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Oppositional Behavior Parallels in Toddlers and Teens and Parent's Response

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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Parents seem to manage oppositional conduct of toddlers but struggle emotionally and physically with oppositional conduct of teenagers, despite similarities in the behaviors. Self-efficacy theory, psychological theory of development, and theory of mind guided the conceptualization of how parents perceive and respond to these two sensitive periods of development. This contrasted group quantitative study pursued measurable similarities in the experience of first-time parents of children aged 18-36 months and 14-15 years of age. Establishing parents' confidence level in their parenting skills and how they perceive and respond to their child's oppositional behavior was also a factor. One hundred and seventy-five parents completed the Eyberg Child Behavior Inventory, 155 of those also completed the Parenting Practices Inventory and Parent Sense of Competence Scale. *T* tests showed that parents perceive oppositional behavior of the age groups similarly for both intensity of the behavior and the level of problem it creates. Analysis of covariance indicated that parents of teens and parents of toddlers see their child's behavior as not a problem, regardless of level of confidence; however, they perceive the level of intensity of those behaviors differently depending on how confident they feel as a parent. Results showed that parents react differently in punitiveness and view their effectiveness differently based on confidence in their parenting skills. Further examination into the parent's experience can lead to positive social change through parent support programs and evidence-based parent-child interventions to help develop confidence in supporting the challenging period of adolescent development.

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Dedication

I dedicate this dissertation to Ms. Abigail Brown, my beautiful God Daughter, who has grown up with me pursuing my education and given me joy the entire time. Her birth helped me decide to go back to school for my first degree and become the role model I wanted to be. Her growth and love kept me going all the way; her toddler years gave me the inspiration for this thesis, and her adolescent years gave me the full experience testing the idea. As you continue to grow and mature, always remember you are never too old to finally be what you wanted to be when you grow up.

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Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Introduction

Parents serve as gatekeepers for their children to keep them safe and guide their early development (Telzer et al., 2015). Parents and children tend to develop interactive coping skills starting when the oppositional actions are "cute" during the toddler years, yet when the child reaches adolescence, previously exhibited good behavior changes, becoming more erratic and emotional and often confounding the parents (Marceau et al., 2015). This study focused on comparing parental responses and levels of self-efficacy to oppositional behavior for toddlers and adolescents to determine if there are similarities to the parent's experience in raising children at these two sensitive periods of development. As the adolescent loses clarity of developed coping skills and reverts to a somewhat toddler-like manner with the flood of new hormones (Rothbart & Bates, 2006), the parent may struggle to see this oppositional behavior as part of the natural developmental process. This chapter will touch on research into childhood behaviors and some of the neurological, psychosocial, and environmental factors that affect behavior, the critical factors of these two age groups, and why studying them together is important. With this study, I intended to identify a pattern that can be used for educating parents in better handling the oppositional adolescent.

Background

The colloquial term "three-nager" commonly refers to the 3-year-old acting like a teenager in nonacademic literature (e.g., Roberts, 2016), while other popular sources try to explain why a pubescent teen appears to revert to toddler behavior (e.g., Willis, 2016).

The literature shows what is happening to the toddler and the adolescent emotionally, developmentally, and socially (Casey et al., 2008; Guyer et al., 2014; Steinberg, 2008), but an exhaustive search did not find any research comparing the parental experience at both ages, including discipline attitudes, beliefs, and level of confidence in response to the child's emotional, social, and disruptive behaviors. With so much similarity in these two sensitive periods of development, research showing the importance of continuity of caregiving and the parental relationship (Repacholi & Trapolini 2004; Thompson et al., 2003; Venta & Sharp, 2015), and the seemingly abrupt nonlinear changes in adolescent behavior (Casey et al., 2008), there is a need for more understanding of how the parental experience in the toddler period relates to that of the adolescent period. Adding to the literature with information comparing these two stages of development will provide a foundation for improved training to help parents understand the similarities between the young adolescent and their earlier toddler self. This can lead to reduced parent stress, an increase in positive parent practices, and sense of efficacy, and positively support this significant period of lifespan development.

Problem Statement

Parents seem to manage oppositional conduct of toddlers but struggle emotionally and physically with the oppositional conduct of teenagers, despite similarities in the behavior. Emotional tantrums, direct and passive defiance, and acting out physically (i.e., hitting) are behaviors that are a natural part of growth for the 2- to 3-year-old toddler as new levels of independence are being reached (Davis et al., 2015). The parent of a toddler seems to know how to adjust his or her tone and behavior intuitively to manage a baby's

needs (Young et al., 2015), and there are numerous materials to help teach a young parent how to navigate early childhood. Adolescent teens exhibit behavior like the toddler, including emotional tantrums, direct and passive defiance, and sometimes acting out physically. It is believed that the adolescent is asserting independence while investigating their new position of impending adulthood, with abrupt and occasionally dramatic changes through physical, mood, and behavioral hallmarks (Casey, 2015; Holmes et al., 2016). Some of this dramatic behavior change is due, in part, to a natural shift as a child begins to develop autonomy from parents (McCormick et al., 2016), a transition that can be observed across species (Casey, 2015). Adolescents slowly separate from childhood attachment to their caregivers (Doom, et al., 2015), shifting the attachment to peers as they begin to navigate the challenges associated with the social domain (Forbes et al., 2011).

While the toddler is developing impulse control and learns to self-regulate, the adolescent loses some of their developed ability to manage impulse control and self-regulate, according to recent neurological evidence (Blakemore & Mills, 2014). During puberty, the adolescent brain develops at a fast pace like that of a toddler and experiences a certain level of remodel, with full maturation of the frontal cortex not reached until the early thirties (Casey et al., 2008; Guyer et al., 2014; Steinberg, 2008). The disruptive behaviors accompanying puberty have been investigated and are somewhat understood neurologically, yet parents commonly question the intense emotional disruptions accompanying the developmental shift, sometimes also questioning their parenting skills. The literature shows, separately, similarities between the development and behaviors of a

toddler and a pubescent teen (Casey, 2015; Holmes et al., 2016), but there is no current research comparing the parent's experience of raising children during these two sensitive periods of development. A parent's level of confidence increases as each parenting task is mastered (Moran et al., 2016), and this begins during the child's early years. When a parent starts to struggle with child-rearing tasks, their confidence level suffers, affecting their success (Junttila & Vauras, 2014). Parents educated in the commonalities of the child-rearing experience of a toddler and adolescent along risk/reward development, based on correlations found in this research, could improve the parent-child relationship. Child-rearing and disciplinary actions that were successful with the toddler could be reviewed and revised to age-appropriate actions for the teenager supporting both the child and the parent.

Purpose of the Study

In this quantitative study I compared first-time parents of toddlers ages 18-36 months and first-time parents of pubescent adolescents ages 14-15 years in how they understand and react to parenting their child's emotional, social, and disruptive behaviors and self-regulation. Parenting self-efficacy was also investigated to ascertain the level of confidence a parent has in their child-rearing efforts for each age group.

While I did not observe children, the intent was to compare parents' experiences and perceptions during these two distinct sensitive periods of child development to identify if similarities exist. Including the variable of parenting self-efficacy expanded our empirical understanding of how confidence may play a part in raising a toddler versus raising an adolescent. Parents' observation of their child's social functioning and

emotional self-regulation, the frequency of behavior difficulties, perceptions of these difficulties, and confidence in addressing them, were examined for parallels across the two developmental stages.

Research Questions

RQ1: Does the level of parenting self-efficacy differ between parents of toddler and adolescent periods?

$H_0$1: There is no difference in parenting self-efficacy level between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

H_a1: There is a difference in the level of parenting self-efficacy between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

RQ2: Does parent perception of oppositional behavior differ between the toddler and the adolescent periods?

$H_0$2: There is no difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

H_a2: There is a difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

RQ3: Do parent response patterns to perceived oppositional behavior differ between the toddler and the adolescent periods?

$H_0$3: There is no difference in parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

H_a3: There is a difference between the parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

RQ4: Does parent perception of oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$4: There is no difference in parent perception of oppositional behavior between the toddler and adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a4: There is a difference in parent perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

RQ5: Does parent response to oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$5: There is no difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices

Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a5: There is a difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by Parenting Practices Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

Theoretical Framework

Three theories can be applied to how a parent experiences the development of toddlers and teenagers, Bandura's (1997) self-efficacy theory, and Erickson's psychosocial theory of development and theory of mind (Premack & Woodruff, 1978). Bandura suggested that anxiety reduces the ability to address the source of the anxiety. Parental self-efficacy is a subset of this theory, suggesting that purposeful parenting is based on a high level of self-efficacy (Jones & Prinz, 2005). Erickson (1968), in the psychosocial theory of development, posited that children move through eight successive psychological states, facing increasing vulnerability coupled with heightened potential (p.96) with parents and peers influencing each stage as the child works to meet the expectations of each (Cross & Cross, 2017). In the theory of mind it is suggested that an individual's perception of what others think affects their behavior (Pavarini et al., 2013). Parenting is a crucial factor for this learned skill that develops through adulthood. As children's perception of their relationship with the parent affects their behaviors, the parent's perception of the behaviors is interpreted through perceived emotions, thoughts, and beliefs (Venta & Sharp, 2015). These theories, alone and together, formed the

foundation for several studies presented in Chapter 2, where they will be more carefully discussed.

Nature of the Study

This study was quantitative in design, using survey research methods. Participants were first-time parents of toddlers or teenagers who were surveyed to determine if child age impacts parents' experience and response to oppositional behavior and if parenting self-efficacy plays a role in how the parent responds. Frankfort-Nachmias and Nachmias (2008) referred to this as cross-sectional research, specifically, the contrasted group design. The cross-sectional research design measures multiple factors to determine if there is a detectable pattern between them. Because this was a static group comparison with one set of observations and no control group, other research designs were inappropriate. The variables for this study were parental response to oppositional behavior of adolescents ages 14 years to 15 years and toddlers ages 18 months to 36 months. Parent participants in the United States were invited to participate and asked to complete self-report inventories as further detailed in Chapter 3.

Significance

Significance to Theory

The emotional connection between parents and children is intricately woven into all three foundational theories of my study, and uncovering commonalities in how a parent experiences raising a toddler to a teenager can contribute to their use in parental education programs. Parents showing lower levels of parental self-efficacy have been found to seek out support for raising children exhibiting behavioral and emotional

problems (Sanders & Mazzucchelli, 2013), while children of parents with high levels of self-efficacy have shown higher competence in learning (Steca et al., 2011). Confident parents support identity outcomes outlined in psychosocial theory of development when children are exploring in psychosocially safe environments (Cross & Cross, 2017), and as parents better understand the foundations of children's behaviors and how they are rooted in psychosocial development, they may exhibit more substantial levels of theory of mind when interpreting those behaviors and the emotions behind them (Pavarini et al., 2013).

Significance to Practice

It has been shown that adolescents whose parents are actively involved in monitoring their behaviors are less likely to engage in risky activities (Chang et al., 2014), pointing to the parent-child relationship being a critical factor in children's behavior. It has also been shown that the parent-child relationship directly affects neural development (Qu et al., 2015). Parents, armed with a better understanding of adolescent development and comfortable knowing the behavior is typical of development and most likely short-term, may be able to develop both coping skills and safe boundary strategies to support the teenager in safer decision-making during this sensitive period of development. Showing parents that they already have the experience and tools to address these behaviors by age-adjusting previous toddler parenting skills may improve parents' sense of efficacy and parenting practices. Professionals may be able to expand empirically validated modern parental educational programs to incorporate the concept of the "three-nager" while comparing the experience of parenting an adolescent to that of the toddler.

Significance to Social Change

This research may better clarify behavioral correlations between adolescents and toddlers. The outcome can contribute to the further development of additional components of parenting education, supporting parents of adolescents in utilizing strengths that they may have developed with their children as toddlers. As the parent has a stronger framework for better understanding adolescent behavior, there may be a reduction in stress and confusion, leading to improved parent-adolescent interactions. Improving parent-child interactions may support positive family dynamics and adolescents' ability to form healthy boundaries with peers.

Summary

Parenting a toddler and parenting an adolescent has been reported as similar in nonempirical literature, but there is no direct evidence linking the two periods as similar for the parent's experience. With recent literature connecting these two child development periods neurologically, it would stand to reason those behaviors and parental responses can also be linked. I aimed to show these similarities in the parent's experience. This chapter introduced this quantitative study and provided an overview of the purpose and need to explore further the similarities of raising a toddler to raising a teenager. In the next chapter, relevant research on childhood development, parental experiences, and the value of self-efficacy in raising children is discussed, leading to the need for additional research in comparing the parent's experience raising these two challenging age groups.

Chapter 2: Literature Review

Introduction

Oppositional behavior is expected during childhood at any given time, but especially during the early toddler years (Davis et al., 2015), colloquially known as the terrible twos and threes. Adolescent teens appear to go through a similar period of asserting independence while investigating their new position of impending adulthood, causing an abrupt and sometimes dramatic change through physical, mood, and behavioral hallmarks (Casey, 2015; Holmes et al., 2016). This acting-out behavior of adolescence is often compared to that of a defiant toddler leading to the idiomatic term "three-nager." Social contexts, including parenting, can be significantly impacted in humans (Casey, 2015). If the parent's experience of raising an adolescent is like that of raising a toddler, then theoretically, similar actions that worked with the toddler may work with the adolescent when adjusted for the age group.

It is well understood that parenting is a key factor in childhood brain development. For adolescents, how the parent manages parental attachment while supporting a natural move towards separation can directly affect neural development (Qu et al., 2015). Qu et al. (2015) studied 23 adolescents comparing fMRI scans taken approximately a year and a half apart and self-reporting measures assessing sense of parental support, disclosure to parents, and conflict with parents. Results suggested that positive parenting, such as compassionate limit setting, open honest discussions, and consistent interactions, decrease risk taking and improves cognitive development. McCormick et al. (2016) studied 20 adolescents during two fMRI scans occurring 1 year

apart, at ages 14 and 15 respectively, along with self-report measures assessing family conflict, and found negative parent-child relationships (i.e., over-reaction, inconsistency, and physical punishment) increases neural activity that increases risk-taking activity. McCormick et al. discussed how the quality of the family relationship affects risk-taking in early adolescence and how negative family contexts were related to patterns of neural change. The authors suggested additional research is needed to better understand the parent's perspective of how the parent-child relationship is affected by puberty.

From a nonneurological perspective, Klahr et al. (2011) studied 672 adolescents in 405 adoptive families and showed that parent-child conflict can be a contributor and possibly a predictor of behavioral conduct problems. Klahr et al. showed how parent-child conflict predicted the development of conduct problems yet conduct problems do not predict increases in parent-child conflict. These authors presented evidence that the parent-child relationship, particularly how the parent interacts with the child, is a primary factor in adolescent behavior and risk taking. While none of these articles outlined thus far suggested that a particular parenting style can stop conduct problems or risk taking, it is inferred that positive parenting and less oppositional approaches to conduct problems may improve the adolescent's cognitive ability and increased family harmony for the adolescent the parent.

To help understand this topic of parent-child relationships, comparatively, during the two developmental sensitive periods of toddler and adolescence, I examined studies related to the following themes: early childhood predictors for adolescent behavior,

oppositional behavior, developmentally sensitive periods, adolescent risk-taking, parent-child relationships, parental self-efficacy, and emotional attention and regulation.

Literature Search Strategy

Google Scholar was used as a primary search resource to direct attention to peer-reviewed journals publishing studies under these topical headings. Keyword searches included the following: *parent-adolescent, parent-adolescent attachment, parent-adolescent interactions, parenting adolescents, adolescence, puberty, development, oppositional behavior, parenting, parent self-efficacy, parental coping, adolescent impulsivity, family relationships, parent-child relationships, parent experience of opposition,* and *psychosocial theory parenting*. Each search term was used independently with a date range limitation of 2013 or later. Databases most often accessed included ProQuest Central, PsycARTICLES, PsycINFO, PubMed, SAGE Premier, ScholarWorks, ScienceDirect, Taylor and Francis Online, Academic Search Complete, EBSCO Open Access Journals, Annual Reviews, CINAHL Plus, ScholarWorks, and MEDLINE with Full Text. Further searches, using the same search string without the date limitations, were made in each of these databases to assure no relevant studies were missed. In selecting studies to review, literature that was relatively current and no older than 7 years old was accessed. Most of the studies (54%) included in this literature review were published later than 2013. Those studies published before 2013 are used as supportive references to establish the validity of declarations further.

Theoretical Foundation

Three theories can be applied to how a parent experiences the development of toddlers and teenagers: Bandura's (1997) self-efficacy theory and Erickson's (1968) psychosocial theory of development and theory of mind (Premack & Woodruff, 1978). Bandura suggested that anxiety reduces the ability to address the source of the anxiety . Parental self-efficacy is a subset of this theory, suggesting that purposeful parenting is based on a high level of self-efficacy (Jones & Prinz, 2005). I used these three theories to develop the foundation for my study.

Parental Self-Efficacy Theory

Moran et al. (2016) suggested that parental self-efficacy is dynamically associated with a parent's experience, particularly during early childhood. As each child-rearing task is mastered, such as diapering or safety proofing a home, the parent feels more confident to tackle new challenges. If a parent struggles with a task, then levels of self-efficacy diminish, potentially affecting future unexpected challenges. Malm et al. (2017) studied 185 fourth and fifth graders and their parents to determine how parental self-efficacy affected bullying and peer victimization behaviors. The authors found that a parent's self-efficacy in knowing when their child was being bullied contributed to fewer reports of peer victimization. This same study found that high levels of self-efficacy in parents responding to a child being bullied were associated with higher victimization reports. They posited this could be because the response strategies were not effective. Sanders and Mazzucchelli (2013) reviewed interventions focused on parental self-regulation and pointed to a low level of self-efficacy as a primary reason for parents to seek out

programs to support them with children exhibiting significant behavioral and emotional problems. Steca et al. (2011) studied 130 Italian teenagers at age 13 and 17 in a two-phase longitudinal study and found that adolescent children of parents with high levels of parenting self-efficacy showed higher competence in learning activities and confidence in family and peer interactions. Junttila and Vauras (2014) studied 981 fourth graders and their parents to determine if parenting self-efficacy affected school-related social competence and found that children of parents with strong parental self-efficacy showed more prosocial aptitude. As more is learned about the parent's experience rearing young toddlers and pubescent teens a connection can be seen about how confidence affects action.

Psychosocial Theory

Erickson (1968), in his psychosocial theory of development, suggested there are eight successive psychological stages of human development. As the child moves through each stage, he or she is faced with a critical "period of increased vulnerability and heightened potential" (Erikson, 1968, p. 96). As each stage is attained, the child develops improved judgment and confidence in the capacity to achieve the standards of that stage and meet the expectations of those important to him or her. Parents and peers are critical to identity outcomes when adolescents explore psychosocially safe or unsafe environments (Cross & Cross, 2017). All of Erikson's stages of development require healthy interactions with adults for positive advancement (Green et al., 2016). The first and second stages; trust versus mistrust and autonomy versus shame, specifically relate to caregiver interactions. During Stage 2, autonomy versus shame, a toddler is learning

independence through experiencing increased mobility with positive interactions and support from caregivers improve the toddlers' level of confidence in exploring more. Lack of caregiver support can induce feelings of discouragement and lack of confidence (Green et al., 2016). Kerpelman and Pittman (2018) reviewed research founded in Erickson's identity theory and interpreted the theory as the result of managing through conflicts within close relationships and the self-awareness that forms from it. Erikson believed the primary result of adolescence is a strong sense of identity, an outcome of the stage identity versus role confusion (Cross & Cross, 2017), developed by trying on different lifestyles and personalities to find their true self. Youth tend to be painfully concerned about what others think of them in that identity formation, and the parent-child relationship provides a foundational backdrop for this formation (Sokol, 2009).

Theory of Mind

Theory of mind refers to how emotions, thoughts, and beliefs affect human behavior (Pavarini et al., 2013). This includes an understanding of how one's own theory of mind and perception of other's theory of mind interacts and conflicts in social situations affecting our ability to understand and interact with one another. Theory of mind is not an innate trait and is developed through young adulthood, with the literature categorized in the social development space focusing on children at different levels of progression (Hughes & Devine, 2015). With theory of mind as a learned skill, parenting and the home environment must strongly contribute to an individual's ability to mentalize the thoughts and behaviors of others in a social situation.

Early work in theory of mind has only focused on preschoolers and beyond; however, more recent work shows that infants and toddlers exhibit understanding of other's mental states (Leblanc et al., 2017). In a study of 227 toddlers with siblings, Leblanc and partners studied environmental influence on a toddlers' theory of mind. They found that toddlers with older siblings performed similarly to their siblings on two tasks to measure discrepant desires and visual perspective taking while toddlers with younger siblings did not perform as well as their peers. The authors believed this provides further evidence that family factors are involved in the development of theory of mind at an early age. Parenting is a critical component in children's development of theory of mind (Pavarini et al., 2013). A child's perception of the relationship with a parent, as secure or insecure, can have a broad effect on how the child later perceives social interactions. Parents too are interpreting their child's behaviors through perceived emotions, thoughts, and beliefs, thus demonstrating this skill, and creating a sense of secure attachment or insecure attachment for the child. Venta and Sharp (2015) studied 271 adolescents of an inpatient psychiatric hospital and found correlations between insecure attachment, problems with peers, and theory of mind. These findings supported prior studies indicating that insecurely attached adolescents tended to interpret social information with a negative bias. If parents and children do not learn to interpret each other's nonverbal cues, it may affect the child's ability to interpret others in social situations.

Literature Review Related to Key Variables

Early Childhood Predictors of Adolescent Behaviors

Some researchers have found that behavioral inhibition seen in a young child could predict similar inhibitions during that child's adolescence (Guyer et al., 2014). Guyer et al. (2014) presented evidence that showed how early childhood temperaments correspond to temperaments during adolescence, furthering the comparison of toddler and adolescent behavior. In this mixed-method longitudinal study of 433 children from 4 months to 7 years of development, with the final sample of 49 children in late adolescence, the authors found that neural response patterns to peer interactions of the behaviorally inhibited adolescents were different from that of the behaviorally noninhibited. The inhibited child tended to be anxious when anticipating responses from selected peers, while the behaviorally noninhibited children showed anxiety when anticipating responses from nonselected peers. This not only shows similarities in the toddler and later adolescent, but it also points to confidence levels as a possible contributor to teen anxiety. This supports the need to answer how parental levels of self-confidence contribute to the child's emotional development.

Guyer et al. (2014) did not claim a causal relationship but did show some correlation to early childhood temperaments corresponding to temperaments during adolescence in which the behaviorally inhibited child tends to socially withdraw or exhibit difficulties with peer engagement. When Lahat et al. (2012) pulled data from subjects in a longitudinal temperament study at ages 14 months, 24 months, 4 years, and 7 years, they made assertions that early childhood behavioral inhibition could also predict

an inclination to substance use during adolescence, but again did not claim a causal relationship. These findings could support the hypothesis that a parent remembering how they coached and protected their toddler might use those experiences as foundations for coaching and protecting their adolescent child, who may exhibit issues of social inhibition and isolation.

Developmentally Sensitive Periods

Fuhrmann et al. (2015) reviewed the literature investigating adolescence as a sensitive period of development and showed how, during these periods, social interactions can affect memory, social stress processing, and risk taking. A sensitive period is defined as a time when neuronal plasticity is heightened, and the nervous system is highly adaptable to environmental demands, experiences, and physiological changes (Fuhrmann et al., 2015) Experience is particularly important during a sensitive period as it customizes the developing neural circuitry to the needs of the individual.

The most well-documented sensitive period in human childhood is the first 3 years of life (Fuhrmann et al., 2015). In a study of 136 abandoned and institutionalized children in Bucharest, Nelson et al. (2007) found that those left in institutions through age 3 and beyond were markedly behind those never institutionalized and those placed in foster care earlier in life. Adolescence, a period of life marked by increasing emotional expression and risk-taking behavior (Qu et al., 2015), is also believed to be a sensitive period for neurological development in which experiences and environmental demands have increased impact (Fuhrmann et al., 2015). From a cognitive-behavioral perspective,

one is left to wonder if this theoretical sensitive period and the heightened responses to experiences contribute to the parental angst of raising a teenager.

Oppositional Behavior

Wahler (1969) defined oppositional behavior as directly opposing requirements set by authority figures, such as parents, schools, and communities in general. Lahey et al. (2000) used secondary data of 1,285 youths aged 9-17 years and further defined the behaviors that are considered oppositional as those of losing one's temper, arguing, defiance, annoying others, blaming others, aggressive touch, as well as angry and spiteful conduct. Their analysis showed that levels of oppositional behavior were greater in the younger years but turned more towards aggression during adolescence. While these behaviors are like that of oppositional defiant disorder as described in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013), the disorder is characterized by behavior lasting at least 6 months, causing clinically significant impairment in social or academic functioning. More typical oppositional behavior is limited to intermittent experiences typical of age-related developmental behavior.

While oppositional behavior can be experienced with both toddlers and adolescents, neurological evidence shows similarities in the pace of development between the adolescent brain during puberty and that of a toddler, with full maturation of the frontal cortex not reached until one's 30s (Casey et al., 2008; Steinberg, 2008). Development of the frontal lobe, particularly as it relates to suppressing impulses, progresses rapidly during the late toddler years (Rothbart & Bates, 2006). During

puberty, the socioemotional network, localized in the limbic and paralimbic areas of the brain, is heavily remodeled by hormonal changes (Steinberg, 2004). This abrupt remodeling, coupled with the ongoing development of the neural cognitive control network (frontal lobe), causes the socioemotional system to be highly activated, affecting impulse control of the adolescent (Romer et al., 2010; Steinberg, 2007). This evidence could account for the similarities in oppositional behavior between toddlers and adolescents.

Adolescent Risk Taking

Emotions and risk taking have been known to increase dramatically during the period of adolescence (Qu et al., 2015). In popular and social media, parents report stories of a child who is well behaved and compliant one day, only to wake up exhibiting abrupt and sometimes dramatic changes through physical, emotional, and behavioral hallmarks (Dorn et al., 1990). Risky decision making is a social hallmark of the adolescent developmental years (Blakemore & Robbins, 2012). Studies have shown that the prefrontal cortex is a key structure related to decision-making, and this structure develops slowly and nonlinearly in adolescents (Blakemore & Robbins, 2012). This results in uninhibited responses to risky situations due to the nonlinear, rapidly increasing development of the neural reward system, which involves several other key brain regions (Yager et al., 2015). While parent-child relationships may not directly affect this reality, more positive relationships between the parent and child have been found to result in reduced risk taking (Qu et al., 2015). Better understanding of how the parent experiences the adolescent period of development could lead to improved parent-child interactions.

The reward center of the brain, particularly the ventral striatum, shows heightened activity in the adolescent when rewarding stimuli are presented (Telzer et al., 2013), while there is less activity in the prefrontal cortex involved in cognitive control when risk is associated with the rewarding stimuli. This concept has been referred to as the developmental mismatch hypothesis (Mills et al., 2014), which points to the neurological immaturity of the adolescent's ability to evaluate risk. This mismatch between the ability to process reward versus risk is heightened during puberty and has been suggested as the foundational explanation for stereotypical adolescent behaviors associated with heightened emotions and risk taking (Mills et al., 2014). While this phenomenon is becoming better understood, there is still some question about how social contexts influence the development of these important neural systems. Crone and Dahl (2012) performed a meta-analysis of adolescent neurological research and suggested that frontal cortical immaturity, as an explanation for dangerous behaviors and impulsivity often associated with adolescence, is not supported by neuroimaging studies. Rather, the authors suggested that the behaviors are more related to social-affective processing and intrinsic motivators based on social contexts in adolescent development.

Blakemore and Robins (2012) reviewed studies related to adolescent decision-making and found that adolescents are particularly likely to make risky decisions when emotions are high, and peers are present. This behavior results in increased activation of the reward system that is naturally super responsive during adolescent development. The combination of a difference in developmental timing between the neural reward system and impulse control center causes the adolescent to be hyper-responsive to pleasurable

experiences and relatively unaware of the consequential negatives that can occur. How the parent handles the child's risky behavior may help strengthen the frontal cortical immaturity potentially reducing the level of danger in the behavior.

Emotional Attention and Regulation

The amygdala and its functional cortical connections are heavily involved in emotional attention and regulation, with connectivity changes over the entire period of neural development. Prefrontal cortex-amygdala coupling has been shown to be relatively insignificant in early childhood, but a change point to significance was found during adolescence (Gabard-Durnam et al., 2014). What is clear from this research is that amygdala-cortical connectivity is dynamic during childhood and gradually moves towards stabilization with the amygdala-prefrontal functional connections maturing late in adolescent development. The effect of peer affiliation becomes heightened in adolescence as thoughts and behaviors turn towards obtaining peer approval and avoiding peer criticism (Guyer et al., 2014). Research on the neural systems of threat processing during puberty (Forbes et al., 2011) found that ambiguous social stimuli resulted in stronger amygdala response in a young person. This suggests that the adolescent sees ambiguous social stimuli as a potential threat.

While a young child shows high reactivity to a negative facial expression, adolescence is marked with reduced reactivity and expression to negative facial images, suggesting internalized responsiveness (Forbes et al., 2011). Swartz et al., (2014) used fMRI, psychophysiological interactions, and self-report measures to study facial expressions of subjects from ages 9 to 19. The researchers found that structural

connectivity that creates a critical link between the prefrontal cortex (impulse control) and the amygdala (fight or flight) increases with age (Swartz et al., 2014). This connectivity plays an important role in emotion processing and regulation that may be more variable during adolescent development, and the research supports strong anecdotal observations of pubescent teens exhibiting unpredictable emotional responses to stimuli that does not match the condition.

Parent-Child Relationships

The parent, or other adult caregiver, is integral to children's healthy physical and emotional development. In addition to providing a safe environment for the child to grow, a parent's responsibility is to provide a secure base from which the child takes certain risks to gain new experiences and learn new skills (Bowlby, 2005). Adolescent teens entering puberty and going through intense neurological adjustment (Steinberg, 2004) can sometimes change temperament over a very short period. Parents or caregivers unprepared for this rapid change in disposition may struggle with how to approach boundaries and discipline (Dorn et al., 1990).

Klahr et al., (2011) studied 672 adolescents in 405 adoptive families at two points, approximately 4 years apart, to determine if family conflict affected adolescent conduct. They showed that parent-child conflict could be a contributor and possibly a predictor of behavioral conduct problems. These authors presented evidence that the parent-child relationship, particularly how the parent interacts with the child, is a primary factor in adolescent behavior and risk-taking. Understanding the evolutionary underpinnings for adolescent behavior and comparisons to cross-species development is valuable to

supporting adolescent development (Casey, 2015). A parent will typically accept the toddler who often says no to a request, as this is a known part of natural development. However, the emotionally defiant adolescent is seen as antagonistic or inappropriate when this too is part of natural development (Casey, 2015). Parental response to adolescent behavior can be instrumental in neurological development and resulting long-term social outcomes (Brenning et al., 2012).

Parents or caregivers can sometimes be observed responding to children's emotional outbursts with equal emotive reactions. The theory of emotional contagion (Hatfield et al., 1993) suggests that humans tend to automatically mimic body language and vocalizations with those they are engaged with. As an adolescent becomes oppositional, it is not uncommon for the parent to respond in kind. How the parent manages his or her own behavior, and the emotional safety of the adolescent can have far-reaching effects on healthy relationships and confident risk-taking later in life (Gorrese & Ruggieri, 2012).

Beijeersbergen et al., (2012) performed a longitudinal study of 125 early adopted adolescents to identify how parental sensitive support affected the continuity of attachment from infancy to adolescence. The authors used the Strange Situation procedure (Ainsworth & Bell, 1970) at 12 months old and the Adult Attachment Interview (George et al., 1985) when the child was 14 years old. They found that maternal sensitivity during teen conflict was key to the security of the adolescent regardless of maternal sensitivity during infancy. A mother who is able to be sensitive to the emotional outbursts of an adolescent may assist the child with managing the response.

Brenning et al., (2012) examined how attachment and emotion were affected by parental responsiveness and autonomy support. They studied 339 Belgium secondary school students, aged 12-14, using the experiences in close relationships scale (Fraley et al., 2000) and found that parental support was indeed related to levels of attachment dimensions and emotional regulation strategies in the adolescent. Jiang et al., (2013) added to this research by studying 565 middle school students, grades sixth through eighth, to determine how global life satisfaction was affected by parent attachment. The authors found that the parent-child relationship was a significant factor in adolescent life satisfaction.

Common to the adolescent period of development is oppositional behavior towards parents to the point that the familial relationship is challenged (Qu et al., 2015). So much of this behavior may be attributed to neural development, particularly the remodeling of the part of the brain that controls impulse control, the pre-frontal cortex, and executive functions, as well as the closely connected limbic system (Casey et al., 2008). During their longitudinal fMRI study, Qu et al. (2015) confirmed that the parent-child relationship did not affect the risk-taking in general but did show that positive familial interactions were related to decreased activations in the reward system during risk-taking, thus making the experiences less exciting and pleasurable.

Telzer et al. (2013) suggested that increased responsibility with family obligations that support the full household can lead to greater self-confidence and overall wellbeing in the adolescent family member. In a mixed-method study using fMRI and self-report assessments, the authors studied 48 adolescents ages 14-16 from Mexican backgrounds

and found that associated feelings of meaningfulness and intrinsic reward may support reduced risk-taking by fulfilling the need to feel valued. However, there is another side to this theory. Neuroimaging shows dampened response of the reward system when the reward is associated with risk, which could hurt the family unit (Telzer et al., 2013). Telzer et al. (2013) showed that risky behavior may reflect poorly on the family unit where all participants have obligations for family wellbeing. Therefore, the consequences become more significant and the reward of the risk less appealing, resulting in reduced activity in the reward center.

Strong family obligation common in families of Mexican descent and the associated values commonly instilled in Mexican children underscore the important protective role that family plays in adolescent development and responding to risk factors (Telzer et al., 2013). As adolescents spend increasingly less time under their parents' supervision, the disclosure of activities may provide opportunities for parents to give their children advice and support, provided they have a reasonable level of self-efficacy, something they would be unable to provide without knowledge of their child's behaviors. Greater family obligation values may help adolescents feel more connected to and supported by their family and may be more willing to share their daily experiences with their families (Telzer et al., 2013). This study underscored the importance of the parent-child relationship in risk response and dealing with peer pressure.

Child Behavior Effect on Parents

There is ample research showing how the parent influences the child's development, however, there is very little empirical discussion about how a child's

oppositional behavior influences the parent. Parenting includes both wonderful and challenging aspects of child-rearing, and the more difficult tasks such as setting firm limits, pushing for cooperation, or discipline require enough motivation on the parent's part for effective execution (Shaffer & Obradovic, 2017). Years of research shows that children are affected by their parents and parents' behaviors are affected by their children (Collins et al., 2000). However, parenting psychological functioning, particularly self-regulation, is often marginalized in parenting training interventions. Shaffer and Obradovic (2017) studied 102 primary caregivers and found that parent self-control was positively associated with sensitive/responsive behaviors, while parents reporting difficulties in emotional regulation led to lower levels of positive behaviors. The authors recommended that parental interventions focus on the role of self-regulation skills to help the parent recognize when their own self-regulation may be challenged by their children.

Disciplinary actions center around the child and their wellbeing, yet misbehavior leading to the discipline can elicit negatively charged thoughts and emotions from the parents (Lorber & O'Leary, 2005). Lorber and O'Leary (2005) studied 93 mother toddler dyads in a laboratory setting. Mothers who rated their children as negative, behavior not seen as negative by objective observers, were seen to practice and self-report overactive discipline. Their findings pointed to a child's misbehavior directly influencing the mother's cognition and emotion, leading to overactive discipline. In other words, parents' and children's actions evoke responses in each other. As a parent struggles with their own self-regulation, it, in turn, affects their child's regulatory functioning (Rutherford et al., 2015).

Parental Self-Efficacy

Parents' confidence in their skills, knowledge, and abilities for raising children is referred to as parental self-efficacy (Malm et al., 2017). Studies have shown both direct and indirect links between parental self-efficacy and child functioning, including improved physical recovery of ailments, lower levels of anti-social behaviors, and higher socioemotional aptitudes (Malm et al., 2017) Bandura (1997) first defined the concept of parenting self-efficacy as part of his self-efficacy theory. Bandura believed that levels of personal self-efficacy determined the amount of effort a person would apply to face, address, and cope with obstacles and unfavorable experiences. As anxiety arouses a fear response, the person feels less able to adequately address the source of that anxiety and therefore becomes defensive and, in some cases, non-responsive. Conversely, as the person successfully faces challenging experiences, levels of self-efficacy increase, thus reducing defensive behaviors associated with them through fear extinction.

Mouton and Roskam (2014) studied the relationship between a mother’s level of self-efficacy and her child’s behavior. In their study of 42 mothers and their 4-5-year-old preschoolers, the authors found that a mother’s self-efficacy can be improved through social learning, leading to reduced frustration for the mother, improved behavior for the child, and improved parent-child relationships. There is some evidence that efficacy beliefs form the baseline for parenting practice; however, it is not considered a fixed trait (Bandura, 1997; Mouton & Roskam, 2014), and thus parenting self-efficacy is learned through experience, observation, and education. A high sense of self-efficacy is thought to help parents cope effectively with children acting in an oppositional and defiant

manner (Mouton & Roskam, 2014), while lower levels of parental confidence have been associated with parental anxiety and depression, potentially reducing the ability to address child behavior in a healthy manner. While there are studies on parental self-efficacy and its effects on parenting practices, there are limited studies on how parental self-efficacy affects various dimensions of family functioning (Carless et al., 2015).

Summary and Conclusion

Parents and children seem to develop interactive coping skills together, starting when oppositional actions are "cute" during the toddler years. However, during adolescence, the child loses clarity of their developed coping skills with the flood of new hormones (Rothbart & Bates, 2006). During this time, the parent may struggle to see this oppositional behavior as part of the natural developmental process. Some teenage behavior can be confusing to adults as it appears to be at a high level of intensity. Positive experiences create euphoric emotional thought, while negative experiences create emotional thought that is catastrophic (Rothbart & Bates, 2006). Associated behaviors, especially those covered heavily by popular media, such as school shootings and suicide, are often explained away as mental or pathological phenomenon (Johnson et al., 2009).

The literature is limited comparing toddler to adolescent behavior as developmental periods tend to be studied in isolation (Casey, 2015). With so much similarity in the two short term phases of toddler and adolescent development, and the seemingly abrupt nonlinear changes in adolescent behavior (Casey, 2015; Holmes et al., 2016), understanding that brain development of the two is similar in magnitude (Marceau

et al., 2015) may help parents redefine how they interact with their teenager during a cloud of new hormonal confusion.

Though Qu and colleagues (2015) found that positive parent-child interactions helped reduce risky behaviors in adolescence, there was no data included accounting for how the maturational and pubertal changes, and subsequent behavior changes, affected the parents. As I have shown in the literature summarized in this paper, there is significant long-term importance to neurological development during the period of adolescence. From social interaction and skill development to appropriate response to risk-taking, how the adolescent experiences this period of life can affect later adult social interactions. From changes in the familial relationship to individual self-efficacy, healthy navigation of this crucial period is important to both the adolescent and the parents.

Families subjected to chronic stressors such as low socio-economic risks or chaotic household environments have vulnerabilities in the intergenerational regulatory processes (Deater-Deckard, 2014). Parents are challenged with regulating the home environment while regulating themselves and helping regulate children. It is possible that understanding the cycle of the intergenerational regulatory process could help with understanding how the period of adolescence affects the parents and the household environment. Parental response to behaviors during the adolescent period of development can be instrumental in neurological development and long-term social outcomes (Brenning et al., 2012).

While research has shown how the parent influences the child's development, there is very little empirical discussion about how the child's behavior influences the

parent, potentially affecting their ability to nurture the child effectively. This research into parents' perceptions, practices, and levels of parenting self-efficacy in response to a child's emotional, social, and disruptive behaviors during these two sensitive periods of child development aimed to empirically elucidate commonalities that can be used to educate and support parents in coping with and managing the impulses of an adolescent as well as show how the child's behavior affects the family dynamic.

By studying parental response to oppositional behavior of an adolescent (14-15y) compared to a child during infancy/toddler development (18m-36m), this research intended to determine if the responses differ or are similar in these periods of development and if parental self-efficacy plays a part in the patterns. Validated similarities in the parent's perception and response to these two sensitive age groups and incorporating this research into parental education could guide adults in making more informed, thoughtful responses to challenging child interactions, potentially leading to improved neurocognitive development.

Chapter 3: Research Method

Introduction

This chapter will introduce the research methodology used for this quantitative study focused on comparing parental response to oppositional behavior of an adolescent (14-15y) as compared to a child during infancy/toddler development (18m-36m) to determine if child age impacts parents' experience and response to oppositional behavior, and if parenting self-efficacy is a contributing factor to how the parent responds Validated similarities may provide a foundation for developing parent education aimed specifically at supporting the development of the teenager. The research plan, including methodology, research questions, analysis, participants, and procedures, will be discussed in this chapter.

Research Design and Rationale

The dependent variables for this research were the parent's response to the oppositional behavior of their child and their sense of self-efficacy. The independent variable was the age group of the child (toddler or adolescent). The study design was quantitative and used the survey research method. Participants were first-time parents of toddlers or teenagers and, therefore, the participants did not have prior parenting experience of their child's age group. Frankfort-Nachmias and Nachmias (2008) referred to the study approach as cross-sectional research, specifically, the contrasted group design. The cross-sectional research design measures multiple factors to determine if there is a detectable pattern between them. Because this was a static group comparison with one set of observations and no control group, other research designs would not be

appropriate. Using predefined measurement tools with reinforcing psychometric properties supported internal validity of the research design.

Methodology

I examined parental response to oppositional behavior of adolescents ages 14 to 15 years and toddlers ages 18 months – 36 months. These parameters were selected based on neurological evidence that the development, and redevelopment, of impulse control is at its peak during these ages (Casey et al., 2008; Guyer et al., 2014; Steinberg, 2008). This led to two populations of interest, first-time parents of adolescents and first-time parents of toddlers. It was believed that by only including first-time parents who were experiencing these developmental age groups for the first time would lead to increased clarity of data. These parents will have no preconceived notions or expectations based on experience with raising the particular age group.

Sampling

The sampling frame for parents of adolescents was parents with their first child of age 14 – 15 years old who live in the United States. The sampling frame for parents of toddlers was parents with their first child of age 18 – 36 months old who live in the United States. The sample size expected was a minimum of 269 participants, with the goal to acquire 300 responses and each group representing close to 150 participants. Sample size was calculated using the tool G*Power 3 (Faul et al., 2007) for *t* tests, difference between two independent means, power analysis of a priori with input parameters of 0.5 effect size, .05 alpha, at 0.95 power.

Procedures for Recruitment

Using a probability cluster sample technique and selecting the United States as the geographical area, social media target marketing (including Facebook, Instagram, and Snapchat), the Walden participant pool recruitment, and Google advertising were employed. The final participant pool was based on those who responded to the study invitation making this a convenience sampling strategy within the cluster technique. Electronic invitations were provided through each group targeting first-time parents with children ages 18-36 months and 14-15 years. Each electronic invitation included a brief link to the study website, which included a detailed overview of the study, study goals, and an explanation of the data collection method. A phone number to contact me was included if a participant wanted to refer someone who does not use internet resources resulting in a mailed invitation. Three self-assessment instruments were included and responses were collected via web-based forms accessible using a direct survey link included in the study website. Mailed assessments were given as an option, including written consent information, paper questionnaires and a self-addressed stamped envelope for their secure return, and a private fax number to be received at my location if the participant so chose; however, no mailings were requested. The final study results were included on the study website for participants to review upon completion.

Limitations and Delimitations

All data was collected using self-reporting methods. A risk to self-reporting was the ability of participants to be properly introspective to assess themselves accurately. In addition, there was an implicit expectation that participants would be honest and sincere

in their answers over responding in a socially desirable manner. Study participants sometimes provide socially desirable responses to present a favorable image of themselves (Van de Mortel, 2008).

Since the sampling strategy was limited to the United States, there was some concern about overall population representation. The area selected had reasonable diversity in demographics and one measure, the measurement tool Eyberg Child Behavior Inventory (ECBI), has some questions about reliability within the African American population. Race/ethnicity was tracked, and a one-way ANOVA will be used to examine scale differences by child race/ethnicity.

Measurement and Instruments

Three measurement tools were presented to participants of the study. The ECBI (Eyberg & Pincus, 1999, see Appendix A), the Parenting Practices Inventory (Fast Track; Conduct Problems Prevention Research Group [CPPRG], 1992, see Appendix B), and the Parenting Sense of Competence (PSOC) Scale (Gibaud-Wallston & Wandersman, 1978, see Appendix C) were selected due to their direct applicability to the research questions, as they can assess perceived oppositional behaviors of children, parent response patterns, and parenting efficacy. In addition to scale instrument collection and age group, demographic variables were collected for secondary analysis to determine any correlations to gender or ethnicity. The age variable was collected as a numeric entry within two measures, the first being two digits indicating months for toddlers, from 18 to 36 months, and the second being in years as a two-digit age of 14 or 15 years old. The variable gender was collected as well as race/ethnicity on a nominal scale using

categories set forth by the National Institute of Health to include American Indian or Alaska Native, Asian, Black, or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, and White.

Eyberg Child Behavior Inventory

The ECBI is a 36-item questionnaire providing two sets of scores. The first score is intensity, measured on a 7-point Likert scale, which measures the frequency of behavior problems through an overall score of disruptive behavior severity. Each item describes a behavior (i.e., Dawdles in getting dressed) with answers ranging from (1) *never* to (7) *always*. The problem score reflects parental tolerance for the behavior, asking the parents to identify if the previously described behavior is a problem for them, with answers of *yes* or *no*. The measure has two clinical cutting scores of 131 for intensity and 15 for problem, with higher scores suggesting the need for treatment (Eyberg & Pincus, 1999).

The ECBI was created by Eyberg in the 1970s and was originally standardized on parents of preadolescent children in 1980 and parents of adolescents in 1983 (Eyberg & Robinson, 1983). There is strong evidence that the ECBI is a valid measure, especially with the White population (Funderburk et al., 2003), with high internal consistency and 1-week test-retest reliability have been demonstrated (Robinson, Eyberg, & Ross, 1980.)

The inventory has been standardized on many culturally diverse populations globally. In 2007, The ECBI was evaluated (Gross et al.) with a U.S. population of 2 to 4-year-old children (N = 682) tracking for race/ethnicity, African American, Latino, and non-Latino White), socioeconomic status, child gender and ECBI language (English and

Spanish.) From a three-way ANOVA analysis, no main effects were found for income or gender for either the Intensity or Problem scales however, there were significant race/ethnicity effects found for the intensity scale, $F(2, 670) = 4.7$, $p < .01$. Children of African American parents received significantly lower Intensity Scale scores (M=82.6, SD = 31.2) than children of Latino (M=89.6, SD=30.7) and non-Latino White (M=91.3, SD=27.6) parents. The Problem Scale means found no race/ethnicity effects, and no significant interaction effects were found for race/ethnicity, income, and gender for either scale. As my study was focused on a U.S. Population, a variable for race/ethnicity was added to the final analysis.

Parenting Practices Inventory

The Fast-Track prevention program is a longitudinal project of the CPPRG that began in 1991 to test a comprehensive intervention to assist children with social skills and academic competencies (Dodge et al., 2015). The Parenting Practices Inventory (PPI) (Fast Track; CPPRG, 1992) was developed for the Fast-Track Project to measure parent's disciplinary permissiveness, the effectiveness of their discipline, and consistency of disciplinary action. The PPI is a 17-item measure with answers coded on a 4-point Likert scale describing specific frequency ratings from (1) *never* to (4) *often*. The items have been factor analyzed (Lochman, 1995), with three factors for consistency (e.g., “If a punishment has been decided on, how often can your child get you to change it by explanations, arguments, or excuses?"), punitiveness (e.g., "How often do you yell at your child?"), and ineffectiveness (e.g., "How often does your punishment make your child behave better?"). Full psychometric analysis could not be found for this measure. In

a comprehensive search for a parent practices inventory with reliability and consistency metrics, none were found. A few scales were identified with limited, nonpeer-reviewed psychometric analysis but were more focused on harsh parenting practices.

Parenting Sense of Competence Scale

The Parenting Sense of Competence Scale (PSOC) was originally designed by Gibaud-Wallston and Wandersman (1978) to measure mother's perceived competence with their infants and included two scales: Value/Comforting and Skills/Knowledge. The instrument was updated in 1989 by Johnston and Mash to include both gender pronouns, change the item wordings from "infant" to "child" (Ohan & Johnston, 2000), and adjust the names of the two scales to Satisfaction and Efficacy. The focus of this instrument is to measure parent's satisfaction with their parenting role and perceived competence in said role. It includes 17 items answered on a 6-point scale ranging from "strongly disagree" to "strongly agree." The items applicable to the Efficacy scale are worded in a positive direction, while those attributed to the Satisfaction scale are worded in the negative direction.

In a study of 110 couples, Ohan and Johnston (2000) verified that the PSOC instrument had good internal consistency, which held across parent gender. The researchers also analyzed differences in scores based on child gender and child age group and validating Johnston and Mash's internal consistencies of .75 for the Satisfaction scale and .76 for the Efficacy scale. While this scale is long standing it appeared to be the most comprehensive measure of parental confidence with the best validation measurements to support this research.

Data Analysis

Data was collected using a system limiting input to the variable scale (i.e., Likert), reducing the probability of data entry errors creating outliers. SPSS was used for data analysis, and data were cleaned by removing participants who are not first-time parents or those with children outside of the age ranges. A missing values analysis was run to identify missing variables, and records that did not include a minimum of one completed scale were removed.

The independent variable for this study was developmental age, of which there are two groups, toddlers between the ages 18 months – 36 months, and pubescent adolescents 14 years to 15 years. The dependent variables were parenting self-efficacy, parent perceptions of oppositional behavior, and parent response patterns to oppositional behavior. Demographic information included the age of children, collected as a numeric entry within two measures, the first being two digits indicating months for toddlers, from 18 to 36 months, and the second being in years as a two-digit age of 14 or 15 years old. Gender information was collected, as well as race/ethnicity on a nominal scale to include American Indian or Alaska Native, Asian, Black, or African American, Hispanic, Native Hawaiian or Other Pacific Islander, White, and those who identify as having two or more races.

Statistical Analysis

The statistical analysis for this study differed between research questions. Research question one, two, and three applied the independent samples *t* test to the scale results. Research questions four and five utilized analysis of covariance with parent

responses separated by level of sense of competence, low and high. This study intended to compare the two sensitive periods of development, the toddler and adolescent period, through the following questions:

RQ1: Does the level of parenting self-efficacy differ between parents of toddler and adolescent periods?

$H_0$1: There is no difference in parenting self-efficacy level between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

H_a1: There is a difference in the level of parenting self-efficacy between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

RQ2: Does parent perception of oppositional behavior differ between the toddler and the adolescent periods?

$H_0$2: There is no difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

H_a2: There is a difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

RQ3: Do parent response patterns to perceived oppositional behavior differ between the toddler and the adolescent periods?

$H_0$3: There is no difference in parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

H_a3: There is a difference between the parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

RQ4: Does parent perception of oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$4: There is no difference in parent perception of oppositional behavior between the toddler and adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a4: There is a difference in parent perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

RQ5: Does parent response to oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$5: There is no difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices

Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a5: There is a difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by Parenting Practices Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

Threats to Validity

The sampling strategy of the United States has reasonable diversity in demographics and one measure, the ECBI, has some questions as to reliability within the African American population. Race/ethnicity was tracked, and a one-way ANOVA was used to examine scale differences by child race/ethnicity. The second measure, the PPI, has not been normed to any population nor analyzed for internal consistency or reliability.

Ethical Considerations

The participation invitation gave clear detail as to the nature of the study, information that was collected, and how that information was to be used. It was made very clear that participation was entirely voluntary, and all information was collected without identifying information. The only demographic information collected was age, gender, and race/ethnicity of the child being referenced with regards to the measurement items.

Summary

Through this quantitative research into first-time parents' perceptions of their child's oppositional behavior, how they respond to them, and levels of parenting self-efficacy, I intended to determine if there is a parallel between parents' experience raising a toddler and that of parents raising a teenager. The instruments chosen to capture these three constructs are parent self-evaluations with responses analyzed to determine if there were significant differences between the two age groups. It was expected that the data would support the findings of researchers included in this paper that focus on only one of the two periods of child development. I intended to bring a new focus on how each period could be viewed and researched in tandem to develop an understanding of whether they are experienced similarly by parents, with implications that knowledge of successful parenting of one can support successful parenting of the other.

Chapter 4: Results

Introduction

This study was designed to explore the experiential similarities of raising a toddler versus raising a teenager, thereby empirically exploring the colloquial term "threenager." Parents with their first child in the age group 18-36 months or 14-15 years old were asked a series of questions intended to understand how they understand and react to emotional and disruptive behaviors of their child and how confident they felt as a parent. Parents' observation of their child's social functioning and emotional self-regulation, the frequency of behavior difficulties, perceptions of these difficulties, and confidence in addressing them, were examined for parallels across the two developmental stages. It was expected that there would be similarities in the perceptions of the behaviors between the two age groups but a difference in response patterns. It was also expected that there would be a difference in the level of parental self-efficacy between the two groups, which affected perception and responses to oppositional behaviors in their child.

This chapter presents the data collected and statistical analysis used to interpret the results for the following research questions:

RQ1. Does the level of parenting self-efficacy differ between parents of toddler and adolescent periods?

$H_0$1. There is no difference in parenting self-efficacy level between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

H_a1. There is a difference in the level of parenting self-efficacy between parents of the toddler and the adolescent periods, as measured by the Parenting Sense of Competence Scale.

RQ2. Does parent perception of oppositional behavior differ between the toddler and the adolescent periods?

H_02. There is no difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

H_a2. There is a difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory.

RQ3. Do parent response patterns to perceived oppositional behavior differ between the toddler and the adolescent periods?

H_03. There is no difference in parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

H_a3. There is a difference between the parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory.

RQ4. Does parent perception of oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$4. There is no difference in parent perception of oppositional behavior between the toddler and adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a4. There is a difference in parent perception of oppositional behavior between the toddler and the adolescent periods, as measured by the Eyberg Child Behavior Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

RQ5. Does parent response to oppositional behavior differ between the toddler and the adolescent periods when controlling for parenting self-efficacy (high and low levels of self-efficacy)?

$H_0$5. There is no difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

H_a5. There is a difference in parent response to oppositional behavior between the toddler and the adolescent periods, as measured by Parenting Practices Inventory, when controlling for parenting self-efficacy, as measured by Parenting Sense of Competence Scale.

Data Collection

Walden University's Institutional Review Board (IRB) approved this research on December 27, 2019, under number 12-27-19-0086923, and data collection began in

February of 2020 and continued until IRB expiration on December 26, 2020. The original sample parameters were parents with their first child in the specified age groups in Western Washington. Invitation posters and postcards were mailed in February 2020, 2 weeks after Covid 19 was first identified in the United States, to pediatricians, middle schools, and parent/child groups within the geographic area and made available to parents who may wish to participate. Each postcard and poster included a link and scannable QR code linking to a website where an online consent form was posted directing those interested to the online survey tool hosted by Survey Monkey. Instructions to request paper questionnaires by mail were included on every invitation and on the web-based consent form. A Facebook page was created with a link to the online consent form, and targeted advertising via social media was employed so parents within the demographic could be engaged.

In April 2020, when Washington State went into Covid lockdown, it became apparent that the data collection plan needed to be adjusted to achieve the number of participants required. The plan was revised and approved by the IRB to broaden the target area to parents of the two age groups within the United States, with heavy electronic advertising to be employed. Demographically targeted advertising was engaged with Facebook, Instagram, SnapChat, and Google.

The goal was to obtain 269 complete response sets in which participants responded to questions for all three included instruments, with an equal split between parents of toddlers and parents of teens. A total of 256 participants responded to the survey, 175 participants completed survey questions past basic demographic information

allowing them to be included in the analysis, and 155 participants completed all three instruments. During an attempt to engage Survey Monkey Audience (the platform's incentivized participants), it was identified that surveys with more than 50 questions did not qualify.

A 2018 review of 25,080 real-world web-based surveys (Liu & Wronksi) confirmed that there is a negative relationship between the length of a survey, question difficulty, and completion rate. This research used three separate data collection instruments, each requesting answers using a different scale and asking for basic demographic information resulting in 105 questions, more than twice the recommended maximum. This could explain the low response rate over such a long period of time.

The participation goal of 269 participants minimum was to achieve a statistical power of 0.95. The actual final full sample of 155, each participant completing all questions in the study, included 61 parents of teens and 94 parents of toddlers. A post hoc power analysis using G*Power indicates an achieved power of 0.916.

Results

This section details the statistical analysis of each research question separately and describes the characteristics of the final sample. The final data set included 175 participants who completed at least one full survey instrument, the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999), which came first on the web-based data collection site. Twenty participants exited the survey when the second set of questions came up in the full survey. This group of 175 was only used for RQ2, which analyzed

answers given for the ECBI only. The remaining research questions used data from the 155 participants who complete all three survey instruments.

Sample Characteristics

Table 1 summarizes the demographic information of the 175 final participants who completed, at minimum, the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999). Parents of teens consisted of 40.6% (71), while parents of toddlers consisted of 59.4% (104). Gender of the children consisted of 56.6% female and 43.4% male, and most of the sample indicated being White/Caucasian (69.7%), with the next highest percentage representing two or more races at 16%. As noted above, not all the final participants completed all questions in the survey. Sample characteristics for each research question are outlined based on one of three assessment tools.

Table 1

Demographic Characteristics of Sample

Variable Name	Category				Frequency	Percent
Age	14 Years				40	22.9%
	15 Years				31	17.7%
	18 months				4	2.3%
	19 months				2	1.1%
	20 months				5	2.9%
	21 months				6	3.4%
	22 months				2	1.1%
	23 months				7	4.0%
	24 months				3	1.7%
	25 months				3	1.7%
	26 months				2	1.1%
	27 months				2	1.1%
	28 months				2	1.1%
	29 months				3	1.7%
	30 months				2	1.1%
	31 months				6	3.4%
	32 months				5	2.9%
	33 months				4	2.3%
	34 months				9	5.1%
	35 months				10	5.7%
	36 months				27	15.4%
Parents of Teens	14-15 years				71	40.6%
Parents of Toddlers	18-36 months				104	59.4%
Gender	Female		Teens	39	99	56.6%
			Toddlers	60		
	Male		Teens	32	76	43.4%
			Toddlers	44		
Race/ethnicity	American Indian or Alaska Native				3	1.7%
	Asian				2	1.1%
	Black or African American				10	5.7%
	Hispanic				10	5.7%
	White or Caucasian				122	69.7%
	Two or more races				28	16.0%

T-Test Results of RQ1

For RQ1, a *t* test was conducted on results of the PSOC Scale (Gibaud-Wallston & Wandersman, 1978,) to determine if there was a difference in confidence level of parenting for parents of teens versus parents of toddlers. Higher scores indicate a higher level of confidence in parenting skills, while a lower score indicates less confidence. With the level of significance being 0.05 no significant difference was found between the

two groups ($t(153) = .654$, $df = 153$, $p > .05$). $H_0 1$ states that there is no difference in parenting self-efficacy level between parents of the toddler and the adolescent periods, a statement which cannot be rejected.

Table 2

Descriptive Statistic Summary of Confidence

Measure	Group	*M*	*SD*	N
PSOC Confidence	Parents of Teens	72.05	12.272	61
	Parents of Toddlers	70.67	13.163	94

T-Test Results for RQ2

RQ2 asks if parents of teens perceive oppositional behavior differently than parents of toddlers. The Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999) presents two sets of scores, the first being the level of intensity of a child's behavior (intensity), and the second being the perception of this behavior being a problem for the parent (problem). A *t* test was conducted on the results of each measure. The results found no significant differences on either measure using a 0.05 level of significance (Intensity: $t(173) = 5.658$, $df = 173$, $p > .05$; Problem: $t(173) = .825$, $df = 173$, $p > .05$). $H_0 2$ states that there is no difference in parents' perception of oppositional behavior between the toddler and the adolescent periods, and this statement cannot be rejected.

Table 3

Descriptive Statistic Summary of Intensity and Problem

Measure	Group	*M*	*SD*	N
ECBI Intensity	Parents of Teens	95.25	31.36	71
	Parents of Toddlers	119.61	25.39	104
ECBI Problem	Parents of Teens	23.18	7.66	71
	Parents of Toddlers	22.26	6.99	104

T-Test Results for RQ3

Determining if parents of teens respond to oppositional behavior differently than parents of toddlers is the subject of RQ3. The Parenting Practices Inventory (Fast Track; CPPRG, 1992) comprises three sets of scores, including perceived consistency of discipline, apparent effectiveness, and level of punitiveness of discipline. A *t* test was conducted to analyze the participants answers and there was no significant difference between the answers of the two groups for any of the three scores using a 0.05 level of significance (Consistency: $t(117.3) = .213$, $df = 117.3$, $p > .05$; Effectiveness: $t(162) = 2.97$, $df = 162$, $p > .05$; Punitiveness*:* $t(162) = 2.08$, $df = 162$, $p > .05$). $H_0 3$ states there is no difference in parental response patterns to perceived oppositional behavior between the toddler and the adolescent periods, as measured by the Parenting Practices Inventory. This statement cannot be rejected.

Table 4

Descriptive Statistic Summary of Consistency, Effectiveness, and Punitiveness

Measure	Group	*M*	*SD*	N
PPI Consistency	Parents of Teens	14.19	3.619	67
	Parents of Toddlers	14.08	2.779	97
PPI Effectiveness	Parents of Teens	10.37	3.024	67
	Parents of Toddlers	11.96	3.573	97
PPI Punitiveness	Parents of Teens	10.75	2.402	67
	Parents of Toddlers	11.61	2.737	97

Analysis of Covariance Results for RQ4

RQ4 sought to determine if parents of teens perceive oppositional behavior differently than parents of toddlers when controlling for high and low levels of self-efficacy. Analysis of Covariance (ANCOVA) was incorporated to determine any significant differences in behavior intensity and perception of the behavior being a

problem using answers to the Eyberg Child Behavior Inventory (Intensity and Problem) and controlling with the Parenting Sense of Competence Scale, with higher scores indicating higher levels of confidence in parenting skills. Using a 0.05 level of significance the Problem score showed no discernable difference between groups ($F(1, 152)=.788$, $p = .376$), however the Intensity score did show a significant difference ($F(1, 152)=40.458$, $p = .000$). This may indicate that while parents of teens and parents of toddlers do not see their child's behavior as a problem regardless of level of confidence, they do perceive the level of intensity of those behaviors differently depending on how confident they feel as a parent. $H_0 4$ states that there is no difference in parent perception of oppositional behavior between the toddler and adolescent periods when controlling for parenting self-efficacy, a statement that can be rejected.

Table 5

Model Summary of the ANOVA Analysis for Research Question Four

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Corrected	ECBI Intensity	46096.998[a]	2	23048.499	39.919	.000	.344	79.839	1.000
Model	ECBI Problem	1292.977[b]	2	646.489	15.097	.000	.166	30.194	.999
Intercept	ECBI Intensity	138419.406	1	138419.406	239.739	.000	.612	239.739	1.000
	ECBI Problem	234.541	1	234.541	5.477	.021	.035	5.477	.643
Confidence	ECBI Intensity	20308.388	1	20308.388	35.174	.000	.188	35.174	1.000
Score	ECBI Problem	1234.081	1	1234.081	28.819	.000	.159	28.819	1.000
Age	ECBI Intensity	23359.518	1	23359.518	40.458	.000	.210	40.458	1.000
	ECBI Problem	33.738	1	33.738	.788	.376	.005	.788	.143
Error	ECBI Intensity	87761.157	152	577.376					
	ECBI Problem	6508.894	152	42.822					
Total	ECBI Intensity	1970838.000	155						
	ECBI Problem	87513.000	155						
Corrected	ECBI Intensity	133858.155	154						
Total	ECBI Problem	7801.871	154						

a. R Squared = .344 (Adjusted R Squared = .336)
b. R Squared = .166 (Adjusted R Squared = .155)
c. Computed using alpha = .05

Analysis of Covariance Results for RQ5

Determining if parents of teens respond differently than parents of toddlers to oppositional behavior when controlling for high and low levels of self-efficacy is the subject of RQ5. ANCOVA was used with all three scales of the Parenting Practices Inventory (Punitiveness, Effectiveness, Consistency) compared to the Parenting Sense of Competence Scale results, with high scores equaling higher levels of confidence. Using a 0.05 level of significance there was a significant difference in the Punitiveness score ($F(1, 152)=4.842$, $p = .029$) and Effectiveness score ($F(1, 152)=12.183$, $p = .001$), however the Consistency score did not show significant difference ($F(1, 152)=1.259$, $p = .264$). This analysis could indicate that parents of teens and parents of toddlers tend to react differently as far as level of punitiveness and how effective they believe their actions to be based on the level of confidence in their parenting skills. $H_0 5$ states that there is no difference in parent response to oppositional behavior between the toddler and the adolescent periods when controlling for parenting self-efficacy. This statement can be rejected based on this analysis.

Table 6

Model Summary of the ANOVA Analysis for Research Question Five

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[d]
Corrected Model	PPI Punitiveness	338.731[a]	2	169.365	35.364	.000	.318	70.729	1.000
	PPI Effectiveness	393.739[b]	2	196.869	21.097	.000	.217	42.194	1.000
	PPI Consistency	206.654[c]	2	103.327	12.564	.000	.142	25.129	.996
Intercept	PPI Punitiveness	1727.608	1	1727.608	360.733	.000	.704	360.733	1.000
	PPI Effectiveness	1605.707	1	1605.707	172.070	.000	.531	172.070	1.000
	PPI Consistency	2040.204	1	2040.204	248.083	.000	.620	248.083	1.000
Confidence Score	PPI Punitiveness	305.702	1	305.702	63.832	.000	.296	63.832	1.000
	PPI Effectiveness	260.770	1	260.770	27.945	.000	.155	27.945	1.000
	PPI Consistency	200.535	1	200.535	24.384	.000	.138	24.384	.998
Age	PPI Punitiveness	23.190	1	23.190	4.842	.029	.031	4.842	.590
	PPI Effectiveness	113.685	1	113.685	12.183	.001	.074	12.183	.934
	PPI Consistency	10.356	1	10.356	1.259	.264	.008	1.259	.200
Error	PPI Punitiveness	727.953	152	4.789					
	PPI Effectiveness	1418.416	152	9.332					
	PPI Consistency	1250.030	152	8.224					
Total	PPI Punitiveness	20667.000	155						
	PPI Effectiveness	21480.000	155						
	PPI Consistency	32910.000	155						
Corrected Total	PPI Punitiveness	1066.684	154						
	PPI Effectiveness	1812.155	154						
	PPI Consistency	1456.684	154						

a. R Squared = .318 (Adjusted R Squared = .309)
b. R Squared = .217 (Adjusted R Squared = .207)
c. R Squared = .142 (Adjusted R Squared = .131)
d. Computed using alpha = .05

Secondary analysis of correlations based on gender or ethnicity found a statistically significant difference between groups for the Parenting Practices Inventory, Consistency measure determined by one-way ANOVA ($F(5,163) = 2.561$, $p = .029$). A Tukey post hoc test revealed that the difference was significant between the Black or African American population and the American Indian or Alaska Native population ($p = .023$). All other groups and measures show no statistically significant difference for ethnicity, and no measures showed significant differences for gender.

Table 7

Model Summary of the ANOVA Analysis of Scales and Ethnicity

PPI Consistency	Sum of Squares	*Df*	Mean Square	*F*	Sig.
Between Groups	120.429	5	24.086	2.561	.029
Within Groups	1485.882	158	9.404		
Total	1606.311	163			

Summary

In this study, I aimed to explore and identify similarities in the experience of raising a toddler to the experience of raising a teenager, and the level of confidence parents feel when doing so. These results show no discernable difference in the level of self-efficacy, or confidence as a parent, between parents of toddlers or parents of teens, and basic perceptions and response patterns to oppositional behavior of each age group are similar. However, when reviewing the data and controlling for level of self-efficacy, perception and response patterns do differ between the age groups when the level of confidence in parenting skills is low versus high. The next chapter will elaborate on these findings while also identifying limitations and making recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Parents hold a critical role in guiding children up into productive healthy adults while keeping them safe and healthy during development. This process is known to be challenging as well as rewarding. It is the challenges that I sought to understand better through research.

I intended to determine if there were similarities in the parent's experience of raising a child during two sensitive periods of development: toddlerhood and adolescence. The focus was on parents of a first child in the age groups of 18-36 months or 14-15 years of age and compared the parent's perception and responses to oppositional behavior and their levels of self-efficacy while addressing those behaviors. The objective of this study was to identify a pattern that can be used for educating parents in better handling the oppositional adolescent.

Interpretation of Findings

During the development of this research, the primary hypothesis was that raising an adolescent can be compared to raising a toddler. Both sensitive periods of development are emotionally challenging to the parent as the toddler and adolescent investigate their surroundings and push boundaries simultaneously. The toddler is experiencing and defining new emotions, thoughts, and beliefs, and parents heavily influence these experiences and interpretations (Venta & Sharp, 2015). For the adolescent, new hormones affect their perception of their parent's role in their life, thus affecting their behavior. Based on this study's results, parents of adolescents perceive

these behaviors with much the same emotions, thoughts, and beliefs as parents do for the toddler, with similar feelings of confidence and with similar levels of intensity. In general, parents also were similar in their beliefs about their level of punitiveness and effectiveness. However, when the parent was shown to have lower levels of self-efficacy or confidence, then their perceptions of the intensity of those behaviors were increased. The subsequent reaction, and punitiveness of that reaction, changed accordingly. In other words, the colloquial term “three-nager” may have been empirically validated with this research.

Parents and children tend to develop interactive coping skills starting when the oppositional actions are “cute” during the toddler years, yet when the child reaches adolescence, previously exhibited good behavior changes, becoming more erratic and emotional, and often confounding the parents (Marceau et al., 2015). A parent will typically accept the toddler who often says no to a request, as this is a known part of natural development. However, the emotionally defiant adolescent is seen as antagonistic or inappropriate, when this too is part of natural development (Casey, 2015). As parental support is related to levels of attachment and emotional regulation strategies in the adolescent (Fraley et al., 2000), confident, effective parenting can make a significant difference in the family dynamic, a factor in adolescent life satisfaction (Jiang et al., 2013).

Adolescents tend to struggle with emotional coping skills regressing into toddler-like behavior when entering puberty (Rothbart & Bates, 2006), conduct a parent may struggle to recognize as part of natural development. A parent whose attempts at

behavioral direction are unsuccessful may suffer from lower levels of self-efficacy and confidence (Junttila & Vauras, 2014). Study results for research question four showed that parents of teens and toddlers who exhibited less confidence in their skills perceived the intensity of oppositional behaviors differently than parents with more confidence.

While the literature shows similarities in the developing brain of a toddler and a pubescent teen (Casey, 2015; Holmes et al., 2016), adolescence brings with its disruptive behaviors as the youth begins to pull away from parents seeking the natural shift to autonomy (McCormick et al., 2016). RQ5 showed that the level of punitiveness and effectiveness of discipline during this time appeared to be different from that for toddlers, especially for parents with lower levels of self-efficacy. This study intended to show that there were similarities in the experience of raising a toddler to that of raising a teen, but that parents seem to manage and interpret the experience with teenagers differently, and in many cases, negatively. The results of RQ5 suggest that this theory may be true.

Klahr et al. (2011) showed how parent-child conflict predicts the development of conduct problems in youth yet conduct problems do not predict increases in parent-child conflict. It would stand to reason that if the results of the research presented here hold true, then it is safe to believe that improving parents' levels of self-confidence in their parenting skills can lead to improved family cohesion and reduced adolescent behavioral conduct problems. This could be particularly true as oppositional behavior tends to turn more aggressive during adolescence (Lahey et al., 2000), and emotions and risk-taking increase (Qu et al., 2015).

It should be noted that secondary analysis of correlations based on gender and ethnicity found a statistically significant difference between Black or African American and the American Indian or Alaska Native parent populations. This was found on the Parenting Practices Inventory, Consistency measure, which suggests that these two populations might have different parenting practices from other demographic populations, a finding that bears further analysis.

This study shows that increases in parental self-efficacy can lead to improvement in the ability to manage anxiety-related situations, as discussed in Bandura's (1997) self-efficacy theory. Parental response strategies born out of lower levels of self-confidence could lead to adolescents having a harder time managing the challenges brought on by natural social interactions (Malm et al., 2017). When children, especially adolescents, are exploring and experiencing identity development, confident parents serve to support the safety of this exploration (Cross & Cross, 2017) and improvement in the development of prosocial aptitudes (Juntila & Vauras, 2014).

As the parent improves their ability to interact with their adolescent through improved self-efficacy, the youth may learn improved ways to interact with the world at large. This anticipated result fits with the concept of theory of mind (Pavarini et al., 2013), suggesting that when an individual (adolescent) perceives supportive parental response strategies, it will affect how that individual behaves. In short, through the parent's actions, the adolescent learns improved ways to mentalize and respond to others in social situations. Erickson's psychosocial theory of development also supports this as

parents and peers are critical to the success of identity development in the adolescent (Cross & Cross, 2017).

Limitations

It should be noted that the ECBI has a Cutoff score for both Intensity (> 133) and Problem (> 15), and those who exceed these scores should be evaluated for possible pathological diagnoses. The number of records exceeding this cutoff for the Intensity measure was 37, and 148 records exceeded the Problem cutoff. While this study was not intended to identify pathological behaviors, this could show that those with children exhibiting extreme behavior may have been more compelled to complete the survey.

The length of the survey, 105 questions, more than twice the recommended maximum, most likely contributed to the low completion rate of 61% (155 out of 256 started). Also, most of the advertisement and invitation was completed online, potentially removing a large portion of the population not using social media or the internet. Even though the data collection tools were offered in print by mail, the primary collection was via the internet, which could have also deterred several possible participants.

While the post hoc power analysis indicating an achieved power of 91.6% is well above the minimum of 80%, this discussion would be stronger if the original statistical power of 95% had been achieved with a larger sample size.

Recommendations

Additional research is needed to better understand the parent's perspective of how the parent-child relationship is affected by puberty. Adding new data to the results of this study could support the theory that parenting actions that worked with the toddler may

work with the adolescent when adjusted for maturity. Longitudinal research of parenting toddlers and then parenting them as adolescents would be ideal in evaluating this theory.

The demographic finding here of a statistically significant difference between Black or African American and the American Indian or Alaska Native parent populations on the Parenting Practices Inventory, consistency measure, should be further analyzed in future studies. Adding variables to the study, such as social-economic status or childhood conditions such as autism spectrum disorder, could reveal additional information.

Originally, this study was intended for a small but diverse geographic region (Western Washington with zip code as a variable) to identify geographically relevant data within the variables. These might have included zip-code related census data such as race/ethnicity and social-economic status. Opening the study to the entire US and obtaining a lower number of data sets than planned made this goal impossible but could be considered for future studies. Expanding the research to include more specific geographic regions within the US, or expanding to other countries, could provide new insights.

The original design included printed posters and takeaway postcards for schools, parent/child groups, pediatrician offices, and online advertising to attract the widest audience. This plan was made impossible with the Covid-19 pandemic. Assuring advertisements and invitations are made available via print may provide improved participation. Repeating this study with a more robust sample set may show improved statistical outcomes for all research questions.

Implications

Raising an adolescent with their moodiness and periodic defiant behavior can be compared to raising a toddler during that period of defining autonomy and pushing boundaries based on the results of this research. In addition, parent's level of confidence increases as each parenting task is mastered (Moran et al., 2016), which begins during the child's early years. Bandura (1997) suggested that anxiety reduces our ability to respond to what is causing that anxiety. Bandura, through his parental self-efficacy theory, suggests that purposeful parenting happens when self-efficacy is at a higher level (Jones & Prinz, 2005).

Creating parental interventions focusing on self-regulation to increase parental self-efficacy may help parents recognize when their own behaviors may be challenged by their children (Shaffer & Obradovic, 2017). Helping parents understand that adolescent disruptive behaviors are a normal part of the developmental process, particularly for identity development (Cross & Cross, 2017), could improve parent's level of confidence in navigating this period of maturity. Incorporating coping strategies and self-regulation techniques that were successful while raising the toddler into parenting the adolescent could improve the parent-child experience during oppositional behavior events, thus affecting their child's regulatory functioning (Rutherford et al., 2015) and possibly even helping with issues such as anxiety and depression found in parents with lower levels of self-efficacy (Mouton & Roskam, 2014).

Conclusion

The purpose of this contrasted group quantitative study was to compare first-time parents of toddlers ages 18-36 months and first-time parents of pubescent adolescents ages 14-15 years in how they understand and react to parenting their child's emotional, social, and disruptive behaviors, and self-regulation. Comparing parental responses and levels of self-efficacy to oppositional behaviors was intended to determine if child age impacts parents' experience and response to oppositional behavior and if parenting self-efficacy is a contributing factor to how the parent responds. The independent variable was parents of the different age groups, toddler or adolescent. The dependent variable was the parent's responses to the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999), the Parenting Practices Inventory (Fast Track; CPPRG, 1992), and the Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978). A total of 175 participants completed all three measurements and were included in the analysis. Descriptive statistics, independent samples *t* tests, and analysis of covariance were conducted.

Levels of self-efficacy between parents of toddlers compared to parents of adolescents showed no difference. Parents of both age groups tended to perceive oppositional behavior and respond to said behavior similarly. This supports the theory that toddlers and teens are very similar in their behaviors, thus validating the colloquial term "three-nager." In addition, while parents of teens and parents of toddlers do not see their child's behavior as a problem regardless of level of confidence, they do perceive the

level of intensity of those behaviors differently and react with different levels of punitiveness, depending on how confident they feel as a parent.

The current study provided insights into how the feelings of a parent that their adolescent has reverted to toddler-like behavior has merit and adds to the research that these behaviors during the toddler and adolescent periods of development are a normal part of natural autonomous maturing. Further, it has been shown that self-efficacy and confidence directly affect the process of parenting these two significant periods of development. The confident parent may improve their ability to interact and support the moody adolescent, thus improving how the adolescent interacts with the family and the world at large. It is hoped that the results of this study, and further examination into the parent's experience with supporting the adolescent, can lead to parent support programs and evidence-based parent-child interventions to help develop self-efficacy in supporting such a challenging period of development.

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Appendix A: Eyberg Child Behavior Inventory

ECBI™ Eyberg Child Behavior Inventory™

Parent Rating Form by Sheila Eyberg, PhD

Your Name _____ Relationship to Child _____ Today's Date ___/___/___

Child's Name _____ Child's Gender _____ Child's Date of Birth ___/___/___

Directions: Below are a series of phrases that describe children's behavior. Please (1) circle the number describing **how often** the behavior **currently** occurs with your child, and (2) circle either "yes" **or** "no" to indicate whether the behavior is **currently a problem for you**.

For example, if seldom, you would circle the 2 in response to the following statement:

	Never	Seldom	Sometimes	Often	Always	Is this a problem for you?	
1. Refuses to eat vegetables	1	(2)	3	4	5	6	7	YES	(NO)

Circle only one response for each statement, and respond to all statements. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect answer and circle the correct response. For example:

1. Refuses to eat vegetables	1	(2)	(X)	4	5	6	7	YES	(NO)

	How often does this occur with your child?							Is this a problem for you?	
	Never	Seldom	Sometimes	Often	Always				
1. Dawdles in getting dressed	1	2	3	4	5	6	7	YES	NO
2. Dawdles or lingers at mealtime	1	2	3	4	5	6	7	YES	NO
3. Has poor table manners	1	2	3	4	5	6	7	YES	NO

Appendix B: Parenting Practices Inventory

Parenting Practices Inventory

			Never	Almost Never	Sometimes	Often
1	51	If you ask your child to do something and s/he does not do it, how often do you give up trying to get him/her to do it?	1	2	3	4
2	52	When your child has done something wrong, how often do you lose your temper toward him/her?	1	2	3	4
3	53	If your child is punished, how often does the punishment work?	1	2	3	4
4	54	If a punishment has been decided upon, how often can your child get you to change it by explanations, arguments or excuses?	1	2	3	4
5	55	If you punish your child, how often does his/her behavior get worse?	1	2	3	4
6	56	How often does your child get away with things?	1	2	3	4
7	57	How often do you feel that it is more trouble than it is worth to ask your child to do something you want?	1	2	3	4
8	58	How often do you have to spank your child?	1	2	3	4
9	59	How often do you have difficulty controlling your child?	1	2	3	4
10	60	How often do you decide not to punish your child even though s/he broke a rule you had set?	1	2	3	4
11	61	How often do you yell at your child?	1	2	3	4
12	62	How often does your punishment make your child behave better?	1	2	3	4
13	63	How often does your child manage to get around the rules you set for him/her?	1	2	3	4
14	64	When you ask your child to do something, how often will s/he do it?	1	2	3	4
15	65	How often will your child accept the punishment you have set?	1	2	3	4
16	66	How often do you have to threaten your child with punishment in order to get him/her to do something?	1	2	3	4
17	67	When you ask your child to stop doing something, how often will s/he stop?	1	2	3	4

Conduct Problems Prevention Research Group (CPPRG)

Appendix C: Parenting Sense of Competence Scale

Parenting Sense of Competence Scale

(Gibaud-Wallston & Wandersman, 1978)

Please rate the extent to which you agree or disagree with each of the following statements.

Strongly Disagree	Somewhat Disagree	Disagree	Agree	Somewhat Agree	Strongly Agree
1	2	3	4	5	6

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired. 1 2 3 4 5 6
2. Even though being a parent could be rewarding, I am frustrated now while my child is at his / her present age. 1 2 3 4 5 6
3. I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot. 1 2 3 4 5 6
4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated. 1 2 3 4 5 6
5. My mother was better prepared to be a good mother than I am. 1 2 3 4 5 6
6. I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent. 1 2 3 4 5 6
7. Being a parent is manageable, and any problems are easily solved. 1 2 3 4 5 6
8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one. 1 2 3 4 5 6
9. Sometimes I feel like I'm not getting anything done. 1 2 3 4 5
10. I meet by own personal expectations for expertise in caring for my child. 1 2 3 4 5 6
11. If anyone can find the answer to what is troubling my child, I am the one. 1 2 3 4 5 6
12. My talents and interests are in other areas, not being a parent. 1 2 3 4 5 6
13. Considering how long I've been a mother, I feel thoroughly familiar with this role. 1 2 3 4 5 6
14. If being a mother of a child were only more interesting, I would be motivated to do a better job as a parent. 1 2 3 4 5 6
15. I honestly believe I have all the skills necessary to be a good mother to my child. 1 2 3 4 5 6
16. Being a parent makes me tense and anxious. 1 2 3 4 5 6
17. Being a good mother is a reward in itself. 1 2 3 4 5 6