, 2006; Getahun et al., 2013; Ohan & Johnson, 2007). Hyperactive children are likely to experience more punishment and criticism than other children (Barkley, 2006; Getahun et al., 2013). Particularly impulsive hyperactive children are prone to risk taking behavior, taking “shortcuts” regarding their work, and making quick decisions both behaviorally and verbally, with little regard for consequences. Due to these tendencies it is not uncommon that an impulsive or hyperactive child experiences ostracism from and conflict with other adults and peers (Ohan & Johnston, 2007).

Parenting Children with ADHD

Children with ADHD present a number of attentional and behavioral symptoms and are frequently noncompliant, which places additional demands on their caregivers (Barkley et al., 1992). Managing a child’s ADHD symptoms can be stressful and challenging, but also quite
emotionally draining as parents seek appropriate ways to help their child. Navigating the
treatment recommendations of ADHD is a laborious, costly, confusing task. Moreover,
caregivers must manage others’ criticism of their child and their parenting methods (Cohen,
1998). Many families also report lack of cohesion with valuable support systems, typically due
to the child’s behavioral outbursts and difficulty engaging in age-appropriate activities. They
report loss of contact with extended family (Cunningham, Benness, & Seigel, 1988),
withdrawing from social contacts (Baker, 2000), and marital conflict (Cunningham & Boyle,
2002; Cunningham et al., 1988). Lack of an adult support system can leave caregivers and
children with ADHD socially isolated, and with more conflict in their caregiver-child
relationship (Baker, 2000). Custodial grandmothers raising children with ADHD report even
less social support than those raising children without ADHD (Emick & Hayslip, 1999). This
problem is particularly salient for custodial grandmothers because, as a group, they report more
initial social isolation due to resuming a parenting role in later life (Baker, 2000). When
considering the impact of having a child with ADHD on a parent’s support system, it is evident
that parenting a child with ADHD can drain a parent’s emotional resources and contribute to
overall adjustment difficulties and problematic parenting.

Child problem behaviors are related to parental negative affect, parental stress, and low
satisfaction (Goodman & Hayslip, 2008; Hayslip & Shore, 2000; Kaminski et al., 2008; Kelley et
al., 2013; Young & Dawson, 2003). Under these challenging circumstances, many mothers of
children with ADHD report psychological distress, depression, anxiety, and increased alcohol
use (Barkley, 2006). From the custodial grandmother’s perspective, raising a grandchild with
behavioral difficulties is associated with poorer parental adjustment (Kaminski et al., 2008) and
can predispose custodial grandmothers to depression (Goodman & Hayslip, 2008). Child
behavior difficulties and hyperactivity are also distinctly related to custodial grandmother physical health (Hayslip et al., 1998; Pruchno & McKenney, 2002; Sands & Goldberg-Glen, 2000). In a study of 101 male and female custodial grandparents who ranged in age from 30 to 71, poorer health was related to reported hyperactivity of their grandchild (Hayslip, Silverthorn, Shore, & Henderson, 2000).

Many parents of children with ADHD struggle to redefine stressful events to make them more manageable for their family (DuPaul, McGoey, Eckert, & VanBrakle, 2001). Moreover, families of children with ADHD also tend to report less adaptive coping styles (Barkley, 2006; DuPaul et al., 2001; Woodward et al., 1998). Mothers of children with ADHD report using more “indirect coping” strategies than mothers of non-ADHD children. These strategies include seeking support from others and using avoidance techniques to cope (Bailey, Barton, & Vignola, 1999). Mothers of children with ADHD also tend to use their indirect coping strategies more frequently than those whose children do not have ADHD. These findings indicate that mothers of children with ADHD frequently need to monitor, manage, and cope, thus using more physical and psychological resources (Bailey et al., 1999). These parents are likely to become overwhelmed with parenting stress and exhibit more lax and/or over-reactive strategies (McKee, Harvey, Danforth, Ulaszek, & Friedman, 2004). Thus, ineffective coping is also related to ADHD symptomology (or perceived ADHD symptoms) in that children are more likely to be described as hyperactive when their parents are coping less effectively (Woodward et al., 1998).

In summary, families of children with ADHD experience greater overall stress related to their own social, psychological, physical adjustment, and difficulty effectively coping (Barkley, 2006; DuPaul et al., 2001). In addition to these stressors, managing child symptoms characterized by unruliness, excessive talking, noncompliance, and emotionally charged
behavior can be particularly stressful (Pelham & Lang, 1993). Children with ADHD are also highly active, have short attention spans, and are impulsive, priming them to develop disruptive behaviors. Children with ADHD also tend to be more aggressive and have difficulty adapting to new routines that deviate from a regular schedule, increasing demands on a parent (Barkley, 2006; Cunningham, 2007; Johnston & Mash, 2001).

Vitanza & Guarnaccia (1999) proposed a model of psychological distress for mothers of boys with ADHD in which the child’s challenging behaviors strongly predicted parenting stress. Parental stress, depression, and difficult child behavior can significantly impact parenting methods (Healey et al., 2011; Heller & Baker, 2000; Modesto-Lowe et al., 2008; Smith & Hancock, 2010). Parents under stress can be more angry and impatient with their children, contributing to negative and controlling parenting strategies (Befera & Barkley, 1985). Moreover, in custodial grandmothers, greater depression and anxiety is related to harsh and inconsistent discipline (Smith & Richardson, 2008). Parents of children with ADHD and behavioral difficulties tend to engage in more controlling and punitive parenting (Healey et al., 2011; Humphries, Kinsbourne, & Swanson, 1978), frequently repeat commands with little time for the child to comply, and give more verbal correction than parents of children without ADHD (Danforth et al., 1991). Mothers of hyperactive children tend to respond to their children less positively (Cunningham & Barkley, 1979), more negatively (DuPaul et al., 2001), are more critical (Battle & Lacey, 1972), and more insulting towards their adolescent children (Barkley, Fischer, Edelbrock, & Smallish, 1991). Furthermore, parents of children with ADHD are likely to engage in more inconsistency than parents of low symptom children (Stormshak, Bierman, McMahon, & Lengua, 2000).
These parenting methods are considered maintaining factors of the problematic behavior associated with ADHD (Danforth et al., 1991; Peris & Baker, 2000; Webster-Stratton et al., 2001). For instance, harsh and inconsistent discipline from a custodial grandmother is associated with greater hyperactivity and conduct difficulties in custodial grandchildren (Smith & Richardson, 2008). Indeed, in a study of 99 children, ages 4 to 8 diagnosed with ADHD, Webster-Stratton and colleagues (2001) utilized parent and teacher report as well as observational data to focus on negative parenting in the form of maternal critical statements and physical punishment. Children who experienced negative parenting showed less improvement after treatment than children whose parents did not engage in negative parenting strategies (Webster-Stratton et al., 2001).

Thus, it appears that the relationship between parenting strategies and child behavior is reciprocal and is influenced largely by parent-child interactional stress (Befera & Barkley, 1985; Mash & Johnston, 1990; Modesto-Lowe et al., 2008; Woodward et al., 1998). Hyperactive child behavior consisting of unruliness, poor attention, and distractibility may present challenges for parents, including their ability to effectively parent, thus contributing to persistent or even increased hyperactivity symptoms (Befera & Barkley, 1985; Woodward et al., 1998). This recursive process can ultimately exacerbate negative symptoms for both parent and child (Modesto-Lowe et al., 2008, Woodward et al., 1998).

Child age, developmental level, and the type of task parent and child are engaging in impact these tendencies in parenting children with ADHD. Many studies also show that behavioral interaction problems are most present for young boys, particularly when interacting with their mothers (Hart et al., 1995). During structured task periods, mothers of children 8 to 9 are more likely to passively observe than intervene. Children aged 4 to 7 are more likely to be
compliant for longer duration when compared to younger children, which is related to less parental directiveness and increased praise from a parent (Barkley, Karlsson, Strzelecki, & Murphy, 1984; Barkley, Karlsson, Pollard, 1985). Among teens ages 12 to 17 years old with and without ADHD, mothers give a similar amount of commands and “put-downs” to their children (Barkley et al., 1992).

Parenting Methods of Interest

Caregiver Acceptance and Warmth

Parent attitudes and behaviors toward their child are important factors in the child’s developing sense of self (Rogers, 1951; Rohner, 1975; Rohner & Khaleque, 2005). Carl Rogers (1961) proposed that acceptance and unconditional positive regard is the basis for mental health. Empathic understanding and acceptance by a parent can influence a child’s emotional security, self-concept, and creative expression (Rohner, 1975). Empathy from a caregiver also serves as a foundation of healthy self-esteem (Laible, Carlo, & Roesch, 2004). While there are many definitions of parental empathy in the literature, support, involvement, warmth, and responsiveness are all ways a parent can demonstrate empathy to their child (Duan & Hill, 1996). Rohner (1975; Rohner & Khaleque, 2005) conceptualizes parental empathy by measuring how accepting or rejecting a child perceives their parents to be.

Acceptance, according to Rohner (1975), is a parent’s warmth, nurturance, support, and love felt by the child. Acceptance by a parent fosters a climate of safety in which a child learns personal worth, regardless of their behaviors. As a child learns personal worth, they learn to accept themselves and develop positive attitudes about themselves. Rogers (1961) proposed that empathy and acceptance promotes psychological growth and helps develop emotional security. Rohner’s (2004) findings support Roger’s claim. In a summary of 40 years of research, Rohner
(2004) claims that 26% of variability in children’s psychological adjustment is accounted for by parental acceptance.

Parents communicate acceptance and warmth through many means, including physical touch, tone, attuned play, and verbal communication. Verbal communication of acceptance and warmth involves saying nice things to or about the child, praising and complimenting the child. These verbalizations convey that the child is important, valuable, attended to, and unique (Kaminski et al., 2002; Rohner & Khaleque, 2005). Parents’ prideful and joyful behaviors also communicate acceptance (Kohut, 1977). Conversely, verbalizations of criticism and harsh rebuke convey lack of attention or interest, lack of warmth, lack of value, and rejection (Kaminski et al., 2002; Kohut, 1977; Rohner & Khaleque, 2005).

There are many constructs of parenting that focus on parental acceptance and warmth. One of the frequently used constructs is positive parenting, which is typically characterized by sensitivity, warmth, acceptance, and quality instruction. These qualities are also typically used to describe generally competent or proficient parenting (Ainsworth, 1969; Kaminski, Warren, Smalts, Tureau, & Durrant, 2007). Qualities that are more specific to positive parenting are empathy, attunement, availability, involvement, and openness (Ainsworth, 1969; Kaminski et al., 2007; Rothbaum & Weisz, 1994). Specific positive parenting practices include setting realistic expectations for a child, being responsive, and communicating positive affect and praise (Warren, 2003). Examples of responsiveness, involvement, and praise from a parent that emphasizes a child’s importance or value include telling a child “I think [your idea] is a great idea,” “You draw beautifully,” “I’m proud of you for eating all of your lunch” (Kaminski et al., 2002, p. 10). Parents’ communication of encouragement (i.e., “Very close, you almost got it”
while attempting to accomplish a task) not only conveys attunement to the child but also that the child is important and valued (Kaminski et al., 2002, p. 10).

Positive parenting is considered a protective factor in child development (Healey et al., 2011) and is associated with lower levels of aggression and externalizing behaviors (Boeldt et al., 2012; McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996). Deater-Deckard, Ivy, and Petrill (2006) interviewed and observed 169 adoptive and biological families and found that positive parenting characterized by maternal warmth moderates the relationship between harsh physical discipline and externalizing problems in children (Deater-Deckard et al., 2006). In another observational study of 56 children diagnosed with ADHD, high parental empathy in the form of acceptance, warmth, and positive comments predicted child self-esteem, peer acceptance, and less child aggression. Parental empathy did not predict more compliance, however, authors state that lack of agreement among compliance coders may have contributed to this finding (Warren, 2003). In a study that utilized parent and teacher-report of children diagnosed with ADHD, positive parenting measured by involvement and praise moderated the relationship between ADHD symptom severity and child overall functioning (Healey et al., 2011). Furthermore, increased positive parenting in the form of praise, positive and proactive discipline, and joint play and talk mediated change in child behavior problems from pre to posttreatment (Gardner et al., 2006). In a meta-analysis of 41 studies of children ages 1 ½ to 11 years, responsiveness, warmth, and positive affect were also related to increased child compliance and positive attention. The authors speculate that the combination of responsiveness, warmth, positive affect with praise make praise especially reinforcing for a child (Owen et al., 2012). In custodial grandfamilies, positive parenting is associated with less psychological distress in grandmothers and more adaptive behaviors with grandchildren (Smith & Richardson, 2008). Additionally, for
custodial grandmothers, studies support that there are not significant differences between 
race/ethnicity in parental warmth or in the amount of help given to custodial grandchildren
(Jackson-Newsom, Buchanan, & McDonald, 2008; Pruchno & McKenney, 2002).

*Caregiver Rejection and Criticism*

In contrast to empathy, positivity, and acceptance, rejection from a parent is associated 
with negative outcome (Coleman, 1956; Dwairy, 2010; Khaleque & Rohner, 2002; Lila et al., 
2007; Rogers, 1961; Rohner, 1960; Rohner, 2004; Rohner & Khaleque, 2005). Coleman (1956) 
suggested that rejection by a parent is related to childhood psychopathology, while Rogers 
(1961) proposed that rejection is the basis for psychological disturbances. Rejection is not only 
the absence of, but also the withdrawal of parental warmth, affection, care, comfort, support, and 
love by a parent. Moreover, rejection includes psychologically hurtful behaviors such as verbal 
abuse, harsh criticism, and chronic correcting (Rohner, 1975; Rohner & Khaleque, 2005). These 
behaviors can each be described as poor parenting practices (Waller, Gardner, Hyde, Shaw, 
Dishion, & Wilson, 2012).

Through extensive cross-cultural research, Rohner (1960) found that parentally rejected 
children were more aggressive and saw the world more negatively than children who had not 
been rejected. Individuals who perceive rejection from their caregivers are likely to feel anxious, 
insecure, and can develop distorted representations of themselves and others. They may view the 
world in a negative light and feel emotionally unsafe (Rohner, 2004). Likewise, lack of maternal 
acceptance is associated with externalizing and internalizing behaviors in children (Lila et al., 
2007). Indeed, rejection effects psychological adjustment and behavioral functioning in adults, 
adolescents, and children (Dwairy, 2010; Khaleque & Rohner, 2002; Rohner & Khaleque, 2005).
Similarly, negative interactions with a parent are related to greater noncompliance and predict more negative behaviors and less positive behaviors (Anderson et al., 1994; Cunningham & Barkley, 1979; Heller & Baker, 2000; Kim et al., 1999). Cunningham & Barkley (1979) observed boys aged 6 to 12 with both normal and high hyperactivity and found that, although some negative parenting strategies were in response to the child’s behavior, their negative parent response contributed to challenging child behavior. Specifically, in a study of hyperactive boys between 7 and 10 years old, Woodward and colleagues (1998) found that self-reported anger and hostility by a parent was significantly related to parent-reported child hyperactivity, even after controlling for conduct disorder and parent mental health. Likewise, in a cross sectional study using parent and self-report, the strongest correlation of parent-child relationship factors and adolescent behavior was perceived parental rejection and externalizing behavior (Muris, Meesters, & van den Berg, 2003). In a longitudinal study conducted in the United Kingdom, Lifford, Harold, & Thapar (2008) examined 194 children aged 11 to 13 and found that child-reported parental rejection was associated with parent-reported child ADHD symptoms. Authors also assessed stability of the rejection score and ADHD symptoms across time, revealing that paternal rejection was associated with increased ADHD symptoms. However, the opposite was found regarding mothers, in which child ADHD symptoms predicted an increase in maternal rejection.

Parenting behaviors and their impact differ widely between ethnic/racial cultures. For instance, in their study of families enrolled in Head Start programs, Reid and colleagues (2002) found that there were significant differences in the number of harsh commands and criticism given to children between White parents and Latino parents. Mexican American parents are also more likely to exhibit an authoritarian parenting style than White parents, however, Mexican
American parents do not significantly differ in measures of authoritative parenting style (Varela, Vernberg, Sanchez-Sosa, Riveros, Mitchell, & Mashunkashey, 2004). In a study of custodial grandparents, White grandparents were more likely to be detached from parenting while African American grandparents corrected and disciplined their grandchild more than other ethnic groups (Cherlin & Furstenberg, 1992). This finding is fairly consistent with other literature in that Black parents and custodial grandparents are likely to report more harsh parenting as a normative style of parenting (Dodge, 2000; Smith et al., 2008). Although African American individuals are likely to engage in more harsh, authoritarian parenting, these styles are not always linked to externalizing behaviors, particularly when compared to other ethnic groups. Researchers propose that this is likely due to a cultural difference in how parenting behaviors are encoded by children (Dodge, 2000; Roche, Ensminger & Cherlin, 2007).

**Commands from a Caregiver and Child Compliance**

Compliance with parental commands or requests is associated with several positive factors for children. Compliance is also associated with fewer externalizing problems and a healthy view of themselves, others, and relationships (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993; Holigrocki, 2010). One key difficulty in parenting a child with ADHD is obtaining compliance with a parent’s instruction (Anastopoulos, Rhoads, & Farley, 2006; Raches, 2004). Parents of children with ADHD report greater noncompliance with their commands (Battle & Lacey, 1972; DuPaul et al., 2001), which can be particularly problematic given the significant amount of disruptive and impulsive behavior associated with hyperactivity and ADHD (Barkley, 2006; Buhrmester, Camparo, Christensen, Gonzalez, & Hinshaw, 1992). Overall, parents of children with ADHD are more demanding, give more ineffective commands, and impose more structure, directiveness, and control over their children. Each of these factors
contributes to behavioral difficulties (Barkley, 2006; Barkley et al., 1991; Buhrmester et al., 1992; Cunningham & Barkley, 1979). It is important to recognize that children with ADHD may need more instruction to stay on task, thus, increased directives can be adaptive and a sign of attuned, effective parenting. However, limiting these commands to matters that are essential to staying on task is thought to be the most effective way to gain compliance (Barkley, 2006; Mash & Johnston, 1982).

Most parent training interventions for children with ADHD emphasize the role of making clear, simple, direct commands to a child in order to achieve much needed compliance from the child (Anastopoulos et al., 2006; Barkley, 2006). In Parent Management Training, commands are seen as an “establishing operation that can affect the motivation of the child and the likelihood of one response rather than another” (Kazdin & Musser, 2005, p. 40). Commands set the pace and tone for subsequent actions and interpretations of both the caregiver and the child. It is not uncommon for parents of children without behavioral difficulties to suggest or request desired behavior from their children, particularly as they age. These utterances are considered indirect commands by a caregiver and, by nature, compliance is considered optional (McNeil & Hembree-Kigin, 2010). Children with behavioral difficulties are not likely to comply with indirect commands because they communicate to the child that both the caregiver and child have equal say in decision-making and that compliance is voluntary. Direct commands, which are declarative instructions, establish an appropriate hierarchy in the caregiver-child relationship and are more likely to be complied with by a child with hyperactivity (Barkley, 2006; McNeil & Hembree-Kigin, 2010). When instructing a child with hyperactivity, compound commands can “set the child up for failure” by surpassing what the child can store in the memory and/or attend to (McNeil & Hembree-Kigin, 2010, p. 108). In this scenario, the caregiver perceives
noncompliance from the child and the child perceives failure. By giving short, simple commands, the child is able to achieve compliance and experience positive rewards for each completed task.

Commands are most effective when given clearly and without vague use of language. By instructing a child to “be good,” “settle down,” or by attempting to tell them to “stop” by calling them by name, children do not know exactly what behavior is expected of them and can easily debate their compliance to the caregiver’s instruction (McNeil & Hembree-Kigin, 2010, p. 109). Caregivers are also encouraged to limit the number of direct commands to those directives that are essential, in order to avoid controlling, overbearing parenting (Barkley, 2006; McNeil & Hembree-Kigin, 2010). Moreover, if repeated commands are given without allowing time for the child to complete the task, the caregiver can become frustrated with lack of perceived compliance while the child is set up for failure (McNeil & Hembree-Kigin, 2010).

Parenting Methods of Interest Related to Child Compliance

Several studies examine positive and negative parenting combined with directives, and child compliance. Eyberg and Robinson (1982) conducted a longitudinal study that employed observational data of children with active behavior problems. They sought to assess the effectiveness of a parent-training model by observing key parent-child variables including labeled praise, criticism, and commands. In their posttreatment follow-up, mothers and fathers gave more labeled praise while mothers gave fewer critical statements. Overall, both parents gave less frequent commands and, when giving commands, used direct commands more frequently than indirect commands. The target child at follow-up showed less deviant behavior and complied more frequently than in the pre-treatment assessment (Eyberg & Robinson, 1982).
Heller and Baker (2000) conducted a longitudinal, observational study that examined both maternal negativity and commands to help understand externalizing symptoms of children. In preschool, maternal negativity was associated with negative behavior by the child and less child compliance. Maternal negativity was also associated with more frequent commands, repeat commands, and less approval of the child. When the target children were in first grade, maternal negativity and repeat commands were associated with externalizing behavior. Finally, at third grade, child ADHD symptoms were predicted by mothers’ commands and repeat commands (Heller & Baker, 2000). These results are supported by a parent-report study of parents and their children with ADHD symptoms in which mothers’ repeated commands frequently were met with more noncompliance and ignoring of their commands (Harvey, Danforth, McKee, Ulaszek, & Friedman, 2003).

One study observed maternal negativity and controlling behaviors towards their child and found that in the presence of an ADHD diagnosis, mothers were consistently more negative, controlling, less supportive and interactive with their child when compared to the non-ADHD comparison group. Moreover, the children diagnosed with ADHD were less compliant and were more negative than their asymptomatic counterparts (Keown & Woodward, 2002; Winsler, 1998). Additionally, maternal negative behavior is associated with child noncompliance (Barkley et al., 1992). In a comparison study that utilized observational data, parents of children with ADHD were three times more likely to engage in negative behaviors toward their children than parents of non-ADHD children, particularly when directing them to complete tasks (DuPaul et al., 2001). Even when hyperactive children comply with requests, mothers respond with more control and negative behavior (Befera & Barkley, 1985; Danforth et al., 1991; Cunningham &
Barkley, 1979). Thus, parenting methods of positivity, negativity, and the style of directives greatly affect child behavior, particularly when considering child compliance.

The Role of Social Support

Extensive literature identifies a bidirectional relationship between parenting stress and social support (Belsky, 1984; Cairney, Boyle, Offord, & Racine, 2003; Degarmo, Patras, & Eap, 2008; Sepa, Frodi, & Ludvigsson, 2004; Simons, Beaman, Cogner, & Chao, 1993; Steinberg, 2001). Social support is particularly important for custodial grandmothers, as they tend to have significant life stressors in taking on a role as custodial grandparents, including having a likelihood of health challenges and limited energy (Dolbin-MacNab, 2006). Additionally, many custodial grandmothers experience disenfranchised grief, which can undermine their ability to receive social support in that many others might not recognize their need for support or, due to grief symptoms, the custodial grandmothers are not able to ask for further support (Miltenberger, Hayslip, Harris, & Kaminski, 2003-2004). For custodial grandmothers, those who receive social support utilize more effective parental coping (Emick & Hayslip, 1999; Hayslip & Kaminski, 2005) and are better able to manage the demands of the parenting role (Ehrle, 2001; Kelley, et al., 2000).

Parenting stress and social support impact parenting behaviors for both traditionally aged parents (Belsky, 1984; Cairney et al., 2003; Degarmo et al., 2008; Sepa et al. 2004; Simons et al., 1993; Steinberg, 2001) and custodial grandparents (Ramaswamy, V., Bhavnagri, N., & Barton, E., 2008; Stevenson, Henderson, & Baugh, 2007). For grandchildren with behavioral problems, social support was associated with custodial grandmothers’ increased tolerance of a grandchild’s disruptive or irritating behavior (Hayslip et al, 1998). Custodial grandparents who experience social support also show a decrease in negative affect scores related to their grandchildren’s
behavior (Hayslip, 2003). In a study of 733 custodial grandmothers with grandchildren aged 4 to 17, social support was related to total effects on grandchildren’s internalizing and externalizing behaviors through grandmother’s distress and dysfunctional parenting (Smith et al., 2008). In a separate study utilizing the same sample, Black custodial grandmothers typically received more social support than those with White background (Kohn & Smith, 2006).

Social support is an important variable particularly for parenting a child with ADHD for both traditionally aged parents and custodial grandparents. Many parents who have a child with ADHD receive limited social support from others in their community (Baker, 2000; Cunningham & Boyle, 2002; Cunningham et al., 1988; Peris & Baker, 2000). This is true as well for custodial grandmothers of children with general problem behavior (Emick & Hayslip, 1999). It is important to consider the relationship between social support, dysfunctional parenting, and problematic child behavior. It seems that these variables can take on a recursive cycle in which a child’s problematic behavior impacts social supports given which heightens both parenting stress and dysfunctional parenting which, in turn, is associated with problematic child behavior. In this recursive cycle, the importance of social support is highlighted and becomes a potential important intervention point to reduce parenting stress and increase healthy parenting.

The Present Study

With the influx of custodial grandparents in the past few decades (Keene & Batson, 2010) and the heightened risk of behavioral difficulties in custodial grandchildren (Hayslip et al., 1998; Kaminski & Murrell, 2008; Kelley et al., 2011; Shlafer & Poehlmann, 2010; Smith et al., 2002; Smith & Palmieri, 2007), it is important to examine parenting methods and the effectiveness of these in order to provide valuable intervention (Dolbin-McNab, 2006; Kaminski et al, 2008; Smith & Richardson, 2008; Smith et al., 2008). Few studies examine parenting
behaviors in this population and even fewer utilize observational methods to capture the nuances of their interactions to better inform our perceptions of custodial grandfamily parenting methods and outcome. This is particularly important for better understanding HI, the most prevalent presenting concern custodial grandparents identify in their grandchildren (Grant & Kucera, 1998; Hayslip et al., 1998; Smith & Palmieri, 2007). Not only is HI commonly reported among custodial grandparents, but these behaviors from a child also contribute to considerable stress and caregiver burden (Barkley et al., 1992; Barkley, 2006; Hayslip et al., 2000; Kaminski et al., 2008).

Extant literature suggests that parental warmth, empathy, and acceptance not only aids in positive outcomes for all children but can also help achieve compliance and reduce externalizing and internalizing behaviors (Boeldt et al., 2012; Gardner et al., 2006; Healey et al., 2011; Laible et al., 2004; MacFadyen-Ketchum et al., 1996; Owen et al., 2012; Rogers, 1961; Rohner, 1975). Furthermore, literature supports that harsh, critical, rejecting parenting methods are associated with behavioral difficulties and externalizing and internalizing behaviors (Anderson et al., 1994; Cunningham & Barkley, 1979; Dwairy, 2010; Eyberg & Robinson, 1982; Heller & Baker, 2000; Khaleque & Rohner, 2002; Kim et al., 1999; Rohner & Khaleque, 2005; Smith & Richardson, 2008; Woodward et al., 1998). The way in which caregivers ask for certain behaviors is also of great importance in gaining compliance from a child, particularly if the caregiver is repeating or adding commands too quickly for the child to keep up with commands (Barkley, 2006; Barkley et al., 1991; Buhrmester et al., 1992; Cunningham & Barkley, 1979; Kazdin & Musser, 2005).

While each of these components of parenting is important to the child’s overall adjustment and behavioral management, few studies have examined how these components function in custodial grandmother-grandchild dyads (Dolbin-McNab, 2006). Smith and
Richardson (2008) found that custodial grandparents self-reported effective parenting strategies such as giving praise, compliments, positive physical gestures (e.g., giving a hug, kiss, “high five”), and monitoring (e.g., supervising and being aware of child’s behavior). These findings were particularly salient in conditions of less psychological distress and grandmother-reported adaptive behaviors in grandchildren. Additionally, they found that self-reported harsh parenting (i.e., raising voice, scolding, saying “things [they didn’t] mean”) and inconsistent discipline by a custodial grandparent was related to greater grandmother-reported hyperactivity and conduct problems in their grandchild (Smith & Richardson, 2008, p. 138).

The present study aimed to extend the literature on parenting methods of custodial grandmothers by using observational data of the unique aspects of the custodial grandmother-grandchild relationship, including parenting methods and child compliance. Aspects of parenting and behavioral compliance for custodial grandmother-grandchild dyads were identified. Furthermore, mechanisms that enhance child compliance were also identified through the study.

Parenting methods and child behavior were analyzed using observational data from interactions between pairs of custodial grandmothers and grandchildren. Positive comments about the child made by the custodial grandmother capture aspects of parental empathy, acceptance, and praise, while negative comments about the child capture aspects of parental criticism and rejection. Commands given by the custodial grandmother were also observed as direct commands and indirect commands, in which compliance can be considered optional. When custodial grandmothers issued multiple commands, repeated a command without giving time for the child to comply, intruded on the task itself or used vague commands, these
interactions were coded as “no opportunity to comply.” Child behavior was assessed by observed grandchild compliance to their grandmother’s commands.

Objectives

The objectives of the current study were to extend the limited literature on parenting practices of custodial grandmothers with observations of custodial grandmother-grandchild interactions and explore parenting methods that might increase compliance in custodial grandfamilies. Specifically, the primary objectives were to 1) observe custodial grandmothers and add to the descriptive picture of custodial grandmothers as their own distinct parenting group with unique characteristics, separate from biological, adoptive, or foster parents and 2) explore group differences between children high in HI compared to those low in HI on observational codes of custodial grandmother-grandchild dyads. Poor, ineffective parenting practices (i.e., harsh criticism and rejection communicated through negative comments and ineffective, excessive commands) as well as positive parenting practices (i.e., praise and acceptance communicated through positive comments and giving appropriate commands) were examined to further inform clinicians on parenting methods specific to custodial grandmothers in the presence of high HI as compared to low HI. The study also aimed to 3) assess the effectiveness of different forms of commands on gaining compliance from a children while exploring the function of HI as a moderator for these two behaviors, and 4) to explore custodial grandmothers’ expressions of acceptance and praise communicated through positive comments as a moderator for gaining compliance from their grandchild. Additionally, 5) the study aimed to explore other variables such as demographic factors and expressive social support that might relate to parenting behaviors, child behavior, and child compliance.
Hypotheses

The following hypotheses were made based on theory and extant literature:

1. In the high HI sample, custodial grandmothers would engage in more poor parenting practices (i.e., harsh criticism, communicating rejection, and giving excessive commands) than in the low HI comparison group. Custodial grandmothers of grandchildren in the high HI group would communicate fewer positive comments and fewer direct commands than in the low HI comparison group.

2. HI scores would moderate the relationship between commands given by a custodial grandmothers and compliance, such that children with higher scores of HI would have fewer instances of compliance. In addition to this moderation effect, it was also predicted that in this model, higher rates of direct commands would be associated with greater compliance.

3. Positive parent verbal responsiveness would moderate the relationship between commands by a custodial grandmother and compliance by the child. That is, when a custodial grandmother communicated more positive comments than negative comments about the child, the child would be more likely to comply with commands from the grandmother. Similarly to the second hypothesis, it was predicted that a greater rate of direct commands would predict greater compliance by the grandchild.
CHAPTER II

METHOD

Participants

Custodial grandmothers of children ages 4 years 0 months to 12 years 11 months were recruited as part of a larger, longitudinal randomized control trial (RCT) conducted in four different states (Texas, Ohio, California, and Maryland). The RCT was designed to compare the short and long-term efficacy of two evidence-based intervention approaches at improving key outcomes for both custodial grandmothers and their grandchildren. Both intervention conditions were compared to one another as well as to an information only control condition.

Institutional Review Board approval was obtained from each site (see Appendix A). Additionally, the National Institutes of Health sponsored and approved this study (Grant #: 443169). In order to be considered for participation in the study, custodial grandmothers had to be a full-time caregiver of their grandchild. The child’s birth parents could not be living in the same home as the custodial grandmother and child, nor be involved significantly in providing care to that child. Grandmothers chose the target grandchild for the study by identifying the child who was most difficult to handle. Grandmothers also were required to have the ability to attend weekly group meetings (e.g., transportation, availability in their schedule), and they had to be able to speak and write in English.

Participants were recruited through many methods. Flyers were posted at a variety of locations, including: schools, faith groups, family law attorney offices, family court offices, social service organizations, beauty shops, daycare and afterschool programs, grocery stores, libraries, and given to senior organizations (see Appendix B). Advertisements with the flyer
were run in newspapers, posted on key websites for the target population (i.e., AARP, Generations United), and distributed via targeted mailings. Principal investigators also educated the public about and recruited for the study during television appearances, radio appearances, and presentations to local agencies serving children and/or older adults.

Custodial grandmothers were compensated with $35 at pretreatment and $35 at the time of each of up to five posttreatment follow-up assessments. Children in the study were compensated with one small age appropriate toy valued at less than one dollar. Participants were also provided with a light lunch and childcare during the RCT group sessions. A resource packet of social service agencies at the national, state, and county level that provide assistance to custodial grandfamilies in any way was given to all grandmothers who inquired about the study. During participation, grandmothers were given referrals to address specific pressing needs if any were identified. To ensure retention in the study and to make participation in the study as convenient as possible for the custodial grandmothers, there were two formats involved in collecting the observational footage of the custodial dyads. Grandmothers could choose to have the observational task administered at their home or at a community setting (e.g. library meeting room, church hall) identified by the research staff for this purpose where privacy and anonymity were assured.

Only those custodial grandfamilies who completed the initial interview and observational task at pretreatment were included in the present study, and only pretreatment data were used in the study. There were originally 190 pretreatment observational tapes of custodial grandmother-grandchild dyads, however, 11 were considered missing data due to audio quality or problems recording the task (i.e., the recording was cut short or not properly stored on the study hard drives). Of the remaining participants, nine did not respond to some of the measures included in
the study and, therefore, were excluded from the study. The missing data was determined to be missing at random and the final number of dyads included in the study was 170.

Regarding ethnicity/race, 51.2% of the participants in the present study identified as White, 35.3% identified as African American, 11.8% identified as Hispanic, and 1.8% identified as “Other.” Grandmothers ranged in age from 40 to 86 with a mean age of 58.77, $SD = 8.23$, and median age of 59. Of the custodial grandchildren, 50% were male and 50% were female. The custodial grandchildren ranged in age from 4 to 12 with a mean age of 8.04, $SD = 2.50$, and median age of 8. See Table 1 for further demographic data. Means, standard deviations, range of scores, and reliability for all other variables are reported in Table 2. Grouped means, standard deviations, and frequencies are also reported in Tables 3 and 4.

Procedure

Once accepted into the study, grandmothers and their target grandchildren were asked to complete pretreatment measures, including: pretreatment interview, Dominic Interactive, and observational dyadic task prior to their participation in psychoeducational parenting groups (see Appendix C). Custodial grandmothers were randomly assigned to one of three RCT conditions. All three RCT conditions were provided in groups that accommodated 8 to 10 members each. After the RCT groups concluded, custodial grandmothers and their target grandchild completed the same posttreatment measures from their initial interview and participated in a posttreatment observational task. Five additional posttreatment follow-up assessments of similar format were performed at six-month intervals over two years. These posttreatment assessments were not used in the current study.

In both pre and posttreatment, two trained research assistants conducted the observational task with each dyad and recorded the observational task via video camera (see Appendix D).
Before the observational task began, the custodial grandmother was asked to choose a toy from several selections provided by each research site (e.g., coloring, a building blocks game, a search and find task etc.). Researchers instructed custodial grandmothers on the three-part format of the task in advance. That is, observational task consisted of three interaction scenarios that were each 6 minutes long. The majority of custodial grandmothers were inadvertently informed of the instructions in front of their grandchild while others \( n = 20 \) were informed before the child entered the room. There were no further instructions given regarding possible interruptions or disturbances to the task. First, custodial grandmothers were asked to play with their grandchild with the chosen toy for 6 minutes. When the timer sounded, the custodial grandmother instructed the child to play with the toy alone while she sat in a nearby chair and read a magazine. At the end of the second 6-minute interval, the timer sounded again and the custodial grandmother asked the grandchild to clean up and put away the toys. For some dyads, cleanup was complete in less than 30 seconds, while for others cleanup took a greater amount of time. There was rarely a timer sound at the end of the cleanup period, rather a researcher would instruct the dyad that their task was complete.

**Instruments**

*Child Hyperactivity-Inattention*

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) is a 25-item questionnaire used to assess psychological adjustment of children and adolescents aged 4 to 16 as reported by their caregiver. The SDQ was originally developed in the United Kingdom by psychiatrist Robert Goodman and is now widely used in diverse populations as well as the United States of America. The National Health Interview Survey, a multi-purpose health survey that serves as the primary source of information on the health of general household populations,
employed the SDQ in their survey in 2001. Based on the National Health Interview Survey results, rate and percentage norms on 9,878 children and adolescents in the United States of America are available by age and gender (www.sdqinfo.com). The SDQ shows good validity when compared to other indices of childhood adjustment (Goodman, 2001). Although the SDQ is not normed on custodial parents as caregivers, Palmieri and Smith (2007) provided structural validity of the SDQ to assess custodial grandmothers report of child psychological adjustment. One subscale of the SDQ was used in the current study. Specifically, hyperactivity-inattention (HI) was assessed by the HI scale, which uses five items regarding the grandchild’s behavior on a three-point scale ranging from 0 (not true) to 2 (certainly true). Items include: “[my child is] restless, overactive, cannot stay still for long,” “constantly fidgeting or squirming,” and “easily distracted, concentration wanders.” Reverse scored items include, “[my child] thinks things out before acting,” “[my child has a] good attention span, sees chores or homework though to the end.” Scores of each scale are computed by summing the items on the scale with possible total scale score ranging from 0 to 10, where higher numbers indicate greater HI. Among custodial grandparents, the HI scale demonstrated good internal consistency in a previous sample (Cronbach $\alpha = .82$) (Palmieri & Smith, 2007) and good internal consistency in the current sample (Cronbach $\alpha = .84$; see Table 2).

There are also banded cutoffs for the HI scale that distinguish between abnormally high levels, borderline levels, and within normal limits of observer-reported HI. These banded cutoffs proposed by Goodman (1997) are not normed by age or gender. In studies of the normal population, scores of 0 to 5 on the HI scale are considered normal, a score of 6 are considered borderline, and score ranging between 7 and 10 are considered high HI (Goodman, 1997). Those who frequently use the SDQ suggest using a banding technique that better represents symptoms.
in specific populations. The general proposed cutoffs based on age may not mean the same across samples of different populations. Specifically, standardized cutoffs of hyperactivity may not be applicable to high-risk groups such as custodial grandfamilies. That is, by using sample-specific banded cutoffs, cases that are abnormal to the sample’s specific rate of symptoms can be identified. Smith and Palmieri (2007) propose using different cutoffs when working with the custodial grandparent population. In one study, their research supports using scores of 0 to 7 to define HI in the normal range, a score of 8 to define the borderline range, and 9 to 10 to define abnormal (high) HI. It is also possible to calculate sample specific banded scores. The highest 10% of scores defines the high HI group; the next 10% defines the borderline HI group, while the remaining 80% represents the low HI group (Bourdon, Goodman, Rae, Simpson, & Koretz, 2005; Goodman, 1997).

Based on scores from the SDQ for low HI, borderline HI, and high HI, there were 86 grandchildren participants in the low HI group, 72 grandchildren participants in the high HI group. There were 12 grandchildren participants in the borderline HI group, which was too few to be included in one of the analyses due to restrictions on cell size.

**Expressive Social Support Scale**

The Expressive Social Support Scale was utilized to measure perceived social support from family and/or friends (Pearlin, Mullan, Semple, & Skaff, 1990). The Expressive Social Support scale asks participants to rate eight items (e.g., “You have at least one friend or relative you want to be with when you are feeling down or discouraged,” “You have people in your life who make you feel good about yourself,” “You have a friend or relative in whose opinions you have confidence) using a Likert scale of 1 (strongly disagree) to 4 (strongly agree). Possible scores range from 8 to 40 with higher scores indicating greater perceived social support from
family and/or friends (Pearlin et al., 1990). This measure showed good reliability (Cronbach $\alpha = .86$).

**Observational Coding System (OCS)**

Two codes were chosen from the Observational Coding System for Caregiver-Child Interactions (OCS) (Kaminski et al., 2002) to apply to the observational tasks in the study. These codes were developed for the Parent-Child Interaction Assessment (PCIA-II; Holigrocki, Kaminski, & Frieswyk, 1999; Holigrocki, Kaminski, & Frieswyk, 2002) standardized tasks, but can be adapted to code caregiver-child interaction in other verbal observational tasks. Thus, the frequency and positivity vs. negativity of verbal comments made by the caregiver about the child were quantified with two codes: positive personal comments (PPC) and negative personal comments (NPC) (see Appendix E).

PPC captures comments made by a caregiver about the goodness of a child’s behavior, personality, appearance, knowledge, accomplishment, or idea. This is marked by the caregiver “going out of their way” to include a complimentary adjective or adverb in their feedback to the child (Kaminski et al., 2002, p. 10). In order to meet criteria for the code, the statement must be considered to be unambiguously positive and clearly complimentary. Statements that are considered “cheering” or vague encouragement (e.g., “Yea,” “There you go”) and statements that appear to be positive but have a negative undertone (e.g., “She can be really sweet when she wants to be”) are not coded as PPC.

NPC captures comments made by a caregiver that criticize the child’s behavior, personality, appearance, knowledge, accomplishment, or idea. NPC includes words of discouragement or when the caregiver was making fun of the child. Comments given a correct NPC code are unambiguously negative (e.g., “You’re too slow,” “Hey there, Miss Silly, let’s
Statements that accurately represent the child’s behavior and appear to be part of a caregiver’s attempt to appropriately discipline their child or teach their child appropriate discipline without being harsh or demeaning are not considered NPC (e.g., “You didn’t hear because you weren’t listening,” “That is not good manners” [when child behaving rudely]). In addition, statements that appear to be positive but have a negative undertone (e.g., “She can be really sweet when she wants to be”) are coded NPC.

The positive parent verbal responsiveness rate (PPVR) captures the rate of positive versus negative personal comments by a caregiver. To calculate this variable, the total number of custodial grandmothers’ NPC is subtracted from the total number of custodial grandmothers’ PPC (Warren, Kaminski, Durrant, & Bayer, 2004). Positive values of PPVR indicate greater PPC than NPC while negative values of PPVR indicate greater NPC than PPC given by a custodial grandmother. Historically, interexaminer agreement has been adequate (ICC = .71) when rating PPC and good (ICC = .86) when rating NPC (Kaminski, Jones, & Harshaw, 2004; Warren, 2003).

Twelve undergraduate students were trained by graduate students to apply these codes to the observational footage over an average of 10 training meetings and 10 homework assignments. During training, they applied the codes to approximately 29 archived PCIA tapes in which their ratings were compared to official ratings given by a subset of creators of the OCS in a previous research study. Four meetings were held per week, with each student-coder attending two meetings. This format allowed for six student-coders to attend each meeting, which provided for more individual attention towards their training. The first few meetings focused on gaining a working knowledge of the coding system. Periodically in training, “checkouts” were performed to assess reliability. Checkouts were designed to indicate how the
student-coders would perform when coding alone. During checkout meetings, student-coders reviewed several tape segments but could not talk openly about the codes. Each tape segment was played as many times as needed until student-coders were confident in their final ratings. Their answers were collected at the end of the meeting and compared to official ratings as well as between one another to assess reliability.

Initially, it was difficult to obtain reliability among student-coders based on the archived PCIA-II tapes. It was determined that the student-coders were struggling with the more complex instances of PPC and NPC that were specific to the PCIA task. That is, the semi-structured PCIA-II task was designed to challenge dyads and elicit a range of complex interactions (e.g., role play, speaking to or referring to imaginary individuals or objects that are part of the PCIA-II task, conflict resolution, competition, and setting boundaries) between the caregiver and child that were not as frequently elicited by the unstructured task in the current study. Therefore, it was decided by graduate students and the research advisor that the student-coders were likely spending a great deal of training time on situational and semantic differences that were not present in the current observational footage. Thus, the expectation for reliability in training was lowered with the understanding that inter-rater reliability would be closely monitored at the onset of coding. Once the student-coders’ ratings were at least a 70% match to official ratings at two consecutive meetings, they were allowed to begin coding.

Dyadic Parent-Child Interaction Coding System (DPICS)

The Dyadic Parent-Child Interaction Coding System, 4th Edition (DPICS; Eyberg, Nelson, Ginn, Bhuiyan, & Boggs, 2013) is a behavioral observation system that assesses parent-child interactions. The DPICS was used in dyadic form to identify commands (i.e., direct and
indirect) given by custodial grandmothers and the subsequent behavior of the child (i.e., compliance, noncompliance, or no opportunity to comply).

When using the DPICS, commands are “statements in which the speaker directs the vocal or motor behavior of the child” and can be in indirect or direct form (Eyberg et al., 2013, p. 43). Direct commands are defined as “declarative statements that contain an order or direction for vocal or motor behavior to be performed and indicate that the child is to perform that behavior” (Eyberg et al., 2013, p. 47). Examples of direct commands include “Put your hands in your lap,” or “Please hand me the hippopotamus” (Eyberg et al., 2013, p. 47). Conversely, indirect commands are suggestions for a vocal or motor behavior to be performed and can be implied or stated in question form. For example, “Will you tell me what letter this is?” or “Remember what I said, OK?” (Eyberg et al., 2013, p. 49).

The child’s responses to their custodial grandmother’s commands were also coded. After the custodial grandmother issued the command, the child’s response after 5 seconds was coded as “compliance” if they followed through on the command and “noncompliance” if they did not. Compliance captures a moment when the command is obeyed or the child begins to obey within 5 seconds. Noncompliance is coded when the child does not obey or begin to obey within 5 seconds, or if the child responds in a way that is not compatible with the original command.

If the grandmother issued another command or prevented the child’s compliance before the 5 seconds elapsed, the child was given the code “no opportunity for compliance.” Additionally, if a grandmother requested action that could only take place in the future, or called for mental actions or unobservable behavior, “no opportunity for compliance” was coded. Examples of no opportunity for compliance include: “Be patient,” “Give your report card to me
as soon as you get home,” or “Hang your coat up [followed by the grandmother hanging the child’s coat up]” (Eyberg et al., 2013, p. 135).

No opportunity for compliance is counted when the custodial grandmother gives a command, but reissues another command without first allowing 5 seconds for the child to comply with the first command. No opportunity for compliance is coded regardless of whether the child was able to comply with the commands. Another code was added to the DPICS protocol to describe moments in which the observational task or the researchers interfered in the custodial grandmother-child interaction in a way that did not give the child an opportunity to comply. This allowed the no opportunity for compliance code to truly capture moments in which the custodial grandmother, rather than circumstances, did not give the child an opportunity for compliance (Eyberg et al., 2013). Reliability for the DPICS-IV coding system is based on the DPICS-III coding system (Eyberg, Nelson, Duke, & Boggs, 2004) and shows adequate inter-coder reliability at kappa = .80 to 1.00 for the parent codes and .80 to .98 for child codes (Eyberg et al., 2013).

The direct command rate was calculated to describe the type of command given by a custodial grandmother in a more parsimonious manner. To calculate the direct command rate, the number of “uninterrupted” direct commands (e.g., direct commands met with compliance or noncompliance by the child) and “uninterrupted” indirect commands were first totaled. Then, the total number of “uninterrupted” indirect commands was subtracted from the total number of “uninterrupted” direct commands. The quotient of this formula was considered the direct command rate. Negative values of the direct command rate indicate that custodial grandmothers delivered more indirect commands than direct commands; similarly, positive values of the direct
command rate indicate that custodial grandmothers delivered more direct commands than indirect commands.

Students utilized 12 tapes from the current observational footage to train on the DPICS codes. They completed five training meetings led by graduate students and additional homework assignments before coding independently. Four of the training sessions were 1 hour in length and the last training session was 4 hours in length. Again, meetings were offered for six graduate students at a time to allow for individualized attention towards each student. Meetings consisted of a similar structure to the OCS coding, in which some meetings involved open discussion of the coding system as applied to the video footage and other meetings implemented “checkouts” to gauge reliability. Each segment was played at least twice and if necessary, tapes were played a third or fourth time during the meeting.

Inter-rater reliability was checked at the conclusion of each meeting by simply grading student-coders’ ratings compared to their cohort’s ratings as well as the graduate student leader’s ratings to the tapes. Once the students achieved at least 90% correct ratings across two training meetings, they were permitted to begin rating tapes.

Reliability of the Current Observational Data

Student-coders were divided into rating teams of two student-coders, and, initially, both team members rated each tape. Once the inter-rater reliability score was at least .80, the tape assignments were tapered so that out of five tapes, four were rated by the rating team and one tape was rated by one student member of the team. That is, 80% of the team’s assigned tapes were rated by the two members of the rating team. Again, once this rating team achieved .80 inter-rater reliability, their tape assignments were tapered such that out of four tapes, two tapes were rated by the rating team and two were rated by one student member of that team. At this
rate, 50% of the tape assignments were rated by the rating team. This tapering continued until 25% of tapes were rated by the rating team and the remaining tapes were rated by one member of the rating team. Throughout the coding process, raters met for 1 hour each week to discuss coding questions, identify discrepant scores, and come to consensus over difficult tapes. All raters were blind to condition and to the overall purpose of the study. The number of tapes reviewed by each rating team varied based on the team’s reliability. Reliability checks were conducted throughout the study to maintain acceptable levels of agreement.

Inter-rater reliability was calculated using Krippendorff’s alpha (KALPHA; Hayes & Krippendorff, 2007). KALPHA has existed for more than 30 years but has not been implemented as abundantly as other measures of inter-rater reliability due to its lack of presence in statistical software packages. In 2007, Hayes and Krippendorff released a macro to be used in SPSS, making it more accessible and easier to utilize. KALPHA was chosen because it placed no restriction on sample size or missing data when calculating reliability, therefore, KALPHA values could be calculated on an ongoing basis to discern appropriate changes in tape assignments based on level of agreement. KALPHA also allows for independent coding rather than paired double coding. Another benefit of using KALPHA is that it can be calculated for variables at different levels of measurement from nominal to ratio (Krippendorff, 2007). KALPHA takes into account chance agreement thus, is a more conservative measure than other methods, such as percentage agreement (Hallgren, 2012).

KALPHA is calculated by dividing observed disagreement by the expected disagreement (i.e., the disagreement one would expect when left to chance) and subtracting this dividend from 1. For instance, if the raters agreed perfectly, observed disagreement would equal 0 and KALPHA (or \( \kappa \)) would equal 1. This would be an example of perfect reliability. Similarly, if
the raters agree at the same rate as what is expected by chance, $\omega = 0$, indicating lack of reliability (Krippendorff, 2011). The cutoff for acceptable reliability is .70 using this conservative measure (Hayes & Krippendorff, 2007). Inter-rater reliability for PPC and NPC was acceptable at Krippendorff’s $\omega = .89$ and Krippendorff’s $\omega = .83$, respectively. DPICS codes ranged from Krippendorff’s $\omega = .99$ to 1 (when rounded to nearest 10th decimal place), indicating acceptable to near perfect reliability (see Table 2).
CHAPTER III

RESULTS

Variable Transformation

In order to conduct the proposed analyses, data cleaning was performed. Variables to be included in the analyses were calculated, including positive parent verbal responsiveness (PPVR) and direct command rate. Tests of normality were conducted and, initially, the measured and observed variables (with the exception of hyperactivity-inattention (HI)) included in the analyses were not normally distributed. An outlier analysis was conducted in which several outliers were identified and adjusted to values within the expected range of distribution. Adjusting these outliers did not affect the distribution (i.e., the data remained skewed), thus, these outliers were reverted to their original values. Transformations were conducted to further explore options to achieve a normal distribution for each variable (Tabachnick & Fidell, 2013). Square root transformation, inverse transformation, and log transformation were conducted for each variable to assess the best method of transforming data to a normal distribution. Even though the data remained significantly skewed, the log transformation was most corrective of the distribution in that it reduced skewness and kurtosis.

The analyses proposed are considered robust to violations of normality when the sample size is large. Although the non-transformed (or raw) data could have been used for these robust models, the log transformations were utilized because they reduced scores of skewness and kurtosis and corrected the presence of multiple outliers (see Tables 5 and 6 for conversions from raw scores to transformed scores). Per Tabachnick & Fidell’s (2013) suggestion, another analysis of outliers was conducted on each transformed variable in order to identify any
persisting outliers or outliers that were newly revealed after transforming the variable. In this analysis of outliers, one case was identified as an outlier across all variables. Removing this case did not greatly impact the distribution for each variable, so the decision was made to retain this case. Being that the analyses in the current study are sensitive to outliers, values for this case were modified to values more consistent with the range for each variable. The maximum value for each variable was used as a guide for modifying this case and the modified case was used throughout the study (Tabachnick & Fidell, 2013). Mahalanobis distance analysis was conducted which indicated that there were no multivariate outliers.

Data Analysis

A preliminary correlation analysis was run to explore relationships between variables (see Tables 7 to 9). Several interesting relationships between variables were revealed. Grandchild age was significantly related to all measured and observed variables in the study except for HI and expressive social support. Grandchild sex was significantly and negatively associated with HI scores, $r = -.28$, $p < .001$, in that higher scores of HI were associated with male children. There was a small but statistically significant, negative relationship between custodial grandmother age and PPVR, in that custodial grandmother reporting older age tended to have lower PPVR scores (i.e., communicating more negative personal comments than positive personal comments), $r = -.16$, $p = .043$. Moreover, custodial grandmothers who identified as White used less direct commands, $r = -.20$, $p = .011$. There were small, positive relationships between custodial grandmothers who identified as African American and increase in rate of direct commands, $r = .17$, $p = .031$. Because these correlations were significant, a one-way between-groups analysis of variance was conducted to explore direct commands as related to race/ethnicity. Results of the analysis of variance were not significant, which indicates that there
is no meaningful difference between race/ethnic groups and number of custodial grandmother
direct commands \( (F(3, 166) = 2.26, p = .084) \).

A one-way multivariate analysis of covariance (MANCOVA) was conducted to assess
the frequency of specific custodial grandmother behaviors for low and high HI custodial
grandchildren while controlling for grandchild age. The independent variable was HI in
custodial grandchildren as measured by the Strengths and Difficulties Questionnaire (SDQ;
Goodman, 1997). The dependent variables were PPVR, direct commands, indirect commands,
and no opportunity to comply. Due to the moderate correlation between grandchild age and the
dependent variables within this sample, grandchild age was used as a covariate in the analysis.
Other variables (i.e., custodial grandmother age, grandchild sex, and expressive social support)
were explored as potential covariates; however, these variables were not significantly correlated
with the dependent variables (see Table 2).

Preliminary checks were conducted to ensure that there was no violation of the
assumptions of normality, linearity, homogeneity of variances (Levene’s test, \( p > .05 \) for each
dependent variable), equality of covariance (M Box’s test approved equality of covariance
matrices, \( p > .05 \)), homogeneity of regression slopes, and reliable measurement of the covariate.
In addition, an a priori G*Power analysis was run to insure that the sample size was large enough
to produce meaningful results (Faul, Erdfelder, Lang, & Buchner, 2007). At a specified effect
value of .4, with \( p \) value of .05, and power of .95, the recommended sample size is greater than
121. The current sample for this model is 154 participants. With few exceptions, the dependent
variables were significantly correlated with one another at small to large correlations that were
under the cutoff of .90 that Tabachnick and Fidell suggest (2013; see Table 9).
The MANCOVA comparing HI groups and observed parenting variables while controlling for child age revealed a non-significant multivariate association (see Table 10). The main effect between HI groups and the dependent variables was not significant Wilk’s $F(4, 148) = .11, p = .978$. Effects of grandchild age as a covariate in the model were significant, Wilk’s $F(5, 147) = 19.96, p < .001$, and the main effects of grandchild age were significant. Grandchild age was significantly associated with PPVR, $F(1, 151) = 26.28, p < .001$, partial $\eta^2 = .15$. Results show that there was a significant relationship between grandchild age and direct commands as well as indirect commands, $F(1, 151) = 47.54, p < .001$, partial $\eta^2 = .24$, $F(1, 151) = 42.89, p < .001$, partial $\eta^2 = .22$, respectively. Finally, grandchild age was significantly associated with no opportunity to comply, $F(1, 151) = 66.88, p < .001$, partial $\eta^2 = .30$. Results suggest that there is a significant negative relationship with large effect sizes between grandchild age on the observed parenting variables. However, there was no significant difference between the low HI group and high HI group on the observed parenting variables while controlling for grandchild age.

A hierarchical multiple regression was run to test if HI moderates the relationship between the direct command rate and compliance while controlling for grandchild age. Preliminary analyses revealed that assumptions of normality, linearity, multicollinearity, and homoscedasticity were met. The direct command rate and HI were used as independent variables in the model and were centered on their respective means. An interaction term of the direct command rate and HI was calculated by multiplying the two centered variables (Aiken & West, 1991; Baron & Kenny, 1986; Fairchild & MacKinnon, 2009).

In the first step, grandchild age was included as a control variable and accounted for 16.9% of the variance in compliance, $R^2 = .169, F(1, 163) = 33.07, p < .001$. Child age had a
beta value of -0.05, \( t(163) = -5.75, p < .001 \). The second step added the direct command rate and HI. Overall, these three variables accounted for a significant portion of the variance \( \Delta R^2 = .20, \Delta F(3, 161) = 25.98, p < .001 \). The direct command rate had the largest beta value as a predictor variable, \( \beta = .59, t(161) = 7.20, p < .001 \), followed by grandchild age \( \beta = -.04, t(161) = -5.45, p < .001 \). Hyperactivity-inattention did not contribute significantly to the model \( \beta = -.00, t(161) = -.61, p = .540 \).

Next, the interaction terms between the direct command rate and HI were added to the regression model in Step 3. The interaction terms did not account for a significant proportion of the variance in compliance, \( \Delta R^2 = .00, \Delta F(4, 160) = .00, p = .928 \). The interaction between the direct command rate and HI was not significant, \( \beta = .00, t(160) = .09, p = .928 \). Based on these results, it appears that, when controlling for grandchild age, the direct command rate significantly predicted grandchild compliance, however, grandchild HI did not serve as a moderator between the direct command rate and custodial grandchild compliance (see Table 11).

A second moderation analysis using hierarchical multiple regression was conducted to assess if PPVR moderates the relationship between the direct command rate and compliance while controlling for grandchild age. Preliminary analyses were conducted to ensure that there was no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The independent variables of the regression were the direct command rate, PPVR, and the interactions between the direct command rate with PPVR. The interaction terms were created by multiplying direct commands and PPVR together and by multiplying indirect commands and PPVR together after each variable was centered to have a mean of zero (Aiken & West, 1991).
In the first step, grandchild age was entered and accounted for the same significant amount of variance as in the first moderation model. The direct command rate and PPVR were added in Step 2 of the analysis. These variables accounted for 38.5% of the variance in compliance at a significant level, \( \Delta R^2 = .22, \Delta F(3, 161) = 28.30, p < .001 \). The direct command rate had the highest beta value of the predictor variables and was significant \( (\beta = .63, t(161) = 7.52, p < .001) \). PPVR had the second highest beta value but the unique contribution of PPVR was not significant \( (\beta = .25, t(161) = 1.98, p = .050) \). The beta value for grandchild age was also significant, \( (\beta = -.03, t(161) = -4.23, p < .001) \).

Next, the interaction term between the direct command rate and PPVR was added to the regression model in Step 3. The total variance accounted for in compliance was 40.5%. The interaction term accounted for a significant proportion of the variance in compliance, \( \Delta R^2 = .02 (f^2 = .02), \Delta F(4, 160) = 5.50, p < .001 \). Based on Cohen’s (1992) guidelines, adding in the interaction term had a small effect on the variance accounted for in the model, however the total effect size for the model was large \( (R^2 = .41, f^2 = .68) \). There was minimal change in the main effects of the direct command rate and PPVR \( (\beta = .68, t(160) = 7.97, p < .001) \) and \( (\beta = .21, t(160) = 1.64, p = .103) \), respectively. The interaction between the direct command rate and PPVR significantly contributed to the model, \( \beta = -1.15, t(160) = -2.35, p = .020 \).

The moderation model was significant and had a large effect size (see Table 12). Although the interaction term only accounted for a small amount of variance in the model, the main effect finding was significant; therefore, the interaction term was further explored using simple slopes analysis. Specifically, simple slopes analysis was chosen because it has increased power with less Type II error while maintaining Type I error equivalent in order to test the significance of the interaction term (Aiken & West, 1991; Holmbeck, 2002). In order to conduct
this analysis, two temporary variables were calculated by re-centering the variables based on 1 $SD$ from the mean. These re-centered variables were then multiplied by the centered independent variable, direct command rate, in order to create temporary interaction terms. Using these new interaction terms, two post-hoc regressions were run, entering direct command rate, the respective temporary moderator variable (i.e., either high PPVR or low PPVR) in the first step, and the respective temporary interaction term (i.e., Direct Command Rate $\times$ High PPVR or Direct Command Rate $\times$ Low PPVR) in Step 2. These regression models provided the slope for the low PPVR condition (1 $SD$ below the mean of PPVR) and for the high PPVR condition (1 $SD$ above the mean of PPVR). Results also indicated whether the simple slope for each condition significantly differed from zero.

Simple slopes revealed a significant positive association between direct command rate and compliance among children who received relatively less PPVR, $b = .98$, $t(166) = 7.87$, $p < .001$. The relationship between direct command rate and compliance among children who received relatively higher PPVR was also positive and significant, $b = .547$, $t(166) = 5.49$, $p < .001$. Based on these results, it appears that the direct command rate significantly predicts grandchild compliance and that PPVR moderates this relationship and is differentially helpful across direct command rate (see Figure 1).
CHAPTER IV
DISCUSSION

The purpose of this study was to further the understanding of custodial grandmother-grandchild relationships while considering hyperactivity-inattention (HI) symptoms. Observational data contributed to limited literature on the parenting behaviors of custodial grandmothers. Hypotheses predicted that grandchildren with high HI scores would receive more criticism and discouragement, indirect commands, and interruptions in their chance to comply with instructions from their grandmothers. The study also sought to examine the role of HI and the role of praise and encouragement (versus criticism and discouragement) as moderators for commands by custodial grandmothers and grandchild compliance. The study predicted that high HI scores would be associated with infrequent compliance and that high levels of praise and encouragement would predict compliance, even when indirect requests for behaviors were frequent. Overall, results of the study provided partial support for hypotheses, some unexpected findings, and interesting exploratory findings.

Summary of Findings

Child Hyperactivity-Inattention and Parenting Behaviors

Results of the multiple analysis of covariance (MANCOVA) did not support hypotheses in that HI was not associated with measures of criticism, discouragement, praise, encouragement (positive parent verbal responsiveness; PPVR), types of commands given by a custodial grandmother, or interruptions in giving the child an opportunity to comply. This finding is not consistent with other literature that associates positive parenting variables and fewer commands with low HI symptoms and, conversely relates criticism, discouragement, more frequent commands, and limited opportunities to comply with high HI symptoms (Befera & Barkley,
Given the significant relationship between these parenting behaviors and age in the current sample, it is possible that the parenting behaviors have a greater relationship with age than HI symptoms in this particular sample. Additionally, it is important to note that the measure of HI was not normed by age or sex and there may be other variables that play a role in the relationship between HI and parenting behaviors. It could also be true that this finding in the current sample is representative of the unique custodial grandmother population and might highlight a difference in parenting children with HI. This speaks to the overall implications of the study and the need for further exploration of parenting behaviors within the custodial grandparent population.

Age was significantly related to PPVR, commands given by custodial grandmothers, and interruptions by custodial grandmothers in chances to comply with commands. Based on correlation analyses, custodial grandmothers made fewer verbalizations towards older children than towards younger children and older children required fewer verbalizations to stay on task or reward behavior. It seems that custodial grandmothers who parent older children give less praise and encouragement, fewer commands, and interrupt opportunities to comply with commands less frequently (Barkley et al., 1984; Barkley et al., 1985). This means that while custodial grandmothers commanded or asked specific behaviors less often with older children than younger children, they also gave less encouragement and praise. These results also suggest that custodial grandmothers engaged in fewer moments of interrupting their own commands or completing the child’s required behaviors for them.

The finding that these parenting behaviors occurred less with child age is developmentally appropriate in many ways. Generally, as children get older, they need to be
reminded less of tasks they have already been asked to complete. It is also developmentally appropriate that custodial grandmothers interrupt their own commands less with older children, as older children should be more likely to follow through with commands. There appears to be a tendency for custodial grandmothers in the current study to give less positive statements for older children than for younger children. Although grandmother age was not significantly correlated with parenting variables, it is possible that this finding is related to cohort effects within the custodial grandmothers. It is important to recognize that although as children get older, it may seem as if they require less encouragement and praise for being attentive and compliant, positive statements by caregivers contribute to improved self-esteem and self-confidence as well as fewer acting out behaviors (Rohner, 1975; Rohner, 2004; Rogers, 1961).

Child Hyperactivity-Inattention and Compliance

Findings related to HI as a moderator for increased commands and child compliance were not significant, even when controlling for child age. Similar to results from the MANCOVA, there was no significant impact of HI, which was a surprising finding given that compliance is a major area of concern for caregivers of children with HI (Anastopoulos et al., 2006; Battle & Lacey, 1972; DuPaul et al., 2001, Raches, 2004). A higher direct command ratio (i.e., higher number of direct commands) predicted more instances of compliance. This expected finding shows similarity between custodial grandmothers and caregiving parents (McNeil & Hembree-Kigin, 2010).

The model also demonstrated that with increasing age there was less compliance from grandchildren. This might be due to having fewer opportunities to comply because there were fewer commands given to older children. The correlation analysis supports this conclusion in
that direct commands, indirect commands, and compliance were negatively correlated with child age (see Table 8).

*Positive Parent Verbal Responsiveness and Child Compliance*

Results of the moderation model supported hypotheses in that PPVR moderates the effect of direct command rate on compliance. The interaction between commands with encouragement and praise from custodial grandmothers was significant but with a small effect size. Generally, the interaction of commands with praise and encouragement predicted greater child compliance, which is consistent with previous literature claiming that positive reinforcement predicts better child compliance (Gardner et al., 2006; Healey et al., 2011; Owen et al., 2012). In the relationship between commands by a custodial grandmother and child compliance when direct command rate is low, high PPVR is associated with greater compliance than is low PPVR. When direct command rates are high and compliance levels are already high, high PPVR is associated with less compliance than is low PPVR.

When interpreting the results of the regression, it is important to note that low PPVR scores represent greater frequency of negative personal comments (e.g., harsh criticism) by the custodial grandmother. The interaction between direct command rate and PPVR revealed that when the direct command rate was low (i.e., more indirect commands than direct commands were given), compliance was highest for grandchildren who received frequent praise and encouragement. These findings are consistent with other literature. Owen and colleagues (2012) proposed that praise from a caregiver is even more reinforcing when combined with responsiveness, warmth, and positive affect. Additionally, in a study of children with Attention Deficit/Hyperactivity Disorder (ADHD), some children who received more praise and less directiveness were more likely to comply with parents’ instructions (Barkley et al., 1984). A
behavioral explanation for this finding is that a child learns to know that they will receive positive feedback and encouragement if they follow their grandmother’s request. Thus, even when asked to complete a task, which inherently suggests that the child has a choice in complying, the child chooses to comply due to expecting praise and compliments.

Another perspective of this finding suggests that indirect requests for behavior might be effective in custodial grandmother-grandchild relationships that have a substantial amount of praise, encouragement, and compliance. That is, the dyad might be higher functioning in general. The child may have a mild temperament or be eager to please their grandmother, while the grandmother may have strong communication skills and a warm personality. These factors could relate to mutual positive regard for one another in which the child is likely to follow indirect instructions and the grandmother likely to give more praise.

Compliance was low for grandchildren who experienced criticism and discouragement with indirect instruction from their custodial grandmothers. Rather than telling the child to do something, the custodial grandmother frequently asked them to do something. This expected finding highlights the challenging negative feedback loop associated with passive communication. When communicating indirectly, caregivers cannot expect that a child comply with a request because the very nature of a request implies that it is acceptable for the child to choose not to obey the request. Furthermore, sometimes indirectly asking a child to do something creates confusion, as the expectations are not clear. The child may be attempting to comply but is unsure of or misinterprets how to obey. This dynamic can be frustrating and disheartening for the child and grandmother. The child’s noncompliance elicits critical and discouraging reactions as a projection of the custodial grandmother’s own frustration, exhaustion, and low self-efficacy, all related back to ineffective communication. For example,
consider a negative feedback loop in which the child does not do (or know) what is expected, and then receives criticism and discouragement. This negative feedback loop impacts the child’s self-efficacy, self-esteem, and anxiety in response to their grandmother and can inhibit their ability to comply with the next indirect request (Kaminski & Murrell, 2008; McNeil & Hembree-Kigin, 2010).

Contrary to hypotheses, the model revealed that in the high direct command condition, children who experienced low PPVR scores have a higher likelihood of complying than those who experienced high PPVR from their custodial grandmothers. That is, children who experienced more harsh criticism and discouragement than encouragement and praise were more likely to follow instructions from their grandmother than those with high encouragement and praise and low criticism and discouragement. This finding was unexpected due to the many examples in the literature noting that for many populations, praise, compliments, and encouragement predicts child compliance and is generally associated with fewer behavioral difficulties (Gardner et al., 2006; Healey et al., 2011; Owen et al., 2012).

It is important to consider the potential type of parenting that involves a higher frequency of commands combined with more criticism and discouragement than encouragement and praise. Custodial grandmothers who verbalize more negative reactions than positive reactions to their grandchild while giving more commands might engage in negative, punitive, controlling, and/or demanding parenting (Heller & Baker, 2000). In this scenario, the custodial grandmother may be more authoritarian or intimidating and may take on parenting attitudes of requiring compliance rather than commanding specific behaviors. Barkley (2006) cautioned parents to limit the number of directives given to their children due to concerns that a high number of directives is indicative of an overbearing or controlling parenting style. It
also seems that this type of parenting can set a child up to feel as if they have failed when they are unable to comply quickly and correctly (McNeil & Hembree-Kigin, 2010). When compared to all other racial/ethnic groups through correlation analysis, African American custodial grandparents did deliver more direct commands, so there is some evidence of a potential cultural tie. However, being that the between-groups findings for race/ethnicity were not significant, this consideration is likely not true of the current sample, and is an area to further explore in future studies.

The model also indicated that encouragement and praise in the presence of a high number of direct commands predicts increased compliance, but, in this condition, does not have as great an effect on compliance as criticism. This finding could be reflective of several considerations. First, the custodial grandmother who engages in frequent direct commands and frequent encouragement and praise, could simply be more talkative and the child ignores, misses, or overlooks directives in the context of their interaction as a whole. If the custodial grandmother senses that the child is ignoring or overlooking directives, they might be more likely to repeat commands or attempt to get the child’s attention through praise.

The second consideration relates to the limited amount of opportunities in the observational task for criticism and praise by custodial grandmothers. The observational task utilized in the study may not capture the “real-world” experience of criticism, encouragement, and praise in the custodial grandmother-grandchild relationship. To this point, there was less variance in custodial grandmother comments (both negative and positive) than expected which likely contributed to limited findings related to PPVR as a whole. The study limitations discuss this assertion in more detail. Finally, there are possible other variables (e.g., other externalizing behaviors aside from HI, other methods of punishment and reward, custodial grandmother
depression and/or anxiety) outside of the scope of this study that could explain the limited impact of encouragement and praise on compliance in the context of direct instruction by a custodial grandmother. The latter two conclusions are true for all findings in the model. Further exploring these considerations would enhance understanding of the relationship between commands, criticism versus praise, and compliance for custodial grandmother-grandchild relationships.

**Additional Findings**

The study revealed other interesting findings outside of hypotheses. HI symptoms were associated with child age and sex as expected. That is, significant associations appeared between high HI symptoms and younger children, particularly male children. This finding is consistent with other literature that suggests significant age differences in expressed HI, age, and sex (APA, 2000; Getahun, et al., 2013; Hart et al., 1995; Smith et al., 2008).

There was a high rate of HI symptoms among grandchildren in the study. Compared to the national rate 3 to 12% prevalence of ADHD (APA, 2000; Getahun, et al., 2013), there was a high prevalence of HI in the current sample. Based on specific cutoffs for custodial grandchildren, 42% of the sample met the cutoff for high HI symptoms. This finding is consistent with previous hypotheses and findings that custodial grandchildren are at greater risk of developing HI difficulties than the general population (Doucette-Dudman & LaCure, 1996; Grant & Kucera, 1998; Hayslip & Shore, 2000; Hayslip et al., 1998; Kaminski & Murrell, 2008; Smith & Palmieri, 2007).

A negative relationship emerged between age and each of the parenting and child behavior variables (see Table 8). It appears that older children in the study received less parenting behaviors overall, including: encouragement and praise, direct commands, indirect commands, and interruptions in chances to comply with commands. Older children were also
associated with less compliance and noncompliance scores. It is important to note that if custodial grandmothers were giving less commands, logically, there would be lower compliance and noncompliance scores for the older children in the study.

Findings related to race/ethnicity of custodial grandmothers were somewhat consistent with findings in other studies that report cultural norms in parenting behaviors (Cherlin & Furstenberg, 1992; Dodge, 2000; Roche et al., 2007). In correlational analyses, White/Caucasian grandmothers engaged in fewer direct commands than other races/ethnicities in the study, which could be considered consistent with other literature that describes White parents as being more detached from parenting and/or to engage in authoritative parenting (Cherlin & Furstenberg, 1992; Varela, et al., 2004). Conversely, African American grandmothers engaged in more direct commands than other races/ethnicities. Although significant, the strength of these correlational relationships was small. Further exploration revealed that there were no significant between-groups differences in direct commands between the racial/ethnic groups. That is, when compared in correlational analyses to the other racial/ethnic groups as a whole, significant differences in White/Caucasian and in African American grandmothers emerged, but only in relation to number of direct commands. When a comparison between all groups was conducted, there were no significant differences between racial/ethnic groups in number of direct commands. There was not a significant relationship between race/ethnicity and other observed variables, thus this finding was not further explored.

The correlation between direct commands and African American grandmothers as well as the lack of significant correlation between other variables and African American grandmothers is consistent with assertions from other studies. That is, African American parents are more likely to engage in authoritarian parenting behaviors and that, for African American children, this is not
linked to further externalizing behaviors (Dodge, 2000; Roche, Ensminger & Cherlin, 2007). Additionally, race/ethnicity was not significantly associated with HI, which supports other findings that HI symptoms are similar across race/ethnicity. This finding also supports arguments regarding disparities in frequency of diagnosis and concerns that White/Caucasian children are more frequently diagnosed with ADHD than other ethnicities even though they score similarly to other groups on ADHD screening measures (Goodman & Silverstein, 2006; Pruchno and McKenney, 2002).

Implications

Theoretical Implications

An unexpected finding that was consistent across analyses is that HI was not related to parenting behaviors or compliance. Sample-specific reasons for this finding could include: measurement limitations within the design of the observational task, limitations in measuring HI without norming for age or sex, and/or differences in perceived behaviors of grandchildren by custodial grandmothers. Custodial grandmothers might underreport HI symptoms. For many custodial grandmothers, there has been a gap in their experience of parenting young children and they may have different expectations of their children, or may be more lenient in their perception of behaviors. Further research may examine parenting behaviors as they relate to HI within the custodial grandparent population. Particularly, further research could clarify if this finding is sample-specific or related to unique characteristics of custodial grandmothers.

Consistent with previous studies, grandmothers in the study who indirectly asked for behaviors rather than directly commanding behaviors were less likely to achieve compliance from the child. These findings suggest that direct communication and instruction is a more effective technique in achieving desired behavior in custodial grandmother-grandchild
relationships. Furthermore, findings support the effectiveness of positive, encouraging parenting, in that custodial grandmothers who gave more indirect commands with a high rate of praise and encouragement, achieved more compliance from their grandchild than those who did not give encouragement and praise. Children who comply with instructions from their warm, encouraging custodial grandmother are also more likely to continue to comply due to reward-based behavioral models and also likely due to having a positive, high functioning relationship. For the current sample, the impact of direct commands on compliance, and the rate of encouragement and praise were true regardless of HI symptoms.

The study revealed the important role that criticism, harshness, and discouragement might play in custodial grandmother-grandchild relationships. When looking at PPVR scores, it seems that the mean score is relatively low, which suggests that, for many of the custodial grandmothers, if they verbalized more encouragement and praise than criticism and discouragement, they only verbalized slightly more encouragement and praise (see Table 2). Based on this, it seems that many of the custodial grandmothers engaged in criticism, harshness, and discouragement fairly frequently compared to engaging in encouragement and praise. Criticism and discouragement was positively and significantly correlated with instances of direct commands and compliance. Results from the regression model suggest that when criticism, harshness, and discouragement and direct commands occur frequently, compliance is higher.

If interpreted at surface level, this significant finding might present criticism, harshness, and discouragement with a high number of direct commands as an effective way to gain compliance from a child. However, from a perspective of well-being, the central idea of parenting is not necessarily to always gain compliance from a child, but to achieve many different qualities related to building self-esteem, competence, and providing a secure base as
well as teaching to follow instructions. These findings provide more information about the role of negative, harsh statements towards a child, particularly as it relates to custodial grandmothers.

In light of this, a concerning finding in the study showed that all observed parenting behaviors were implemented less with older children. In some ways, it is developmentally appropriate that an older child be given fewer commands and be allowed time and space to comply with commands (rather than being interrupted or having a task completed for them). However, this finding also suggests that custodial grandmothers provide less encouragement and praise and, for some, even more criticism and discouragement. Considering these findings in a holistic context, it seems that the parenting environment for these older children-custodial grandmother dyads might be void of communication and direction, and when that void is filled, it is done so with criticism and discouragement. That is, from the child’s perspective, they may only receive feedback or communication when they have done something incorrectly.

Clinical Implications

The current study supports that parent training for custodial grandmothers should continue to focus on teaching custodial grandmothers how to be direct in their instructions versus asking for or suggesting behaviors. For custodial grandmothers who find it difficult to deliver direct commands or have habits of indirect communication, a reward-based approach of encouragement and praise appeared to be associated with a higher frequency of compliance by a child. Some custodial grandmothers could find it more palatable to positively reinforce their grandchild’s behavior than to change their personal manner of giving instructions. For these grandmothers, it would be useful to explore their hesitation around providing directives and if this is linked to parenting strategies employed with their grandchild’s parent and/or if there is role dissonance in parenting as a grandmother that might be impacting communication.
Appropriate intervention for custodial grandmothers who engage in a considerable amount of criticism and discouragement might include learning more about the impact of harsh, authoritarian parenting, and learning to supplement negative feedback with increased encouragement and praise. One method to accomplish this could be to conduct interviews, interventions, and psychoeducation on the goal of parenting and knowledge of child development from a culturally sensitive, generation-sensitive approach. For instance, an intervention might utilize interviews designed to help custodial grandmothers define their goal of parenting (e.g., to gain compliance/have a well behaved child, to build self-esteem, to instill a sense of competence, and/or to raise a child who has healthy, supportive relationships with peers). As a second step, clinicians might provide relevant, culturally sensitive psychoeducation around the impact of specific parenting strategies on the current child generation. Clinicians then might collaborate with grandmothers to create intentionality behind their parenting strategies so that they can see the utility of altering their strategies while remaining consistent with their values around parenting. This intervention would be particularly relevant for the low PPVR group of grandmothers, in building self-efficacy in parenting and recognizing the overall impact (within cultural norms) that their parenting strategies have on the well-being of their grandchild.

It should be noted that, although not fully supported in the current study, existing literature supports that harsh, authoritarian parenting can be normative in African American homes and these parenting behaviors do not significantly impact externalizing behaviors in the way that they might in other cultures (Dodge, 2000; Roche, Ensminger & Cherlin, 2007). Further exploration is needed to examine if harsh, authoritarian parenting within African American grandfamilies has an influence on other variables that are also important to child
functioning (e.g., self-esteem, self-efficacy, adjustment, attachment, etc.) and provide culturally sensitive intervention based on findings. For custodial grandmothers with older grandchildren, parenting intervention might focus even more specifically on the need for positive attention, compliments, and praise in building a warm, resilient relationship, feelings of competence, and self-esteem (Rohner, 1975; Rohner, 2004; Rogers 1961), particularly as grandchildren enter adolescence.

The current study also makes the disparity in child HI between the general population and custodial grandchildren more salient. For mental health providers who meet with custodial grandmother or grandchildren, it would be important to consider the role that HI might have in any presenting concerns. It would also be important to monitor the custodial grandmother’s perception of the grandchild’s behavior in relation to developmental milestones. While HI was not significantly related to variables of interest in this study, there is much data to support the family difficulties that arise from HI. With this high rate of HI in custodial grandchildren, it is likely that those presenting in treatment will have some symptoms related to HI.

Limitations and Strengths

The study had some limitations regarding demographic factors in that it included only custodial grandmothers rather than custodial grandfathers and did not note child ethnicity as a demographic variable. This study also did not account for socio-economic resources and took into account the custodial grandmother relationship with one particular child who the custodial grandmother chose. It is possible that, for custodial grandmothers who provide care for multiple grandchildren, one-on-one interactions with grandchildren seem less challenging because they are used to managing multiple children. In this scenario, researchers may not get a realistic view of the custodial grandmother-custodial grandchild relationship on a day-to-day basis.
The final scenario in the observational task was not standardized. Intentions were for each scenario to last six minutes for each dyad, but, once they put away their toy, the observational task ended. Therefore, segments of tape are not standardized. Additionally, some of the toys in the study consisted of few parts (e.g., doodle board, find it game) and clean up occurred more quickly than with other toys. This left the final scenario of the observational task that would likely elicit more positive and negative personal comments, commands, and/or compliance from the dyad as an unstandardized segment of time, which created variability that is difficult to account for. For example, a child who scored high in HI might have completed the cleanup task in 10 seconds because they simply placed their doodle board in the box. Similarly, another child who scored low in HI might have had a toy that was complicated to put away (e.g., jumbling towers), taking all 6 minutes, and eliciting more instruction from the custodial grandmother. The latter situation in this comparison would provide more opportunities for instruction, thus more opportunities for positive and negative personal comments and/or compliance. While this might be an accurate representation of this dyads day-to-day interactions, the observed behaviors would appear inflated when compared to the child high in HI who completed to cleanup task in 10 seconds with little to no instruction. Likewise, the child with high HI who placed her doodle board in the box for cleanup likely did not need many instructions and did not have conflict with her custodial grandmother in completing the task. Again, observations of this dyad would not be an example of their day-to-day interactions.

Furthermore, the observational task did not stress the dyadic relationship in that there was very little catalyst to observe how the dyad typically functions during high stress interactions (e.g., working to solve a puzzle against a timer, completing a task with challenging or complicated instructions). Thus, the observational task might not have been a “real-world”
example of interacting when custodial grandmother or grandchild stress is high and there is an opportunity for conflict. This aspect of the observational task might have contributed to lower instances of positive and negative personal comments, particularly.

Children of a wide range of age were included in the study which, while a strength of the study in general, presented some challenges around developmentally appropriate material. Some of the toys utilized in the study were not developmentally appropriate for all age groups included in the study in that some were not very complicated or stimulating for older groups and others may have been too challenging to sustain attention for the younger group of children (e.g., find it game, small puzzles, double shutter tin). The assumption of the study is that the custodial grandmother chose the toy for the children to use, thus the toy should be developmentally appropriate given what the custodial grandmother knows about the child. However, in some dyads, it was clear that the custodial grandmother chose a toy that was not developmentally appropriate for their child to play with for the 12-minute task. This speaks to a larger subject in custodial grandmother parenting in that it is important that custodial grandmothers have an accurate sense of developmental age, appropriate activities, and appropriate expectations for their grandchild.

Outside of developmental appropriateness, there were also instances in which toys/tasks that the custodial grandmother chose for the child to play with did not elicit much interaction with the child and some did not require many instances of verbal exchange between custodial grandmother and grandchild (e.g., doodle boards, small puzzles). Again influencing the amount of stress the dyad experienced as well as the necessity of verbal exchange while completing the task. The majority of children were present for the instructions of the task which might have primed them for expectations of the task overall. This might be particularly impactful for child
behavior for the older children given that they might have remembered more of the instructions and had the ability to stay on task without prompts in order to carry it through.

Lastly, researchers administered some observational tasks in a designated community setting while others were conducted in the home environment. For some dyads, when they were at home, some other family members were present in the room, or in the nearby room. Additionally, some videos contained disruptive audio (e.g., TV, radio, other people talking) that made it difficult to decipher the verbalizations on tape.

One limitation of the data is that it did not follow a normal distribution. The analyses chosen are robust to violations of normality; however, skewness still occurred in most variables. This skewness is likely due to limitations of the observational task that did not stress the dyadic relationship and/or did not require many verbalizations. In fact, many dyads had little verbal interaction at all, which skewed the data to scores of zero. The data was also observational data, which creates more variance in areas of reliability and validity. Although scoring systems are designed to be objective and many efforts were made to provide for uniform observation of the videotapes, coding observational data is a subjective task and not every utterance can fall neatly into a categorical coding system. Additionally, the Strengths and Difficulties Questionnaire does not have norms for age or gender, which is a particularly important variable when looking at HI due to differences in expression of HI symptoms as children age (Barkley et al., 1985; Danforth, et al., 1991; Hart et al., 1995; Mash & Johnston, 1982; Smith et al., 2008).

Lastly, there are many other important factors to look at which might influence parenting behaviors. For instance, custodial grandmother depression, history of prenatal alcohol or other substance exposure, oppositional-defiant symptoms, number of caregivers in the home, number
of children in the home might effect the relationship between commands and compliance, PPVR, and the impact of HI symptoms.

The majority of studies on custodial grandfamilies recognize this group as a distinct population with different norms and different expectations than other families, (Hayslip et al., 1998; Hayslip et al., 2014; Hipple & Hipple, 2008; Kaminski & Murrell, 2008; Whitley et al., 2001). Thus, studies that focus on understanding their unique strengths and unique needs add to our knowledge, interventions, and awareness of systemic concerns. There is a dearth of literature regarding custodial grandmothers’ parenting behavior (Dolbin-MacNab, 2006; Kaminski et al, 2008; Smith & Richardson, 2008; Smith et al., 2008), and this study adds to the small body of literature. This study has a large sample representing four distinct regions of the United States and was diverse regarding age of both participants and ethnic identity. The study also implemented age as a continuous variable rather than separating into groups. This accommodates for more variability in child development, which is particularly important when studying a distinctive population of children whose age-related developmental norms might vary from traditional norms.

This study uniquely adds to the literature on custodial grandfamilies in that it includes information about parenting behaviors by custodial grandmothers and includes observational data, rather than exclusively self-report. Dyadic coding of behavior between custodial grandmothers and grandchildren is also included and links specific types of commands with compliance. This allowed for a versatile look into the dynamic between custodial grandmothers and grandchildren in researchers could look at commands and compliance separately or linked if needed.
Researchers took careful steps to eliminate the potential for unintentional or subconscious bias while rating the tapes. Observational data raters were blind to the purpose of the study, treatment condition, time sequence of the tape in question (i.e., pre or post-treatment), and the region in which the observational task occurred. Some bias around desired behaviors and parenting style is unavoidable in observational techniques. Trainers were particularly sensitive to language used to describe dyads and codes in training to rate observational tapes. For instance, in coding the tapes, negative personal comments and noncompliance were not conceptualized as “bad” behaviors and likewise, positive personal comments and compliance were not conceptualized or communicated as “good” or desirable behaviors. There are inherent judgments assigned to each of these behaviors, but researchers made intentional efforts to not perpetuate these judgments and to promote a neutral stance of observing the interactions without judgment. These measures insured the accuracy and quality of the data gleaned from the observational footage and contributes to the strengths of the study.

Future Directions

Results of this study support areas of future research to better understand unique parenting dynamics in the custodial grandfamilies. First, future studies might explore the surprising findings that HI did not significantly relate to parenting or child behavior variables. These studies could explore the utility of using a five-item screener to assess HI versus utilizing a more detailed measure specifically designed to assess HI and/or ADHD. These studies could also include other variables that might impact this relationship, including custodial grandmother depression, other externalizing behaviors, number of children in the home, and custodial grandmother cohort effects. The non-significant and unexpected findings related to custodial grandmother age, child sex, and race/ethnicity are deserving of further study to clarify if the
current findings are representative of custodial grandmothers in general, or if they are specific to the current sample.

One important question that the study revealed addresses the relationship between PPVR and compliance. Further studies could incorporate additional variables that might clarify this relationship (e.g., other types of reward or punishment, number of verbalizations in an interaction). Additionally, future studies could utilize observational tasks that provoke “real-world” examples of the usage of encouragement and praise as well as criticism and discouragement. Improved applicability and variance in the observed behaviors could enhance and address many of the conclusions and questions presented in this study. For instance, these studies could seek to understand the conditions in which children comply with commands because of a sign of positive parenting versus compliance due to fear, intimidation, or demanding parenting practices. They could also explore the protective factors related to families in which there are indirect commands, encouragement and praise, and high rates of compliance to further inform intervention.

Additionally, studies that compare to a control group of children raised by their parents would contribute greatly to the literature on custodial grandfamilies. Currently, comparisons can be made between the two groups based on extant literature, however, few studies utilize between groups comparison and would greatly contribute to our knowledge of distinct norms in custodial grandfamilies. Future studies of parenting behaviors within custodial grandfamilies might continue to consider the utility of observational and qualitative data, particularly because there are few studies regarding parenting behaviors of custodial grandparents. Observational footage and qualitative data allow for unrestricted assessment or a “blank slate” of patterns and relationships for newly explored populations. It is difficult to truly assess nuances in custodial
grandfamilies when using conventional norms because unique factors might be lost. By broadening the scope of research for this population, researchers can identify and further understand exclusive patterns, norms, and within group differences. These efforts would bridge our current understanding with a comprehensive and inclusive conceptualization of adjustment, child development, and overall quality of life as well as distinct strengths and factors of resilience.
Table 1

*Frequencies and Descriptive Data of Demographic Variables*

<table>
<thead>
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<th>SD</th>
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<td></td>
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Table 2

*Descriptive Data and Reliability of Observed Variables with Log Transformation Conversions*

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<th>SD</th>
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<th>Mean</th>
<th>SD</th>
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<th>Max</th>
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<td></td>
<td>5.52</td>
<td>3.11</td>
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<td>4.28</td>
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<td>3.57</td>
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<td>3.53</td>
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<td></td>
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<td>49</td>
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Note. Positive Parent Verbal Responsiveness (PPVR)
Table 3

*Grouped Means by Child Sex and Hyperactivity-Inattention (HI) Symptom Groups*

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<th>Male</th>
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<th>High HI</th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
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<tr>
<td>Male</td>
<td>-</td>
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<tr>
<td>Female</td>
<td>-</td>
<td>-</td>
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<td></td>
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<td>49.4%</td>
<td>43</td>
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<td>African American</td>
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<td>35.3%</td>
<td>30</td>
<td>35.3%</td>
<td>29</td>
</tr>
<tr>
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<td>10.6%</td>
<td>11</td>
<td>12.9%</td>
<td>13</td>
</tr>
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<td>1.2%</td>
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<table>
<thead>
<tr>
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<th>Male</th>
<th>Female</th>
<th>Low HI</th>
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<th>High HI</th>
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<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
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<td>3.77</td>
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<td>11.99</td>
<td>15.05</td>
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<td>5.72</td>
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<td>10.24</td>
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*Note.* Positive Parent Verbal Responsiveness (PPVR)
Table 4

*Grouped Means by Race/Ethnicity*

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<th>Other</th>
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<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
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<td>8.07</td>
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</tr>
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<td>3.03</td>
</tr>
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<td></td>
</tr>
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<td>3.97</td>
<td>1.37</td>
<td>3.04</td>
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<td>9.96</td>
<td>17.93</td>
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<td>Compliance</td>
<td>7.62</td>
<td>4.80</td>
<td>9.70</td>
<td>8.26</td>
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<tr>
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<td>3.25</td>
<td>2.72</td>
<td>3.83</td>
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<td>11.30</td>
<td>10.54</td>
</tr>
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<td>7.02</td>
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*Note.* Positive Parent Verbal Responsiveness (PPVR)
Table 5

*Conversion Table for Log Transformations of Variable Raw Scores*

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<th>Log Transformation</th>
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<td>.30</td>
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</tr>
<tr>
<td>2</td>
<td>.48</td>
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</table>

*Note: Variables that have negative values (i.e. Direct Command Rate and Note. Positive Parent Verbal Responsiveness (PPVR) have different log transformation values and are represented in Table 6.*
Table 6

Conversion Table for Log Transformations of Direct Command Rate and Positive Parent Verbal Responsiveness Rate (PPVR)

<table>
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<th>PPVR</th>
<th>PPVR Log Transformation</th>
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</tr>
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<td>11</td>
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</tr>
<tr>
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</tr>
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**Correlation Analysis of Demographic Variables, Hyperactivity-Inattention, and Expressive Social Support**

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*p < .05, **p < .01
Table 8

**Correlation Analysis of Demographic Variables and Observational Data**

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*Note. Positive Parent Verbal Responsiveness (PPVR). *p < .05, **p < .01*
Table 9

*Correlation Analysis of Hyperactivity-Inattention, Expressive Social Support and Observational Data*

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*Note.* Positive Parent Verbal Responsiveness (PPVR). *p < .05, **p < .01*
### Table 10

**Multivariate Analysis of Covariance (MANCOVA) Results for Hyperactivity-Inattention (HI) Groups and Observed Parenting Behaviors (N = 154)**

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**Note.** Positive Parent Verbal Responsiveness (PPVR). Possible range of (transformed) scores was 0 to 1.7 for direct command, indirect command, and no opportunity to comply (see Table 5). Possible range of transformed scores was 0 to 1.36 for PPVR (see Table 6; negative numbers indicate more negative personal comments than positive personal comments). Means within each row did not differ significantly.

$^\dagger$ Numbers in parentheses = partial $\eta^2$.

* $p < .05$, ** $p < .01$
Table 11

Results from Regression Exploring Hyperactivity-Inattention (HI) as Moderator for Direct Command Rate and Compliance (N = 164)

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*p < .05, **p < .01
Table 12

Results from Regression Exploring Positive Parent Verbal Responsiveness Rate (PPVR) as Moderator for Direct Command Rate and Compliance (N = 164)

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*p < .05, **p < .01
Figure 1

*Simple Slopes Analysis of Interaction Effect of Direct Command Rate and Positive Parent Verbal Responsiveness Rate (PPVR)*

Note. The figure reflects values that are +/- 2 SD of the mean. Values with subscripts were included in the simple slopes analysis. Values whose subscripts are the same indicate significant difference at $p < .001$. 

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APPENDIX A

INFORMED CONSENT
University of North Texas Institutional Review Board

Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand
the following explanation of the purpose, benefits and risks of the study and how it will be
conducted.

Title of Study: Comparing interventions to improve the well-being of custodial
grandfamilies

Principal Investigator: Bert Hayslip Jr, University of North Texas (UNT) Department
of Psychology.

Purpose of the Study: You are being asked to participate in a research study which involves
asking you questions about you and your grandchild as well as enlisting your participation in one
of three interventions designed to benefit grandparents and their grandchildren. These
interventions will involve helping you develop your parenting skills or helping you cope with the
demands of raising your grandchild or participating in a support group.

Study Procedures: You will be asked to complete a series of surveys asking you questions
about you and your grandchild, and you will be asked to participate in one of 3 interventions
designed to benefit grandparent caregivers and their grandchildren. After these interventions
have ended, you will be asked to again complete several surveys asking questions about you and
your grandchild. You will also be videotaped in working on a puzzle with your grandchild. We
expect that each interview/set of surveys will require approximately 1 hour to complete, and that
each intervention will involve 10 sessions of approximately 1 hour each.

Foreseeable Risks: While we anticipate no foreseeable risks are involved in this study, if you
become anxious in answering any questions about you or your grandchild, contact Dr. Hayslip
and he will refer you to the UNT Psychology Clinic so that you might have the opportunity to
talk about these concerns.

Benefits to the Subjects or Others: We expect the project to benefit you by either giving you
new skills to help you cope with the responsibilities of raising a grandchild, or to give you new
skills to enable you to more effectively parent your grandchild.

Compensation for Participants: You will receive a $35 monetary payment each time you
complete each round of surveys.

Procedures for Maintaining Confidentiality of Research Records: Signed consent forms and
coded survey results will be maintained in separate locations (Terrill 242 and Terrill 381). The
confidentiality of your individual information will be maintained in any publications or
presentations regarding this study.

Questions about the Study: If you have any questions about the study, you may
contact Dr. Bert Hayslip Jr. at telephone number 940-565-2675.

Office of Research Services
University of North Texas
Last Updated: August 9, 2007
Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- Bert Hayslip Jr. or his research assistant has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.

Printed Name of Participant

Signature of Participant

Date

APPROVED BY THE UNT IRB

For the Principal Investigator or Designee:

I certify that I have reviewed the contents of this form with the subject signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

Signature of Principal Investigator or Designee

Date

Office of Research Services
University of North Texas
Last Updated: August 9, 2007
APPENDIX B

PROJECT C.O.P.E. BROCHURE
At Project C.O.P.E., our goal is to provide excellent programming to grandmothers raising their grandchildren, and to find out if our programs improve the lives of custodial grandmothers and the grandchildren they care for.

Project C.O.P.E. will provide information that can help grandmothers get through the difficult job of caring for grandchildren in changing times.

How to Contact Project C.O.P.E.

Please call or email: Karie Feldman, Ph.D., Project Director

Phone: 330-672-3029 or Toll Free at 855-260-2433

email: grandmothers@kent.edu

Project C.O.P.E. Team

Dr. Gregory Smith
Kent State University
Dr. Bert Hayslip
University of North Texas
Dr. Frederick Strieder
University of Maryland, Baltimore County
Dr. Julian Montoro-Rodriguez
University of California, San Bernardino
Dr. Karie Feldman
Kent State University

Grandmothers Raising Grandchildren

Project C.O.P.E.
Caring for Others as a Positive Experience
Toll Free: 855-260-2433
grandmothers@kent.edu
Why you?
• You are doing a wonderful thing by caring for your grandchild.
• You are keeping a family connected and together.
• You are helping a child whose early life experiences were not easy.

How do you benefit?
• You can help both yourself and grandmothers across the country.
• You will receive support, information and a chance to meet grandmothers like you.
• You will help the community of kinship caregivers by helping researchers find out what helps the most.

What is required of you?
Weekly meetings:
• 10 two-hour sessions one time per week.
• Groups are led by a professional and a grandmother like you!
• Childcare will be provided, including help with homework.
• Share a hot meal with other grandmothers & grandchildren.

Interviews:
• A 30-40 minute phone interview prior to the first meeting.
• A 30-40 minute in-person interview of both you AND your grandchild at a location convenient to you prior to the first meeting.
• A phone & in-person interview after the program is complete.
• Four additional phone and in-person interviews over two years.
• You will receive $35 each time you interview with us, for a total of $210 over two years!

Who is Eligible?
• Grandmothers should provide full-time care to at least 1 grandchild between the ages of 4 & 12 years old.
• Your grandchild’s birthparents should not live with you.
• Grandmothers should consider this a long-term care situation.
• Grandmothers should have the ability to get to meetings on a weekly basis.

How to Contact
Project C.O.P.E.
Please call or email:
Karie Feldman, Ph.D.
Project Director
Phone: 330-672-3029 or
Toll Free at 855-260-2433
email: grandmothers@kent.edu
APPENDIX C

MEASURES INCLUDED IN OVERALL RCT STUDY
Phone interview with grandmother:
- Center for Epidemiologic Studies Depression Scale Revised (CES-D)
- Overall Anxiety Severity and Impairment Scale (OASIS)
- Strengths and Difficulties Questionnaire (SDQ)
- Multi-dimensional PDR
- Parent Behavior Inventory (PBI; Supportive/Engaged Scale)
- Parenting Practices Inventory (PPI; Harsh/inconsistent Discipline Scale)
- Expressive Social Support
- Family Empowerment Scale
- 9 items from the SF-12 Health Survey
- 10 items from the Child Health Questionnaire (CHQ)
- 11 items from the Positive and Negative Affect Scale (PANAS-T)
- 10 items from the Affect in Grandparent-Grandchild Relationship Scale
- Program Satisfaction (post-test only)

In-person interview with grandmother
- Montgomery-Asberg Depression Rating Scale (MADR-S)
- Hamilton Anxiety Rating Scale (HAM-A)
- Multi-dimensional PDR
- Observational Protocol

In-person interview with grandchild
- Dominic Interview
- Observational Protocol
APPENDIX D

PROJECT C.O.P.E. OBSERVATION GUIDE
Project C.O.P.E.

Observation Guide
Protocol for videotaping
grandmother and grandchild interactions
The purpose of this task is to videotape the interactions between a grandmother and her grandchild in three separate situations. Your task, as a team, is to set up the room, read the instructions to the grandmother, show the grandmother how to set the timer for each situation, and videotape the interactions.

After you video the interactions, you will upload the video to the specified server and assign a file name that corresponds to the number given on the document for the grandmother/grandchild dyad. The observational task should take no longer than 30 minutes from set up to completion.

The responsibilities for the tasks are divided as follows:

<table>
<thead>
<tr>
<th>Graduate Student Interviewer</th>
<th>Undergraduate Student Interviewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Get materials from site coordinator and make sure they are present at the interview</td>
<td>☐ Set up the room</td>
</tr>
<tr>
<td>☐ Explain task to Grandmother prior to grandchild coming into the room</td>
<td>☐ Check the camera and sound</td>
</tr>
<tr>
<td>☐ Have grandmother select activity</td>
<td>☐ Make sure the room is left how you found it</td>
</tr>
<tr>
<td>☐ Answer the grandmother’s questions</td>
<td>☐ Entertain the child while waiting for the grandmother to complete the other part of the interview</td>
</tr>
</tbody>
</table>

The steps for the observational task are as follows:

**Step 1. Set up the room and materials.**

**Video camera and room**

☐ Set up the video camera on a tripod.  
☐ Check that the video camera has a SD card with sufficient space for 20 minutes of video.  
☐ Check that the video camera has power (the battery is charged or the camera is plugged into the circuit).  
☐ Make sure the volume on the camera is at its maximum capacity for recording audio.  
☐ There should be a small table with two chairs in the best view of the camera.

*2*
☐ Double-check through the viewfinder that both grandmother and child will be in the sights of the camera throughout the observational task.
☐ Place an additional chair off to the side of the table, but still within view of the camera.
☐ Double-check that this additional chair is also in the sights of the camera.

Materials
☐ Make sure all of the activities/toys are complete and in their boxes or containers.
☐ Display all of the activities/toys in a row on a surface area to make choosing one item convenient (the grandmother should not need to move them around to see all of the choices).
☐ Place a book or magazine in the additional chair that is off to the side of the table.
☐ Have the timer preset at 6-minute intervals.
Step 2. Provide directions to the grandmother to choose an activity for the child.

☐ Read the following instructions to the grandmothers before asking the child to join you:

“The next activity we are going to do today involves watching you and your grandchild interact. As we discussed, we will be video-recording this task so that we can look at it at a later date.”

“For this activity, we will need your grandchild to have one item to play with. Please choose one of these activities for your grandchild to play with.”

[Show the grandmother the following choices]

- Find It Games, Kids Version – Red Ends [game]
- I Spy Eagle Eye [game]
- Fisher-Price Doodle Pro Travel Green [doodle-board]
- Double Shutter Tin [game]
- Jumbling Towers (48 wood pieces) [game]
- 2-3 small puzzles
- Various Activity Books and Pencil box with pencils and crayons

☐ “Which item do you think your grandchild would like to play with?”

Step 3: Explain the three situations and the intervals of the observation.

☐ Hand the grandmother the timer.

☐ Read the following instructions to the grandmother:

“There are three situations in this observation. Each situation will last 6 minutes. This timer will beep at the end of each 6-minute interval, indicating that you should begin the next situation.”

“The first situation will start when you sit down at the table. Start the timer then.” [Show the grandmother how to start the timer and ask her to demonstrate it to you.]

“Do you have any questions about the timer?” [Answer any questions.]
“After you start the timer, tell your grandchild to sit down at the table and play with the activity or toy with you.”

“When the timer beeps, tell your grandchild to keep playing with the activity or toy while you read the magazine (book). Get up from the table and move over to the other chair in the room. There will be a magazine (book) in the seat of the chair.”

“Pick up the magazine (book) and read it.”

“When the timer beeps again, tell your grandchild it is time to put the activity or toy away and clean up the area. S/he can put the item back in its box and push the chairs against the table.”

“So, first you will go into the room and play with the item with your grandchild, then you will move to the chair and read, then you will ask your grandchild to clean up. The beeps will indicate when you switch situations. How does that sound to you?”

“Here is a card that will remind you of each of the three situations.” [Hand the grandmother the card.]

1. Play with your grandchild
2. Read by yourself
3. Clean up
“If your grandchild does not cooperate, you should say whatever you typically would say in such a situation. If s/he has not completed one of the situations before the timer beeps, that’s OK. Go ahead and begin the next situation.”

“Do you have any questions?” [Answer the questions posed. See FAQs that follow.]

Step 4. Begin the observation.

☐ Provide the grandmother the “cheat card” and the timer.
☐ Place the activity/toy chosen by the grandmother on the table.
☐ Start the video camera.
☐ Remind the grandmother to tell her grandchild to play with the item with her and start the timer.

Step 5: End of observation.

☐ Thank the grandmother and grandchild for participating.
☐ Stop the video camera.
☐ Rearrange the observation room, if necessary (place chairs at the table and the additional chair away from the table).
☐ Take the activity/toy back to the selection area.

Step 6: Upload the video to the dropbox site.

☐ Take the SD card out of the video camera.
☐ Insert the SD card into the reader attached to the project computer.
☐ Open the site for the dropbox.
☐ Upload the video from the SD card.
☐ Name the video file as indicated on the roster.
☐ Save the video and exit the dropbox.

***
Frequently Asked Questions  
Observational Task

<table>
<thead>
<tr>
<th>Questions Grandmothers Might Ask</th>
<th>Sample Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why are you asking me to do this?</td>
<td>We are interested in the ways grandmothers and grandchildren interact and this will give us a brief example.</td>
</tr>
<tr>
<td>What should I do if my grandchild won’t sit down at the table?</td>
<td>You should say what you usually say in this type of situation. For example, you can begin playing with the item and request again that s/he joins you.</td>
</tr>
<tr>
<td>What should I do if my grandchild won’t leave me alone when I start reading?</td>
<td>You should say what you usually say in this type of situation. For example, you can tell him/her to go back to the table and play.</td>
</tr>
<tr>
<td>What should I do if my grandchild needs to go to the restroom?</td>
<td>If you think s/he might need to go now, you can go now. If it comes up during the observation, and you think your grandchild needs to go right away, you can take him/her to the restroom. I will come in and stop the video recording and we can restart it after the restroom visit.</td>
</tr>
<tr>
<td>Who will see this video?</td>
<td>One of the permissions you signed said that you would allow only project staff to see the video or that we may be able to use it for educational purposes.</td>
</tr>
<tr>
<td>Questions You Might Ask</td>
<td>Sample Answers</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>What if the grandmother says she does not want to do this? Or does not want to be videotaped while doing it?</td>
<td>Reschedule with the grandmother. Contact your supervisor.</td>
</tr>
<tr>
<td>What should I do if the grandmother says her child won’t listen to her?</td>
<td>Tell the grandmother that often children do not follow directions and that we are interested in seeing all the ways grandmothers and grandchildren interact.</td>
</tr>
<tr>
<td>What should I do if the grandchild needs to go to the restroom during an observation?</td>
<td>Stop the video recording while they go to the restroom. When they return, restart the situation that they were in when the interruption occurred. Upload all of the video into the dropbox as one observation.</td>
</tr>
<tr>
<td>What should I do if the camera isn’t working?</td>
<td>Replace the battery or plug it into the wall circuit. Check to make sure the SD card is fully engaged in the slot. If the camera still isn’t working, and you do not have a backup camera, reschedule the observation with the grandmother. Contact your supervisor.</td>
</tr>
<tr>
<td>What should I do if I don’t have internet connection at the site I am at when I try to upload the video?</td>
<td>Leave the recorded observation on the SD card and transfer it as soon as you have a connection available.</td>
</tr>
<tr>
<td>What should I do if the grandmother just isn’t following my instructions?</td>
<td>Speak to the grandmother in private and tell her that you want to be sure that she understands the tasks you need her to do. Restate the tasks and ask again if she has</td>
</tr>
</tbody>
</table>
questions. Answer any that she has. If her noncompliance is about issues of changing activities, she may simply not understand how to use the timer or remember what to do. In this case, enter the videotaping area and prompt her (model for her) to tell her grandchild about the change. Wait there until she does.
1. Play with your grandchild
2. Read by yourself
3. Clean up

Copy this page on colored cardstock and cut around the box.
Fidelity Checklist

**Step 1. Set up the room and materials.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video camera on a tripod.</td>
<td></td>
</tr>
<tr>
<td>SD card in camera.</td>
<td></td>
</tr>
<tr>
<td>Video camera has power.</td>
<td></td>
</tr>
<tr>
<td>Volume on the camera is at its maximum.</td>
<td></td>
</tr>
<tr>
<td>Table and two chairs positioned in the best view of the camera.</td>
<td></td>
</tr>
<tr>
<td>Additional chair is in the best view of the camera.</td>
<td></td>
</tr>
<tr>
<td>Activities/toys are complete and in their boxes or containers.</td>
<td></td>
</tr>
<tr>
<td>Activities/toys displayed in a row.</td>
<td></td>
</tr>
<tr>
<td>A book or magazine is in the additional chair.</td>
<td></td>
</tr>
<tr>
<td>Timer is preset at 6-minute intervals.</td>
<td></td>
</tr>
</tbody>
</table>

**Step 2. Provide directions to the grandmother to choose an activity for the child.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the instructions to the grandmother.</td>
<td></td>
</tr>
<tr>
<td>Show grandmother the choices of activities/toys.</td>
<td></td>
</tr>
</tbody>
</table>

**Step 3: Explain the three situations and the intervals of the observation.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand the grandmother the timer.</td>
<td></td>
</tr>
<tr>
<td>Read the instructions to the grandmother.</td>
<td></td>
</tr>
</tbody>
</table>

* * *
**Step 4. Begin the observation.**

<table>
<thead>
<tr>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the grandmother the “cheat card” and the timer.</td>
</tr>
<tr>
<td>Place the activity/toy chosen by the grandmother on the table.</td>
</tr>
<tr>
<td>Start the video camera.</td>
</tr>
</tbody>
</table>

**Step 5: End of observation.**

<table>
<thead>
<tr>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank the grandmother and grandchild for participating.</td>
</tr>
<tr>
<td>Stop the video camera.</td>
</tr>
<tr>
<td>Rearrange the observation room</td>
</tr>
<tr>
<td>Take the activity/toy back to the selection area.</td>
</tr>
</tbody>
</table>

**Step 6: Upload the video to the dropbox site.**

<table>
<thead>
<tr>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take the SD card out of the video camera.</td>
</tr>
<tr>
<td>Upload the video from the SD card.</td>
</tr>
<tr>
<td>Name the video file as indicated on the roster.</td>
</tr>
<tr>
<td>Save the video and exit the dropbox.</td>
</tr>
</tbody>
</table>
APPENDIX E

OBSERVATIONAL CODING SYSTEM (OCS)
Caregivers’ Positive Personal Comments about the Child (PPC)

1. Code
   Count frequency of occurrence

Positive Personal Comments (PPC) occur when the caregiver makes a comment or statement about the goodness of the child’s behavior, personality, appearance, knowledge, accomplishment, idea, etc. Most often, the caregiver is going out of their way to include a complimentary adjective or adverb in their feedback to their child. To be counted, it should be unambiguously positive. That is, the comment is clearly complimentary.

Examples
2. Caregiver: I think that’s a great idea [in reference to child’s idea]. Code = PPC
4. Caregiver: Good girl! Code = PPC
5. Caregiver: That’s a great idea! Code = PPC

Only count positive descriptions of the child’s behavior that go beyond a statement of basic fact, even if you think the caregiver is obviously enthused.

Examples
1. Caregiver: You won! Code = 0 PPC
2. Caregiver: You won because you’re so fast. Code = PPC
3. Caregiver: You’re right, we did see lots of animals today. Code = 0 PPC (simple statement of fact)
4. Caregiver: You ate all your lunch! Code = 0 PPC
5. Caregiver: You’re such a good eater; you ate all your lunch. Code = PPC
6. Caregiver: I’m so proud of you for eating all your lunch. Code = PPC

Do not count encouragement or cheering with this code, it will be coded separately.

Examples
1. Caregiver (in response to child’s incorrect, but close, spelling of a word): Very close, very close, you almost got it. Code = 0 PPC (although the tone may have been positive, this really is just a statement of fact—it will get “counted” later as “encouragement”).
2. Caregiver (in response to child’s incorrect, but close, spelling of a word): That was such a hard word and you almost got it; you really are a good speller. Code = PPC
3. Caregiver: Yes (cheering), you won! Code = 0 PPC
4. Caregiver: There you go! Code = 0 PPC

Do not count “backhanded” compliments. When these are not ambiguous they may be NPCs (e.g., when they are clearly criticizing how a child “usually” is).

Examples
1. Caregiver (to administrator): She can be really sweet when she wants to be.
Code = 0 PPC
2. Caregiver: You weren't scared like you usually are.  Code = 0 PPC & 1 NPC
3. Caregiver: Thank you for not crying like you usually do. Code = 0 PPC & 1 NPC

Do not count compliments or praise that are sarcastic. We want to avoid inferring sarcasm solely from voice tone. Instead, pay attention to the whole context and look for statements that are incongruous. (Note: If there IS behavioral evidence that makes the sarcasm clear, rate as NPC)

Example
1. Caregiver: (after child has acted afraid about the scary tunnel) I'm so glad that all those camping trips I've taken you on have taught you how to be brave.  Code = 0 PPC, 1 NPC

Do not count ambiguous comments.

Examples
1. Caregiver: Wow, you're too fast for me.  Code = 0 PPC
2. Caregiver: Did you pick that figure because he has curly hair like yours?  Code = 0 PPC
3. Caregiver: Next time you'll learn the names of more new animals, right?  Code = 0 PPC
4. Caregiver: Wow-weel (in response to child's ability to spell gorilla correctly).  Code = 0 PPC (in addition to communicating that one is impressed, exclamations such as "wow", "wow-weel" and "oh!" can communicate surprise or astonishment, neither of which is unambiguously positive)
5. Caregiver: Wow-weel, you're a great speller. (in response to child's ability to spell gorilla correctly).  Code = PPC
6. Child: Zebras live in Africa. Caregiver: That's wonderful!  Code = 0 PPC (because it's not clear if the caregiver is praising the child or the fact that zebras live in Africa).
7. Child: Zeebodeekas live in Africa. Caregiver: That's wonderful!  Code = PPC (because even if the caregiver is praising the notion that "zeebodeekas live in Africa", she is also making a comment about the goodness of what is clearly the child's idea).

Do not count endearments.

Examples
1. Caregiver: OK, honey, let's go get some ice cream.  Code = 0 PPC
2. Caregiver: Hey sweetie, I said we can come back another time.  Code = 0 PPC

Do not count verbal affection, it will be counted as Positive Caregiver Affect (PA)

Example
1. Caregiver: I love you.  Code = 0 PPC, 1 PA

Do not count politeness, but do count "polite" words that are used as a means to praising the child or identifying their behavior as positive. This most often occurs when a caregiver is thanking a child for compliance or obedience. A "hint" for determining whether a 'polite' statement is a PPC or not is to consider whether: 1) it could potentially build a child's self-esteem
(then it IS a PPC) and 2) an adult would say that "polite" statement to an adult acquaintance (if so, it's probably NOT a PPC).

**Example**

1. Caregiver: Congratulations on winning the race. Code = 0 PPC
2. Caregiver: Thank you for the juice box. Code = 0 PPC
3. Caregiver: Please pass the ketchup. Code = 0 PPC
4. Caregiver: Thank you for not crying when we left. Code = 0 PPC (not a *positive* personal comment; caregiver could have said something like "thank you for listening so well when it was time to leave the zoo today", added that they were proud, etc.)
5. Caregiver: Thank you for being so good today. Code = PPC
6. Caregiver: Can you give me 2 more minutes, please? Thank you. Code = 0 PPC (the caregiver's "thank you" occurs prematurely, before the child succeeded in waiting at all, which falls more into the realm of politeness or automatic speech than actual praise).
Caregivers’ Negative Personal Comments about the Child (NPC)

1 Code
Count frequency of occurrence

Negative Personal Comments (NPCs) occur when the caregiver criticizes the child’s behavior, personality, appearance, knowledge, accomplishment, idea, etc. NPCs can also be words of discouragement (e.g., making fun of a child’s idea). To be counted, it should be unambiguously negative. That is, the comment is clearly a put-down.

Examples
1. Caregiver: You were too slow that time. Code = NPC
2. Caregiver: Well that wasn’t smart [in reference to something the child did]. Code = NPC
3. Caregiver: That won’t work [in reference to child’s idea] Code = NPC
4. Caregiver: Why do you always have to be so hyper? Code = NPC
5. Caregiver: If you don’t stop acting so spoiled, we’re going home! Code = NPC
6. Caregiver: You’re not usually so good at listening, are you? Code = NPC

Some of the most difficult decisions for this code are when a caregiver is accurately describing the child’s misbehavior or mistake without being harsh or demeaning. Accurate statements are usually specific and not exaggerated. The “rule” here is that we make an exception for (i.e., don’t count) accurate negative feedback about a child’s behavior or verbalizations that appear to be part of a caregiver’s attempt to appropriately discipline their child or teach their child necessary skills or behavioral control. Such feedback typically is about a specific behavior and often includes the caregiver’s explanation or rationale about why it is unacceptable, not optimal, etc. Global statements and negative adjectives applied to the child in general, however, are coded as “NPC”.

Examples
1. Caregiver: You didn’t tell me what the rules were. That’s not fair. (after child has told the mother she “cheated”, but child made up the rules without telling them to his mother). Code = 0 NPC
2. Caregiver: That’s not very nice. Just because you fell down doesn’t mean that you can push me down (after child has knocked mother’s figure down). Code = 0 NPC
Caregiver: I’m telling your father that you’re not being very nice. Code = NPC [because the use of repetitive criticism is not constructive; “you’re not being” would also be too general to be helpful in some contexts.]
3. Caregiver: Why are you always misbehaving? If you keep acting like that, no one will want to play with you (after child has been misbehaving). Code = NPC [because the first (critical) statement cannot be accurate, a child cannot always be misbehaving]
4. Caregiver: When you play meanly like that, people won’t want to play with you (after child has been aggressive). Code = 0 NPC
5. Caregiver: You’re bad. If you keep acting like that, no one will want to play with you (after child has been misbehaving). Code = NPC [because the first (critical) statement cannot be accurate, no child is “bad” although their behavior may be “bad”]

6. Caregiver: Come down, you come down here right now! (Child pretends to fall off the high rock).
   Caregiver: That’s not funny, not like that! Can you climb down nicely, please? I don’t want you to go to the hospital. Code = 0 NPC

7. Caregiver: That was naughty (after child has thrown a toy). Code = NPC

8. Caregiver: That was not polite (after child has thrown a toy). Code = 0 NPC

9. Caregiver: That was not showing good manners (after the child has grabbed a toy out of the examiner’s hand). Code = 0 NPC

10. Caregiver: You are so rude! Code = NPC

11. Caregiver: You can’t fly. Code = 0 NPC because we can’t know whether the caregiver was just stating their opinion, playing out the story realistically, or actually criticizing the child.

12. Caregiver: I don’t think you’d normally go in [the scary tunnel]. Code = 0 NPC because the caregiver may be just stating their opinion or trying to play out the story realistically, plus, “not going in” is not an unambiguous criticism.

13. Caregiver: I don’t think you’d normally go in [the scary tunnel], because you’re a big chicken. Code = NPC (for name-calling).

Do count accurate negative feedback that is “thrown back in the child’s face” even if it is done in a reasonable manner. That is, the caregiver is “allowed” to verbalize the negative feedback for the purposes of correction, teaching, discipline, etc., but they are not “allowed” to dwell on a negative behavior that they’ve already corrected. Once a misbehavior has occurred, been corrected (NOT counted as a NPC), the caregiver WILL receive NPC(s) if they make repeated negative comments IF the child has not repeated the negative behavior.

Do count criticism that the caregiver directs at their child along with him- or herself.

Examples

1. Caregiver: I don’t think we’re doing this right. Code = 0 NPC OR 1 NPC, depending on context [whether it was a criticism (e.g., they were playing out a scenario in a way the caregiver thought was “wrong”) or just an innocuous statement of fact (e.g., they were trying to make a see-saw and it wouldn’t work)]

2. Caregiver (to administrator): I bet we’re messing up your movie, huh? Code = NPC

3. Caregiver (during Inquiry): We weren’t doing [the scene] right. Code = NPC

“Name-calling” is typically coded as a NPC. Be aware that caregivers who name-call often appear to be teasing. In order to rate this reliably (and because “teasing” is often a sign of passive-aggressiveness), we count all name-calling, even if it appears that the caregiver is teasing. Other times the caregiver is frustrated and uses a “name” instead of handling it in a more direct and adult manner.

Examples

1. Caregiver: You’re a gorilla (apparently teasing, the context does not support the idea that the child is pretending to be a gorilla or wants to be called a gorilla). Code = NPC
2. Caregiver: Hey Miss Silly, let's just play right. Code = NPC
3. Caregiver: There's no one in this scary tunnel except us scaredy-cats. Code = NPC
   (although the caregiver is including herself, she is referring to herself and her child as
   "scaredy-cats.")

Caregivers are entitled to their preferences. Don't count statements caregiver makes about what
they prefer (unless it is delivered in a harsh or critical way).

**Examples**
1. Caregiver: Mommy doesn't like it when you cry when we have to leave some place. Code
   = 0 NPC
2. Caregiver: Mommy *hates it when you* cry like that! Code = NPC

Do not count ambiguous comments:

**Examples**
1. Caregiver: Wow, you're too fast for me. Code = 0 NPC
2. Caregiver: Did you pick that figure because he has curly hair like yours? Code = 0 NPC

Some "backhanded" compliments may be NPCs, but only if they are unambiguously negative
(e.g., when they are clearly criticizing how a child "usually" is).

**Examples**
1. Caregiver: (to administrator): She can be really sweet when she wants to be. Code = 0 NPC
2. Caregiver: You weren't scared like you usually are. Code = NPC
3. Caregiver: Thank you for not crying like you usually do. Code = NPC

Do not count sarcasm unless there is behavioral evidence that clearly supports that the
statement was sarcastic. Pay attention to the whole context and look for statements that are
incongruous with what was happening in the scenario. (We rely on behavioral evidence because
we won't be able to get good inter-rater reliability when we have to make inferences about tone
and intent).

**Examples**
1. Caregiver: (after child has been very active) I'm so glad to have a nice & calm daughter like
   you. Code = 1 NPC & 0 PPC
2. Caregiver: (after child has acted afraid about the scary tunnel) I'm so glad that all those
   camping trips I've taken you on have taught you how to be brave. Code = 1 NPC & 0 PPC
3. Caregiver: That's nice that you can fly, but come stand by your mother (intent unclear,
   ambiguous) Code = 0 NPC & 0 PPC

Do not count verbal threats, unless they are imbedded with criticism.

**Examples**
1. Caregiver: If you don't behave, you're getting a big spanking when we get home. Code = 0
   NPC
2. Caregiver: Since you're so bad, you're getting a big spanking when we get home. Code = NPC
REFERENCES


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