

PREDICTORS OF RESILIENCE IN FAMILIES
OF CHILDREN WITH A MENTAL HEALTH
DISORDER

By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July 2019

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ACKNOWLEDGEMENTS

This study is dedicated to all the families who are loving and nurturing a child with a mental health disorder. Every day you wake up and you fight and you search and you love and you go to bed with thoughts or prayers racing through your head about how to help your child tomorrow. Your children are blessed to have devoted and determined families enveloping them as they navigate through their mental health challenges.

I sincerely hope my work honors your journey.

A well-known saying articulates, “It takes a village to raise a child.” Not far into my doctoral journey, I recognized, “It takes a village to raise a PhD.” I have been abundantly nourished, strengthened, encouraged, challenged, supported, and valued by my village.

For that, I am eternally grateful.

I so deeply appreciate the growth and experience I have been gifted via the steadfast support, collaboration, encouragement, direction, redirection and celebration from the two best mentors in the world: Dr. Kami L. Gallus and Dr. Carolyn S. Henry. I am also truly pleased and appreciative to have my committee rounded out with such compassionate and thoughtful individuals as Dr. Mike Stout and Dr. Valerie McGaha. I truly had the “very best committee”. A special thank you also to my professors and mentors at Oklahoma State. Each of you provided encouragement to me in a way that fortified my belief in myself and clarified my passion for the human development and family science fields.

I would like to extend deep gratitude and sincere respect to all of those supporting the distribution of my survey (see Appendix B). You are the boots on the ground and you are moving mountains for families and children struggling with mental health challenges.

Thank you to my parents and in laws – your love and support have made me who I am today – specifically, to my Mom and Dad, Deanna and Joseph Tipton, who taught me the value of family. Thank you to my friends and colleagues – the sharing of this journey has bonded my heart to yours.

My personal tribe, my family, is owed the greatest gratitude for they made the greatest sacrifices and supplied the deepest support. I specifically want to acknowledge my incredible daughters: Braigen Faith, Mikayla Rae, Katrina Maria, Emillia Grace, and Annalea Joy. If it was not for our journey together, this study would not exist. From smoothies for the road and packing my lunch to listening to me ramble about family resilience and children’s mental health to believing in my abilities, vision, and passion, you have blessed this mom beyond anything I could hope for or imagine. YOU are my greatest joy and my most amazing accomplishment!

Last and most importantly, my devoted husband, amazing best friend, and humorous partner in all things life: Bret A. Hubbard, DO. Every journey has been with and because of you and every journey has been extraordinary – this being no exception. You have made our life beautiful and if I could express how much gratitude I feel for you daily, I could fill the oceans of the earth. Thank you for loving me.

Name: REBECCA L. HUBBARD

Date of Degree: AUGUST, 2019

Title of Study: PREDICTORS OF RESILIENCE IN FAMILIES OF CHILDREN WITH
A MENTAL HEALTH DISORDER

Major Field: HUMAN SCIENCES

Abstract: While much theorizing and research has been conducted on family resilience, the concepts and theories of family resilience have not been applied to families who have a child with a mental health disorder. The proposed study utilized the family resilience model (Henry, Morris, & Harrist, 2015) to explore a model of interactive family resilience when a child experiences a mental health disorder. The associations between child mental health demographics, family processes, family-community fit and family resilience were explored. The sample included 78 parents/parent-figures of a child, adolescent or adult child diagnosed with a mental health disorder before the age of 19. Parent surveys were completed online via an anonymous link. A series of hierarchical multiple regressions were run to explore associations between parents' report of child mental health demographics, family processes, family-community fit and family resilience.

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CHAPTER I

Introduction

Child mental health disorders present a significant and growing concern for families, communities, and policy makers. Worldwide, 20% of children experience a mental health disorder each year (WHO, 2005). Recent statistics estimate 49.5% of children in the US will experience a diagnosable mental health disorder in their lifetime, with 22.2% suffering serious impairment in their daily functioning (Merikangas et al., 2010). In 2013, the Center for Disease Control and Prevention identified childhood mental health disorders as a significant public health issue in the US, citing an estimated annual cost of approximately \$247 billion. Effective prevention and intervention services and support programs are necessary to prevent symptom onset, increase awareness and knowledge, and inhibit mental health disorder progression in childhood and adolescence (Drake & Ginsburg, 2012; Gilbo, Knight, Lewis, Toumbourou, & Bertino, 2015; Morgan et al., 2017; Noam & Hermann, 2002; Wang et al., 2005).

Children with a mental health disorder need not only direct individual intervention but also intervention in the context in which they most frequently live: the family (Marsh, 2001; Masten, 2018). Likewise, families need intervention and support navigating the many challenges associated with mental health symptoms and diagnoses. Often, families with children experiencing a mental health disorder receive little to no family level intervention to assist them with such challenges (Cohen, Ferguson, Harms,

Pooley, & Tomlinson, 2011; Crowe & Lyness, 2014; Mendenhall & Mount, 2011). Assessing and intervening in family processes is vital to the health of families and children navigating a diagnosis (Becvar, 2013; Hamall, Heard, Inder, McGill, & Kay-Lambkin, 2014; Shapiro, 2013). Family processes impact the functioning of the family and child (Masten, 2018) and as such, are potential points of prevention, intervention, and support when children in the family system face a mental health diagnosis. Additionally, the interface between the family and the community may be important factors in family adaptation. For example, when a child has a mental health disorder, the child's experiences with symptoms and mental health related processes could impact the family and the family's adaptation to the child's mental health disorder could impact the child. Likewise, the community interface with the family could either support (e.g., open mental health dialogue) or hinder (e.g., public mental health stigma) the family's adaptive processes. Further, the family's willingness to embrace community support could either enhance or decrease the continuation and further development of community support with regard to childhood mental health disorders. Consequently, investigation of the association between the individual and the family (Bowen, 1978; Masten & Monn, 2015; Masten, 2018) as well as the association between the family and the community (Henry et al., 2015; Masten & Monn, 2015; Masten, 2018) are necessary.

Prevention and intervention programs offering family support and family level therapeutic intervention may be notably beneficial to family adaptation and child adaptation when addressing family processes (e.g., communication patterns) and family-

community factors (e.g., stigma resistance). While some family support programs focus on child mental health disorder prevention and intervention at the family level, the majority of available programs are limited to family psychoeducation (Lucksted, McFarlane, Downing, & Dixon, 2012; Lucksted et al., 2017) and/or the application of individual-based therapeutic techniques to the family system (Enns et al., 2016). Additionally, while evaluations of family support programs show some benefits for parent and child adaptation, only a handful of studies evaluating the current family support programs examined what, if any, positive impact prevention and support programs have at the family level (Cavaleri, Olin, Kim, Hoagwood, & Burns, 2011; Enns et al., 2016; Hoagwood et al., 2014; Kuhn & Laird, 2014). Specifically, limited research has evaluated family level processes or family-community factors when a family has a child with a mental health disorder. Indeed, of the over 200 programs reviewed, only a handful of programs have been evaluated with regard to family processes, family-community factors, or family resilience. Research examining family processes and family-community fit is an important next step to assist the development of adjunctive family-level interventions and adequate family support programs that promote family resilience among families of children with mental health diagnoses.

Family resilience represents the restored state of balance a family enters after adapting well to an adversity (Henry et al., 2015; Masten, 2018). Although theoretical models of family resilience have been developed and empirically supported with families facing various adversities, no research to date has specifically delineated the constructs

that promote family resilience when a child has a mental health disorder. Further, existing literature has yet to specifically examine family resilience data to inform practices and policies in children's mental health. The lack of analysis for families and their potential for resilience in response to a childhood mental health disorder is a significant gap in the literature. The unique family dynamics and processes that may significantly impact resilience for families with a child with mental health disorder need investigation. Further research can delineate and describe the specific concepts and processes involved for families to demonstrate resilience and ultimately influence children's adaptation.

Determining the family processes and the family-community fit that promote family resilience for families with a child with a mental health disorder is the primary aim of the current study. The current study aims to take first steps at validating the family interactive resilience model (FIRM) as an interactive psychosocial model of assessment and intervention for family resilience and child adaptation for families with children diagnosed with a mental health disorder (see Figure 1).

1. The first goal is to explore the relationship between child mental health demographics (i.e., diagnosis, age of onset, age of diagnosis, types of treatment, support group types), family processes (operationalized as family meaning making, family communication patterns, family rhythm, and family coherence), family-community factors (operationalized as stigma resistance, social support, and navigation of services) and family resilience (operationalized family cohesion and adaptation as reported by *parents*).

2. The second goal is to explore the relationship between child mental health demographics (i.e., diagnosis, age of onset, age of diagnosis, types of treatment, support group types), family processes (operationalized as family meaning making, family communication patterns, family rhythm, and family coherence), family-community factors (operationalized as stigma resistance, social support, and navigation of services) and family resilience (operationalized family cohesion and adaptation as reported by the *child*).
3. The third goal is to explore the relationship between child mental health demographics (i.e., diagnosis, age of onset, age of diagnosis, types of treatment, support group types), family processes (operationalized as family meaning making, family communication patterns, family rhythm, and family coherence), family-community factors (operationalized as stigma resistance, social support, and navigation of services) and child adaptation (operationalized as youth coping as reported by the *child*).

Conceptual Definitions

Child adaptation: The coping capacity of the child diagnosed with a mental health disorder.

Family coherence: The family's relational disposition and aptitude for coping.

Family communication: Positive and negative communication interactions that serve to support or hinder effective family communication and adjustment to adversity.

Family meaning making: The family's collective meaning applied to a given situation.

Family resilience: Maintaining or restoring balance in families during and following an adversity.

Family rhythm: Routines, rituals, and patterns of family interactions that reflect the ebb and flow of the family and family environment.

Social support: Seeking and acquiring support from friends, neighbors, faith communities, and family.

Stigma resistance: Recognizing and resisting the internalization of stigma.

Systems of services navigation: Managing the interaction with all systems of services.

CHAPTER II

Review of Literature

This literature review presents evidence for the examination of an interactive model of resilience when a family has a child with a mental health disorder. First, child mental health disorder and its impact on families is discussed. Next, a review of existing efforts to address family functioning and child adaptation is presented. Family resilience is defined and the theoretical lens of Henry et al.'s (2015) family resilience model is presented next. Finally, qualitative themes and quantitative findings from the existing family resilience literature is reviewed with specific attention given to defining the relevant family processes and family-community factors hypothesized to promote family resilience when a child has a mental health disorder.

Child Mental Health Disorders and Families

Child mental health disorders are faced by one out of every five families (CDC, 2011; NIMH, 2011). Across the lifetime, 49.5% of children in the US will experience a mental health disorder and at least 20% of children experience severe impairment due to a mental health disorder (Merinkangas et al., 2010). Since 50% of persons with a mental health disorder have onset of symptoms before the age of 14 and 75% by the age of 24 (NIMH, 2011), mental health disorders are often present during childhood and adolescence when a family can serve as a primary point of prevention and early intervention. Although symptom onset often occurs during childhood and adolescence

(Kessler et al., 2005), research suggests that it takes an average 10 years after the onset of symptoms for individuals to seek professional help (NIMH, 2011; Ramsawh, Weisberg, Dyck, Stout, & Keller, 2011), further highlighting families as a critical system for enhancing mental health recovery through education, support and provision of services. However, the lack of the available prevention and intervention programs and therapeutic approaches incorporating and involving the family likely hinders adaptation.

When a child has a mental health disorder, family functioning may be encumbered as a result of a unique set of risks and vulnerabilities experienced in family processes, such as parental and family grief, concern and grief for the child with the mental health disorder, disruption to family routine, internalized stigma and depleted energy due to emotional and practical demands (Crowe, & Lyness, 2014; Godress, Ozgul, Owen, & Foley-Evans, 2005; Jonker & Greef, 2009; Marsh et al., 1996; Marsh & Johnson, 1997; Mukolo, Heflinger, & Wallston, 2010; Richardson, Cobham, McDermott, & Murray, 2013). Additional common risks and vulnerabilities for families facing mental health challenges include, but are not limited to, hindered community involvement, financial and resource limitations, and service limitations in both availability and accessibility (Bishop & Greeff, 2015; Jonker & Greeff, 2009; Plotnick & Kennedy, 2016). An additional and immeasurable cost to families is suicide, an often co-occurring condition with mental health disorders and the second leading cause for death of children, adolescent, and young adults (American Academy of Child and Adolescent Psychiatry, 2017; Whiteford et al., 2013). Due to the prevalence and impact of childhood mental

health disorders on the family as well as long term consequences of untreated mental health conditions, effective family level efforts that intervene on family processes and family-community engagement are needed.

Family Support and Intervention

While family support programs exist, the benefit to families is largely unknown. Hoagwood et al. (2014), Kuhn and Laird (2014), and Enns et al. (2016) conducted extensive reviews on the literature regarding *family level support programs* for children with a mental health disorder. They reviewed research studies evaluating these many programs which examined outcomes for children and their parents; however, only a few of the over 200 reviewed programs evaluated family processes and family-community factors and none evaluated family level resilience. Additionally, these studies reported a significant variation of benefit at the child and parent level (i.e., benefit at child level but not parent, benefit at parent level but not child, benefit at both levels, or no benefit at either level) for the various programs being reviewed (Hoagwood et al., 2014; Kuhn & Laird, 2014). While a comprehensive understanding of the impact of family level interventions on parent or child outcomes was provided, a dearth of understanding with regard to the impact of intervention on family processes, family-community fit, and family resilience still exists.

Some researcher-practitioners have attempted to implement family-based intervention for childhood mental health disorders (Hamall et al., 2014; Ginsburg & Schlossberg, 2002, Morgan et al., 2017; Thompson, Boger, & Asarnow, 2012;

Thompson, Langer, Hughes, & Asarnow, 2017; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006; Wood & McLeod., 2008). However, these approaches may be improved upon by establishing the validity of such efforts relevant to the factors that promote family resilience for families of a child with a mental health disorder. Current approaches are limited in that they often apply an individual-based therapeutic modality to the family, recruit family members as a part of the “therapeutic team” for management of symptoms and therapeutic homework, or implement an intervention with the sole focus on child treatment outcomes. Although these efforts to assist families who have a child with a mental health disorder are important, determining the specific family processes and family-community factors to address in prevention and intervention efforts will more adequately support family resilience and thus, child adaptation. Therefore, it is important to investigate the experiences of families who have a child diagnosed with a mental health disorder and examine the processes and community interactions that help families to achieve resilience throughout that process.

Family Resilience Defined

Demonstration of family resilience occurs when families have positive family cohesion and successful system adaptation. The Latin root word for cohesion means “to stick together” and the Latin root word for adapt means “to fit” (Merriam-Webster). Families who “stick together” are able to balance being with one another as individuals and together as a unit or as Olson (1986) defined, sufficiently emotionally bonded with one another. Families who “fit together” are able to adjust and change as needed to maintain balance or as Olson (1986) defined, the ability to adapt family roles, rules, and power structures in light of changes, stressors, and adversities. Walsh (2016) offered a

definition for family resilience as the ability of a family to withstand and to bounce back from adversity. Walsh further explained that family resilience involves both “recovery and positive growth” (Walsh, 2016). Resilience is the ability to adapt *and* to be ‘stronger’ despite of and due to the imposed risk or adversity on a system. Henry et al. (2015) offered a consolidated definition from existing resilience research, suggesting that demonstration of family resilience occurs when a family system maintains, manages, or restores the family system balance after adversity. Thus, for the current study, family resilience consists of positive family cohesion and successful family adaptation that allows for positive management of the adversity and restoration of balance in the family.

Family Resilience Model. Henry et al. (2015) consolidated current individual and family resilience literature to conceptualize the family resilience model (FRM, see Figure 2), providing a promising framework for understanding the processes leading to expression of resilience in families with a child with a mental health disorder. Within FRM, Henry et al. (2015) suggested that when a family experiences an adversity, such as a childhood mental health disorder, vulnerabilities and protections are expressed through individual functioning, dyadic relationships, and the overall family system. Specifically, processes of family resilience exist within the family adaptation systems (FAS), reflecting the impact of adversity and the emergence of resilience in the family through the effects and adjustments in the FAS (see Figure 3; Henry, Hubbard, Struckmeyer, & Spencer, 2018).

For the purpose of this study, FRM serves as the theoretical model and childhood mental health disorder is considered a family-level adversity requiring family adaptation. Specifically, family meaning making, family rhythm, and family communication (Henry

et al., 2015), as integrated in the FRM-FAS, represent a portion of the families' ability to adapt and thus display resilience. Additionally, Henry et al. (2015) signify the importance of the family-community fit in family resilience and as such, factors such as social support and system navigation are significant considerations in family resilience processes.

Family Resilience Research

Research focused on family resilience in child mental health is limited. In a literature review of the impact of child mental health disorders on parents, Mendenhall and Mount (2011) found expanded social support, positive community connection, and greater unity in the family to be potential positive outcomes. In studying the experiences of parents whose child was diagnosed with ADHD, Brown, Howcroft, and Muthen (2010) found factors supporting family resilience, including positive communication, effective problem solving, quality time together, and social support. Studies on family resilience for families experiencing similar adversities will also guide the current study due to a significant lack of research on family resilience for families with a child mental health disorder. Specifically, reviews of literature in family resilience and childhood developmental disabilities (Bayat, 2007; Breitzkreuz, Wunderli, Savage, & McConnell, 2014; Cridland, 2014; Farrugia, 2009; Gardiner & Iarocci, 2012; Knestrict & Kuchey, 2009) and adult family members with serious mental illness (e.g., schizophrenia; Armstrong, Birnie-Lefcovitch, & Ungar, 2005; Bishop & Greeff, 2015; Plotnick & Kennedy, 2016) are explored. Additionally, studies of families with children whom have a chronic illness (Hamall et al, 2014; Rolland, 2012; Thompson et al., 2017) are reviewed as the dynamics and challenges, while unique, parallel those of families with a child who

has a mental health disorder. Family and community literature sets the context for evaluation of resilience and potential points of intervention and resilience literature provides definition and clarity of desired outcomes.

Family Processes

Henry et al. (2015) delineate communication patterns, meaning making, family rhythm, and consideration of the family-community interface as important processes contributing to family resilience. In therapeutic settings, meaning making and communication patterns are seen as inherent processes within a family that can foster adaptation (Walsh, 2016). Rogers (2006) explains that through the exchange of various messages or communication behaviors family members establish and maintain who they are in relation to others in the system while also concurrently shaping the environment of their relationship. This process creates and maintains mutually produced communication patterns, meaning making, and family rituals and routines (i.e., family rhythm). Bishop and Greeff (2015) found family coping and family communication as important processes contributing to family resilience when a family member has a severe mental illness. Similarly, Crowe and Lyness (2014) also found family communication, family management, and meaning making to be important processes related to adaptive family functioning. Additionally, family rhythm, meaning making, communication patterns, family coping, and family empowerment are identified themes in current qualitative research (Bayat, 2007; Black & Lobo, 2008; Breitkreuz et al., 2014; Cridland, 2014; Farrugia, 2009; Gardiner & Iarocci, 2012; Kapp & Brown, 2011; Knestrict & Kuchey, 2009; King, 2009; Plotnick & Kennedy, 2016; Rolland, 2012) that support positive

adaptation and the presence of family resilience in families with a child with a chronic illness or developmental disorder.

Family Meaning Making. Meaning making, as defined by Henry et al. (2015), is the shared perceptions in a family that emerge through family interaction and serve as a family-level lens for addressing adversities (Patterson, 2002; Patterson & Garwick, 1994). Baxter (2006) explains, “Family members exist in webs of meaning spun through communication with others (p. 133).” Meaning making is particularly focused in Baxter’s (2006) relational dialectics theory and a significant component of Walsh’s (2016) family resilience framework. With regard to the presence of a mental health disorder, a family will likely develop one or more situational meanings in relation to having a child with a mental health disorder. A family situational meaning (Henry et al., 2015) is how a family defines a situation based on their previous interactions and experiences and their current assessment and interpretation of the particular situation. Reframing and redefining these situational meanings can often be a portion of the resilience processes for a family when facing an adversity (Henry et al., 2015). Current research has revealed family meaning making as a core component of resilience in families with a child with a disability or an adult family member with schizophrenia (Bishop & Greeff, 2015; Breitzkreuz et al., 2014; Knestrict & Kuchey, 2009).

Family Communication Patterns. Family communication is an integral process within the family system. Communication between family members can be a protective process or a vulnerability (Patterson, 2002) or a positive or negative outcome to an adversity (Henry et al., 2015) depending on whether the discourse is supportive or defensive. It is this discourse that transmits meaning making among other family

constructs and is the conduit for family problem solving. Rogers (2006) explains the flow of family communication patterns as a “dance”. This interactive dance becomes a place of potential assessment and intervention. As Rogers says, “change the steps and you change the dance (p. 116)”. Positive family communication was found to be positively and significantly correlated with family resilience in families with a severely mentally ill adult member as well as families with a child having a developmental disability (Bishop & Greeff, 2015; Knestrict & Kuchey, 2009).

Family Coherence. Family coherence, as defined by McCubbin, Larsen, and Olson (1987), encompasses the coping strategies utilized by families to manage problems or address adversity. Coherence also includes processes beyond coping or management, such as trust, loyalty, acceptance, respect, and shared values (McCubbin et al., 1987). Family coherence instituted or employed by a family during an adversity contributes to family resilience. McCubbin and McCubbin (1988) found families with higher levels of coherence to also have higher levels of adaptation. In the case of having an adult member with a severe mental illness (Bishop & Greeff, 2015) or a child with a developmental disability (Breitkreuz et al., 2014; Greeff & van der Walt, 2010), family coherence (i.e., family coping) was found to be a significant process related to family resilience.

Family Rhythm. Family rhythm as defined by McCubbin and McCubbin (1988) is the process in families that demonstrates value or consistent investment in family time and family routines. Value based rules, consistently followed routines, meaningful rituals, and family time contribute to family rhythm, which studies have found to play an integral role in promoting family resilience (Bishop & Greeff, 2015; Knestrict & Kuchey, 2009) for families with mental illness or developmental disability diagnoses. Further, Breitkreuz

et al. (2014) found that maintained routines and rituals promoted resilience in families that have a child with a disability.

Family-Community Factors

A family is, in various ways, dependent upon the community within which it lives. This is particularly the case when a family encounters a challenge or adversity that necessitates a family-community interface beyond the norm. Families who have a child with a mental health disorder experience a unique interface with their community, as they explore and access assistance for their child, advocate for their child, and adapt as a parent and as a family. Plotnick and Kennedy (2016) found that as children with mental health disorders become older teens and adults, lack of community inclusion is a significant barrier for them and their caregivers. This is often due to stigma, lack of knowledge or understanding regarding mental health, and lack of acceptance (Gilbo et al., 2015; Mukolo et al., 2010; Plotnick & Kennedy, 2016). Farrugia (2009) found that parents with medical knowledge regarding autism were able to resist stigma actively in the community and their social circles. Similarly, mental health knowledge may empower families to resist stigma, illicit community support, and successfully navigate systems of services.

Subsequently, the interface between the family and their community holds unique influences on family resilience and child adaptation (Henry et al., 2015; Masten, 2018; Walsh, 2016). Once a family has determined a cause for seeking help and gained the knowledge and courage to seek out that help, difficulty accessing services and resources and navigating the systems of services in general can be profound (Breitkreuz et al., 2014; Knestrict & Kuchey, 2009). Moreover, families who have a member with a mental

health disorder experience various family-community risks and vulnerabilities, including but not limited to lack of community inclusion and public stigma (Mukolo et al., 2010; Plotnick & Kennedy, 2016). The service system, social support, and stigma experiences a family encounters within a community are significant considerations for family resilience and child adaptation.

Stigma Resistance and Social Support. Many studies have found mental health stigma resistance, community inclusion, and social support (Armstrong et al., 2005; Bishop & Greeff, 2015; Breitzkreuz et al., 2014; Farrugia, 2009; Kuhn & Laird, 2004; Pescosolido et al., 2008; Plotnick & Kennedy, 2016) to be key factors for family resilience. Specifically, social support (e.g., family, friends, and neighbors) and stigma resistance (e.g., one's own acceptance of mental health disorders) are important contributors to family resilience (Marsh et al., 1996; Mukolo et al., 2010; Ritscher & Phelan, 2004). Breitzkreuz et al. (2014) found social support (e.g., extended family, health professionals, education staff, church groups, neighbors, friends, and various community organizations) to be a particularly salient theme for families with a child with a disability. Marsh et al. (1996) found families with a member with a severe mental illness indicated social support (e.g., quality connection to a mental health support group and assistance from the community) to be an important factor for adaptation. As an additional consideration, a common lack of parental knowledge regarding childhood mental health symptoms as well as knowledge about appropriate and effective treatment also complicate this journey for many families (Gilbo et al., 2015). This is particularly salient when a family is impacted by stigma (Mukolo et al., 2010). As communities seek to be

informed and inclusive, programs and opportunities can be offered to educate, equip, and empower families facing a childhood mental health disorder.

Systems of Services Navigation. From inordinate wait times for psychiatrists to expensive psychological testing to simply locating a properly trained professional to treat their child's particular diagnosis (Breitkreuz et al., 2014; Knestrict & Kuchey, 2009; Pescosolido et al., 2008; Sareen et al., 2007), families face a confusing and elusive path to recovery and resilience. In addition, many families find socioeconomic constraints, excessive and complicated paperwork, and a shortage of properly trained specialists (Breitkreuz et al., 2014; Knestrict & Kuchey, 2009) common barriers to successfully navigating the systems of services and thus, a deterrent to individual and family resilience. Personal resources, time and money are spent in navigation of services rather than on personal and family well being. Moreover, the lack of availability of treatment incorporating and involving the family further complicates adaptation and resilience (Armstrong et al., 2005; Bishop & Greeff, 2015). Family empowerment (i.e., agency and advocacy) has been shown as a significant factor for family resilience in these types of scenarios (Anuradha, 2004; Breitkreuz et al., 2014; Farrugia, 2009; Plotnick & Kennedy, 2016). The family's successful determination of child and family needs and their agency and advocacy (i.e., empowerment; Bayat, 2007; Breitkreuz et al., 2014; Farrugia, 2009) provide skills for successful navigation of the systems of services and is essential for child adaptation and family resilience.

Research Questions

While extensive research has been conducted on resilience in general, family resilience research has not yet been applied to families who have a child with a mental

health disorder. Moreover, the family level interventions that have been implemented may not be intervening on family processes and family-community fit factors most central to family adaptation in the face of a childhood mental health disorder (Hoagwood et al., 2014; Kuhn & Laird, 2014). The purpose of the proposed study is to explore the family-level processes and family-community dynamics that contribute to family resilience and child adaptation. Specifically, the family processes explored include family meaning making, family communication, family rhythm, and family coherence. The family-community dynamics that potentially support family resilience and thus are a focus of this study include social support, navigation of systems of services, and stigma resistance. The primary aim of this study is to establish the first empirical evidence for the family interactive resilience model (FIRM, see Figure 1) as a unique model of family resilience and child adaptation for childhood mental health disorders. Specifically, the following research questions and exploratory analyses guided the proposed study:

Research Question 1: How are child mental health demographics, family processes, and family-community fit factors related to parent report of family resilience (see Figure 4)?

Hypotheses: Due to the exploratory nature of the current study, no formal hypotheses regarding the unique and significant predictors of family resilience will be made. Rather, development of hypotheses for future research will be generated by first validating these variables as significant predictors for parent report of family resilience and second, observing the level of significance for each predictor.

Research Question 2: How are child mental health demographics, family processes, and family-community fit factors related to child report of family resilience?

Hypotheses: Due to the exploratory nature of the current study, no formal hypotheses regarding the unique and significant predictors of family resilience will be made. Rather, development of hypotheses for future research will be generated by first validating these variables as significant predictors for child report of family resilience and second, observing the level of significance for each predictor.

Research Question 3: How are child mental health demographics, family processes, and family-community fit factors related to child report of child adaptation?

Hypotheses: Due to the exploratory nature of the current study, no formal hypotheses regarding the unique and significant predictors of child adaptation will be made. Rather, development of hypotheses for future research will be generated by first validating these variables as significant predictors for child adaptation and second, observing the level of significance for each predictor.

CHAPTER III

Methodology

Study Context

To understand the family processes and family-community dynamics that assist a family in adapting when a child within the system has a mental health disorder, the original study design and procedures focused on collecting data from parent-child dyads through an online, quantitative survey. The anonymous online survey, using *Qualtrics Survey Software* (2018), was developed to gather paired data from parent-child dyads for children ages 11 to 19 (i.e., adolescents). Parent surveys were designed to gather responses regarding child mental health demographics (i.e., diagnosis, age of onset, age of diagnosis, types of treatment, support group types), and family level data for family processes (i.e., communication, meaning making, family rhythm, family coherence), family-community fit (i.e., social support, systems navigation, stigma internalization), and family resilience, whereas child surveys gathered responses representing family level data for family resilience and individual level data for child adaptation.

Initial recruitment of parent-child dyads for the online anonymous survey was attempted. An automated link on the recruitment form connected parent participants to the anonymous survey. The parent first completed the parent consent form and the child consent form for children who are minors and participating with them in the survey. After completion of the consent forms (see Appendix A), the parent completed the parent

survey, which was designed to take approximately 45 minutes to complete. At completion of the parent survey, parents were instructed to stop and allow their child to complete the remainder of the survey. Parents were instructed to allow their child to freely and independently fill out the remainder of the survey, providing them privacy but staying available for assistance as needed.

The child participant, upon clicking the forward button in the survey, was first directed to the child assent/consent form. After completion of the child assent/consent form, the child participant was able to begin the child survey. The shorter child survey was designed to take approximately 15 minutes to complete. Parents were encouraged to only provide clarification as requested by the child and only with regard to what a question means (i.e., not how to answer).

Upon obtaining permission to implement the study from the Oklahoma State University Institutional Review Board, sample recruitment was initiated via social media posts and emails. Over the course of 14 days, the initial survey was accessed only 33 times. Of the parents who initiated the original survey, 31 participants gave parental consent, 1 dissented consent, and 22 gave consent for their child to complete the child portion of the survey. Of the 31 parents who provided consent, complete data for all study variables was provided for only three parents and two children. Based on feedback from collaborative survey distributing organizations, it was determined that the length of the survey as well as child responses required for the dyadic data design were not feasible. A decision was made to adapt the survey to a parent-only survey, with a

significantly decreased completion time (15-minutes) through streamlined demographics and reduction of measures. Demographic questions were retained based upon applicability to the revised survey. Decisions to streamline family process measures were based on current research providing stronger evidence for meaning making and communication as family process predictors of family resilience in the qualitative literature (Bishop & Greeff, 2015; Breitzkreuz et al., 2014; Knestrict & Kuchey, 2009). As a result, two family process measures: Family Time and Routines Index (family rhythm) and Family Sense of Coherence (family coherence) were removed from the survey. Permission to discontinue the initial survey and implement the revised survey was obtained from the Oklahoma State University Institutional Review Board.

Revised Study Procedures

Revised sample recruitment targeted only the parent or parent figure (e.g., biological, adoptive, step, other family member), hereafter referred to as parents, of a child diagnosed with a mental health disorder. To avoid duplicate data from the same recruitment sample, the original data from the first recruitment was not retained for analysis. Parents were informed that the child should have a mental health diagnosis received before the age of 19 in order to complete the study. Diagnoses included one or more of the following: mood disorder (e.g. major depressive disorder, dysthymia, bipolar I or II disorder), anxiety disorder (e.g. generalized anxiety disorder, social phobia, specific phobia, panic disorder, posttraumatic stress disorder, or separation anxiety), obsessive compulsive disorder, or Tourette's syndrome (APA, 2013). Children diagnosed

with behavioral disorders (e.g. attention deficit hyperactivity disorder, oppositional defiant disorder, or conduct disorder) or substance abuse disorder were also included in the study. Residence in the United States or a foreign located United States territory and English proficiency was necessary for inclusion.

Recruitment was conducted through social media sites (e.g., Facebook, Instagram) and specific organization pages on those sites (see Appendix B). Additional recruitment took place through online newsletters, blogs and mental health listservs (see Appendix B). Snowball sampling was employed as participants were encouraged to share the recruitment information and link via social media sharing (e.g., share to personal, group or organization Facebook page, share as a tweet on Twitter) and email to potentially interested persons. Sample size calculation determined a minimum sample size greater than 78 was required to detect an effect of the specified size, probability level, and power level (Soper, 2018). Based on these calculations and general recommendations for a sample size ratio of 15 participants per the 5 independent variables in the study (Tabachnick & Fidell, 2007), a minimum sample size of 100 participants was targeted. Participants connected to the revised anonymous survey through an automated link on the recruitment form. The survey was generated and maintained through *Qualtrics Survey Software* (2018), an online research survey platform. The participant first completed a consent form and then completed the survey (See Appendix A).

On average, survey completion took 33 minutes, with participants' total time in the online survey ranging from 9 to 346 minutes. Participant demographic data were collected first, followed by the standardized family process and community-family fit measurements, then child mental health and wellbeing demographics, and finally two qualitative questions. Upon completion, survey responses were automatically recorded as anonymous data. Since this was an anonymous survey, no specific debriefing was initiated with participants; however, participants were encouraged to retain the mental health resources list provided at the beginning of the survey for further assistance.

Measures

Participant Demographics. Parent age, gender, ethnicity, and race were assessed by a standard demographic questionnaire. Gender was measured by a single item coded as 1 (*male*), 0 (*female*). Ethnicity was measured by a single item coded as 1 (*Hispanic*), 0 (*non-Hispanic*). Race was measured by a single item and as 1 (*other*), 0 (*White*). Family-level demographic data were collected from the parent participant. Income level was measured by a single item coded as 1 (*low*; < \$35,000), 2 (*middle*; \$35,000 - \$74,999), 3 (*upper middle*; \$75,000 - \$149,999), and 4 (*high*, > \$150,000). Relationship to child was measured by a single item coded as 0 (*biological parent*), 1 (*adoptive parent*) 2 (*stepparent*), 3 (*grandparent*), and 4 (*aunt or uncle*).

Child Mental Health Demographics. Child mental health data were collected from the parent for the child's mental health diagnosis (see Figure 5), age at onset of mental health symptoms, age at diagnosis and types of treatments accessed. Child's

mental health diagnoses were coded as diagnosis type(s) and summed to create a total number of diagnoses for each child. Age of symptom onset and age of diagnosis were used to calculate the average age of symptom onset, average diagnosis age, and average lapse of time from symptom onset to diagnosis. Types of treatment accessed was measured by one item coded as 1 (individual only), 2 (individual + family), 3 (individual + group), and 4 (individual + family + group).

Family Measures. Data for family processes, family-community fit factors, and family resilience were collected from the parent through the established measures as described below (see Appendix A).

Family Process Variables

Communication. Communication was assessed through parent report on the Family Communication Scale (FCS; Olson, 2011). The FCS is a 10-item measure of family communication. The scale measures family communication with items such as “*Family members try to understand each other’s feelings.*” and “*Family members are very good listeners.*” The items are summed to create a score ranging from 10 to 50. Lower scores indicate less satisfaction in family communication and higher scores indicate more satisfaction in family communication (FCS; Olson, 2011), with a score of 44-50 indicating very high, 38-43 high, 33-37 moderate, 29-32 low, and 10-28 very low. The FCS has an internal reliability of .90 and a test-retest reliability of .86. For this study, the alpha for the FCS was .89.

Meaning Making. Family meaning making was assessed through parent report using the Reframing Subscale of the Family Crisis Oriented Personal Evaluation Scale (F-COPES; McCubbin, Olson & Larsen, 1981). The subscale is a 5-point Likert scale consisting of eight questions. The subscale measures how families redefine the impact of adversity using items such as, “*Knowing we have the power to solve major problems.*” Responses range from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The items are summed to create a subscale score ranging from 8 to 40. Lower scores indicate less successful reframing of adversity as manageable and higher scores indicate more successful reframing of adversity as manageable. Overall, the F-COPES has an internal reliability of .86 and a test-retest reliability of .81 (McCubbin et al., 1981). The reframing subscale has an internal reliability of .72 (McCubbin et al., 1981). For this study, alpha for the F-COPES Reframing subscale was .77.

Family-Community Fit Variables

Social Support. Social support was assessed through parent reports on the Family Crisis Oriented Personal Evaluation Acquiring Social Support Subscale (F-COPES; McCubbin et al., 1981). The 9-item Likert social support subscale measures how well a family accesses social support with items such as, “*When we face problems or difficulties in our family, we respond by ...sharing concerns with close friends.*” Participants select a response for each item ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The acquiring social support subscale is calculated by summation with possible scores ranging from 9 to 45. Lower scores indicate less effort to acquire social support and

higher scores indicating stronger efforts to acquire support. The acquiring social support subscale has an internal reliability of .70 (McCubbin et al., 1981). The alpha in the present study for the F-COPES Social Support subscale was .81.

Systems of Services Navigation. Systems of services navigation was assessed through parent report on the Family Empowerment Service System Subscale (FES-SS; Koren, DeChillo, & Friesen, 1992). The FES-SS subscale consists of 12 items. The subscale measures the agency and advocacy present in a family as measured by items such as *“I feel I have the right to approve all services my child receives”* and *“I make sure that professionals understand my opinions about what services my child needs”*. Participants select responses on a 5-point Likert scale ranging from 1 (*Not true at all*) to 5 (*Very true*) Items were summed, providing a subscale score ranging from 12 to 60 with lower scores indicating less empowerment within navigation of systems and higher scores indicating stronger agency and advocacy. The FES-SS has an internal reliability of .87 and a test-retest reliability of .77 (Koren et al., 1992). The service system subscale has a kappa coefficient of .70 (Koren et al., 1992), demonstrating inter-rater reliability of ratings from child and family social work faculty or practitioners. The FES shows discriminant validity between participants in six empowerment activities (e.g. advisory, political, legal, assisting, organizing, participating) versus those not involved in empowerment activities (Koren et al., 1992). The alpha in the present study for the FES System Navigation subscale was .87.

Stigma Resistance. Stigma resistance was assessed through parent report on the Internalized Stigma of Mental Illness Inventory (ISMI; Ritsher, Otilingam & Grajales, 2003). The ISMI consists of 29 questions in five subscales (e.g., alienation, stereotype endorsement, discriminant experience, social withdraw, and stigma resistance) and measures the subjective experience of stigma on an individual with a mental health diagnosis. Items were adapted for families with a child with a mental health disorder and include adapted items such as, “*Nobody would be interested in getting close to[us] because [our child has] a mental illness*” and “*[We] feel out of place in the world because [our child has] a mental illness*”. Participants selected a response on a 4 point Likert scale ranging from 1 (*Strongly Disagree*) to 4 (*Strongly Agree*) The total ISMA score is calculated by summation after reverse coding for the stigma resistance subscale then dividing by the total number of answered questions. Scale score range from 1 to 4 with scores indicated as follows: 1.00-2.00 no to minimal internalized stigma, 2.01-2.50 mild internalized stigma, 2.51-3.00 moderate internalized stigma, and 3.01-4.00 severe internalized stigma (Ritsher et al., 2003). Because stigma internalization opposes stigma resistance, higher scores (i.e., 3,01-4.00) indicate lower stigma resistance and lower scores (e.g., 1.00-2.00) indicate higher stigma resistance. The ISMI has an internal reliability of .90 and a test-retest reliability of .92 (Ritsher et al., 2003). The ISMI has good construct validity in expected directions with the Perceived Devaluation-Discrimination and the Center for Epidemiological Studies – Depression (CES-D; Ritsher et al., 2003). The alpha in the present study for the ISMI was .92.

Criterion Variables

Family Resilience. Family resilience was assessed through parent report using the Family Adaptability and Cohesion Evaluation Scales (FACES IV; Olson, 2011). The FACES IV is a 5 point Likert scale consisting of 42 items divided into two subscales: cohesion and adaptability. Questions measuring cohesion included items such as “*Family members like to spend free time together.*” Adaptability was measured by items such as “*We shift household responsibilities from person to person.*” Responses range from 1 (*Almost never*) to 5 (*Almost always*). The FACES IV subscales have alpha reliabilities of .89 for the balanced cohesion scale, .84 for the balanced adaptability scale, .77 for the enmeshed scale, .87 for the disengaged scale, .86 for the chaotic scale and .82 for the rigid scale (Olson, 2011). FACES IV was found to have content, construct, and concurrent validity (Olson, 2011). For the present study, Cronbach’s alphas were .84 for the balanced cohesion scale, .54 for the balanced adaptability scale, .74 for the enmeshed scale, .73 for the disengaged scale, .81 for the chaotic scale, .61 for the rigid scale. For this study, the FACES IV total ratio score was used. The FACES IV total ratio scores indicate balanced/unbalanced family functioning. Ratio scores were calculated by summing the six subscales, calculating cohesion ratio and flexibility ratio scores, and then averaging the cohesion and flexibility ratios to create the total ratio score. Scores range from 0 to 10, with most scores within a 0-2 range (Olson, 2011). At or above one on the cohesion and adaptability scales indicate balanced cohesion and balanced flexibility in the family. Scores at or above one for the total ratio score indicate balanced

functioning and thus, demonstrated resilience. Lower scores represent overall lower family functioning, with low scores on the cohesion and adaptability scales indicating a disengaged and rigid family functioning or an enmeshed and chaotic family functioning (Olson, 2011).

Data Analysis Plan

IBM SPSS Statistics 25.0 software (2017) was used to analyze the data. Initially, data were screened for missing items, outliers, and univariate normality. Missing items were replaced with the series mean. No outliers were detected. Univariate normality was satisfied, as assessed by Shapiro-Wilk's test ($p > .05$) and examination of Q-Q plots. There was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p > .05$).

Descriptive statistics, *t*-tests, ANOVAs and correlations were run to explore the sample. To examine Research Question 1, a three stage hierarchical multiple regression was run with family resilience as the dependent variable. Framed by Henry et al.'s (2015) family resilience model (see Figure 2) and informed by Bronfenbrenner's (1979) ecological systems theory, the variables were entered starting with the individual, then family, and finally the family-community level. Number of diagnoses was entered on Step 1, family processes (i.e., family communication and meaning making) were entered on Step 2, and family-community fit factors (i.e., social support, systems navigation, and stigma internalization) were entered on Step 3. Prior to conducting the hierarchical multiple regression, the relevant assumptions of statistical analysis were tested. There

was independence of residuals, as assessed by a Durbin-Watson statistic of 2.19. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by no tolerance values less than .555. There was one outlier as assessed by studentized deleted residuals greater than ± 3 standard deviations, which was retained due to no significant differences when run without the case. There were three leverage values greater than 0.2, which were retained due to low values (i.e., .227, .213, .204). No influential values were found as assessed by Cook's distance values above 1. Normality was met, as assessed by visual examination of the standardized residual histogram and the P-P plot.

Due to the lack of child reports in the final data set due to survey revision, analyses exploring Research Questions 2 and 3 were not possible.

CHAPTER IV

Findings

Participant Descriptives

Across a 30-day period, 152 individuals accessed the survey and consented to participate. Of the 152, 126 (83%) completed only participant demographic questions, 109 (72%) completed measures for family resilience, family processes (i.e., communication, meaning making), and one family-community fit measure (i.e., social support), 102 (67%) completed measures for family resilience and all predictor variables, including all family-community fit factors (i.e., social support, system navigation, and stigma internalization, and 78 (51%) completed the full survey, including child mental health demographic questions. The final two qualitative questions were answered by 63 (41%) and 55 (36%) participants, respectively.

Of the 78 surveys with completed data for family resilience, family processes, family-community fit factors, and child mental health demographics, 71 (91%) participants identified as female and seven (9%) as male. Average age of participants was 47 years old with a range of 28 years to 68 years. A strong majority of participants ($n = 70$; 90%) identified as White, two (2.5%) as Black, two (2.5%) as American Indian, and four (5%) as multiracial. Regarding ethnicity, a majority of the sample ($n = 70$; 90%) were non-Hispanic, with eight (10%) reporting to be Hispanic. Regarding income, five (6%) reported low (< \$34,999), 30 (39%) reported middle (\$35,000 - \$74,999), 29 (37%)

reported upper middle (\$75,000 - \$149,999), and 13 (17%) reported high (> \$150,000). Regarding participants' reported relationship with child, 65 (83%) reported being a biological parent, seven (9%) reported as adoptive parents, two (3%) reported as stepparent, two (3%) reported as grandparents, and two (3%) reported as aunt or uncle.

Child Mental Health Descriptives

Total number of mental health diagnoses per child ranged from one to six, with 18 (23%) reporting one diagnosis, 23 (29%) two diagnoses, 18 (23%) three diagnoses, 14 (18%) four diagnoses, four (5%) five diagnoses, and one (1%) six diagnoses. Average age of symptom onset was seven years old, with a range from 1 to 15 years of age. Average age at diagnosis was 10.5 years, with a range from 2 to 19 years. The average time lapse from reported symptom onset to reported first diagnosis was 3.5 years. Regarding child treatment types accessed, 20 (26%) reported only individual therapy, 25 (32%) reported both individual and family therapy, ten (13%) reported individual and group therapy, and 21 (27%) reported individual, family, and group therapy.

Preliminary Analysis

Independent *t*-tests. To test potential differences in family resilience based on gender, ethnicity, and race, a series of independent samples *t*-tests were run. Results were not significant for gender $t(1,77) = -.41, p = ns$, or race, $t(1,77) = -.19, p = ns$, suggesting no group differences in family resilience between male ($M = 1.30, SD = 0.48$) and female ($M = 1.24, SD = 0.34$) participants or between White ($M = 1.24, SD = 0.36$) and minority ($M = 1.27, SD = 0.06$) participants. Results of the independent samples *t*-test for

ethnicity were significant, $t(1,77) = 2.56, p = .01$, with Hispanic participants reporting significantly lower levels of family resilience ($M = 0.95, SD = 0.31$) than non-Hispanic ($M = 1.28, SD = 0.34$) participants..

Analysis of Variance. A series of one-way ANOVAs was conducted to determine if participants' reports of family resilience was different based on income level, relationship to child, or types of treatment sought.

First, a one-way ANOVA was run to examine family resilience by income level (i.e., low, middle, upper middle, and high). Differences among the four income groups was statistically significant, $F(3, 73) = 6.74, p < .000$. Bonferroni post hoc analysis revealed a statistically significant mean increase between the low and middle income groups ($-.46, 95\%CI [-.87, -.04], p = .02$) and between the low and upper middle groups ($-.62, 95\%CI [-1.04, -.20], p = .001$). No other group differences were statistically significant. Family resilience was significantly lower among participants in the low income group ($M = .77, SD = .31$) compared to participants in the middle ($M = 1.23, SD = .29$) as well as the upper middle ($M = 1.40, SD = .38$) ($M = 1.11, SD = .22$) income groups.

Next, a one-way ANOVA was conducted to determine if family resilience was different based on parent-figure relationship types: biological parent ($n = 65$), adoptive parent ($n = 7$), stepparent ($n = 2$), grandparent ($n = 2$) and aunt/ uncle ($n = 2$). Family resilience statistics across groups by relationship type included, biological parent ($M = 1.23, SD = .36$), adoptive parent ($M = 1.32, SD = .39$), stepparent ($M = 1.28, SD = .04$),

grandparent ($M = 1.47, SD = .11$), and aunt or uncle ($M = 1.26, SD = .02$). The differences among relationship groups were not statistically significant, $F(4, 73) = .35, p = .84$.

A final one-way ANOVA was conducted to determine if family resilience was different based on participants' reported access of treatment types. Participants were classified into four groups: individual therapy only ($n = 20$), individual and family therapies ($n = 25$), individual and group therapies ($n = 10$) and individual and family and group therapies ($n = 21$). Family resilience across treatment types were as follows: individual ($M = 1.28, SD = .40$), individual and family ($M = 1.28, SD = .39$), individual and group ($M = 1.20, SD = .20$), and individual and family and group ($M = 1.20, SD = .33$). The differences in family resilience scores among treatment type groups were not statistically significant, $F(3, 75) = .27, p = .85$.

Correlations. Correlations were run to assess relationships between child mental health demographics, family processes, family-community fit factors, and family resilience. Results are presented in Table 1. Total number of child mental health diagnoses was positively associated with stigma internalization. Family communication was positively associated with meaning making, all family-community fit factors (i.e., social support, systems navigation, stigma internalization) and family resilience. Meaning making was positively associated with social support and family resilience. Social support was positively associated with systems navigation and family resilience, and systems navigation was positively associated with family resilience. Stigma

internalization was negatively associated with communication, meaning making, systems navigation, and family resilience.

Hierarchical Multiple Regression

A hierarchical regression model was run to explore the statistically significant amount of progressive variance (Aron, Aron, & Coups, 2008; Tabachnick & Fidell, 2007) in family resilience as a function of child mental health demographics, family processes, and family-community fit factors. Specifically, the child mental health demographic variable (i.e., number of diagnoses) was entered on Step 1. Next, two family process variables (i.e., family communication, meaning making) were entered on Step 2. Last, three family-community fit factors (i.e., social support, systems navigation, stigma internalization) were entered on Step 3. See Table 2 for full details on each regression model.

In Step 1, no support was found for a relationship between total number of mental health diagnoses and family resilience. The addition of family processes (Step 2) led to a statistically significant increase in R^2 of .55, $F(2,74) = 44.58, p < .001$, adjusted $R^2 = .53$, thus family processes accounted for 53% of the change in family resilience. Further, a significant positive beta coefficient ($\beta = .72, p < .001$) was found for the relationship between family communication and family resilience. The addition of the family-community fit factors did not support statistical significance and provided a decrease in ΔR^2 to .03. Thus, the full model was not statistically significant, $R^2 = .58, F(3,71) = 1.40, p = .25$, adjusted $R^2 = .54$.

Post Hoc Analysis

Due to a significant and particularly strong correlation, and noting the significant positive beta coefficient between family communication and family resilience, a post hoc analysis was run without family communication to explore for other potential predictive values that may have been masked by the strong predictive relationship between family communication and family resilience. A hierarchical multiple regression was run with number of adolescent mental health diagnoses entered on Step 1, meaning making on Step 2, and the family-community factors (i.e., social support, systems navigation, stigma internalization) on Step 3. No support was found for a relationship between total number of mental health diagnoses and family resilience (Step 1). The addition of meaning making (Step 2) led to a statistically significant increase in R^2 of .17, $F(1,75) = 15.83$, $p < .001$, adjusted $R^2 = .16$, thus meaning making accounted for 16% of the change in family resilience in this model. The addition of the family-community fit factors (i.e., social support, systems navigation, stigma internalization) led to a significant increase in R^2 of .13 accounting for an additional 13% of variance in family resilience, $F(3,72) = 4.54$, $p = .006$, $R^2 = .31$. Thus, the full post hoc model was statistically significant for this analysis, adjusted $R^2 = .26$. Specifically, the beta coefficients were significant in the full model for meaning making ($\beta = .27$, $p = .029$) and for stigma internalization ($\beta = -.41$, $p = .001$). Thus, for every unit increase in positive meaning making families displayed a .27 increase in family resilience. Likewise, for every unit increase in stigma internalization, families reported a .41 decrease in family resilience.

CHAPTER V

Discussion

The findings of the current study provide support for the family interactive resilience model (FIRM) as a framework for assessment and intervention focused on enhancing resilience in families when a child is diagnosed with a mental health disorder. Among participants in the current sample, the family processes outlined in the FIRM were found to be significant predictors of family resilience. Specifically, and similar to previous research (Bishop & Greeff, 2015; Breitreuz et al., 2014; Crowe & Lyness, 2014; Greeff & van der Walt, 2010; Jonker & Greeff, 2009; Kapp & Brown, 2011), family communication and meaning making appear to play key roles as significant predictors of family resilience. The current study also provides evidence to support family-community factors in the FIRM as significant predictors of family resilience, specifically the inverse relationship between stigma internalization and family resilience (i.e., with each unit of increase in reported internalization of stigma, reported family resilience decreased by .41). Therefore, above and beyond family communication and meaning making predicting family resilience, stigma resistance as measured by stigma internalization may also serve as a significant predictor of family resilience. In summary, family communication was a particularly salient predictor of family resilience in the overall model, with meaning making and stigma internalization as noticeable predictors

in the post hoc model suggesting these factors are an important consideration in future family resilience intervention and research.

Further, the current study suggests communication as a distinct process separate from, yet uniquely explaining variance in family resilience outcomes of adaptability and cohesion. Positive family communication is conceptualized as a protective family process (Henry et al., 2015; Olson, 2011; Patterson, 2002) and has been found in several studies to be positively and significantly correlated with family resilience (Bishop & Greeff, 2015; Knestrict & Kuchey, 2009). The current study provides evidence to support positive family communication as a predictor of family resilience for families with a child with a mental health disorder. For every unit increase in family communication there was a .72 increase in the reported presence of family resilience. As parents reported healthier family communication (i.e., *Family members can calmly discuss problems with each other.*), they reported higher levels of balanced cohesion (i.e., fitting together; *Family members seem to avoid contact with each other when at home.*) and adaptation (i.e., sticking together; *My family is able to adjust to change when necessary.*). Thus, while there may be some concern about the strong correlation between family communication and family resilience, the measures are conceptually distinct and the results of this study support the facilitating process of communication for cohesion and adaptability (i.e., family resilience).

For further clarification, Olson, Waldvogel, and Schielff (2019) explain the development of the Circumplex model of family functioning and the conceptual

understanding that adaptability and cohesion are curvilinear circumplex dimensions and communication is a linear facilitating dimension. Cohesion and flexibility are constructs assessing the levels of balance versus unbalance in a family, while communication is the “facilitating dimension” (Olson, 2011; Olson et al., 2019), which assists the family in attaining and maintaining balance. In other words, families stick together (i.e., cohesion) and fit together (i.e., adaptation) allowing restoration to balanced functioning in the family after an adversity and communication is one process that facilitates the rebalancing. While the FACES IV scales measure the atmosphere (e.g. *Our family has a good balance of separateness and closeness.*) in which family processes such as communication take place, the Family Communication Scale distinctly measures a continuum of positive family communication (e.g. *Family members are able to ask each other for what they want.*).

Meaning making is deeply rooted in the conceptual and theoretical family resilience literature (Baxter, 2006; Henry et al., 2015; Patterson, 2002; Patterson & Garwick, 1994; Walsh, 2016). Further, various studies have established meaning making as a principal factor related to resilience in families with a child with a disability or an adult family member with schizophrenia (Bishop & Greeff, 2015; Breitzkreuz et al., 2014; Knestrict & Kuchey, 2009). In post hoc analysis, meaning making accounted for 16% of the variance in family resilience and a .27 increase in family resilience for every unit of increase in meaning making for the full model. Meaning making appears to be an integral

factor for predicting family resilience in families with a child with a mental health disorder and may be particularly salient when assisting families to adapt and rebalance.

A significant number of previous studies have found stigma (i.e., a public or internalized shame for a characteristic, quality, or condition) to be a salient factor with regard to adaptation and resilience in mental health (Farrugia, 2009; Mendenhall & Mount, 2011; Mukolo et al., 2010; Ritsher & Phelan, 2004; Plotnick & Kennedy, 2016). Stigma internalization was negatively correlated with all variables except number of diagnoses to which it was positively correlated, indicating stigma resistance would have a positive relationship to family communication, meaning making, social support, and systems navigation. In the post hoc analysis, stigma was also found to be statistically significant above and beyond number of adolescent mental health diagnoses and meaning making, reporting a .41 decrease in family resilience for every unit increase in stigma internalization. Stigma resistance appears to be a significant predictor of family resilience with family processes such as family communication and meaning making. Families who experience stigma may find it particularly necessary to have more clear, direct, and open communication as they determine the meaning a mental health disorder holds for their family and learn to navigate the internal challenges of their child's disorder.

A unique risk families of children with mental health disorders may face, severity and number of diagnoses (Jonker & Greef, 2009; Marsh & Johnson, 1997), may further necessitate clear and positive communication and adaptive meaning making as essential factors for balanced family functioning. The current study looked broadly at mental

health diagnoses both in scope of diagnoses and number of total diagnoses for the child (i.e., schizophrenia, mood disorders, anxiety disorders, compulsive disorders, phobia disorders, etc.), while previous studies typically focused on one type of diagnosis or a primary reported diagnosis (Bishop & Greeff, 2015; Huang, Hung, Sun, Lin, & Chen, 2009; Marsh et al., 1996). Also unique from previous studies (Crowe & Lyness, 2014), the current sample of parents reported a high number of multiple mental health diagnoses with 60 children (77%) having two or more diagnoses. Total number of child mental health diagnoses correlated positively with stigma internalization but no other variables, suggesting stigma internalization may be higher for families with a child with multiple mental health diagnoses. Number of diagnoses and stigma internalization may necessitate clear and open communication and reframing situational meaning within families to avoid miscommunications, minimize guilt or shame, deter further stigmatization, and restore or enhance balanced family functioning.

Due to symptom onset often occurring in childhood or adolescence (Kessler et al., 2005), family level prevention and intervention is clearly vital to positive adaptation. Thus, timing of symptom onset and age of diagnosis are also important considerations. Moreover, with research suggesting it takes an average ten years to seek professional help (NIMH, 2011; Ramsawh et al., 2011), engaging the family as a point of prevention and early intervention is necessary to address the important public health concern of child mental health disorders. Implementing specific family communication and meaning making interventions within the family system should be explored.

Results of the current study suggest family level therapeutic interventions may be particularly beneficial to families with a child with a mental health disorder. Interventions focused on enhancing clarity, open emotional expression, and collaborative problem solving in family communication are key to engaging resilience in systems (Walsh, 2016). Providing techniques to family members to enhance clarity in their communications and meaning making may be particularly salient with mental health concerns, both due to stigma (Marsh et al., 1996; Mukolo et al., 2010; Plotnick & Kennedy, 2016; Ritsher & Phelan, 2004) and to potentially complex exchanges of covert and overt messages (i.e., direct and indirect but understood, Day, 2010). Day (2010) described covert and overt messages in a family as an iceberg: the overt messages are the part that is seen and the covert messages are under the surface of the water (unseen). Clarity and emotional expression can help family members process emotional responses to the complex interface of family dynamics and mental health challenges, overcome stigma internalization, and create positive meaning making in the family. Walsh defined clarity in two parts: using clear and consistent words and actions and seeking to clarify ambiguous messages and obtain truth. Intentional choice of words, actions, and tone of voice can be particularly relevant in the context of mental health challenges with regard to stigma resistance and meaning making. Emotional expression can further help families establish positive meaning with regard to the mental health diagnosis and subsequent challenges. Walsh suggested that emotional expression should be open, including sharing both painful feelings and positive feelings and interactions. For example, open emotional

expression can be sharing sadness, fear, or disappointment as well as expressing appreciation and engaging in fun and humor. This also includes self-care and respite from ongoing and cumulative stressors. Walsh suggested an approach to effective family problem solving through four main categories with specific action steps: shared resourcefulness (identify problem, brainstorm creative solutions, discuss resources), shared decision making (negotiate, compromise, show reciprocity, be fair, resolve conflict), attaining mastery (focus on goals, take specified steps, celebrate success, learn from failure), and taking a proactive approach (plan, prevent, prepare). Collaborative problem solving could help disseminate the burden across the entire system, empower the child with a mental health disorder, fortify family meaning making processes, clarify challenges and strengths, and reestablish family balance. Further, it is important to note that a strengths-based approach (Tse et al., 2016) emphasizing existing family skills and abilities may be particularly salient for families who may be experiencing internalized stigma, shame, grief, or self-blame with regard to their child's mental health challenges.

Findings from this study suggest the development and implementation of community support programs targeting family communication and meaning making are also key when working to establish and enhance resilience within families when a child is diagnosed with a mental health disorder. A dearth of programs targeting family level adaptation and specifically family communication and meaning making exists. Of over 200 family intervention programs, Hoagwood et al. (2014) reviewed 50 programs that met their inclusion criteria (e.g., mental health diagnosis only, focus beyond strictly child

outcomes). Programs were categorized by type of leader: clinician led, peer led, or team led (clinician and peer). Of the 50 programs, 15 (11 clinician-led, 4 peer-led) reported communication and five (all clinician-led) reported cognitive restructuring (i.e., reframing) as an instructional goal. While several of the clinician-led programs stated a focus on communication skills, training was typically focused on parents managing therapeutic homework or assisting their children in addressing their mental health challenges through communication techniques. Likewise, since the programs addressing cognitive restructuring were focused on the diagnosed child and the primary caregiver, it is likely that family level meaning making was not addressed in these interventions. Of the handful of *family based peer support* programs, the National Alliance on Mental Illness (NAMI) Basics program was the only program reported to target and assess family communication (Hoagwood et al., 2014). Brister et al. (2012) evaluated the NAMI Basics program, a 6-week program providing mental health education and advocacy training for parents of children exhibiting mental health symptoms, and found improvements with regard to incendiary (i.e., negative, inflammatory) family communication from pre to post-test with a sample of 36 families. None of the 17 peer and team led programs reviewed by Hoagwood et al. (2014) reported meaning making as an instructional goal of the program, Likewise, none of the 33 clinician led programs reported family functioning as a targeted outcome. Efforts focused on family resilience, family communication training, and engagement with family level meaning making may be appreciably helpful as specific support program goals.

Programs aimed at educating, equipping, and empowering families with mental health knowledge and awareness are needed. Equipping parents and families can be accomplished through mental health school programs (i.e., preventative psychoeducation for students and parents), community mental health engagement (e.g., mental health fairs, trainings, programs aimed at providing next step information such as when, how, and where to get help or support), and mental health screenings (e.g., online, with primary care physicians, at community based mental health facilities, or in schools).

Empowerment (i.e., internalized confidence; Rodriguez et al., 2011), an important quality for families and parents of children with a mental health disorder, can be introduced through interactive community based support groups, such as the NAMI BASICS program and local or state chapters of the National Federation of Families for Children's Mental Health (NFFCMH). NAMI Basics is a free 6-week education program for parents with a child under the age of 22 who is experiencing mental health symptoms. NAMI Basics covers the following topics: understanding the impact of mental health on the individual and the family, parent self care, decreasing internalized stigma, problem solving and effective communication, advocacy for the child, learning about systems of care, and how to prepare for and respond to a mental health crisis (NAMI, 2019). Local and state chapters of NFFCMH provide various support services such as support group meetings, legislative advocacy, family and individual advocacy training, referrals to service providers, and mental health education and awareness materials and trainings.

The current findings suggest that preventative measures that enhance family communication, meaning making, and stigma resistance may also serve as protective measures in family resilience and child mental health adaptation, deterring compound effects of untreated mental health disorders. Efforts within communities to provide programs that teach positive parenting, emotion regulation skills, and coping skills with family communication tools could serve to prevent the often increasing and complex challenges. For example, positive parenting programs such as Enhanced Triple P (Sanders, Markie-Dadds, Tully, Bor, & Kendall, 2000) and Active Parenting (Popkin, 2014) offer education and practice with emotion regulation and parenting strategies incorporating specific parenting language and communication engagement. While providing fee-based programming may help some families, providing the concepts within the program in community-based settings free of charge, or providing incremental instruction through public service announcements via social media, radio, billboards, and community newspapers or magazines may have a broader impact on families less likely to seek out programming due to stigma or lack of resources.

For example, in the current study, a significant difference in means between the low-income group and both the middle and upper middle-income groups indicates higher income may support the presence of family resilience. Previous studies have also found the presence of family resilience varies by income (Knestrick & Kuchey, 2009; Greeff & van der Walt, 2010; Bishop & Greeff, 2015), suggesting that income level may be a factor in a family's ability to adapt when a child has a mental health disorder. Likewise,

Hispanic parents reported lower levels of family resilience in this study. This may be related to the ethnic sensitivity of FACES IV. Rivero, Martinez-Pampliega, & Olson (2011) found mixed results with regard to the application of FACES IV in Hispanic populations. Due to the small sample size and concerns of power, additional analyses of the potential effect of parent ethnicity on family resilience was not examined. As Saunders (2003) suggested, development of culturally and socially sensitive psychoeducation models is needed as well as broader research in family resilience and mental health potentially related to cross-cultural distinctions. Similarly, Hispanic parents may be under or misrepresented in accessing therapeutic services and family support. Thus, wide dissemination of information about child mental health and balanced family functioning may prove highly beneficial for those who otherwise do not have access to this important information due to lack of financial resources or due to cultural values or internalized stigma.

Two such entities exist: Child Mind Institute (CMI) and the National Federation of Families for Children's Mental Health (NFFCMH). CMI and NFFCMH disseminate informative and educational material to support parents and families of children with mental health disorders. Specifically, CMI and NFFCMH post and email articles about recent children's mental health research and practices, parenting children with mental health disorders, and even offer online screening tools via social media and email newsletters. However, awareness of these organizations is limited and likely not accessed until after diagnosis. Healthy family communication skills and stigma reduction efforts

provided by local mental health professionals and family therapy consultants could also be disseminated through social media, television, radio, and other arts and media venues utilizing technology like podcasts, memes, interviews, and blog articles.

Another important construct related to communication is coping skills. Coping skills are often and easily taught as an integral part of therapeutic intervention; however, educating large groups in school or community settings or the general public through media and other communication means is a feasible and less expensive way to further equip more families. Mental Health America (MHA) and NAMI provide these types of trainings and media presence. However, the trainings are often difficult for parents to attend with an already burdened load of care and responsibility with children with additional needs due to mental health challenges (Becvar, 2013; Bishop & Greeff, 2015; Plotnick & Kennedy, 2016). Media presence for MHA and NAMI is also largely for adult mental illness and their families, leaving a gap for efforts to connect with parents of children with a mental health disorder. Educational programs or communication and media publications could also be implemented through school systems, places of faith, community based programs, and counseling centers by local mental health professionals and community based services programs, such that all parents have access to mental health information and education.

The current findings should be considered within the context of the unique sample of parents who reported particularly high levels of the presence of family resilience. Of the 78 parents in the sample, 60 (77%) reported at or above the level ($M \geq 1.0$) indicating

more balanced family functioning as measured by family cohesion and adaptability. On average, time lapse from symptom onset to diagnosis was 6.5 years less than national reports (NIMH, 2011; Ramsawh et al., 2011). This sample also received a significant amount of family level intervention with 41 (53%) families accessing family therapy in addition to other types of treatment. These characteristics may contribute to the particularly high levels of reported resilience in this sample. Future research should explore the roles prevention and early intervention potentially play as supportive factors for family resilience. While not specifically explored in the model, the generally high presence of resilience reported by parents in the current sample suggests that programs targeted at prevention and early intervention efforts through community based family engagement related to children's mental health may be particularly helpful for families.

Limitations and Implications for Future Research

Assessing processes and outcomes in a field that is still largely coming to agreement with regard to terms, definitions, and adequate measures is challenging. The ability to measure the bidirectional processes of family functioning and family resilience has significant limitations. More advanced statistical procedures and more precise measurements of family resilience are needed. While the current study can assert that family processes and family-community factors predict family resilience, to what extent certainly necessitates additional research and analysis. Limitations of the current study and consideration of future research suggestions are notable. The current sample was small and relatively homogenous. Larger sample sizes including more diverse sample

populations will likely yield more generalizable findings, specifically in relation to marital status, race, ethnicity, and socioeconomic status. Importantly, due to the IRB approved recruitment strategy, most of the sample were likely recruited from social support/advocacy support groups. As such, it is possible that this particular sample reported higher levels of resilience due to their accessing of supports and services. Efforts to recruit beyond social support and advocacy based support groups is important to ensure representation of all families impacted by childhood mental health diagnoses. Further, analysis over time with specific types of intervention would provide detail and clarity to potential interventions most supportive of family resilience for this population.

Due to the necessary revisions to increase participation and retention, family level data was reported by a single, adult family member. Future research is needed to assess family processes at dyadic and/or family levels with multiple responders. Given the added responsibilities and challenges parents of a child with mental health disorders experience (Crowe & Lyness, 2014; Godress et al., 2005; Jonker & Greef, 2009; Marsh et al., 1996; Marsh & Johnson, 1997; Mukolo et al., 2010), parents and caregivers may be particularly challenging to engage in a lengthy survey. To obtain dyadic or family level data, it may be necessary to incentivize participation in the study. It may also be beneficial to study families within a laboratory setting versus an online platform, which may serve to increase engagement and retention of participants who may be experiencing lower levels of family resilience than primarily reported within the current sample.

Due also to the survey revision, salient themes from the extant literature were not

fully assessed in the current study nor accounted for in the models analyzed. The effect on family resilience of family processes such as family rhythm (Breitkreuz et al., 2014; Kapp & Brown, 2011) and family coherence (Breitkreuz et al., 2014; Greeff & van der Walt, 2010) need to be explored among families with a child who has a mental health disorder. Family rhythm and family coherence were found as salient factors in family resilience research in families of adults with severe mental illness, childhood chronic illness, and developmental disabilities. Given similar trajectories of the adversities and the findings of previous research in family resilience, it is likely that family rituals and routines (i.e., rhythm; McCubbin & McCubbin, 1988) may be disrupted due to the impact of mental health disorders on the family. Similarly, trust, acceptance, loyalty, and respect (i.e., coherence; McCubbin et al., 1986), may likely falter or be challenged as the family adapts to changes in interactions and relational connection. For example, when a child is hospitalized due to a psychiatric crisis, routines and even rituals will likely be disrupted and often difficult to reinstitute when the child returns home as behavior patterns or environmental adaptations may be necessary. Likewise, when a child has violent outbursts due to their mental health disorder, family members may experience degradation in trust and safety, which in turn can impact acceptance and loyalty. Future research should examine these potentially important factors for family resilience.

Despite a broad recruitment procedure allowing for a national sample, with minimal exclusion criterion, rates of participant recruitment and study completion remained low and the final sample was fairly homogenous. Participants in the sample

were predominantly White (90%) and non-Hispanic (90%). Similar to Saunders (2003) and Crowe & Lyness (2014), most reported to be a female parent figure ($n = 71$, 91%) with 67 (86%) reporting as biological mother. The majority of this sample was above the poverty line with 94% reporting greater than \$35,000 for annual household income, limiting generalizability to the population. Future studies should aim to recruit a larger, more diverse sample representative of the general population with regard to gender, marital status, race, ethnicity, and socioeconomic status.

It should be noted that the Cronbach's alphas for the FACES IV (Olson, 2011) rigid scale ($\alpha = .61$) and the balanced adaptability scale ($\alpha = .54$) were low and of concern (DeVellis, 2003; Nunnally & Bernstein, 1994) in the current study. Therefore, FACES IV scores and subsequent analyses should be considered with caution. These scores may be due to not consistently measuring the construct across items for this sample or it could be due to social desirability relative to stigma. In particular, answering questions such "*When problems arise, we compromise*" and "*Our family has a rule for almost every possible situation*" may be complicated by the unpredictable course of mental health complexities. Further, as noted above, more precise measures are needed to satisfactorily assess the presence of family resilience.

The current findings support further research efforts to determine the specific "webs of meaning" (Baxter, 2006) and methods of communication that best support family resilience. Specifically, meaning making processes and patterns of communication, as discussed by Rogers (2006), could be examined for this specific

population. Rogers observes and codes communication interactions between family members as complementary (i.e., opposite control messages), symmetrical (i.e., similar control) or transitory (i.e., combination). The types of communication can be further assessed by examining patterns across an interaction (e.g., rigid complementary, competitive symmetry, negotiation). These types of communication coding could be highly beneficial in guiding family assessment and intervention that promote resilience. Additionally, iterative communication sequences (i.e., pre-existing, ongoing patterns), problem solving based communication, emotion based communication, and relational dialectical communication (i.e., meaning making - balance between integration, certainty, and expression; Baxter, 2006) could each be examined in relation to family resilience for this population. Future studies could examine these detailed communication patterns and networks of meaning development in relation to family resilience and mental health. Moreover, the processes and outcomes associated with stigma internalization for a family with a child with a mental health disorder could be further examined.

Conclusion

This study serves as a primary and necessary examination of family resilience factors for families of a child with a mental health disorder. The results begin to fill the sizeable gap in the literature with regard to family resilience within the unique context of childhood mental health. The first to explore the predictors of family resilience among families of a child with a mental health disorder, this study serves as a foundation for further examination of family resilience and child adaptation as a bidirectional process

(Masten, 2018) for families facing child mental health disorders. Evidence is presented to support a need for the family interactive resilience model (FIRM) as an assessment and intervention foundation for family functioning in the context of a child mental health disorder. The findings highlight important considerations in both future research and current therapeutic application. Specifically, the findings validate the importance of family communication and meaning making in supporting family adaptation. Family communication focused intervention and future studies of family communication processes can address the important details of effective family communication in promoting family resilience. Consideration of meaning making processes in both therapeutic interventions and research foci can enhance understanding and intervention of family processes leading to family resilience. Additionally, the findings validate the impact of stigma internalization on families adapting to having a child with a mental health disorder. Stigma resistance alongside family communication and meaning making are important factors to address in therapeutic interventions and in future research for families with children with a mental health disorder. This study initiates the exploration of those bidirectional processes of resilience for families and a child with a mental health disorder and calls for further investigation into these processes.

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Table 1

Parent Reports: Descriptive Statistics and Correlations (N = 78)

Variables	1	2	3	4	5	6	7
1. Diagnoses	-						
2. Communication	-.17	-					
3. Meaning Making	-.10	.53**	-				
4. Social Support	-.10	.24*	.08	-			
5. Systems Navigation	-.12	.29**	.52**	.21	-		
6. Stigma Internalization	.33**	-.50**	-.45**	-.11	-.42**	-	
7. Family Resilience	-.09	.74**	.42**	.17	.27*	-.50**	-
<i>Mean</i>	2.56	37.97	32.19	27.51	52.15	1.71	1.24
<i>SD</i>	1.24	7.33	4.70	7.03	6.10	.42	.35
<i>Range</i>	1-6	13- 49	16 - 40	9 - 41	35 - 60	1 - 3	0.44 - 2.17

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

Table 2

Hierarchical Regression Analysis for Variables Predicting Family Resilience (N = 78)

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Diagnoses	-.03	.03	-.09	.01	.02	.04	.02	.02	.09
Communication				.03	.00	.72***	.03	.01	.66***
Meaning Making				.00	.01	.05	-.00	.01	-.01
Social Support							.00	.00	-.01
Systems Navigation							.00	.01	.01
Stigma Internalization							-.16	.01	-.20
R^2		.01			.55***			.58	
ΔR^2		.01			.54***			.03	
ΔF		.61			44.58***			1.40	

Note: Diagnoses is total number of child mental health diagnoses. Note.

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

Figure 1.1 A Model of Family Interactive Resilience

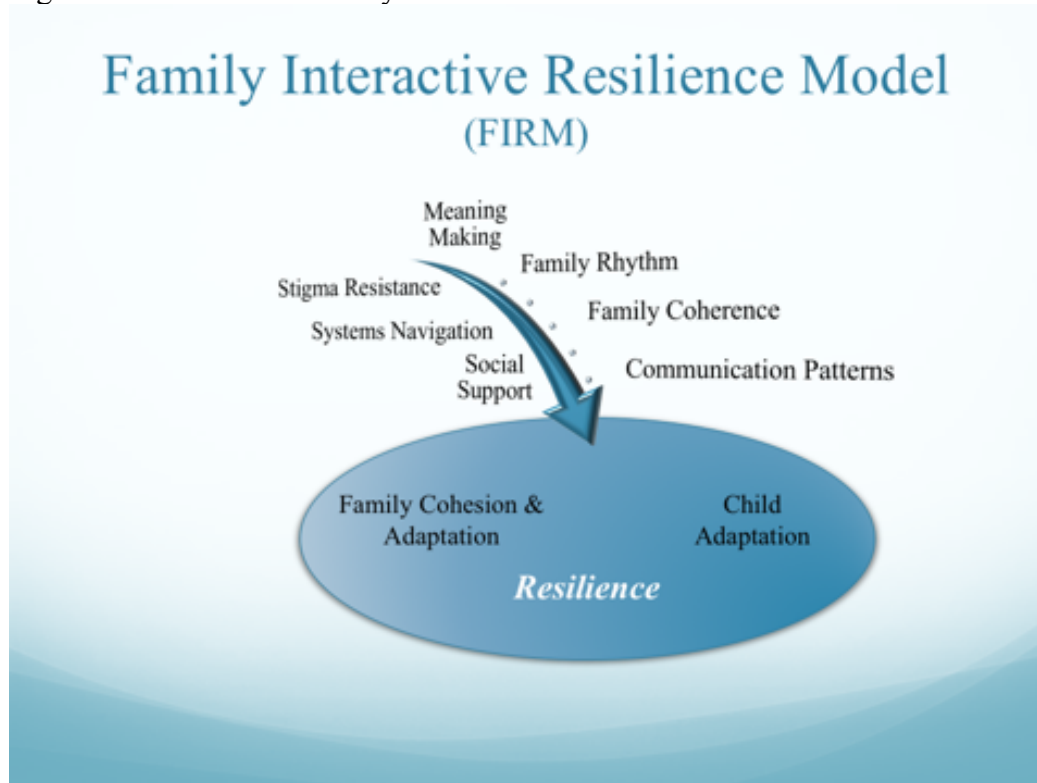


Figure 1 This model shows the four family processes most prominent in related literature for childhood conditions and family resilience and the three most common family-community factors related to family resilience with children having a chronic illness or developmental disability. These factors are hypothesized to be important factors for family resilience and child adaptation when a family has a child with a mental health disorder.

Figure 1.2 Family Resilience Model (Henry, Morris & Harrist, 2015)

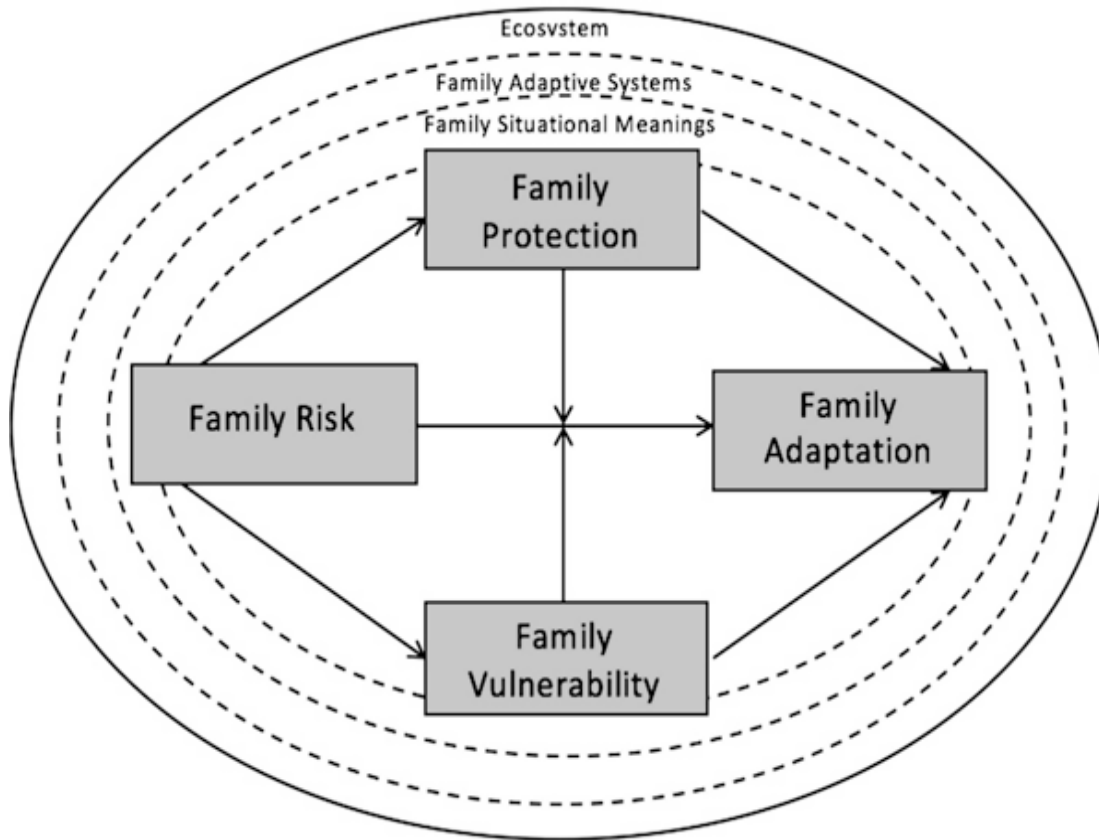


Figure 2. Reprinted with permission.

Figure 1.3 Model of the Family Adaptation Systems

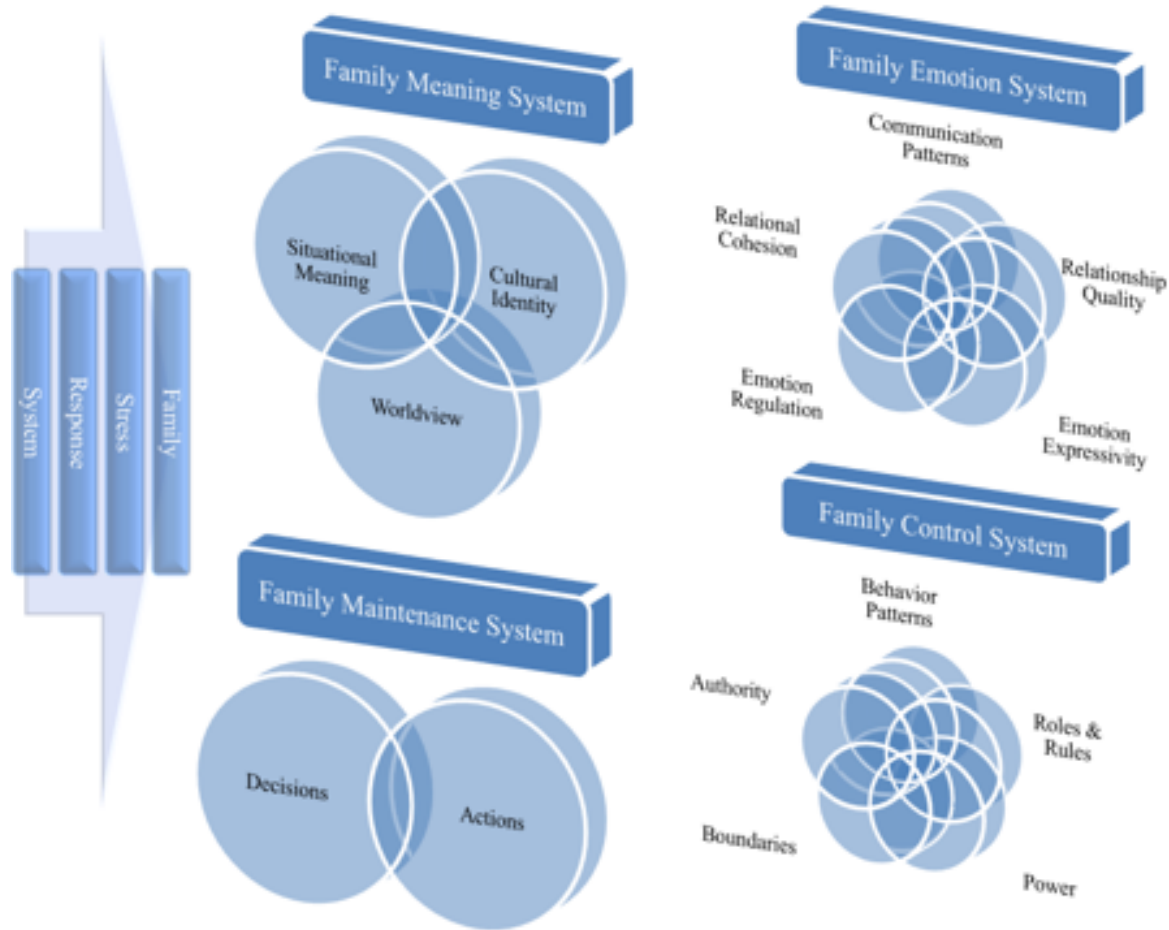


Figure 3. Family Adaptation Systems (FAS; Henry, Hubbard, Struckmeyer, & Spencer, 2018) is a working model that explains the four adaptive systems and the meta-system of the family stress response system which serves as an indicator of effects and adaptations in the FAS. These five systems comprise the FAS as developed by Henry and colleagues (2015). Reprinted with permission.

Figure 1.4 Diagram of Nested Factors in Relation to Family Resilience.



Figure 4. This diagram depicts the nested child with mental health demographics, in the family with relevant family processes, and finally in the community with relevant family-community fit factors.

Figure 1.5 A Graph of Child Mental Health Disorders

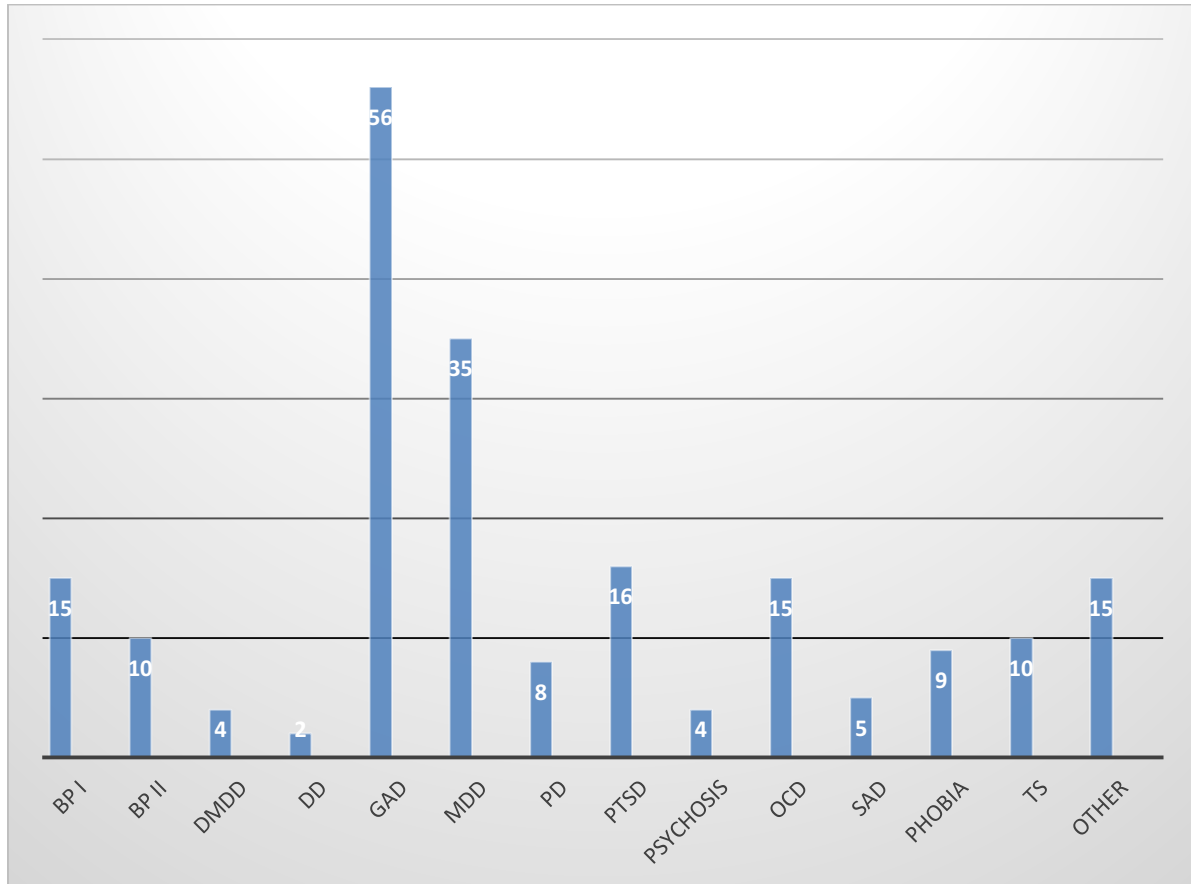


Figure 5. This graph depicts the child mental health disorders reported by parents. More than one diagnosis could be reported and thus, multiple diagnoses for a single case may be represented. Note: BP I = Bipolar I Disorder; BP II = Bipolar II Disorder; DMDD = Disruptive Mood Dysregulation Disorder; DD = Dysthymia Disorder; GAD = Generalized Anxiety Disorder; MDD = Major Depressive Disorder; PD = Panic Disorder; PTSD = Post Traumatic Stress Disorder; Psychosis = schizophrenia or other psychoactive disorders; OCD = Obsessive Compulsive Disorder; SAD = Separation Anxiety Disorder; Phobia = social or specific; TS = Tourette’s Syndrome; Other = inclusive of personality disorders, eating disorders, attachment disorders, compulsive disorders, and suicidal ideation.

APPENDIX A

Survey: Family Adaptation

Start of Block: Parent Consent

INFORMED CONSENT: Family Adaptation Survey

Researcher and Principal Investigator:

Rebecca L. Hubbard, MS

Oklahoma State University, Human Development and Family Science

Contact Information/Questions About the Study:

You may contact the principal investigator at the following e-mail address or phone number if you want to talk about your participation in the study or ask anything about the study:

Rebecca L. Hubbard, MS rebecca.hubbard@okstate.edu phone 405-744-5360

This research study has been reviewed and approved by the Oklahoma State University Institutional Review Board.

Study Description:

This study is about families who have/have had a child with a mental health diagnosis. I am studying how families adapt when they have a child with a mental health diagnosis. I am also studying how families and communities interact when a family has a child with a mental health diagnosis.

Survey Description:

The survey should take approximately 15 minutes to complete, should be taken in one setting as responses are not saved, and should be completed by one parent/parent figure.

Participant Description:

The parent can be any parent figure (e.g., aunt, parent, grandparent) in a child/adult child's life. The child/adult child needs to have/have had a mental health diagnosis before the age of 19.

Potential Benefits, Risks, or Discomforts:

Parents may benefit from participating in this research by learning more about mental health needs and resources. They may also learn more about family interaction and how interactions between families and communities relate to mental health. Additionally, a possible benefit to society is that prevention and intervention efforts for childhood mental health may be discovered. The risks of participating in this study are not predicted to be greater than those ordinarily experienced in daily life. Participants may experience some emotional discomfort when answering some of the questions.

Confidentiality Statement:

Participation in this survey is anonymous (no names or other personal identifying information). All information was kept confidential. This study uses a security certificate enabled survey collection site that minimizes internet confidentiality risks. Only the principal investigator(s) will have access to the data. A copy of the final data file was stored on the principal investigator's work computer which is physically secured and password protected.

Consent/Dissent:

By clicking “Yes” below, I voluntarily agree to participate in the above listed research project and I understand the above listed explanations and descriptions of this research study.

I also understand that there is no penalty for refusing to participate. I understand that I am free to withdraw my consent and participation in this project at any time without penalty. I understand that I can skip questions at any time and I can stop the survey at any time. I understand that I can also contact the principal investigator listed above at any time concerning my participation in this study.

I have read and fully understand this Informed Consent Form.

By selecting “YES,” I acknowledge that I am taking this survey freely and voluntarily.

Note: Please print this page if you would like to keep a copy of the consent form.

Yes

No

This list of mental health and family support resources is provided to you for your information and convenience. Please feel free to screen shot or print this page for future reference.

Mental Health America (Information)

<http://www.nmha.org/mental-health-information>

SAMHSA’s National Mental Health Information Center

<http://promoteacceptance.samhsa.gov>

<http://www.samhsa.gov/mentalhealth/understandingmentalillness.aspx>

National Treatment Referral Line

1-877-726-4727

National Directory of Mental Health Facilities

https://www.samhsa.gov/data/sites/default/files/2015_National_Directory_of_Mental_Health_Treatment_Facilities.pdf

National Suicide Prevention Hotline

<https://suicidepreventionlifeline.org/>

1-800-273-TALK (8255)

Crisis Text Line

741741

NAMI – National Alliance on Mental Illness (Family Support)

<http://www.namioklahoma.org>
1-800-950-NAMI (6264)

NFFCMH - National Federation of Families for Children's Mental Health

<https://www.ffcmh.org/>

Click the right hand arrow at the bottom of the screen to move forward through the survey.
What is your current age? (years)

What is your gender?

Female

Male

Other (please specify) _____

Are you of Latino, Hispanic, or Spanish origin?

Yes

No

How would you describe yourself? You may choose more than one.

American Indian or Alaska Native

Asian

Black or African American

Native Hawaiian or Other Pacific Islander

White

Other, please specify _____

What is your highest level of completed education?

- Less than a High School Diploma
- High School Diploma or Equivalent (GED)
- Trade/Technical/Vocational
- Some College/No Degree
- Associate Degree
- College/Bachelor's Degree
- Master's Degree
- Doctorate Degree (ex., PhD, MD, DO, EdD, JD)

What is your total yearly household income?

- less than \$20,000
- \$20,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 to \$199,999

\$200,000 or more

In which US state, territory, or military base do you reside?

What is your legal relationship to your child?

Biological mother

Biological father

Adoptive mother

Adoptive father

Stepmother

Stepfather

Grandmother

Grandfather

Aunt

Uncle

Other, please specify _____

What age is your child currently? (years)

Family Adaptation and Cohesion

Directions to Family Members:

1. All family members over the age 12 can complete FACES IV.
2. Family members should complete the instrument independently, not consulting or discussing

their responses until they have been completed.

3. Fill in the corresponding **number** in the space provided.

	Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree
Family members are involved in each others lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our family tries new ways of dealing with problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We get along better with people outside our family than inside.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We spend too much time together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are strict consequences for breaking the rules in our family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We never seem to get	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

organized in our family.

Family members feel very close to each other.

Parents equally share leadership in our family.

Family members seem to avoid contact with each other when at home.

Family members feel pressured to spend most free time together.

There are clear consequences when a family member does something wrong.

It is hard to know who the leader is in our family.

Family members are supportive of each other during difficult times.

Discipline is fair in our family.

Family members know very little about the friends of other family members.

Family members are too dependent on each other.

Our family has a rule for almost every possible situation.

Things do not
get done in our
family.

Family
members
consult other
family
members on
important
decisions.

My family is
able to adjust
to change
when
necessary.

Family
members are
on their own
when there is a
problem to be
solved.

Family
members have
little need for
friends outside
the family.

Our family is
highly
organized.

It is unclear who is responsible for things (chores, activities) in our family.

Family members like to spend some of their free time with each other.

We shift household responsibilities from person to person.

Our family seldom does things together.

We feel too connected to each other.

Our family becomes frustrated when there is a change in our

plans or routines.

There is no leadership in our family.

Although family members have individual interests, they still participate in family activities.

We have clear rules and roles in our family.

Family members seldom depend on each other.

We resent family members doing things outside the family.

It is important to follow the

rules in our family.

Our family has a hard time keeping track of who does various household tasks.

Our family has a good balance of separateness and closeness.

When problems arise, we compromise.

Family members mainly operate independently.

Family members feel guilty if they want to spend time away from the family.

Once a decision is made, it is very difficult to modify that decision.

Our family feels hectic and disorganized.

Family Communication

Directions to Family Members:

1. All family members over the age 12 can complete FACES IV.
2. Family members should complete the instrument independently, not consulting or discussing their responses until they have been completed.
3. Fill in the corresponding **number** in the space provided.

	Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree
Family members are satisfied with how they communicate with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family members are very good listeners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Family members express affection to each other.

Family members are able to ask each other for what they want.

Family members can calmly discuss problems with each other.

Family members discuss their ideas and beliefs with each other.

When family members ask questions of each other, they get

honest answers.

Family members try to understand each other's feelings

When angry, family members seldom say negative things about each other.

Family members express their true feelings to each other.

Social Support and Meaning Making

First, read the list of response choices one at a time.

Second, decide how well each statement describes your attitudes and behavior in response to problems or difficulties. If the statement describes your response very well, then select the number 5 indicating that you **STRONGLY AGREE**; if the statement does not describe your response at all, then select the number 1 indicating that you **STRONGLY DISAGREE**; if the statement describes your response to some degree, then select a number 2, 3, or 4 to indicate how much you agree or disagree with the statement about your response.

When we face problems or difficulties in our family, we respond by:

1 - Strongly disagree

2 - Moderately disagree

- 3 - Neither agree nor disagree
- 4 - Moderately agree
- 5 - Strongly agree

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
Sharing our difficulties with relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seeking encouragement and support from friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing we have the power to solve major problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seeking advice from relatives (grandparents, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing that we have the strength within our own family to solve our problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receiving gifts and favors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

from neighbors (e.g., food, taking in mail, etc.)

Asking neighbors for favors and assistance

Facing the problems "head-on" and trying to get solutions right away

Showing that we are strong

Accepting stressful events as a fact of life

Sharing concerns with close friends

Accepting that difficulties occur unexpectedly

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Doing things with relatives (get-togethers, dinners, etc.)

Believing we can handle our own problems

Defining the family problem in a more positive way so that we do not become too discouraged

Asking relatives how they feel about problems we face

Sharing problems with neighbors

Systems Navigation

Below are a number of statements that describe how a parent or caregiver of a child with an emotional problem may feel about his or her situation. For each statement, please select the response that best describes how the statement applies to you.

- 1 - Not true at all
- 2 - Mostly not true
- 3 - Somewhat true

4 - Mostly true
5 - Very true

	Not true at all	Mostly not true	Somewhat true	Mostly true	Very true
I feel that I have a right to approve all services my child receives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know the steps to take when I am concerned my child is receiving poor services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make sure that professionals understand my opinions about what services my child needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to make good decisions about what	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

services my child needs.

I am able to work with agencies and professionals to decide what services my child needs.

I make sure I stay in regular contact with professionals who are providing services to my child.

My opinion is just as important as professionals' opinions in deciding what services my child needs.

I tell professionals what I think about

services
being
provided to
my child.

I know what
services my
child needs.

When
necessary, I
take the
initiative in
looking for
services for
my child and
family.

I have a good
understanding
of the service
system that
my child is
involved in.

Professionals
should ask
me what
services I
want for my
child.

Internalized Stigma

We are going to use the term "mental illness" in this questionnaire, but please think of it as whatever you feel is the best term for it.

For each question, please mark whether you strongly disagree (1), disagree (2), agree (3), or strongly agree (4).

1 - Strongly disagree 2 - Disagree 3 - Agree 4 - Strongly agree

	Strongly disagree	Disagree	Agree	Strongly agree
We feel out of place in the world because our child has a mental illness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentally ill people tend to be violent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People discriminate against us because our child has a mental illness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We avoid getting close to people who don't have a mental illness to avoid rejection.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We are embarrassed or ashamed that our child has a mental illness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mentally ill people shouldn't get married.

People with mental illness make important contributions to society.

We feel inferior to others who don't have a mental illness.

We don't socialize as much as we used to because our child's mental illness might make us look or behave "weird."

People with mental illness cannot live a good, rewarding life.

We don't talk about our child much because we don't want to burden others

with his/her
mental illness.

Negative
stereotypes about
mental illness
keep us isolated
from the
“normal” world.

Being around
people who
don’t have a
mental illness
makes us feel out
of place or
inadequate.

We feel
comfortable
being seen in
public with an
obviously
mentally ill
person.

People often
patronize us, or
treat us like a
child, just
because our
child has a
mental illness.



We are disappointed in our child for having a mental illness.

Having a mental illness has spoiled our life.

People can tell that our child has a mental illness by the way he/she looks.

Because our child has a mental illness, we need others to make most decisions for us.

We stay away from social situations in order to protect our family or friends from embarrassment.

People without mental illness could not

possibly understand us.

People ignore us or take us less seriously just because our child has a mental illness.

Our child can't contribute anything to society because he/she has a mental illness.

Living with mental illness has made our child a tough survivor.

Nobody would be interested in getting close to our child because he/she has a mental illness.

In general, our child is able to live his/her life



the way he/she wants to.

We can have a good, fulfilling life, despite our child's mental illness.

Others think that our child can't achieve much in life because our child has a mental illness.

Stereotypes about the mentally ill apply to our child.

Family Satisfaction

How satisfied are you with:

1 - Very Dissatisfied

2 - Somewhat Dissatisfied

3 - Generally Satisfied

4 - Very Satisfied

5 - Extremely Satisfied

Very Dissatisfied Somewhat Dissatisfied Generally Satisfied Very Satisfied Extremely Satisfied

The degree of closeness

between family members.

Your family's ability to cope with stress.

Your family's ability to be flexible.

Your family's ability to share positive experiences.

The quality of communication between family members.

Your family's ability to resolve conflicts.

The amount of time you spend together as a family.

The way problems are discussed.

The fairness of criticism in your family.

Family members concern for each other.

Child Demographics

What mental health diagnosis/diagnoses has your child been given? You may select more than one.

- Bipolar I Disorder
- Bipolar 2 Disorder
- Dysthymia
- Generalized Anxiety Disorder
- Major Depression
- Panic Disorder
- Post Traumatic Stress Disorder
- Psychotic Disorders (e.g., Schizophrenia, Schizoaffective, Delusional)
- Obsessive Compulsive Disorder
- Separation Anxiety Disorder

- Social Phobia
- Specific Phobia
- Tourette's Syndrome
- Other, please specify _____

If your child is/was also diagnosed with a behavioral or substance abuse disorder, which diagnosis/diagnoses has your child been given? You may select more than one.

- Attention Deficit Hyperactivity Disorder
- Autism
- Conduct Disorder
- Oppositional Defiant Disorder
- Substance Use Disorder
- Other, please specify _____

At what age did your child first start having symptoms (years)? Please also list the diagnosis next to the age that you are indicating symptom onset for.

- 1 _____
- 2 _____
- 3 _____
- 4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

11 _____

12 _____

13 _____

14 _____

15 _____

16 _____

17 _____

18 _____

19 _____

At what age was your child diagnosed (years)? Please also list the diagnosis next to the age.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

11 _____

12 _____

13 _____

14 _____

15 _____

16 _____

17 _____

18 _____

19 _____

What types of treatment has your child had? You may select more than one.

Individual

Family

Group

What types of support groups for your child's mental health disorder has your child attended?
Please list specific ones as you are able.

General mental health support group

Disorder specific support group

Age specific support group (e.g., teens)

Situation specific support group (e.g., suicide survivor)

Other, please specify _____

What types of support groups for your child's mental health disorder have you attended? Please list specific ones as you are able.

General mental health support group

Disorder specific support group

Parent or family support group

Other, please specify _____

Has your child been diagnosed with a chronic or terminal physical illness? Please list any chronic physical illnesses (example: diabetes, asthma, leukemia, psoriasis, lymphoma).

Yes _____

No

Has your child been diagnosed with a developmental or intellectual disability? Please list any developmental or intellectual disability (example: autism, down syndrome, fragile-x syndrome, learning disorder).

Yes _____

No

Has your child experienced a trauma or adverse experience?

Yes, please specify type of trauma/adverse experience

No

Qualitative

In addition to what you've already answered, what in your family and/or in your community has helped you through your experience of having a child with a mental health disorder?

What is something that you did not have that would have helped your family adapt to, navigate through, or otherwise manage the situations related to your child's mental health disorder?

APPENDIX B

Survey Distributors

Social Media

Child Mind Institute Child Anxiety Support Group
Mental Health America
Mental Health Association of Oklahoma
Mental Health Referral Network
Minnesota Association for Children's Mental Health
NAMI Tulsa
National Federation of Families for Children's Mental Health
Oklahoma Family Network
Parents with Children with Depression, Anxiety, & OCD
Parents of Teens with Depression
Therapist Connect Group
Tic Talk
Tourette's Support Group

Newsletters, Blogs, Email Listservs

Families as Allies (Mississippi FFCMH; Maguena Adetona)
Families Together New York State (FTNYS; Kimberly Hoagwood, Susan Berger)
FAVOR (Connecticut FFCMH; Joy Hogge)
Minnesota Association for Children's Mental Health (MACMH; Deb Cavitt)
National Federation of Families for Children's Mental Health (NFFCMH; Kelsey Engelbracht)
The Youth Mental Health Project (NY, NJ, CT, OR; Randi Silverman)

Personal Distribution

A special thank you to friends, families, and colleagues who forwarded, reposted, and otherwise shared the survey with potential participants.

VITA

Rebecca L. Hubbard

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Doctor of Philosophy

Thesis: PREDICTORS OF RESILIENCE IN FAMILIES
OF CHILDREN WITH A MENTAL HEALTH DISORDER

Major Field: Human Development and Family Science

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Human Sciences at Oklahoma State University, Stillwater, Oklahoma in May, 2019.

Completed the requirements for the Master of Science in Professional Counseling at Grand Canyon University, Phoenix, Arizona in 2014.

Completed the requirements for the Bachelor of Arts in Psychology at University of Tulsa, Tulsa, Oklahoma in 1995.

Experience:

Oklahoma State University

Instructor of Record 2016 - present

Family Youth and Development Project Lab Coordinator 2015 - 2017

Family and Community Policy Research Associate Spring 2017

Community Mental Health Centers

Master Level Intern & LPC Candidate 2013 - 2015

Community Church

Children & Family Life Ministry Leader 2004 - 2015

Professional Memberships:

National Council on Family Relations

National Federation of Families for Children's Mental Health