WHERE THE HEART IS: THE IMPACT OF STRUCTURE AND MOTIVATION ON HOMESCHOOLING FAMILIES' FUNCTIONALITY AND PROMOTION OF DIFFERENTIATION-OF-SELF

by

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To my mother, my sister, and to my friends – near and far;
To the cohorts, to the faculty, and to my clients – just as they are;
To those who have walked before and beside me;
Whom have run in ways I may yet know;
My dedication is to you, the "we;"
Whom have shaped and made that day, tomorrow.

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ABSTRACT

Much of the current academic literature on the practice of homeschooling has revolved around the individual academic, social, and psychosocial outcomes of homeschooled youth. As such, the relational and systemic implications of homeschooling have been neglected in the current body of research, thus leaving the practice's long-term outcomes on family and relational functionality up to heuristic assumption by homeschooling families and the general public. The current study sought to address this gap in the literature by introducing a family systems perspective to the assessment of homeschooling families and homeschooler's relational functionality. Comparisons between homeschooled ($n = 145$) and non-homeschooled ($n = 147$) adults found that, after controlling for demographic differences, homeschooled adults reported that their families had higher levels of unbalanced Enmeshment and Rigidity, along with lower levels of unbalanced Disengagement, than non-homeschooled participants within the Circumplex Model of Marital and Family Functioning. Homeschoolers also displayed greater levels of Differentiation-of-Self in the domains of Emotional Reactivity and I-Position taking than non-homeschoolers. These results, however, were found to be closely connected to homeschooled participants' reports of how many years they were homeschooled, the degree of structure in their homeschooling environment, as well as the strength of several different common rationales they believe motivated their family to choose to homeschool, with certain factors emerging as significant predictors of whether homeschoolers reported a more functional family environment and higher Differentiation-of-Self. The clinical and research implications, limitations, and future directions for studies of this kind, are discussed.

CHAPTER 1: STATEMENT OF THE PROBLEM

The practice of homeschooling describes the voluntary undertaking of parents, guardians, or other caregivers in providing partial or full-time education for the children under their care within the context of their homes, rather than within a public or private education context (Department for Education, 2019). As of 2016, it has been estimated that approximately 3% (approximately 1.7 million) of children aged 5-17 years old in the United States are, or have been, educated through some method of homeschooling (McQuiggan, et al., 2017). Such estimates have nearly doubled from those taken just over a decade prior, where it was presumed that only 1.4% of school-aged children in 1999 were being educated via homeschooling approaches.

Having had early proponents in both the progressive, counter-culture movement of the 1960s and the conservative, religious fundamentalist groups emerging in the 1970s, parents engaged in the practice of contemporary homeschooling in America have often cited some mixture of pedagogical dissatisfaction with the nation's public school system, ideological conflict with the curriculum offered by public institutions, or general concerns about whether the quality of an out-of-home schooling environment compares to that which they feel they can provide at home (Nemer, 2002; Thomas, 2019; Van Galen, 1987). Allegiance to these concerns, in addition to practical barriers to education such as a lack of accessibility to public schooling resources due to location or disability, has informed many families' decision to adopt the practice of homeschooling. This growing "homeschooling movement," as it is commonly referred to, has consequently been examined by scholars both as an evolving social phenomenon and as a practical factor in affecting the educational, social, and occupational outcomes of those who participate in it (Murphy, 2014; Nemer, 2002).

Recent literature has implicated generally positive outcomes in homeschooled children's academic (Martin-Chang et al., 2011) and psychosocial (Drenovsky & Cohen, 2012) domains of individual functioning. Though these and other historically positive findings are often echoed in popular publications, contemporary homeschooling scholars have frequently noted that implicit bias in favor or in opposition of homeschooling is incredibly common within the established literature base (Drenovsky & Cohen, 2012; Murphy, 2014; Kunzman & Gaither, 2020), and that significant variance often exists in homeschoolers' outcomes based upon the structure of the

homeschooling environment (Martin-Chang et al., 2011). In addition to this, several pertinent topics in the literature base remain underexplored or left only to occasional mention in qualitative interviews with homeschooling families (Kunzman & Gaither, 2013). Within this literature base of qualitative and – occasionally questionable – quantitative findings, the relational implications and outcomes of practicing homeschooling have remained one such underexplored area of study. Murphy (2014) makes note in their review of homeschooling literature that while the enrichment of healthy familial bonds are considered one of the primary motivations for families choosing to practice homeschooling, there is a notable lack of research confirming this presumed outcome of the practice. As this present gap concerns itself with outcomes beyond those experienced by a homeschooled person individually, a prime opportunity exists to introduce scholars of family science and relational systems into the realm of homeschooling literature. This systemic perspective, which is sensitive to the impact of context and relational patterns existing beyond the individual level, would allow researchers to incorporate a bi-directional, systemic perspective to homeschooling outcomes that is sensitive to existing diversity in how homeschooling is practiced and among the families who choose to undertake said practice.

While studies such as those conducted by Guterman and Neuman (2017a; 2017b; 2018) have begun to examine systemic functions in families and their impact upon the outcomes of homeschooling children, such studies have foregone analysis of the relational, structural, and emotional dynamics at play in homeschooling families. Utilizing a systemic perspective to compare such dynamics within homeschooled and non-homeschooled families naturally lends itself towards a recognition of how variance in homeschooling practice, familial identity, and other contextual variables may impact how members of homeschooling families uniquely experience and relate to one another. Findings to this end are also of significant relevance to practitioners of systems-informed therapy and other human services professionals who are seeking to develop effective treatment modalities and diversity-sensitive practices with clients from homeschooling backgrounds, or with families who are actively homeschooling children in their household.

To address the gap in homeschooling literature regarding familial functioning and the relational dynamics of homeschooling families, this study seeks to explore whether families who homeschool differ significantly across factors of familial functioning and systemically-grounded

relational outcomes in comparison to non-homeschooling families and other homeschooling families. In taking a systemic perspective to this analysis, a specific focus has been placed upon conceptualizing homeschooling and non-homeschooling families as existing in numerous permutations of relational, social, and pedagogical contexts.

CHAPTER 2: LITERATURE REVIEW

Within contemporary American society, the family system and the educational system are typically distinguished as two distinct social institutions. For a significant portion of school-aged children, however, these two institutions become one-in-the-same when their families choose to undertake the practice of homeschooling. Defined simply as the practice of a parent(s) or guardian(s) undertaking direct oversight over the primary education of the children under their care – often primarily within in a home-based context (Department for Education, 2019), homeschooling poses a unique educational paradigm that challenges typical divisions of labor between family systems and public institutions.

Even though it bears an inherently relational grounding within a family context, homeschooling is often framed as a practice that only affects the child on the receiving end. Despite being an ever-evolving social phenomena deeply rooted in the socio-systemic elements that impact the families who employ it, a systems framework has yet to be applied directly to the study of the contemporary practice of homeschooling. Contrasting an individualized "outcomes"-based perspective of linear inputs and outputs, it is the basic presumption of general systems theory that all observable entities function in interaction with one another, effectively working together as part of a self-organizing and self-regulating complex of dynamic elements (Bertalanffy, 1952). Such entities include not only the physical and biological components of human existence, but also describe ecological entities that form within the complex network of social relationships and political interdependence within communities. As an abstract merger of the socially disparate institutions of the family and the public education system, homeschooling reflects a culturally divergent educational paradigm adopted by families capable of, and rationally drawn to undertake, a practice which defines a new systemic relationship between family and education. To understand how the complex intersection of these two distinct social institutions emerged in an American context, it is worth briefly reviewing the history of homeschooling and its emergence into its current iteration in American society.

The Systemic History of Homeschooling

Preceding the introduction of the first legal statute for compulsory attendance to public education in the United States (An Act concerning the Attendance of Children at School, 1852), evolving social conditions in post-colonial [1770s – Present Day] America had already begun to challenge the then-pervasive pedagogical norm of parents facilitating their children's education themselves. Previous generations saw a rudimentary and foundational education taking place completely within the family system in an informal context, or occurring through a community-based trade apprenticeship that would aim to set a child up for a more specialized occupation later in life (Nemer, 2002). As industrialization grew in the 19th century, however, the socially defined role of the family shifted. As the family institution adapted to changing socio-economic conditions, so did its reliance upon informal systems of family and community-driven education give way to utilization of public education intuitions. This gradual shift toward the compulsory public education system we know today finally concluded in 1918, when the state of Mississippi became the last state to adopt a legal statute requiring minors to attend some method of formal, institutionalized schooling (Katz, 1976).

Nemer (2002) notes that, though discontent and skepticism toward public education was present among a portion of the public in the early 20th century, those who actively challenged the authority of local school districts embodied only a niche subset of the American public. For many families, continuing to practice home education despite the new compulsory education laws being enacted was a matter of necessity rather than rebellion. These families, such as those who were geographically isolated, whose religious membership precluded them from engaging with public institutions, or were otherwise thought to live "on the fringes of American society" often found themselves continuing to rely upon to the colonial-era method of at-home schooling as a means of providing an education for their children (Nemer, 2002, p. 7).

The extremely niche resistance to public education surged throughout the mid-to-late 20th century, as critiques of the American public education system spurred families within the progressive countercultural movement of the 1960s to reconsider their trust in the state to provide an appropriate education for their children (Nemer, 2002). Skepticism of the public education system at this time summarily coincided with the emergence of conservative, religious fundamentalism as a social and political force in American society in the 1970s, which itself brought forth heated rebuttals against the perceived secularization and moral divergence such

groups believed was occurring in public schools (Nemer, 2002; Van Galen, 1987). Thus, despite their politically dichotomous nature, the families within these cultural groupings reacted to the socio-political stressors of the times by ultimately coming to a common practice: to withdraw their children from the public school system and to educate them within their own homes.

This surge in at-home schooling during the late 20th century is viewed as the beginning of the contemporary practice of homeschooling and the modern "homeschooling movement," with the most recent estimates classify at least 1.7 million children in the United States as being homeschooled (McQuiggan, et al., 2017). Even more recently, in response to the COVID-19 pandemic, more and more families were forced back into the role of facilitating their children's education in the home. While online "e-learning" solutions provided through local public school districts gave many families a structured, safe option for keeping their children within the public school system while observing social distancing guidelines, emergent data has begun to indicate that many families have chosen to withdraw their children from public school and begin independently homeschooling in the face of the ongoing pandemic (see: Montana Office for Public Education, 2020). Although data is still being collected on its exact impact on homeschooling enrollment, there is significant indication that societal and institutional adaptations spurred on by the COVID-19 pandemic will, in much the same way as 19th century industrialization, pose another unique social problem which will challenge American families' traditional engagement with contemporary systems of out-of-home education.

Current Topics in Homeschooling Research and Literature

As the practice has increased in popularity, homeschooling has been recognized as a social phenomenon which carries significant institutional and social implications upon the American education system. This acknowledgement has spurred continual debates around the intersecting needs and interests of the state in supporting an educated citizenry, of parents in maintaining autonomy over the trajectory of their children's growth and education, and of the overall well-being of the children participating in homeschooling or similar alternate educational paradigms (Glazner, 2008; Kunzman, 2012; Reich, 2008). These debates around homeschooling, aided by a public fascination with homeschooling as a social oddity, has driven decades worth of academic scholarship intended to scrutinize, evaluate, and gain a sociological understanding of the homeschooling through its surge in popularity in the late 20th century and early 21st century

(Kunzman & Gaither, 2020). Much of the current body of homeschooling literature has been dominated by studies seeking to determine homeschooling's efficacy as an alternative means of educating and socializing children to be effective members of society (Kunzman & Gaither, 2013; Murphy, 2014). With homeschooling existing in contrast to public schooling, a now venerable public institution whose methods and outcomes are viewed as measurable and largely stable, the majority of homeschooling literature has focused on how homeschooled children compare to non-homeschooled children across a variety of academic and social factors common to the assessment of public school's institutional efficacy.

Academic Rigor and Achievement

Among the most common outcomes explored by homeschooling scholars, and the most eagerly consumed by members of the public, are those relating to how homeschooled children stack up against non-homeschooled children in the realm of academic achievement. A cursory glance at the foundational literature in this realm appears to indicate that homeschooled children tend to perform on par, or above average, on national standardized tests in comparison to non-homeschooled youth (Ray, 2000; 2010; Wartes, 1987; 1988,). However, homeschooling scholars have become more critical of these early findings, particularly in those studies conducted by Dr. Brian Ray of the National Home Education Research Institute – a research institute closely associated with the homeschooling advocacy group, the Home School Legal Defense Association (HSLDA) – whose methodology has come under significant criticism of being biased in favor of homeschoolers and non-representative of homeschoolers as an overall group (Kunzman & Gaither, 2013; 2020).

More recently, studies have found that homeschooled youth do tend to perform favorably in comparison to non-homeschooled samples on a variety of common measures of academic achievement in higher education settings, such as collegiate GPA and standardized college entrance exam scores such as the SAT and ACT (Cogan, 2010; Snyder, 2013; Sorey & Duggan, 2008). While results such as these could be interpreted as the simple act of undertaking home education being enough to improve a child's overall academic performance, other studies have indicated that there is nuance to the impact homeschooling can have on academic achievement. Barwegen et al. (2004), for example, note that traditionally schooled students with high levels of parental involvement in their education performed at parity with homeschooled youth on

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standardized exams. Similarly, Martin-Chang et al. (2011) pose findings which indicate that the presence of structure (e.g. use of structured homeschooling curricula or implementing a daily schedule) in a child's daily homeschooling regimen was a significant factor in determining whether homeschoolers performed better or worse than non-homeschoolers on standardized academic tests. Findings such as these implicate that there are both pedagogical and relational components that define academic achievement for youth and young adults in the context standardized testing. A number of social and psychological factors, such as a family's socio-economic status and parental personality factors such as conscientiousness, have been found to be associated with the degree to which families implement a structured format into their homeschooling practice (Guterman & Neuman, 2018); further complicating the historically, and perhaps misleadingly, straight-forward results of early research on homeschooler's academic success. Although factors which scaffold academic success could be presumed to be common in homeschooling practice, nuanced results such as these indicate that these factors should not be viewed as: 1) inherently unique to the homeschooling format, and 2) universal among families practicing homeschooling.

These findings indicate the significant impact of diversity upon homeschooling's long-term impacts on a child's academic achievement; both in how homeschooling is practiced and among the characteristics of the families which undertake it. It is worth noting that tepid consideration ought to be given in examining these results, due to the limiting effect of defining "academic success" through traditional measures such as GPA and standardized test scores. Measures such as these, while not only being vulnerable to a greater impact of systemic racial and economic bias, have been critiqued within the body of homeschooling literature as being vulnerable to the influence of self-selection bias among socially and economically advantaged homeschooler samples (Hill, 2000; Welner & Welner, 1999).

Social Skills and Socialization

In addition to their role as an educational institution, public schools have also been acknowledged for their role in providing a social space for youth to practice, develop, and proliferate social skills and cultural mores within broader range of peer and adult relationships (Lynch & Cicchetti, 1997; Molla, 2016). This critical process of socialization has also become a significant area of debate in the comparison between public schooling and homeschooling, where

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concerns about homeschooled youth being deprived or limited in ability and opportunity to socialize with others and gain access to important social norms and mores (Kunzman & Gaither, 2020; Lebeda, 2007).

In the assessment of homeschoolers' social skills development, several different measures have been implemented to assess attitudes and behaviors commonly held as pro-social in the American context. Medlin (2013), for instance, provides a review of a number of studies on homeschoolers which have been conducted using the Social Skills Rating System (SSRS). The findings from these studies generally indicate that homeschooled children tend to score at or above national norms across dynamics such as cooperation, assertion, empathy, and self-control. In these studies, gendered differences in social skill aptitude that were found to exist within normed populations of non-homeschoolers seem to be minimized in homeschooling populations, indicating that there is likely a difference in the gendered socialization of homeschooled youth relating to the reinforcement of social skills.

Several older studies have also noted that homeschoolers tend to demonstrate useful pro-social aptitudes, such as leadership (Montgomery, 1989) and a capacity for building social harmony in academic and occupational contexts in adulthood (Webb, 1989). More recently, Drenovsky and Cohen (2012) have indicated that homeschoolers tend to adapt well to the transition from at-home education to environments of public higher education, and tend to exhibit lower symptoms of mental distress (e.g. depression, low self-esteem) than their publically schooled counterparts during their freshman year in college. With all of this in mind, however, many homeschoolers have also reported dissatisfaction in their socialization opportunities as a homeschooler (Coalition for Responsible Home Education, 2014). Additionally, other studies have found that some homeschoolers experience psychological distress or other negative psychosocial outcomes due to a perceived lack of social connection and social opportunity, with some of these outcomes being highly dependent upon factors of a homeschooler's family's social location (e.g. the amalgamation of cultural and social identities which a person presents with, affording them group membership, social privilege, and/or marginalization within the society they live), as well as their and educational environment (Pennings et al., 2011, 2012).

As assessments of social skills begin to blend into the related concept of socialization, focus has also been placed upon the variety of social contexts homeschoolers encounter while practicing the social skills they appear to be adept in. Reich (2002) articulates one of the primary

critiques of homeschooling's potential shortcomings in this regard, noting that the "customization" of a child's educational environment inherent to homeschooling can facilitate further isolation from educational materials, ideas, and people which may conflict with values held by the parents or guardians facilitating the practice. As it pertains to social development, this ideological isolation could then limit the contexts in which homeschooled children's social skills continue to perform at parity with non-homeschoolers, as they may only be prepared to implement these skills with certain likeminded individuals. Such concerns have been indirectly acknowledged through recent studies such as Saunders (2009), which found that homeschooled and non-homeschooled students appear to achieve similar levels of social integration in higher education settings. While these results appear to speak positively to the sampled homeschoolers level of social integration, the sampling of students at a Christian university was acknowledged as a limitation on the generalizability of the results.

Potential confounds in sampling or methodology, as in the study of homeschoolers' academic success, are unfortunately not uncommon within studies on homeschoolers' social skills development. However, sound research has indicated that homeschooled children tend to have social networks of about the same size as their publically schooled counterparts that – by comparison – tend to contain fewer relationships with children of a similar age while containing significantly more relationships with adults and younger children (Chathan-Carpenter, 1994). Taken as a whole, the rigor and generalizability of these studies often live and die based upon how closely authors peer into contextual factors surrounding a homeschooler's lived experience, rather than simply approaching homeschooling as a monolith with intrinsically positive or negative qualities. As such, the mixed finding on socialization outcomes for homeschoolers indicate an inherent value of context, social location, and familial environment to understanding the impact that homeschooling has upon these types of outcomes.

Current Demographics and Stereotypes of Homeschoolers

Tangential to these assessments of homeschooling's practical outcomes emerges a consistent question: "Who are the American homeschoolers?" Due to a lack of federal registration, and the sporadic presence of homeschooler registration regulations at the state level, the inherently individualized nature of homeschooling makes getting a comprehensive demographic view of the American homeschooling landscape extremely difficult (Kunzman &

Gaither, 2013). In this unknown space, where very little solid demographic information about homeschoolers is confidently known, researchers have noted the persistence of several pervasive stereotypes about the social location, social skills, and lived experiences of homeschooled children and their families (Drenovsky & Cohen, 2012; McCulloch et al., 2013; Ray, 2004; Romanowski, 2006). Alongside an evolving expectation that homeschooled individuals will excel academically, associations between homeschooling families and Christian fundamentalism, conservative political extremism, and social isolationism remain common features of public's construction of the archetypal American homeschooler.

Associations between homeschooling, religious fundamentalism, and social isolationism have been traced back to high-profile legal disputes such as *Wisconsin v. Yoder* (1972), which helped frame homeschooling in the public sphere as a practice undertaken, and vehemently advocated for, by insular, fundamentalist religious groups living as social outcasts within American society. Additionally, as Gaither (2009) notes, the emergence and heightened political action of conservative lobbying groups in favor of homeschooling in the 1980s caused a temporary yet significant increase in homeschooling's appeal among conservative and religiously-motivated families. Due to this, it is estimated that a majority of the early "modern" homeschooling movement was comprised of members which fit this cultural template of the radically conservative, highly religious homeschooling family (Gaither 2009; Schumm, 1998).

This stereotype of the young, racially white, socially inept individual from an insular and staunchly right-wing Christian family persists today, despite evident cultural and ideological diversity among contemporary homeschooling families (Kunzman, 2010; 2012). Current estimates of homeschooler demographics have noted that the percentage of Black and Hispanic homeschoolers have increased significantly in recent years (Hirsh, 2019). Within these growing subpopulations, minority families often cite pedagogical concerns of systemic racism and the disenfranchisement students-of-color face within the American public education system as their primary reason for choosing to homeschool. These qualitative reports appear to be echoed within recent data from the U.S. Department of Education's NHES Parent and Family Involvement Survey (Cui & Hanson, 2019), where data appears to indicate that pedagogical concerns, such as the quality of the academic instruction provided at local schools or a general dissatisfaction with these schools' learning environment, appeared to have been the rationales for a similar numbers of families as those seeking to providing specific religious and/or moral instruction. In both

surveys of current homeschooling trends, it is also notable that many homeschooling families have begun to more vigorously incorporate online resources from both public and private education institutions into their homeschooling practice. Additionally, many families appear to be adopting a "flexischooling" approach that allow children to attend some public schooling alongside their home education (Cui & Hanson, 2019; Hirsh, 2019). These emergent trends further challenge extant stereotypes about the socially reclusive and isolated homeschooling family, as engagement with communal resources via the internet and public educational institutions appear to signal a changing trend in how home education is practiced.

Why Families Homeschool

Building an understanding of homeschooling's historical journey consequently encourages an understanding of the variety of circumstances that have prompted families to take up the practice. Though the tale of modern homeschooling's emergence appears to exemplify social equifinality – bringing together families from a variety of socially and politically-divergent groups under a common practice – research on homeschoolers has found that families propose a variety of reasons for why they have chosen to homeschool their children. Seminal works by Van Galen (1987; 1988) established the first typology for categorizing the motivating rationales homeschooling parents espoused in recounting their decision to homeschool their children. This typology proposed that that the rationales for homeschooling often presented by families are typically steeped in a sense of pedagogical distrust (i.e. the belief that a standardized curriculum does not adequately meet the needs of one's own child), ideological influence (i.e. the belief that schools do not teach or enforce moral values that align with one's worldview), or some combination of the two (Nemer, 2002).

Van Galen's initial typology remained venerable across many decades of homeschooling scholarship. However, recent expansions of this typology have been proposed as different methodologies for assessing familial motivation to homeschool have emerged. Commonly, homeschooling families also cite general concerns about the safety or quality of the public school environment they would be sending their child to, or report that homeschooling was the most logical outcome for ensuring their child received an adequate education due to an interceding disability or alternative needs-based circumstance (McQuiggan et al., 2017). Motivations for homeschooling have also been found to be fluid over time as changes in a family's pragmatic

context (Miller, 2014), relational hierarchy (Montes, 2006) and connections to homeschooling subculture (Safran, 2010) change over time. Consistently, however, homeschooling parents have often cited an intention to improve, maintain, or recentralize familial bonds as a primary motivator for why they choose to homeschool their children.

The Presumed Improvement of Homeschooling Families' Relationships

Spanning numerous qualitative and quantitative studies, homeschooling families often cite the enrichment of familial bonds as a major component of their choosing to homeschool (Guterman & Neuman, 2017a; Murphy, 2014; Van Galen, 1987). For parents and guardians, the choice to homeschool has been found to often accompany a sense that they were in competition for their children's attention and influence against teachers, friends, and other relationships they would make in a public school setting (Van Galen, 1987). Thus, for many families, it has been found that the adults who make the choice to homeschool their children were often doing so in an attempt to emphasize the centrality of the family unit as an institution, while also aiming to strengthen relational bonds between family members and reclaim a perceived loss of authority that they believe public schooling inflicted upon their children's views of the family (Van Galen, 1987). More recently, Guterman and Neuman (2017a) made note that family-related subjects (e.g. the belief that the family is the best environment for children to be nurtured in; the gaining of a simple sense of joy in being able to bond with children) played a significant part, second only to pedagogical concerns, in influencing parents' decision to homeschool within an Israeli context. This perception that homeschooling will have a positive impact upon familial relationships, which appears to exist across both cultural and generational spheres, indicates that the choice to homeschool is not simply pedagogical or values-based in nature. Rather, it is also deeply rooted in a relational logic that has been nurtured within the larger homeschooling community.

Despite these pervasive beliefs among homeschooling families about the improvement of their relationships, the research in this area is purely qualitative at this time. While extensive reports from parents of homeschooling families exist within the literature base, no quantitative research currently exists to support these claims that homeschooling promotes healthy familial bonds and increased functionality in homeschooling family systems. Murphy (2014) notes that this lack of quantitative research on homeschooling family relationships speaks to the broader,

underexplored realm of relational outcomes for homeschooling children. Murphy (2014) elaborates further upon this gap in the homeschooling literature by noting that, within the field of homeschooling scholarship, there are a general lack of quantitative operationalization of relational outcomes, and a lack of measures which can assess for concepts such as relational functionality and health in family and other intimate social relationships.

Conceptualizing Relational Outcomes and Family Functionality

Definitions and conceptualizations of relational functioning, nurtured within the study of family systems theory and systemic family therapy, may be capable of providing a new perspective to the study of homeschoolers' relational outcomes. As a derivative of General Systems Theory, family systems theory applies Von Bertalanffey's (1952) initial conceptualization of "systems" to the non-tangible networks of social and relational connections – such as families. In applying the system label to families, family systems theory conceptualizes families as adaptive, resourceful entities whose organization and outcomes are presumed to be driven by a desire for structural and relational homeostasis within the complex web of social institutions, cultural information, and personal relationships that constitute their lived environment (Wedemeyer & Grotevant, 1982). Likewise, the family unit itself is perceived as an environment that affects individual family members, whose outcomes are heavily guided by the complex series of interactional patterns which function in response to the relational hierarchies, boundaries, and subsystems that comprise the family system.

A systemic perspective provides a functional means for conceptualizing social institutions and phenomena as functional outcomes of a multigenerational social system. Just as the modern homeschooling movement can be understood as a rational, yet divergent social outcome for families of specific social and contextual locations within American society, family systems theory posits that the behaviors and interactional patterns of individual family members are guided by an innumerable volume of socio-political factors, cultural norms, and transgenerational interactions stemming from the relational ecosystem that the family both resides in and continually recreates within itself. It is thus impossible to answer the question of whether homeschoolers hold differing capacities for developing healthy and functional relationship systems across the lifespan without also asking whether the dynamics and functionality of their family differ from non-homeschoolers.

"Relational Outcomes" and Differentiation of Self

Murphy (2014) notes that research has historically neglected to examine the capacity for family members in homeschooling families to facilitate stronger intra-familial bonds with one another in both platonic (e.g. sibling or parent-child) and romantic (e.g. parents or committed romantic partners) contexts. This question ultimately relates back to both the larger scholarly interest in the socialization of homeschoolers and the emergent topic of homeschooling's effect on family systems, wherein research has typically examined individual social functioning in adulthood. As such, through the lens of family systems theory, the concept of "relational outcomes" for homeschoolers will be discussed here as defined by homeschoolers' ability to create and maintain successful long-term interpersonal relationships in adulthood.

Systemic literature has routinely linked the functionality of familial bonds and interactional patterns as a key determinant of individual functionality and satisfaction in relationships later in life (Boszormenyi-Nagy & Krasner, 1986; Framo, 1992; Soloski et al., 2013). Bowen Family Systems Theory (BFST) is one such systemic model which has become well-regarded in family research and clinical practice for its empirically-tested operationalization of familial relationships and its conceptualization of relational difficulties in the present as existing within a transgenerational family context (Kim et al., 2014; Lohan & Gupta, 2013). BFST posits that our involvement in relationships will inherently generate some degree of relational "anxiety," which emerges naturally as the stability of relational systems (e.g. family, friendships, romantic relationships) are challenged or require adaptation across the lifespan (Kerr & Bowen, 1988). As such, the more a person invests their sense of "self" into a relational system, the greater their sense of emotional and psychological well-being will be disrupted when the stability of that relationship is threatened with change or perceived termination.

One of the standout components of BFST is it's concept of *differentiation-of-self,* which is conceptualized as an individual's capacity to combat the natural generation of relational anxiety by defining a sense of individuality and autonomy in their emotionally salient relationships with others (Kerr & Bowen, 1988). Persons with low differentiation are likely to become over-invested (i.e. "enmeshed") in emotionally salient relational systems, causing them to experience high levels of relational anxiety whenever there is a perceived threat to the stability of those systems or to their relationship with that person. Persons with high levels of differentiation, on the other hand, display an increased capacity to distinguish and choose

between emotionally reactive responses based on subjective perception and intellectually-informed responses that are sensitive to context and relational nuance (Kerr & Bowen, 1988). Thus, when a relationship is experiencing significant changes or requires adjustment from its members, highly differentiated participants are able to remain invested and connected with others in that relational system without being as disrupted and influenced by the emotional reactivity of others within that system.

Several factors are theorized to impact an individual's level of differentiation. Kerr & Bowen (1988) posit that each person develops a "basic" level of differentiation, which establishes a fixed spectrum of differentiation behavior. A person's "functional" level of differentiation, which describes their current exhibition of differentiated-related behavior, will vary within this fixed "basic" spectrum depending upon the level of anxiety produced naturally in their current relationships. Because a person's "basic" level of differentiation is hypothesized to be constructed from the level of emotional independence a person was permitted to experience from the relationships in their family-of-origin, Kerr & Bowen (1988) describe differentiation as a "multi-generational emotional process" which builds upon the "functional" level differentiation of a person's parents (p. 98); consequently relating to the basic and functional levels of differentiation experienced by all subsequent generations within a family system.

Although an exact "scale" of one's differentiation exists only in abstract theory (Kerr & Bowen, 1988 p. 100), several distinct relational dynamics have been identified as components indicative of one's level of differentiation (Skowron & Friedlander, 1998). First, the higher a person's level of general *Emotional Reactivity*, which describes a person's tendency to remain calm or become emotionally distressed in response to emotionality from others in relational systems, the less differentiated they are hypothesized to be. Likewise, a person who is less differentiated is more likely to engage in either *Emotional Cutoff* or *Fusion* as a means of trying to disperse of the high levels of relational anxiety they accrue in their relationships. These two reactions are behaviorally dichotomous, as emotional cutoff describes a person's tendency to remove themselves completely from relationships in response to anxiety while fusion describes a person's tendency to pursue further enmeshment in anxiety-producing relationships as a way to restore stability. However, as both behaviors are driven by a person's reaction to high levels of emotionality and anxiety, BFST notes that they are two sides of the same coin of low differentiation (Bowen, 1978). Finally, highly differentiated people are hypothesized to be able

to maintain an *'I-Position'* in their relationships with others the majority of the time. I-Position taking, within BFST, describes a person's ability to maintain a sense of self outside of the relational system such that they can more flexibly move between intimacy and connection with others with and their own internal convictions and duty-to-self.

These constructs of differentiation have allowed the concept to be empirically validated for use in research on relationships and clinical outcomes for psychotherapy (Jankowski & Hooper, 2012; Lam & Chan-So, 2015). Literature in these realms have indicated that higher levels of differentiation-of-self can be linked with several positive psychosocial and relational outcomes, such as positive individual psychosocial developmental outcomes (Jenkins et al., 2005) and increased familial resiliency to persistent trauma (Pagorek-Eshel & Finklestein, 2019). Most critically to the study at hand, differentiation-of-self has also been associated with positive outcomes in relationships, such as generalized satisfaction in romantic relationships (Cepukiene, 2021; Ferreira et al., 2014) and an increased capacity to successfully navigate periods of marital adjustment (Lohan & Gupta, 2016; Işık et al., 2020). Because of its functional grounding in healthy familial bonds, as well as its demonstrated impact upon generalizable relational outcomes in adulthood, differentiation-of-self presents itself as an effective first step for assessing the broad concept of "relational outcomes" for homeschoolers defined by Murphy (2014).

Family System Functionality

As the structuralist, systemic perspective of family systems theory took root in the field of family science, family scholars of the 1960s and 70s began to develop models of family functionality which set forth general principles that could be used to define the image of a "healthy" family system (Holman & Burr, 1980). As family systems thinking has gradually broadened to acknowledge the diversity of family structures and organizations, however, many long-standing principles about family functioning have come under sound critique for failing to account for the influence of social privilege (e.g. systemic sexism, racism) and ethno-centrism in their definitions of a healthy family (McGoldrick & Hardy, 2019; Rothbaum et al., 2002). Due to the significant utility that general definitions of systemic health provide to clinicians and family scholars, many systems-derived theories of family functioning have continued to be refined and tested in cross-cultural contexts in an effort to distill out key themes which denote a functional

family system. Of these extant theories, the Circumplex Model of Marital and Family Systems (Olson, 2011) has remained a notable standout due to its theoretical parsimony and cross-cultural validation.

The circumplex model of marital and family functioning is a venerable framework which has been used extensively in both research and clinical settings as a method for analyzing family functionality (Olson, 2011). The circumplex model distills concepts and themes such as emotional connectedness, structural flexibility, and hierarchical rigidity, which have been repeatedly and independently associated with familial functionality (Minuchin, 1974; Vandeleur et al., 2009), into two distinct relational dimensions: emotional cohesion and adaptability (Olson, et al. 1979; Olson, 2000). *Emotional cohesion*, as it was initially defined by Olson, et al. (1979), pertains to the family's nurturance of an environment which balances family members' needs for emotional bonding and inter-reliance on one another, while also supporting each member's ability to experience autonomy within the family and develop a personal identity which is separate from the family's shared identity. *Adaptability* (also referred to as "flexibility"), on the other hand, is intended to describe the family's capacity to adapt and transform its internal power structure and role delegations in response to stressors, while also accounting for its ability to develop a logical organizational structure that will promote a sense of stability and reliability among its members (Olson, et al, 1979; Olson, 2000).

Families who are not able to maintain the balance between connectedness and independence (Cohesion) or flexibility and structure (Adaptability) are considered at risk for dysfunctional behaviors or outcomes among their members, as the family's environment is experiencing either too much or too little of one or both of the core relational dynamics (Olson, 2000; 2011). For Cohesion, families are said to experience *Enmeshment* if they engage in high levels of emotional connection that fosters a deep sense of interdependence; stymying individual autonomy and the capacity for members to differentiate their identities from the family's own. Conversely, families reporting lower levels of Cohesion are said to be in a state of *Disengagement*, which is characterized by low levels of emotional connection between members and an environment which fosters a lack of commitment to the family system. The model proposes a similar dichotomy for the dimension of Adaptability. High levels of Adaptability may lead to a *Chaotic* family environment, wherein family members do not have a stable sense of organization or leadership, while low levels of Adaptability fosters *Rigidity* in the family system;

preventing the family from adapting its hierarchical power structure effectively to better manage acute stressors or natural, developmental shifts throughout the family's lifecycle. These "unbalanced" dimensions of the model's primary two relational dynamics have existed since the circumplex model's inception. However, assessment of their presence within a family system has become a more central concern in the circumplex model's most recent iteration (Olson, 2011). In addition to these two functional dynamics, the circumplex model also emphasizes the key role of healthy family communication as key to maintaining functionality and satisfaction with the family system. Per circumplex theory, families are hypothesized to naturally fluctuate in the degree of Cohesion and Adaptability their system maintains due to developmental stress or other crises. Communication, it is assumed, is the factor which determines a family's capability for navigating back to balanced levels of these domains when they become unbalanced (Olson, 2000).

Research using the circumplex model has found that families who report themselves as having higher levels of unbalanced cohesion and adaptability tend to also report having a higher degree of family-derived stress and a lower level perceived of satisfaction with their family systems (Craddock, 2001). The model's assumptions around the universally dysfunctional nature of the unbalanced dynamics have been challenged, namely Adaptability and its unbalanced dynamic of Rigidity (see: Everri et al., 2016). However, the model has generally produced strong results implicating that relational and behavioral dysfunctions are often accompanied by unbalanced Cohesion and/or Adaptability in an individual's family system (Kawash & Kozeluk, 1990; Mengel et al., 1991; Margasiński, 2014; Roswell et al., 2016). Recent developments in the model have included adaptations which acknowledge the influence of cultural diversity on family systems organization and describe how cultural norms may mitigate the dysfunctional effect that the model presumes of unbalanced dimensions (Olson et al., 2019). This acknowledgement follows several studies in recent years which have validated the model and its accompanying assessments for use with certain populations in cross-cultural contexts (García & Peralbo, 2000; Rada & Olson, 2016; Everri et al., 2020), while highlighting limitations of its applicability to others (Pirutinsky & Kor, 2013; Turkdogan et al., 2019).

The Current Study

      While the studies by Martin-Chang et al. (2014) and Guterman and Neuman (2017a; 2017b; 2018) highlight the criticality of understanding homeschooling as a non-monolithic practice undertaken in a diversity of ways, there remains a striking commonality among each of these studies. Though they push further to consider a dynamic and systemic view of homeschooling outcomes, there remains an inherent focus upon the structure of homeschooling practice, the motivations families have for choosing to homeschool, and the practical outcomes of academic success and individual adjustment for homeschoolers into society at-large. Kunzman and Gaither (2013) speak to this stagnation in research interests as one that plagues the current state of homeschooling research, emphasizing the need for rigorous quantitative studies over unexplored topics relevant to homeschooling practice. This call-to-attention over gaps in the current homeschooling literature base is further emphasized by Murphy (2014), which notes that – even though academic and social outcomes of homeschooling have been well-tread – "relational" outcomes of the practice have yet to be explored rigorously. While these relational outcomes also include homeschooled children's ability to create stable and health bonds with romantic partners and to establish healthy relationships in adulthood, Murphy highlights that typical assumptions around the strength of intrafamilial bonds within homeschooling family systems also remains underexplored.

      The notion that homeschooling will bring about improved bonds among parents, children, and siblings within the family unit appears pervasive among families who choose to homeschool; these relational outcomes are anecdotal and largely presumed by parents, with very little insight being gleaned from homeschooled children. Murphy (2014) notes that the majority of the scholarly understanding that exists about familial relationships within homeschooling families comes from indirect insights collected via qualitative case studies. Murphy continues by noting that such a lack of research is startling given the centrality of the family unit, and the atypical practical pressures (i.e. a reduction in income and available time for parents, or the limitation in career opportunities for mothers – who are often the undertakers of providing homeschooling education) faced by families who homeschool. Beyond the burden that homeschooling families potentially face by functioning in a dual-institutional role (family and educational), it is worth considering that, given the prevalence of negative stereotypes of homeschoolers and homeschooling families noted by Drenovsky and Cohen (2012), a lack of empirical information

about homeschooling families leaves them vulnerable to potential bias, marginalization, or oversight by professionals and institutions aimed at providing family or human services. Given both the imperative need to better understand the impact that homeschooling may have upon the quality and dynamics of relationships in the families who practice it, as well as the overall need for new quantitative research questions to enter the realm of homeschooling literature (Kunzman & Gaither, 2013), this particular gap in homeschooling literature presents itself as a topical area primed for academic attention.

To meet the needs proposed by Murphy (2014) for effective, scholarly research on the relational outcomes of homeschooling, the fields of family scholarship and systemic family therapy finds themselves in a unique position of interest and ability in the exploration of relational dynamics within homeschooling families. Building upon the systemic foundation put forth in the studies by Guterman and Neuman (2017a; 2017b; 2018), which acknowledged the impact that extant diversity among homeschoolers has upon how homeschooling is practiced and what draws families to the practice, the foundational systemic theory used by family scholars and clinicians provides ample opportunity to address the understudied realm of relational outcomes while still attending to aspects of diversity. Additionally, as the field of family scholarship has also been a nurturing ground for empirically validated measures for assessing relational health and factors of family relational dynamics, the barriers noted by Murphy (2014) in the realm of operationalizing concepts like "relational outcomes" of homeschooling should be able to be addressed in a manner that allows for quantitative data to be generated and interpreted within a grounded, systemic theoretical basis. A conceptual model for how the variables used in this study are hypothesized to interact with one another is provided in Figure 1.
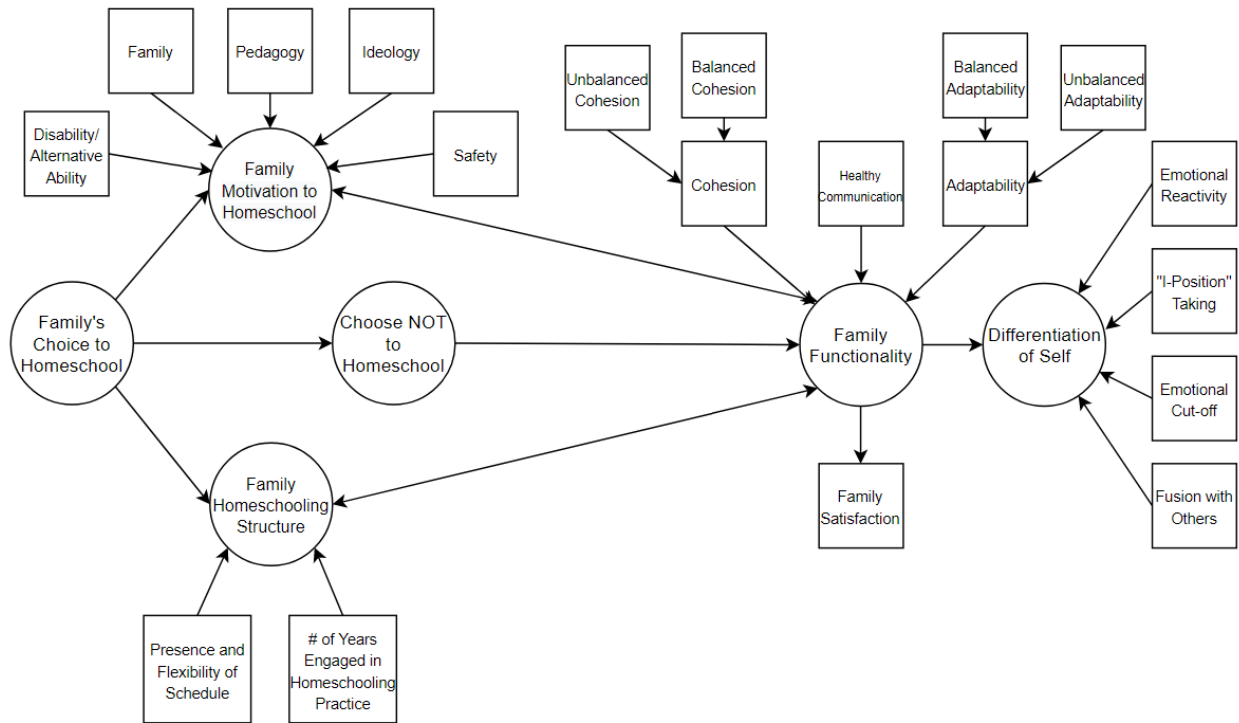
Figure 1: Conceptual model of the interaction between homeschooling practice, family functionality, and differentiation of self.

Research Questions and Hypotheses

With a stated interest in exploring the relational outcomes of homeschoolers as it pertains to the dynamics of their family-of-origin systems, there primary research questions have been identified. Within these questions, the following hypotheses will be tested:

First, this study is concerned with whether homeschooling practice is associated with healthier family functioning in comparison to non-homeschooling families. Specifically, given that homeschooling parents have traditionally reported that they have chosen to homeschool in order to improve the health and strength of familial bonds, the first research question in this study asks whether homeschooling families have healthier familial functioning, on average, than non-homeschooling families. The dynamic of family-of-origin functionality is operationalized by the theoretical constructs of the Circumplex Model of Marital and Family Functioning. This question will be evaluated across eight hypotheses: H^1, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of balanced Cohesion they report in their family-of-origin; H^2, which states

that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of balanced Flexibility they report in their family-of-origin; H^3, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of unbalanced Enmeshment they report in their family-of-origin; H^4, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of unbalanced Disengagement they report in their family-of-origin; H^5, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of unbalanced Chaos they report in their family-of-origin; H^6, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of unbalanced Rigidity they report in their family-of-origin; H^7, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level of positive communication they report in their family-of-origin; and H^8, which states that participants' self-identified homeschooler status (homeschooled vs. non-homeschooled) will be a significant predictor of the level satisfaction they report having in the functionality of their family-of-origin system.

Second, this study is concerned with how diversity in homeschooling practice affects the emergence of functional relational dynamics within homeschooling families. Specifically, this second research question is concerned with whether diverse factors in homeschooling practice, such as a family's rationale for choosing to homeschool, the length of time that they spent receiving an education while homeschooling vs. non-homeschooling, and the degree of structure of their homeschooling schedule, affect homeschooling families' functionality? This question will be evaluated across eight hypotheses: H^9, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of balanced Cohesion they report in their family-of-origin systems; H^{10}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning

environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of balanced Flexibility they report in their family-of-origin systems; H^{11}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of unbalanced Enmeshment they report in their family systems; H^{12}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of unbalanced Disengagement they report in their family-of-origin systems; H^{13}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of unbalanced Chaos they report in their family-of-origin systems; H^{14}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of unbalanced Rigidity they report in their family-of-origin systems; H^{15}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of positive communication they report in their family-of-origin systems; and H^{16}, which states that

homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will moderate the impact of their self-identified homeschooler status (as homeschooled) on the level of familial satisfaction they report having in their family-of-origin systems.

Third and finally, this study is concerned with whether homeschooling appears to affect the process of homeschooled children achieving differentiation-of-self. Specifically, this research question concerns itself with whether homeschooling has an effect on homeschooled children's level of differentiation-of-self by the time they reach adulthood. This question will be assessed across the following two hypotheses: H^{17}, which states that there will be a significant difference between homeschooled and non-homeschooled participants on the subscales of Emotional Reactivity, "I-Position" taking, Emotional Cut-off, and Fusion with Others on the DSI-R; and H^{18}, which states that homeschooled participants' self-identified family homeschooling rationales (pedagogical, ideological, safety, family bonds, disability or alternative ability accommodations), the number of years they report having spent in a homeschooling learning environment, and the reported flexibility of their homeschooling schedules will predict their overall differentiation score on the DSI-R.

CHAPTER 3: METHODS

Sample

The overall sample for this study is comprised of two subsamples of participants. Participants in Subsample 1 were comprised of adults over the age of 18 who identified themselves as having primarily attended an in-person, out-of-home public or private school in the United States for the majority of their K-12 education. Participants in Subsample 2 were comprised of 150 adults over the age of 18 who identify themselves as having been homeschooled for some portion of the primary education, while also residing in the United States for the majority of their K-12 education. The goal for this study was to recruit 150 participants in each subsample, for a total of 300 participants. The estimated total sample size for this study was established based upon a priori power analyses conducted in G*Power 3.1.9.7 (Faul et al., 2007). Analyses conducted in G*Power on a fixed model, R^2 increase multiple linear regression indicated that a sample size of $N = 103$ would be required to achieve power greater than 0.80 when a medium effect size f = 0.15, α = .05, β = .20 were utilized on an F test with seven tested predictor variables. In an effort to keep sample sizes approximately equal to preserve homogeneity of variance and ensure equivalent power between groups, while also looking to ensure that minimum power was preserved in case of missing data, a sample size of $N = 150$ per subsample was determined to be the most appropriate sample size.

Sampling Method

Participants were recruited using a snowball sampling via Facebook advertising. Due to the relatively small population and decentralized nature of homeschoolers, Facebook advertising was chosen as the method of recruitment for its demonstrated effectiveness for reaching niche participant populations for a variety of research paradigms (Iannelli et al., 2020).

The advertisement to participate in the present study was delivered via two different Facebook "Ad Sets." Facebook Ad Sets allow an advertiser to target their ads toward specific audiences. Each ad set was designed to deliver the advertisement to participate in the study to a specific subsample using demographic information relevant to that subsample. Ad set 1 was designed to target potential participants for Subsample 1, with the set designed to display the ad

to adults in the U.S. ranging from 18-65+ years of age with no restrictions on gender or other specific demographic and interests. This ad set ran for approximately 7 days before recruitment of participants for the non-homeschooler subsample was complete. Ad set 2 was designed to target potential participants for Subsample 2. This ad set ran for approximately 14 days, spread across two 7 day advertising campaigns, before recruitment of participants for Subsample 2 was complete. During the first 7 day campaign, the ad set was designed to display the ad to adults in the U.S. ranging from 18-65+ years of age, with no restrictions on gender, while being limited to individuals who identified themselves as: a) "Homeschooled" in the demographics section of their Facebook profile, or b) were identified by the Facebook algorithm as having an interest in "homeschooling." During the second 7 day campaign, the audience age, gender, and location parameters were kept identical. However, the interest and demographic limitations was made stricter to only display the ad to individuals who identified themselves as "Homeschooled" in their Facebook demographics.

All participants were presented with an identical recruitment advertisement. This advertisement invited prospective participants to participate in a research study on "Education, Relationships, and Family Dynamics." The advertisement also presented potential participants with a link to the online survey instrument. Participants were notified in this advertisement of the parameters for participant eligibility (over 18, located in the U.S., completed majority of K-12 education within the U.S.), the estimated time to complete the attached survey instrument, and of their opportunity to enter a drawing for one of 12 $25 Amazon Gift Cards by participating in the study. Participants were provided with their estimated odds of winning a gift card, which were listed as 1 in 25 as based upon the number of participants intended to be recruited.

Procedure

Prior to the collection of data, approval for this study was received from the Purdue University Institutional Review Board (IRB #2021-668). Data was collected through an online survey hosted through Qualtrics. This survey contained all informed consent documentation (Appendix A), demographics surveys (Appendix B & C), and psychometric assessments (Appendix D & E) utilized to collect data on the measured variables.

After accessing the survey via the Facebook advertisement, participants were first presented with the informed consent document, a copy of which is located in Appendix A.

Participants who agreed to provide their consent to participate were then directed to the first demographics survey, located in Appendix B. Upon completion of this initial demographics survey, participants were next presented with the general schooling information demographics survey. This survey began with a question which asked participants whether their schooling experiences met the study's definition of homeschooling, which was defined as "an approach to education that involved at least some portion of your primary (K-12) education take place at home, rather than being enrolled full-time at an out-of-home school institution." Depending on whether participants identified themselves as having been homeschooled or not, based on this question, they were presented with one of two possible routes through the general schooling survey. Those who identified themselves as having been homeschooled were routed through a slightly longer survey which asked them to complete demographic information relevant to their homeschooling environment and the pedagogical methods and materials their family employed. Those who identified themselves as having not been homeschooled were routed through a survey which asked them general questions about their schooling experiences, such as their experiences with eLearning. A copy of the general schooling information survey is included in Appendix C.

After completing their designated path through the general schooling information survey, participants were presented with the complete FACES-IV instrument, provided in Appendix D. Finally, participants were presented with the DSI-R instrument, provided in Appendix E. After completion of the DSI-R, participants were automatically redirected to a separate Qualtrics survey which allowed them the option to submit their email address in order to enter into the compensation drawing for an Amazon Gift Card.

Measurements

Demographics and General Schooling Information

Basic demographic information collected from each participant included the participant's age, legal sex at birth, current gender identity, sexual orientation, race/ethnicity, current relationship status, whether they were currently engaged in a polyandrous or consensually non-monogamous relationship, religious affiliation, highest level of educational attainment, annual income, as well as the U.S. state they currently reside in.

Participants who self-identified as not having been homeschooled (i.e. non-homeschoolers) were asked to specify which grades (K-12) they primarily attended a face-to-face public or private school and whether they ever used an at-home or at-school eLearning program as part of their education. Non-homeschooling participants who indicated that they used an eLearning program were asked to specify how long they utilized this program, whether they felt it affected their ability to learn the presented material, and whether they felt that eLearning from home affected the level of stress in their family.

Participants who self-identified as being homeschooled were asked to identify which grades (K-12) they were homeschooled in, how many years they were homeschooled in total, as well as who they would identify as "primary instructors" in their average day of homeschooling. Homeschooled participants were also be asked general questions about their family's pedagogical practice of homeschooling, including their usage of learning materials designed for use in public or private school systems, their use of digital and/or online learning tools, and their participation in a public or private school courses either through eLearning platforms or hybrid learning approaches.

Homeschooling Rationale

Typologies of homeschooling rationales identified by Spiegler (2010) and Murphy (2012) were utilized as a basis to create a measure of homeschooling rationales for this study. Five rationale statements were created based upon language used in the 2016 NHES survey on homeschoolers (see: McPhee et al., 2018), with each statement describing a different rationale for choosing to homeschool. These statements included a pedagogical rationale ("Concerns about the quality of the education or teaching being provided at local schools."), an ideological rationale ("Concerns about the religious, political, or ideological education that may, or may not, be offered at local schools."), a safety-oriented rationale ("Concerns about the safety or potential dangers present at local schools."), a family bonds-oriented rationale ("A desire to strengthen or improve bonds within the family."), as well as a disability/alternative ability-oriented rationale ("Concerns about the accessibility of local schools, due to you or a family member experiencing a physical, mental, or social disability, limited ability, or alternative ability circumstance."). Participants were asked to rate each statement on a five-point Likert-type scale (1 = Not a

motivator at all; 5 = A very strong motivator) based upon how strongly they felt each rationale was in motivating their family to choose to homeschool.

Homeschooling Structure

Two separate variables were operationalized with regards to homeschooling structure. The first, simply, was the number of years a homeschooled participant reported themselves as having been educated using a homeschooling approach. Participants who identified themselves as having been homeschooled were allowed to select the number of years (1-18+) they had been homeschooled from a dropdown box during the General Schooling Information portion of the survey.

Another element of homeschooling structure was also operationalized based upon the presence of a set schedule for homeschooling activities, and the degree of flexibility for this schedule, as reported by homeschooled participants. Homeschooled participants were asked to indicate whether their family maintained a homeschooling schedule that denoted when they needed to be considered doing schoolwork or otherwise be considered "in school." Participants who indicated that their family did maintain a schedule were then asked to rate how flexible this schedule was on most days on a five-point Likert-type scale (0 = Very flexible; 4 = Very inflexible). The variable of flexibility was then assessed on a score of 0 to 5, with a score of 0 indicating that the participant reported that there was no homeschooling schedule present in their day-to-day homeschooling experience, and a score of 1 indicating that a schedule was present. Participants who do indicate the presence of a schedule then had their rating of that schedule's flexibility added to their initial score. For example, a participant who indicated that their family had a homeschooling schedule (1) but that this schedule was "Very Flexibile" (0) would receive a flexibility score of 1 (1 + 0 = 1), whereas a participant who reported their schedule as being "Somewhat Flexible" (2) would receive a score of 3 (1 + 2 = 3). For brevity, this variable was referred to as a participant's "Homeschooler Flexibility" or "HS Flexibility" score.

Family Functionality

Family functionality, as operationalized by the circumplex model of marital and family functioning, was assessed using the Family Adaptability and Cohesion Evaluation Scales IV (FACES-IV) (Olson, 2011). The FACES-IV assessment is the most recent edition of the original

FACES instrument, which was designed to measure the balanced and unbalanced dynamics of adaptability and cohesion within the circumplex model (Olson, 2011; Hamilton & Carr, 2016). The instrument asks participants to rate their agreement with a series of descriptive statements as they apply to their family, and contains eight distinct subscales: two which assess the "balanced" dimensions of Adaptability and Cohesion, four which assess the "unbalanced" dimensions of Enmeshment, Disengagement, Rigidity, and Chaos proposed within the model, and two which assess for Family Satisfaction and Communication within the system.

For this study, all eight subscales were utilized. Each item in these subscales is measured on a 5pt Likert-type scale, with 1 equaling Strong Disagreement, and 5 equaling strong agreement with the statement posed. A few example items include, from the "Cohesion" subscale, "Family members are supportive of each other during difficult times." Another example item, from the "Rigid" subscale, reads "There are strict consequences for breaking rules in our family." All scales are reported with strong factor validity and reliability (Cronbach's alpha for all scales = >.77). Permission and license to use the FACES-IV instrument was purchased from copyright holders PREPARE/ENRICH, LLC prior to the collection of data for this study. The FACES-IV instrument, as utilized in this study, can be found in Appendix D.

Differentiation of Self

Differentiation of self was assessed using the Differentiation of Self Inventory – Revised (DSI-R) (Skowron & Schmitt, 2003). The DSI-R is a revised version of the original Differentiation of Self Inventory proposed by Skowron and Friedlander (1998), which offered the first psychometrically valid method of operationalizing the construct of differentiation in adults for scholarly and clinical applications. This revised assessment contains 46 items measured across a 6pt Likert-type scale. Each item is prefaced as being related to the participant's perceptions about their relationships with others, with the participant indicating how closely they feel the item is true of them (1 = Not at all true of me; 6 = Very true of me). The DSI-R allows for researchers to calculate both a participant's overall "total" differentiation score by adding together all items into a single variable, as well as to calculate a participant's score on a specific subscale domain of differentiation. In all cases, the DSI-R is structured such that a higher total or subscale score indicates a higher level of differentiation-of-self.

The DSI-R maintains three of the original measurement's four subscales of assessing contributing factors to differentiation: Emotional Reactivity, "I" Position, and Emotional Cutoff. The DSI-R, however, contains a revised Fusion with Others subscale which boasts stronger internal consistency (Cronbach's alpha > .80 for all scales), reliability, and construct validity within the revised 12-item Fusion with Others subscale. Example items from these subscales include "When someone close to me disappoints me, I withdraw from him/her for a time" from the Emotional Reactivity subscale, and "I often feel unsure when others are not around to help me make a decision" from the revised Fusion with Others subscale. The full DSI-R scale can be found in Appendix E.

Analytical Plan

All data analysis took place in IBM SPSS 26. Following data cleaning procedures, reliability analyses were conducted on the FACES-IV and DSI-R subscales to confirm reliability and validity of scale data, based upon preexisting factors assumed by the scales.

Analyses were grouped by research question. The following section details the analyses which were conducted upon specific hypotheses by research question:

Research Question #1: *Do homeschooling families have healthier familial functioning, on average, than non-homeschooling families?*

> **H[1]:** Homeschooled participants will have higher levels of balanced Cohesion in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.
>
> **H[2]:** Homeschooled participants will have higher levels of balanced Flexibility in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.
>
> **H[3]:** Homeschooled participants will have lower levels of unbalanced Enmeshment in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.
>
> **H[4]:** Homeschooled participants will have lower levels of unbalanced Disengagement in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.

H[5]: Homeschooled participants will have lower levels of unbalanced Chaos in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.

H[6]: Homeschooled participants will have lower levels of unbalanced Rigidity in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV.

H[7]: Homeschooled participants will report higher levels of positive communication in their families-of-origin than non-homeschooled participants, as assessed within the Circumplex Model using the FACES-IV Family Communication Scale.

H[8]: Homeschooled participants will report higher levels of satisfaction with their family-of-origin systems than non-homeschooled participants, as assessed on the FACES-IV Family Satisfaction Scale.

To test H[1] through H[8], eight linear regression analyses were conducted using homeschooling status as a predictor variable, and each subscale of the FACES-IV instrument as the dependent variable, per their relevant hypothesis. These analyses provided information pertaining to whether homeschooler status is predictive of increases or decreases in FACES-IV subscale scores, thus providing insights into how these identities impact familial functionality.

Research Question #2: *Do diverse factors in homeschooling practice, such as a family's rationale for choosing to homeschool, the length of time that they spent receiving an education while homeschooling vs. non-homeschooling, and the degree of structure of their homeschooling schedule, affect homeschooling families' functionality?*

H[9]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of balanced Cohesion they report in their family-of-origin systems.

H[10]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of balanced Flexibility they report in their family-of-origin systems.

H[11]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of unbalanced Enmeshment they report in their family-of-origin systems.

H[12]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of unbalanced Disengagement they report in their family-of-origin systems.

H[13]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of unbalanced Chaos they report in their family-of-origin systems.

H[14]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of unbalanced Rigidity they report in their family-of-origin systems.

H[15]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of positive communication they report in their family-of-origin systems.

H[16]: Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will moderate the degree of familial satisfaction they report in their family-of-origin systems.

Six multiple linear regression analyses were conducted to test H[9] through H[16], with homeschooled participants' self-reported homeschooling rationales, the number of years they reported having been homeschooled, and their homeschooling schedule flexibility score acting as predictor variables in each model. Each subscale of the FACES-IV were again used as the dependent variable for their relevant hypothesis test. These analyses provided information pertaining to whether the diverse factors of homeschooling measured in this study are predictive

of increases or decreases in FACES-IV subscale scores, thus providing insights into how these factors impact familial functionality.

Research Question #3: *How does homeschooling affect homeschooled children's level of differentiation-of-self by the time they reach adulthood?*

> **H[17]:** Significant variance will exist between adults who were homeschooled as children and adults who were not homeschooled as children on the subscales of Emotional Reactivity, "I-Position" taking, Emotional Cut-off, and Fusion with Others on the DSI-R.
>
> **H[18]:** Homeschooled participants' family homeschooling rationales, the length of time in years that they reported homeschooling, and the reported flexibility of their homeschooling environment will predict homeschooled participants' overall differentiation score on the DSI-R.

Finally, for H[17], four independent samples t-tests were conducted to assess for differences between homeschooled versus non-homeschooled participants' scores on the four DSI-R subscales, thus providing insight into whether homeschooled and non-homeschooled participants differed significantly in their aspects of differentiation-of-self. A multiple regression analysis was then conducted to test H[18], with homeschooled participants' self-reported homeschooling rationales, the number of years they reported having been homeschooled, and their homeschooling schedule flexibility score being loaded as predictor variables for their Total Differentiation Score outcome variable. This analysis allowed for insights to be gleaned into whether any diverse factors in homeschooling practice function as a predictor for homeschooled participants' scores on the DSI-R.

CHAPTER 4: RESULTS

Data Screening and Cleaning Procedures

Missing data analyses were conducted prior to statistical analysis of the data. A cutoff percentage of 5% missing data (e.g. missing 2 or more items on the FACES-IV, or three or more items on the DSI-R) was utilized to delineate participant data which were missing-not-at-random (MNAR) (Schafer, 1999). Participants with data classified as MNAR, based on these criteria were excluded from analyses via listwise deletion from the data set. In total, one participant – missing data from 43 items on the FACES-IV measure, and seven participants – each missing three or more items on the DSI-R, were excluded via listwise deletion for meeting MNAR criteria stated above. The final participant count following missing data analysis was N = 292.

Cases in which data were determined to be MAR (e.g. two or fewer missing data points on either assessment) were resolved using data imputation via series mean for impacted variables. FACES-IV items for which one datum was imputed were: 2, 4, 6, 7, 8, 15, 18, 19, 23, 28, 29, 31, 32, 36, 40, 41, 42, 44, 45, 46, 48, 49, 50, 51, 52, 53, and 54. Items for which two data were imputed were: 5 and 12. In total, 31 data points were imputed via series mean across 29 items. This equates to less than .001% of all participant data for the FACES-IV assessment being entered via multiple imputation. DSI-R items for which one datum was imputed were items: 5, 8, 11, 15, 24, 29, 30, 31, 33, 36, 38, 40, 43, 45, and 46. Items for which two data were imputed were: 9, 17. 22, and 32. Finally, items for which three data points were imputed were: 2, 21, 23, and 27. In total, 34 data points were imputed via series mean across 23 items for the DSI-R assessment. This equates to less than .003% of all participant data for the DSI-R being entered via multiple imputation.

Sample Demographics

In total, 292 participants were included in data analysis. Subsample 1 of non-homeschoolers was $n = 147$, while Subsample 2 of homeschoolers was $n = 145$. The average age of participants in the overall sample was $M = 41.63$ years old. However, an independent samples t-test determined that the average age differed significantly between homeschooled participants ($M = 32.03$, $SD = 9.16$) and non-homeschooled participants ($M = 51.1$, $SD = 16.13$), $t(290) = -$

12.40, $p < .001$. The total sample was predominantly white (88.7%) (Table 1), assigned female sex-at-birth (85.6%) (Table 2), held a female gender identity (81.5%) (Table 3), and identified themselves as heterosexual (81.8%) (Table 4). Most participants also identified themselves as currently being married or partnered (65.8%) (Table 5), as not currently being engaged in a polyamorous/consensually non-monogamous relationship (92.1%) (Table 6), and as Christian in their religious affiliation (66.4%) (Table 7). The following tables provide specific breakdowns of how participants in each subsample identified themselves demographically.

Table 1. Racial Identity of Participants

Race (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
White	130	88.4%	129	89.0%	259	88.7%
Bi/Multiracial	3	2.0%	6	4.1%	9	3.1%
Asian	5	3.4%	3	2.1%	8	2.7%
Black	4	2.7%	3	2.1%	7	2.4%
Hispanic or Latino/a/x	3	2.0%	2	1.4%	5	1.7%
American Indian or Alaska Native	1	0.7%	2	1,4%	3	1.0%
Not listed/Other	1	0.07%	0	0.0%	1	0.3%

Table 2. Assigned Sex-at-Birth of Participants

Legal/Assigned Sex-at-Birth (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
Female	133	90.5%	117	80.7%	250	85.6%
Male	14	9.5%	28	19.3%	42	14.4%

Table 3. Current Gender Identity of Participants

Current Gender Identity (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
Female	129	87.8%	109	75.2%	238	81.5%
Male	14	9.5%	28	19.3%	42	14.4%
Non-binary	2	1.4%	2	1.4%	4	1.4%
Unsure/ Exploring	1	0.7%	2	1.4%	3	1.0%
Genderfluid	0	0.0%	2	1.4%	2	0.7%
Genderqueer	1	0.7%	0	0.0%	1	0.3%
Transgender	0	0.0%	1	0.7%	1	0.3%
Agender	0	0.0%	1	0.7%	1	0.3%

Table 4. Participants Sexual Orientation

Sexual Orientation (n = 289)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
Heterosexual	126	86.3%	113	79.0%	239	82.7%
Bisexual	4	2.7%	14	9.8%	18	6.2%
Lesbian	3	2.1%	6	4.2%	9	3.1%
Pansexual	3	2.1%	3	2.1%	6	2.1%
Asexual	1	0.7%	4	2.8%	5	1.7%
Queer	4	2.7%	1	0.7%	5	1.7%
Gay	3	2.1%	1	0.7%	4	1.4%
Unsure/Exploring	2	2.1%	1	1.4%	3	1.0%
Missing/Decline to Answer	*	*	*	*	3	1.0%

Table 5. Current Relationship Status of Participants

Sexual Orientation (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
Married or Partnered	102	69.4%	90	62.1%	192	65.8%
Single, but have dated previously	14	9.5%	17	11.7%	31	10.6%
Dating	4	2.7%	26	17.9%	30	10.3%
Divorced	14	9.5%	5	3.4%	19	6.5%
Single, and have never dated previously	6	4.1%	7	4.8%	13	4.5%
Widowed	7	4.8%	0	0.0%	7	2.4%

Table 6. Participants' Current Engagement in Polyamory/Consensual Non-Monogamy

Current Engagement in Polyamory or CNM Relationship (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
No	135	91.8%	134	92.4%	269	92.1%
Yes	11	7.5%	9	9%	20	6.8%
Rather not say/Unsure	1	0.7%	2	2%	3	1.0%

Table 7. Participants' Religious Affiliation

Religious Affiliation (n = 292)						
	Non-homeschooled Participants	Percentage of non-homeschooled participants	Homeschooled Participants	Percentage of homeschooled participants	Total Frequency in Sample	Total Percentage of Sample
Christian	85	57.8%	109	75.2%	194	66.4%
Atheist	14	9.5%	10	6.9%	24	8.2%
Agnostic	9	6.1%	8	5.5%	17	5.8%
None	13	8.8%	0	0.0%	13	4.5%
Spiritual	5	3.4%	7	4.8%	12	4.1%
Jewish	9	6.1%	2	1.4%	11	3.8%
Other/Not listed	8	5.4%	2	1.4%	10	3.4%
Islam	2	1.4%	3	2.1%	5	1.7%
Wiccan	1	0.7%	3	2.1%	4	1.4%
Hindu	1	0.7%	1	0.7%	2	0.7%

For participants who identified as homeschooled, only 35.4% (n = 51) indicated that they had been homeschooled for their entire primary K-12 education. This contrasts against participants who identified as non-homeschooled, of whom 92.9% indicated they had attended an out-of-home public or private school for their entire K-12 education. Among homeschooled participants, the average number of years homeschooled was 8.01 years (*SD* = 4.84), with the average number of hours homeschooled participants reported spending on homeschooling per week being 21 hours (*SD* = 10.34). 94.2% of participants identified their mother as one of, if not their only, primary instructor(s) in their daily homeschooling routine. Table 8 provides data on how frequently various family and community members were identified as primary instructors by homeschooled participants.

Table 8. Primary Instructors for Homeschooled Participants

Primary Instructors in a Typical Homeschooling Day (n = 145)		
	Frequency of Selection	Percentage of Cases
Mother	131	94.2%
Father	32	23.0%
Professional Teacher/Tutor (non-relative)	25	18.0%
Other Non-Relative Adult	6	4.3%
Older Sibling	5	3.6%
Neighbor or Family Friend (non-relative)	5	3.6%
Grandmother	4	2.9%
Grandfather	2	1.4%
Younger Sibling	1	0.7%

Note: Participants were allowed to select multiple "primary instructors." As such, total frequency of selection for all instructor options exceeds the subsample size of n = 145.

Reliability and Validity Analysis of Data Set and Scale Variables

To validate the normality of the data collected, analyses of skewness and kurtosis were conducted. Skewness and kurtosis values of +/-3.00 were utilized as the cutoff marker for normality (Kline, 2011). All items on the FACES-IV and DSI-R subscales scored within normality parameters for skewness and kurtosis, indicating that the data was normally distributed. Assessment for multicollinieirity was conducted via analysis of Pearson correlation coefficients among all test variables, with *r* values ≥.80 indicating probable multicollinieirity (Berry & Feldman, 1985). See Table 9 for a summary of these correlation analyses.

Table 9. Correlation Coefficients for All Experimental Variables

Correlation Coefficients for Experimental Variables (n = 292)

	1. Balanced Cohesion	2. Balanced Flexibility	3. Unbalanced Disengaged	4. Unbalanced Enmeshed	5. Unbalanced Rigid	6. Unbalanced Chaotic	7. Family Communication	8. Family Satisfaction	9. Total D.O.S. Score	10. Emotional Reactivity	11. I-Position	12. Emotional Cutoff	13. Fusion-with-Others	14. Years Homeschooled	15. Pedagogy Rationale	16. Ideology Rationale	17. Safety Rationale	18. Family Rationale	19. Disability Rationale	20. HS Flexibility
1.	1																			
2.	.79**	1																		
3.	-.79**	-.51**	1																	
4.	-.27**	-.32**	.25**	1																
5.	-.12*	-.11	.16**	.40**	1															
6.	-.45**	-.41**	.57**	.44**	-.02	1														
7.	.83**	.83**	-.61**	-.30**	-.19**	-.39**	1													
8.	.76**	.81**	-.54**	-.26**	-.18**	-.37**	.85**	1												
9.	.29**	.27**	-.36**	-.38**	-.23**	-.30**	.35**	.29**	1											
10.	.24**	.26**	-.28**	-.24**	-.21**	-.23**	.31**	.30**	.85**	1										
11.	.23**	.26**	-.20**	-.28**	-.08	-.20**	.29**	.25**	.74**	.54**	1									
12.	.44**	.35**	-.54**	-.41**	-.21**	-.39**	.43**	.35**	.69**	.40**	.31**	1								
13.	-.08	-.05	-.04	-.21**	-.18**	-.05	.02	-.06	.80**	.67**	.51**	.31**	1							
14.	.13	-.16	-.40**	-.08	-.01	-.25**	-.11	-.21*	.17*	.02	.17*	.32**	-.01	1						
15.	.11	.24**	.04	-.07	.01	.02	.19*	.23**	.03	-.01	.02	.14	-.10	-.05	1					
16.	-.15	-.19*	.08	.36**	.38**	.10	-.26**	-.21**	-.19*	-.13	-.13	-.12	-.21*	.19*	.18*	1				
17.	.02	.16	.15	.30**	.21*	.20*	.11	.16	-.28**	-.19*	-.21*	-.20*	-.29**	-.24**	.37**	.23**	1			
18.	.13	.23**	.09	.14	.10	.15	.15	.25**	-.08	.02	-.07	-.01	-.20*	.00	.31**	.31**	.42**	1		
19.	-.11	.19*	.33**	.19*	.04	.28**	.08	.14	-.14	-.06	-.05	-.27**	-.04	-.64**	.11	-.10	.28**	.08	1	
20.	-.06	.13	.21*	.04	.13	-.14	.10	.13	-.21*	-.12	-.20*	-.20*	-.13	-.29**	.07	.07	.12	-.01	.21*	1

Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).

Five instances of strong (r >.80) coefficients were found to exist among the variables. Three emerged in relation to the FACES-IV Family Communication subscale – namely in its relationship to the Balanced Cohesion ($r = .83$, $p < .01$), Balanced Flexibility ($r = .83$, $p < .01$), and Family Satisfaction ($r = .85$, $p < .01$) subscales. These results are in line with the theoretical and factorial assumptions of the circumplex model and the FACES-IV instrument and were deemed to be non-problematic for the planned analyses, as no FACES-IV subscale would be utilized as a predictor variable for another in any regression model created for testing the present hypotheses. The remaining two instances emerged in relation to the Total Differentiation of Self (D.O.S.) Score, wherein the DSI-R subscales of Emotional Reactivity ($r = .85$, $p < .01$) and Fusion-with-Others ($r = .80$, $p < .01$) were found to be strongly correlated. These results are in line with the DSI-R's scale construction, as the Total D.O.S. Score is calculated by simply adding up all items in the instrument into a single score. Again, as no DSI-R subscale would be utilized as a predictor for another DSI-R subscale in any regression model planned for testing the present hypotheses, it was determined that these instances of multicollinierity would not interfere with any planned analyses.

Finally, Cronbach's alphas were calculated to validate reliability for each subscale utilized in data analysis. Results indicated that all DSI-R subscales, Emotional Reactivity ($\alpha = .87$), I-Position ($\alpha = .83$), Emotional Cutoff ($\alpha = .87$), and Fusion with Others ($\alpha = .78$) were within acceptable realms of reliability give the size of each subscale (Cortina, 1993). Likewise, all FACES-IV subscales, Balanced Cohesion ($\alpha = .87$), Balanced Flexibility ($\alpha = .83$), Unbalanced Disengagement ($\alpha = .86$), Unbalanced Enmeshment ($\alpha = .87$), Unbalanced Rigidity ($\alpha = .74$), Unbalanced Chaos ($\alpha = .89$), Family Communication ($\alpha = .92$), and Family Satisfaction ($\alpha = .95$), returned acceptable results for reliability.

Chi-Square Analyses for Subsample Independence

In order to ensure that comparisons of homeschoolers and non-homeschoolers controlled for any significant between group differences aside from status as a homeschooler, preliminary chi-square tests of independence were conducted across demographic variables of race, assigned sex at birth, gender identity, sexual orientation, current relationship status, religious affiliation, highest level of educational attainment, employment status, and estimated income between the two subsamples. Due to low counts (>5 participants) in more than 20% of cells, effective chi-

square analyses were unable to be run for the variables of race, gender identity, sexual orientation, current relationship status, religious affiliation, highest level of educational attainment, and employment status. To address this issue, these variables were transformed into binary variables which attempted to maintain variable integrity while condensing lower frequency responses into a singular variable. The outcome of these transformations were that the variable of Race was condensed into a dichotomy of White and Non-White Person-of-Color (Non-White P.O.C.); the variable of gender identity was condensed to a dichotomy of Cisgender and Non-Cisgender; the variable of sexual orientation was condensed into a dichotomy of Heterosexual/straight and LGB+; current relationship status was condensed into a dichotomy of Partnered (Dating, Married) and Non-Partnered (Single, Divorced, Widowed); religious affiliation was condensed into a dichotomy of Religiously Affiliated (Identified as one of major religious groups or as affiliated, but not listed) and Non-Affiliated (Atheist, Agnostic, Not Affiliated); highest level of educational attainment was condensed into a dichotomy of Non-Degree Obtained (Pre-high school, High school Diploma, Some college) and Degree Obtained (Associate's or Technical Degree, Bachelor's, Master's, Doctorate); and employment status was condensed into a dichotomy of Employed for Income (Part-time, Full-time) and Not Employed for Income (Unemployed, Disabled, Volunteer, Caregiver/Stay-at-home parent, Retired, Student).

Results of chi-square tests of independence between homeschoolers and non-homeschoolers returned non-significant results for the transformed variables of race, $\chi^2(1, N = 291) = 0.00$, $p < .05$; gender identity, $\chi^2(1, N = 289) = 1.10$, $p < .05$; sexual orientation, $\chi^2(1, N = 292) = 2.98$, $p < .05$; and relationship status, $\chi^2(1, N = 292) = 2.49$, $p < .05$. Conversely, results for the transformed variables of religious affiliation, $\chi^2(1, N = 292) = 7.06$, $p < .05$; educational attainment, $\chi^2(1, N = 292) = 20.00$, $p < .001$; and employment status, $\chi^2(1, N = 292) = 11.79$, $p = .001$, all returned as significant – indicating that significant difference existed in the frequency of responses between homeschoolers and non-homeschoolers on these transformed variables. Likewise, significant difference was found between these groups through chi-square tests of independence which were run on the untransformed variables of assigned sex at birth, $\chi^2(1, N = 292) = 5.68$, $p < .05$, and estimated annual income, $\chi^2(1, N = 287) = 44.95$, $p < .001$.

These results, taken alongside the significant independent samples t-test noted earlier which found a significant difference in subsample groups' average age, indicated the need to

control for the variables of age, assigned sex at birth, religious affiliation, educational attainment, employment status, and estimated annual income in analyses which examined differences between homeschooled and non-homeschooled participant subsamples. As such, planned analyses for Hypotheses 1 – 8 (Simple Linear Regressions) and Hypothesis 17 (Independent Samples t-Tests) were converted to hierarchical linear regressions, with the identified variables being loaded in to the regression model a step prior to the loading of the homeschooler status variable. By converting these planned analyses into hierarchical linear regressions, analysis of homeschooling status' impact upon a given dependent variable was able to be more accurately ascertained, as hierarchical regression allows for any confounding predictive power driven by significant differences in subsample demographics to be differentiated from the actual predictive power of homeschooler status itself.

Hypothesis Testing

Research Question #1: Hypotheses 1 - 8

Hierarchical linear regression analyses were conducted to determine whether homeschooling status (e.g. homeschooled vs. non-homeschooled) functioned as a significant predictor for participants' scores across each of eight subscales of the FACES-IV instrument when participants' age, assigned sex at birth, religious affiliation, educational attainment, employment status, and estimated annual income were controlled for. Each regression model contained two steps. Step 1 loaded the variables of age, assigned sex at birth, religious affiliation, educational attainment, employment status, and estimated annual income as predictor variables, with the FACES-IV subscale loaded as a dependent variable. Step 2 loaded homeschooler status as a predictor variable, with the same FACES-IV subscale remaining loaded as the dependent variable. F values returned allowed for interpretation of whether a certain variable returned as a significant predictor of a FACES-IV subscale score, while returned changes in R^2 values indicate the specific percentage of participants' scores on the FACES-IV subscales that could be predicted solely by their homeschooler status. Of the eight models created, four models returned significant results.

The model for H[3], which loaded the Enmeshment subscale as a dependent variable, returned significant results, $F(7, 286) = 10.59$, $p < .001$, $R^2 = .21$, indicating that participants'

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reported Unbalanced Enmeshment was significantly predicted by their homeschooling status (β = -.30, p < .001). Assigned sex at birth (β = -.12, p < .05) and educational attainment (β = -.19, p = .001) also maintained a significant predictive quality in step 2 of the model, with values of R^2 change (R^2 Change = .054) indicating that homeschooling status predicted approximately 5.4% of variance in participants' scores on the Enmeshment subscale. The model for H^4, which loaded the Disengagement subscale as a dependent variable, likewise returned significant results, $F(7, 286)$ = 4.38, p < .001, R^2 = .10, with homeschooler status emerging as a significant predictor (β = -.15, p < .05) of participants' report on the Disengagement subscale, alongside age (β = -.16, p < .05) and assigned sex at birth (β = -.21, p < .001) in step 2, for a total predictive power of approximately 1.4% of the variance (R^2 Change = .014) in participants' Disengagement subscale score. Conversely, although the model for H^5, which loaded the Chaos subscale as a dependent variable, also returned significant results, $F(7, 286)$ = 7.13, p < .001, R^2 = .15, homeschooling status did not emerge as a significant predictor of participants' report of Unbalanced Chaos in their family-of-origin system (β = -.05, p = .47) when demographic differences were controlled for. Age (β = -.29, p < .001), assigned sex at birth (β = -.15, p = .007), and educational attainment (β = -.14, p = .021) all maintained significance in step 2 of the model, with values of R^2 change (R^2 Change = .002) indicating that homeschooling status predicted approximately 0.2% of variance in participants' scores on the Chaos subscale. Finally, the model for H^6, which loaded in the Rigid subscale as a dependent variable, returned significant results, $F(7, 286)$ = 2.74, p = .009, R^2 = .06 with homeschooler status emerging as the sole significant predictor variable (β = -.22, p = .003). R^2 change (R^2 Change = .030) indicating that homeschooling status predicted approximately 3% of variance in participants' scores on the Enmeshment subscale.

Hierarchical regression models for H^1, H^2, H^7, & H^8, which loaded the subscales for Balanced Cohesion, Balanced Flexibility, Family Communication, and Family Satisfaction respectively as dependent variables, were all found to be non-significant. Model results for H^1, $F(7, 286)$ = 1.40, p = .203; H^2, $F(7, 286)$ = .84, p = .557; H^7, $F(7, 286)$ = .99, p = .437; and H^8, $F(7, 286)$ = 1.41, p = .202, all indicated that neither homeschooling status nor any differing demographic characteristics between subsamples were predictive of variance in participants' scores on these subscales. Results from step 2 of the hierarchical regression analyses conducted for these hypotheses are summarized in Tables 10 and 11.

Table 10. Step 2 Results of Hierarchical Linear Regression Analyses for $H^1 - H^4$

Summary of Regression Results for $H^1 - H^4$ (n = 292)											
	H^1: Cohesion			*H^2: Flexibility*			*H^3: Enmeshment*			*H^4: Disengagement*		
	B	*SE* B	β	B	*SE* B	β	B	*SE* B	β	B	*SE* B	β
Constant	25.12	2.59		25.52	2.67		28.60	2.50		24.20	2.59	
Age	.04	.03	.10	.03	.03	.09	-.04	.03	-.11	-.06	.30	-.16*
Sex-at-Birth	1.68	.93	.11	-.16	.96	-.01	-2.12	.90	-.13*	-3.41	.93	-.21**
Religious Affiliation	-1.50	.86	-.11	-1.67	.88	-.12	1.15	.83	.08	1.51	.86	.10
Educational Attainment	.20	.86	.01	-.41	.88	-.03	-2.67	.82	-.19**	-1.53	.86	-.11
Employment Status	-.01	.75	-.00	-.12	.77	-.01	-.24	.72	-.02	-.30	.75	-.03
Estimated Annual Income	.02	.12	.01	-.03	.12	-.02	.22	.11	.12	-.06	.12	-.04
Homeschooler Status	-.87	.82	-.08	-.12	.85	-.01	-2.47	.79	-.30**	1.74	.66	.15*
R^2	.04			.02			.21			.10		
F	1.40			.84			10.59**			4.45**		
Adjusted R^2	.01			-.00			.19			.78		
R^2 Change	.004			.00			.054			.014		

*Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).*

Table 11. Step 2 Results of Hierarchical Linear Regression Analyses for $H^5 - H^8$

	H^5: Chaos			H^6: Rigidity			H^7: Communication			H^8: Satisfaction		
Summary of Regression Results for $H^5 - H^8$ (n = 292)												
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Constant	25.45	2.71		27.78	2.32		37.09	4.13		38.55	4.44	
Age	-.11	.03	-.29**	.02	.03	.08	.06	.04	.11	.02	.05	.03
Sex-at-Birth	-2.65	.97	-.15**	-.69	.83	-.05	-.37	1.48	-.02	-2.34	1.60	-.09
Religious Affiliation	1.40	.90	.09	-1.10	.77	-.09	-.2.23	1.36	-.10	-2.09	1.47	-.09
Educational Attainment	-2.07	.89	-.14*	-.47	.77	-.04	.31	1.36	.02	.32	1.47	.01
Employment Status	-.74	.78	-.06	-.60	.67	-.06	.18	1.19	.01	.92	1.28	.05
Estimated Annual Income	.07	.12	.04	.11	.10	.07	-.04	.18	-.01	-.14	.20	-.05
Homeschooler Status	-.63	.86	.05	-2.20	.74	-.22**	-1.77	1.31	-.10	-2.07	1.41	-.11
R^2	.15			.06			.02			.03		
F	7.13**			2.73**			.99			1.40		
Adjusted R^2	.13			.04			.00			.01		
R^2 Change	.002			.030			.006			.007		

Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).

To confirm the direction of significant results for the homeschooling status variable, Pearson correlation coefficient analyses were conducted. Arbitrary numerical coding for the binary, categorical homeschooling status variable assigned a value of "1" to homeschoolers and "2" to non-homeschoolers, which allowed for correlation coefficient analyses to be utilized. Correlation coefficients for all FACES-IV subscales with homeschooling status are summarized in Table 11. The significant results of negative correlation coefficients between homeschooler status and participants reports on the Unbalanced Enmeshed, $r(290) = -.38$, $p < .001$, Unbalanced Rigid, $r(290) = -.21$, $p < .001$, and Unbalanced Chaos, $r(290) = -.16$, $p < .01$ indicate that each of these factors were higher amongst homeschooled participants than in non-homeschooled participants, whereas a non-significant but positive coefficient between homeschooler status and reported scores on the Unbalanced Disengagement, $r(290) = -.01$, $p > .05$, indicates that non-

homeschoolers were slightly higher overall on disengagement. Summaries of correlation coefficients between FACES-IV subscales and homeschooler status are presented in Table 12.

These results indicate a failure to reject the null hypothesis for all but H^4 among the hypotheses in Research Question #1, as participants' status as a homeschooler did not predict significantly higher scores on Balanced Dimensions, Family Communication, or Family Satisfaction, and did not predict significantly lower scores on Unbalanced Enmeshment, Rigidity, and Chaos, when demographic variables were controlled for. Rather, status as a homeschooler versus a non-homeschooler was only found to be predictive of lower scores on the Unbalanced Disengagement subscale; emerging alongside participant age and assigned sex-at-birth, which also emerged as significant predictors. R2 change values also indicate that the influence of homeschooler status is minimal overall, with actual estimated predictive strength of homeschooler status ranging between 0.2% and 5%, depending upon the subscale.

Table 12. Pearson Correlation Coefficients between Homeschooler Status and FACES-IV Subscales

Pearson *r* Correlation Coefficients for Homeschooler Status & FACES-IV (n = 292)									
	Homeschooler Status	Cohesion	Flexibility	Disengagement	Enmeshment	Rigidity	Chaos	Family Communication	Family Satisfaction
Homeschooler Status	1								
Cohesion	-.02	1							
Flexibility	-.00	.79**	1						
Disengagement	.01	-.76**	-.51**	1					
Enmeshment	-.38**	-.27**	-.32**	.25**	1				
Rigidity	-.21**	-.12*	-0.11	.16**	.40**	1			
Chaos	-.16**	-.45**	-.41**	.57**	.44**	-.02	1		
Family Communication	-.06	.83**	.83**	-.61**	-.30**	-.19**	-.39**	1	.
Family Satisfaction	-.12*	.76**	.81**	-.54**	-.26**	-.18**	-.37**	.85**	1

*Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed). Positive coefficients indicate higher scores for non-homeschooled participants; Negative coefficients indicate higher scores for homeschooled participants.*

Research Question #2: Hypotheses 9 – 16

Eight multiple linear regression models were constructed to test whether homeschooled participants scores on the FACES-IV subscale could be predicted by the number of years they reported being homeschooled, the strength of the rationales they reported as driving their family to homeschool (pedagogy, ideology, safety, family bonds, disability/alternate ability), as well as the degree of structure of their homeschooling environment based on the presence and flexibility of a homeschooling schedule. Each model loaded in participants' reported number of years homeschooled, ratings on the five rationale statements, as well as their overall homeschooler flexibility score as independent variables. Each model then loaded in the appropriate subscale total of the FACES-IV assessment as a dependent variable, per the intended hypothesis being tested. Nine participants declined to indicate the number of years they were homeschooled, and were excluded from analysis. Means and standard deviations of the independent variables are presented in Table 13.

Table 13. Means and Standard Deviations for Homeschooling Subsample Variables

Means and Standard Deviations for Homeschooling Subsample Variables (n = 145)		
	M	*SD*
Years Homeschooled (n = 136)	8.01	4.84
Pedagogy Rationale	3.45	1.27
Ideology Rationale	3.64	1.41
Safety Rationale	2.81	1.40
Family Rationale	3.08	1.40
Disability Rationale	2.15	1.57
Homeschooling Flexibility Score	1.61	1.44

Of these eight multiple linear regressions, only the first model – which loaded the Balanced Cohesion subscale (H^9) as the dependent variable – returned non-significant results, $F(7, 128) = 2.03$, $p = .056$, $R^2 = .10$. In this model, only participants' rating of the Ideology

Rationale statement were found to have a significantly negative predictive effect, $\beta = -.25$, $p = .008$. Thus, hypothesis nine was not supported.

The second tested model, which loaded the Balanced Flexibility subscale as the dependent variable (H^{10}), found the independent variables to predict 16.7% of the variance, $F(7, 128) = 4.86$, $p < .001$, $R^2 = .21$. In this model, scores on participants' Pedagogy ($\beta = .20$, $p = .008$) and Family Bonds rationales ($\beta = .25$, $p = .006$) were found to be positive predictors of Balanced Flexibility, while Ideology Rationale rating emerged as a negative predictor ($\beta = -.31$, $p < .001$). The third model, loading the Unbalanced Enmeshment subscale as the dependent variable (H^{11}), found 22.3% of the variance to be explained by the independent variables, $F(7, 128) = 4.86$, $p < .001$, $R^2 = .21$. In this model, Pedagogy Rationale scores ($\beta = -.22$, $p = .008$) emerged as a negative predictor, while Ideology ($\beta = .37$, $p < .001$) and Safety Rationale ($\beta = .27$, $p = .004$) scores emerged as positive predictors. Disability Rationale score approached significance as a positive predictor ($\beta = .20$, $p = .052$), but was found non-significant in the model.

The fourth model, loading the Unbalanced Disengaged subscale as the dependent variable (H^{12}), found that 15.9% of the variance could be explained by the independent variables, $F(7, 128) = 4.64$, $p < .001$, $R^2 = .20$. In this model, the number of years that participants reported being homeschooled was the only predictor ($\beta = -.33$, $p = .003$), with a negative relationship indicating that Disengagement scores increased as homeschooled participants reported fewer years of homeschooling. The fifth model, loading the Unbalanced Chaos subscale as the dependent variable (H^{13}), found that 15.5% of the variance could be explained by the independent variables, $F(7, 128) = 4.55$, $p < .001$, $R^2 = .20$. Here, Disability Rationale scores emerged as a significant positive predictor ($\beta = .23$, $p = .033$), while Schedule Flexibility scores emerged as a significant negative predictor ($\beta = -.27$, $p = .001$). The sixth model, which loaded the Unbalanced Rigidity subscale as the dependent variable (H^{14}), found that 16.5% of the variance could be explained by the independent variables, $F(7, 128) = 4.80$, $p < .001$, $R^2 = .21$. In this model, only Ideology Rationale scores emerged as a predictor ($\beta = -.42$, $p = .001$), with its positive relationship indicating that increasing strength of Ideology Rationale reports by homeschooled participants related to increasing level of reported Rigidity.

The seventh model loaded the Family Communication subscale as the dependent variable, in order to test H^{15}. This model found that the independent variables accounted for

14.4% of the variance, $F(7, 128) = 4.24$, $p < .001$, $R^2 = .19$, with Family Bonds Rationale scores emerging as a significant positive predictor ($\beta = .21$, $p = .023$), and Ideology Rationale scores emerging as a significant negative predictor ($\beta = -.379$, $p < .001$). Finally, the eighth model loaded the Family Satisfaction subscale as the dependent variable, in order to test H^{16}. This model found that 19.3% of the variance could be accounted for by the independent variables, with Pedagogical ($\beta = .18$, $p = .04$) and Family Bonds Rationale scores ($\beta = .30$, $p = .001$) emerging as significant positive predictors, while Ideology Rationale score emerged as a negative predictor ($\beta = -.34$, $p < .001$). These results indicate support for hypotheses 10 through 16. Summary results for hypotheses in Research Question #2 can be found in Tables 14 and 15.

Table 14. Results of Linear Regression Analyses for $H^9 - H^{12}$

Summary of Regression Results for $H^9 - H^{12}$ (n = 136)											
	H^9: Cohesion			H^{10}: Flexibility			H^{11}: Enmeshment			H^{12}: Disengagement		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Constant	25.78	2.16		19.40	2.23		11.56	2.51		16.99	2.25	
Years Homeschooled	.12	.12	.12	-.01	.12	-.01	.03	.14	.02	-.38	.13	-.33**
Pedagogy Rationale	.35	.38	.08	.91	.39	.20	-1.19	.44	-.22**	-.12	.40	-.03
Ideology Rationale	-.91	.37	-.25**	-1.26	.35	-.31**	1.76	.39	.37**	.57	.35	.14
Safety Rationale	.18	.37	.05	.13	.38	.03	1.26	.43	.27	-.12	.39	-.03
Family Rationale	.69	.36	.19	1.02	.37	.25**	-.25	.42	-.05	.19	.37	.05
Disability Rationale	-.41	.37	-.12	.31	.38	.09	.86	.44	.20	.42	.39	.11
HS Flexibility Score	.04	.32	.01	.39	.33	.09	-.20	.38	-.04	.44	.34	.11
R^2	.10			.21			.26			.20		
F	2.03			4.86**			6.54**			4.64**		
Adjusted R^2	-.05			.17			.22			.16		

Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).

Table 15. Results of Linear Regression Analyses for $H^{13} - H^{16}$

	H^{13}: Chaos			H^{14}: Rigidity			H^{15}: Communication			H^{16}: Satisfaction		
Summary of Regression Results for $H^{13} - H^{16}$ (n = 136)												
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Constant	16.02	2.54		16.45	2.02		32.44	3.35		29.49	3.69	
Years Homeschooled	-.25	.14	-.19	-.01	.11	-.01	-.02	.19	-.01	-.27	.21	-.13
Pedagogy Rationale	-.28	.45	-.06	-.25	.35	-.06	1.13	.59	.17	1.34	.65	.18*
Ideology Rationale	.70	.40	.15	1.53	.31	.42**	-2.27	.52	-.38**	-2.29	.57	-.34**
Safety Rationale	.47	.44	.10	.49	.35	.13	.45	.58	.08	.26	.63	.04
Family Rationale	.25	.42	.05	-.30	.33	-.08	1.27	.55	.21*	2.10	.61	.30**
Disability Rationale	.95	.44	.23	.11	.35	.03	-.26	.58	-.05	-.36	.64	-.06
HS Flexibility Score	-1.23	.38	-.27**	.41	.30	.11	.59	.50	.10	.64	.55	.10
R^2	.20			.21			.19			.24		
F	4.55**			4.80**			4.24**			5.62**		
Adjusted R^2	.16			.17			.14			.19		

*Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).*

Research Question #3: Hypotheses 17 & 18

To test H^{17}, a series of four hierarchical linear regressions were conducted to determine whether homeschooling status (e.g. homeschooled vs. non-homeschooled) functioned as a significant predictor for participants' scores across the four subscales of the DSI-R instrument when participants' age, assigned sex at birth, religious affiliation, educational attainment, employment status, and estimated annual income were controlled for. Identically to tests for Hypotheses 1 – 8, each regression model contained two steps – with step 1 loading in the variables of age, assigned sex at birth, religious affiliation, educational attainment, employment status, and estimated annual income as predictor variables, and one DSI-R subscale being loaded in as a dependent variable. Step 2 then loaded homeschooler status as a predictor variable, with the same DSI-R subscale remaining loaded as the dependent variable.

All four models returned significant results. The first model, which loaded in the Emotional Reactivity subscale, was significant $F(7, 286) = 3.26$, $p = .002$, $R^2 = .75$, with homeschooler status ($\beta = -.15$, $p = .038$) emerging as a significant predictor alongside participants' age ($\beta = .17$, $p = .033$), religious affiliation ($\beta = .14$, $p = .017$), and estimated annual income ($\beta = .17$, $p = .01$). R^2 change values indicated that homeschooler status accounted for approximately 1.4% of variance on participants' Emotional Reactivity scores. The second model, which loaded in the I-Position subscale, was significant $F(7, 286) = 2.56$, $p < .05$, $R^2 = .06$, with homeschooler status ($\beta = -.15$, $p = .04$) emerging as a significant predictor alongside participant age ($\beta = .20$, $p = .014$) and estimated annual income ($\beta = .16$, $p = .021$). R^2 change values indicated that homeschooler status, again, predicted approximately 1.4% of the variance in participants' I-Position scores. While the third model, which loaded in the Emotional Cutoff subscale, returned significant results $F(7, 286) = 6.11$, $p < .001$, $R^2 = .13$, homeschooler status ($\beta = -.07$, $p = .343$) did not emerge as a significant predictor of participants' Emotional Cutoff scores. Rather, participants' assigned sex at birth ($\beta = .21$, $p < .001$), educational attainment ($\beta = .24$, $p < .001$), and employment status ($\beta = .13$, $p = .04$) emerged as significant in the model's second step – with homeschooler status only predicting approximately 0.3% of the variance in Emotional Cutoff scores among participants. Similar results were found in the final model, which loaded in the Fusion-with-Others' subscale, and returned significant results, $F(7, 286) = 4.23$, $p < .001$, $R^2 = .10$. Despite the model itself being significant, homeschooler status ($\beta = -.11$, $p = .12$) did not emerge as a significant predictor of Fusion-with-Others score variance, with R^2 change values indicating that only 0.8% of the variance could be explained by homeschooler status alone. Instead, only participants' age ($\beta = .17$, $p = .039$) and estimated annual income ($\beta = .20$, $p = .002$) emerged as significant predictors in the model's second step. Results from these three models are summarized in Table 16.

Table 16. Step 2 Results of Hierarchical Linear Regression Analyses for H[17]

	Emotional Reactivity			I-Position			Emotional Cutoff			Fusion-with-Others		
Summary of Regression Results for H⁵ – H⁸ (n = 292)												
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Constant	31.54	5.07		46.14	4.27		25.97	5.48		29.97	4.66	
Age	.12	.05	.17*	.11	.04	.20*	.00	.06	.00	.10	.05	.17*
Sex-at-Birth	-1.28	1.82	-.04	.16	1.53	.01	7.28	1.97	.21**	1.97	1.68	.07
Religious Affiliation	4.02	1.68	.14*	-.01	1.41	.00	-3.11	1.81	-.10	2.35	1.54	.09
Educational Attainment	-.14	1.67	-.01	-.95	1.41	-.04	6.95	1.80	.24**	.14	1.54	.01
Employment Status	1.65	1.47	.07	.41	1.23	.02	3.27	1.58	.13*	2.10	1.35	.10
Estimated Annual Income	.58	.23	.17**	.44	.19	.16*	.36	.24	.10	.64	.21	.20**
Homeschooler Status	-3.36	1.61	-.15*	-2.80	1.36	-.15*	-1.65	1.74	-.07	-2.31	1.48	-.11
R^2	.08			.06			.13			.10		
F	3.26**			2.56**			6.11**			4.23**		
Adjusted R^2	.05			.04			.11			.07		
R^2 Change	.014			.014			.003			.008		

*Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).*

Follow-up analyses were conducted to determine whether the homeschooling-relevant independent variables included in the previous regression analyses could predict homeschooled participants' scores on the DSI-R's individual subscales. Four multiple regression analyses were conducted, loading each of the DSI-R's subscales as dependent variables, with years homeschooled, participant ratings on the five rationale statements, and homeschooler flexibility score being loaded in as predictor variables. Results from the Emotional Reactivity model were non-significant, $F(7, 128) = 1.61$, $p = .137$, $R^2 = .08$, although follow-up analyses identified participant Safety Rationale score as a significant predictor ($β = -.26$, $p = .012$). Significant results were found in the I-Position model, with the predictor variables accounting for 6.00% of the variance, $F(7, 128) = 2.23$, $p = .036$, $R^2 = .11$. Although homeschooling flexibility score approached significance ($β = -.17$, $p = .056$), no variables emerged as significant predictors within this model. Significant results were also found in the Emotional Cutoff model, $F(7, 128)$

= 4.77, $p < .001$, $R^2 = .21$. 16.3% of the variance in this subscale amongst homeschooled participants could be explained by the predictor variables, and both years homeschooled ($\beta = .21$, $p = .049$) and Pedagogy Rationale ($\beta = .227$, $p = .056$) emerged as positive predictors. Finally, significant results emerged from the Fusion with Others model, $F(7, 128) = 2.90$, $p = .008$, $R^2 = .137$. Reported results indicate 9.00% of the variance was able to be explained by the predictor variables, with only the Safety Rationale variable ($\beta = -.26$, $p = .008$) emerging as a significant predictor. These results are summarized in Table 17.

Table 17. Results of Secondary Linear Regression Analyses for DSI-R Subscales

Summary of Regression Results for DSI-R Subscales (n = 136)											
	Emotional Reactivity			*I-Position*			*Emotional Cutoff*			*Fusion-with-Others*		
	B	*SE* B	β	B	*SE* B	β	B	*SE* B	β	B	*SE* B	β
Constant	42.09	4.76		45.88	4.13		50.53	5.03		53.41	4.41	
Years Homeschooled	-.08	.27	-.03	.39	.23	.19	.56	.28	.21*	-.10	.25	-.05
Pedagogy Rationale	.83	.84	.09	1.05	.72	.13	2.33	.88	.23**	.15	.77	.01
Ideology Rationale	-.78	.74	-.10	-.72	.64	-.10	-1.49	.78	-.16	-1.04	.69	-.14
Safety Rationale	-2.08	.82	-.26*	-1.30	.71	-.18	-1.62	.86	-.18	-2.03	.76	-.26**
Family Rationale	.76	.79	.09	-.03	.68	-.00	.48	.83	.05	-.51	.73	-.06
Disability Rationale	.25	.83	.04	.90	.72	.14	-1.23	.87	-.15	.31	.76	.05
HS Flexibility Score	-.96	.71	-.12	-1.19	.62	-.17	-.46	.75	-.05	-.89	.66	-.12
R^2	.08			.11			.20			.14		
F	1.61			2.23*			4.77**			2.90**		
Adjusted R^2	.03			.06			.16			.09		

*Note: * = significant at .05 level (two-tailed); ** = significant at .01 level (two-tailed).*

Finally, as a test of H^{18}, a multiple linear regression analysis was conducted. This model loaded homeschooled participants' total differentiation score as the dependent variable, and participants' reported number of years homeschooled, ratings on the five rationale statements, and their overall homeschooler flexibility score, as independent variables. Results indicated that these independent variables predicted 11.4% of the overall variance in total differentiation scores

amongst homeschooled participants, $F(7, 128) = 3.48$, $p = .002$, $R^2 = .160$, with participants' Safety Rationale score emerging as the only significant predictor within the model ($\beta = -.28$, $p = .004$).

These results indicate that, although homeschooler status did appear to negatively predict participants' Emotional Reactivity and I-Position scores, thus indicating that homeschooled participants had higher scores in these domains, other demographic differences between subsamples also appeared to play a significant role in predicting whether participants' scores on DSI-R subscales would increase or decrease. These results also indicate that, within the homeschooling subsample, the number of years a participant was homeschooled and their reported motivation for homeschooling were significant predictors of DSI-R subscale scores. Thus, diversity between and within homeschooling and non-homeschooling groups appears to be very prominent in determining differentiation scores, rather than this difference emerging solely from their differing homeschooling status.

CHAPTER 5: DISCUSSION

The present study aimed to provide a foundational exploration of how the practice of homeschooling impacts familial dynamics, the systemic functionality of families, and the process of differentiation-of-self for homeschooled individuals. This was undertaken by not only examining differences in family functionality and differentiation-of-self between those who were homeschooled and those who were not, but by also exploring how differences in homeschooling practice and a family's motivation for choosing to homeschool cause variance in these outcomes among homeschooling families. By answering the proposed research questions, this study intended to provide foundational insights for systemic clinicians and researchers in both family and pedagogical scholarship about general characteristics of homeschooling families and adults who were homeschooled. Likewise, this study also intended to supplement the predominantly qualitative endorsements in the extant homeschooling literature of homeschooling's positive effects on familial bonds with quantitative assessment of systemic functionality and relational health. By specifically recruiting adults who were homeschooled, this study also intended to introduce a diversity of perspectives into the homeschooling discourse of extant homeschooling scholarship about the impact of homeschooling on familial bonds, which has thus far often been dominated by parental perspectives.

Implications of Results

Familial Functionality in Homeschoolers and Non-Homeschoolers

The mixed support for H^1 – H^8 under Research Question #1 paints an interesting portrait of the broad differences in family functionality that appear to exist between homeschooling and non-homeschooling families. Per these results, participants who identified themselves as homeschooled were more likely than their non-homeschooled counterparts to report significantly higher levels of unbalanced Enmeshment and unbalanced Rigidity, and significantly lower levels of unbalanced Disengagement. These findings, coupled with the lack of significant difference between homeschoolers and non-homeschoolers in balanced levels of cohesion, flexibility, family communication, and family satisfaction, appear to run mostly counter to the assumptions

often made about homeschooling's positive effect on a family's relational well-being (Guterman & Neuman, 2017a; Murphy, 2014; Van Galen, 1987). Rather, it appears that homeschooling does not predict higher levels of healthy systemic functioning within families, and instead appear to indicate that some systemic element of, or some factor which attracts a family to, homeschooling actually functions to disrupt family functionality.

That said, despite having several strong overall indications of familial dysfunctionality in their higher reported levels of unbalanced Enmeshment and Rigidity, homeschooled participants did not report significantly different levels satisfaction in their family-of-origin in comparison to their non-homeschooled counterparts. These results are, at first glance, confounding, as increased emergence of unbalanced cohesion and flexibility have been identified as predictors of lower familial satisfaction both within circumplex theory (Olson & Gorall, 2016) and in practice (Schnider et al., 2016). Results from $H^9 - H^{10}$ under Research Question #2, however, begin to shed light on this apparent contradiction by indicating that a family's motivating rationale and elements of their homeschooling structure likely play a significant role in influencing homeschoolers' assessment of the functionality of their family-of-origin system, as well as their satisfaction with it.

Structurally, the number of years a participant was homeschooled was found to negatively predict their report of their families' level of unbalanced Disengagement. This result is particularly significant to the literature, as very few studies have examined the role and impact of the number of years an individual has been homeschooled as an independent variable (Kunzman & Gaither, 2020), let alone identified it as a functional predictor of relational health. One possible explanation of this result is that, per the common report amongst homeschooling adults that they choose to homeschool in order to increase the frequency of interaction they have with their children (Guterman & Neuman, 2017a; Van Galen, 1987), families who homeschool over an extended period of time are less susceptible to a sense of emotional disengagement due to an increase in the overall amount of familial interaction. Another possible explanation, however, is that participants who homeschooled for fewer years may have experienced more extenuating familial circumstances which made adherence to one educational modality infeasible or impractical to sustain. Such circumstances may have placed additional stress on the family system, causing them to remain in an unbalanced state of cohesion for a longer period of time (Olson, 2000).

Also in the structural realm, homeschooled participants' homeschooling flexibility score was found to be a negative predictor of unbalanced Chaos. This finding aligns itself with the circumplex model's systemic assumptions about the dynamic of flexibility, as Chaos is defined specifically by a lack of structure in the family system (Olson, 2011). Of note, however, was that the current study did not identify a strong relationship between homeschooling flexibility score and balanced Flexibility or unbalanced Rigidity. This indicates that, although the presence of homeschooling structure may be useful in predicting a non-chaotic level of flexibility, increasingly structured homeschooling does not serve as a useful indicator of probable balanced or high levels of unbalanced flexibility.

To this end, familial motivating rationales for homeschooling emerged even more frequently than structural dynamics as predictors of familial functionality. Most prominently, the reported strength of an ideological rationale proved significant in predicting all but the factors of unbalanced Disengagement and unbalanced Chaos. Emerging as a negative predictor of balanced cohesion and flexibility, as well as healthy family communication and family satisfaction, an ideological rationale was found to be a significant negative predictor of all functionality-associated domains of the circumplex model. Likewise, the ideology rationale variable also emerged as a positive predictor of both the unbalanced Rigidity and unbalanced Enmeshment subscales. Taken together, these results indicate that the stronger an ideological rationale functions as a motivating factor for homeschooling, the poorer homeschooled participants reported their family-of-origin's functionality to be.

Conversely, rationales pertaining to pedagogical concerns and family relationships were both found to be predictive factors for pro-functionality facets of the circumplex model. Both rationales were positively predictive of participants' family satisfaction scores, with the pedagogy rationale emerging as a significant negative predictor of unbalanced Enmeshment, and the family relationships rationale emerging as a positive predictor of both balanced Flexibility and healthy family communication. This indicates that greater emphasis upon familial connection or pedagogical factors as a central motivator for choosing to homeschool are likely to result in higher levels of functionality within homeschooling family systems, per the report of homeschooled participants in this study. It is worth noting in comparing the influence of these three rationales that, although "ideological" rationales have traditionally been associated with conservative and/or traditionalist religious affiliation by the general public and within

homeschooling scholarship (Thomas, 2019), ideological motivation as defined in this study was inclusive of religious, political, and moral ideologies. To this point, it is worth noting that the transformed religious affiliation variable – recoded to compare participants who identified themselves as part of a major religious group (e.g. Christianity, Judaism, Islam, Hinduism, Buddhism) and those who did not (e.g. Atheist, Agnostic, Unaffiliated) – did not emerge as significant predictor While this limits the ability to make inferences about the specific effect that any of these three factors may have on familial functioning, the current results do allow us to make broad-level inferences about how ideological motivation to homeschool may implicate poorer systemic functioning, as experienced by individuals who were homeschooled as children.

Overall, these results indicate that, while slight variance does appear to exist between homeschoolers and non-homeschoolers, significant variance also exists within homeschoolers as a population in regard to family functionality. Although ideological, pedagogical, and family relationship-oriented rationales for homeschooling emerged as major facets for predicting familial functionality, these results also indicate that a systemic connection exists between the logistical aspects of homeschooling practice and the interpersonal dynamics assessed for within the circumplex model. Likewise, it is worth noting that the actual predictive power of homeschooler status on family functionality appears to be relatively small; with significant effect sizes of the homeschooler status-inclusive models ranging from between 0.2% to 5.4% in this study. For many of these models, other factors such as age, participants' assigned sex at birth, as well as their educational attainment and annual income accounted for a significant amount of variance that naturally existed between participants. As such, in interpreting the findings of this study, it is critical that results from hypotheses across both Research Question #1 and #2 need to be considered when deriving assumptions about family functionality for homeschooling families. Likewise, the salient role of other systemically salient demographic factors such as age, sex, SES, and educational attainment need to be considered for their equally salient role in influencing individuals' experiences with family and their interpretation of family system functionality.

Differentiation-of-Self in Homeschoolers and Non-Homeschoolers

The apparently positive impact of a homeschooling background on participants' Emotional Reactivity and I-Position subscale scores on the DSI-R lends some credence to the

positivist takeaways from literature on homeschoolers' socialization, which has posited that homeschoolers tended to have more pro-social outcomes than non-homeschoolers (Drenovsky & Cohen, 2012; Medlin, 2013). However, the incredibly small effect size and lack of apparent difference between homeschoolers and non-homeschoolers on the Emotional Cutoff and Fusion-with-Others subscales indicate that this difference is perhaps nominal at best. Per the assumptions BFST, these results do indicate that homeschooling practice in of itself does appear to participate in certain aspects of the intergenerational emotional process that Bowen hypothesized to affect a person's development of differentiation-of-self (Kerr & Bowen, 1988). Again, however, analyses conducted on the homeschooling subsample of participants specifically identified significant variance among homeschoolers' differentiation-of-self outcomes, based upon their reports of structural factors and how strongly certain motivating rationales were present in their family's unique homeschooling experience.

It is worth noting that, despite not having any significant impact on family functioning, the safety-oriented rationale emerged as the only significant predictor for homeschooled participants' Total Differentiation score, as well as their scores on the Fusion with Others and Emotional Reactivity subscales; despite the latter not producing a statistically significant predictive model. As it is worded, the statement used to operationalize the "safety" rationale spoke broadly to general concerns about unnamed potential dangers that may exist in the school environment. Common apprehensions about safety among homeschooling families have traditionally included concerns such as drugs, sexual content or activity, or violent activity at schools (see: Thomas. 2019), but has also been noted to include macro-level concerns about exposure to systemic or overt racism towards minority students within a public schooling environment (see: Mazama & Lundy, 2012). It stands to reason that significant concerns about safety may indicate a stronger desire from parents to protect children from dangers in the outside world, which may facilitate a systemic environment where less emotional and physical distance between family members is maintained in order to preserve that sense of safety. Thus, an individual's basic level of differentiation-of-self is likely to be impacted in this environment due to potential restrictions on the amount of emotional separation that they are allowed to experience from their family system.

Interestingly, the number of years a participant reported being homeschooled emerged alongside the pedagogical rationale as a positive predictor for Emotional Cutoff. This result, in

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theory, coincides directly with results from H^{12}, as the strategy of emotional cutoff demonstrates similarities with unbalanced Disengagement (e.g. the creation of emotional distance to relieve relational anxiety) (Skowron & Friedlander, 1998). Thus, taken together, the negative to neutral associations these variables share with unbalanced Disengagement indicates that a pedagogical rationale and more years homeschooled appear to decrease reliance on emotional disengagement as a relational coping strategy without also driving participants to rely upon Enmeshment or its related differentiation strategy, Fusion with Others, instead.

Scholarly Implications

Novel Strategy for the Recruitment of Homeschooling Adults

In terms of implications for scholarly research, the present study first highlights a potential recruitment avenue for connecting with adult homeschoolers. This population was deemed as critical for the present study in order to diversify reports about familial bonds beyond the reports of homeschooling parents. With that in mind, Facebook Advertisements proved effective at quickly recruiting a high-quality sample of adults who were homeschooled to participate in this study. Traditionally, studies on homeschooling which have used online surveys have often relied on distribution via email, as conducted through the researcher's connections or outreach to homeschooling organizations or directors of homeschooling groups (see: Mitchell, 2021; Thorpe et al., 2012). However, such studies often seek to get in touch with parents or caregivers currently engaged in homeschooling, rather than previously homeschooled adults who may be further decentralized due to potential lack of engagement in homeschooling communities after completing their education. Although other online survey vendors such as Amazon's Mechanical Turk (MTurk) platform have demonstrated capability for recruiting large samples of a wide variety of participants for low cost to researchers, recent studies have been critical of the average response quality that services like MTurk generate (Pickering & Blaszczynski, 2021; Smith et al., 2016). Recognizing that homeschoolers are themselves considered difficult to sample from due to their decentralized nature (Kunzman & Gaither, 2013), homeschooled adults may themselves be further decentralized as a subpopulation of homeschoolers due to their potentially limited connection with homeschooling communities or integration of homeschooling into their identity. As such, Facebook Advertisements' reputation for being able to target niche

characteristics of users on the Facebook platform presents itself as promising means of convenience sampling for homeschooling scholarship which seeks to recruit homeschooled adults.

Final cost per click for the ad set targeting homeschooled participants was approximately $0.28, with the cost per complete response ($n = 150$) being approximately $0.89. The overall cost per participant was significantly lowered as users shared the advertisement and tagged people in comments to encourage participation of other eligible participants, thus removing the need for the ad to be delivered via the Facebook algorithm to prospective participants. Although the limitations to generalizability that come with snowball sampling still apply, Facebook Advertisements pose a potentially effective means of accessing homeschooled adults as a population of interest for online research. Experimentation with the inclusion of other characteristics as limiters for ad delivery, such as age, race, or geographic location, may prove equally beneficial for researchers seeking to target niche subpopulations of homeschooled adults, and should be explored in future literature.

Support for Years Homeschooled as a Salient Structural Variable

Other implications for research include the present study's insertion of participants' years engaged in homeschooling practice as a practical independent variable. Returning again to the recent literature survey conducted by Kunzman and Gaither (2020), this particular variable has been relatively absent in the extant literature on homeschooling. As mentioned previously, although the current study simply relied upon asking participants to indicate how many years in total they were homeschooled, the significant findings attached to this variable indicate that homeschooling duration likely carries salient connections to systemic dynamics within homeschooling families. Although more complex methodologies can and should be considered for conceptualizing when and where gaps in homeschooling, or when changes in homeschooling approach, may have occurred in participants' education, the addition of homeschooling duration poses a relatively simple addition to quantitative methodologies that should be considered as a potential standard of analyses concerning themselves with the environmental structure of homeschooling.

Clinical Implications

This study enters the literature base as the first known study on homeschooling families and homeschoolers, as explored through the lens of systemic family scholarship. Through the use of theoretical constructs from the Circumplex Model of Marital and Family Functioning and Bowen Family Systems Theory, these results provide a foundational level of clinical instrumentality to systemic family therapists who may find themselves working with individuals or relational systems coming from a homeschooling background. Given the comparable size of the estimated population of homeschooled youth in the U.S. (~3%) to other significant populations of clinical interest, such as LGBT+ identifying individuals (~4.5%) (Newport, 2018), it is likely that clinicians will encounter homeschooled individuals or homeschooling families at some point in their practice. Thus, it is critical for C/MFTs and other systemic clinicians to have a rudimentary understanding of how homeschooling may impact familial dynamics, functionality, and the functionality of adults in relationships.

The results of this study indicate that clinicians should gain a well-rounded understanding of their homeschooled clients' experiences with homeschooling, as these experiences may indicate salient connections to intergenerational, intra-familial, and socio-cultural processes at play in the client's life. Based on the present study, clinicians should seek to gain an understanding of: 1) How many years a client or family system was/has homeschooled, being mindful to explore significant events, systemic shifts, or other occurrences which prompted discontinuity in schooling modality. 2) How a client or family system experienced structure and delivery of their education via homeschooling, with a specific eye towards whether this environment lacked structure, or how flexible the structure of their homeschooling environment was – if some form of structure was present. 3) How the client's family came to the decision to homeschool, with specific attention being paid to any contextual rationales or significant event that are mentioned by the client(s). Gaining a more nuanced picture of a family's homeschooling experience in this way will allow a clinician to potentially glean more information about the family's degrees of cohesion and flexibility, allowing them to target interventions that address these structural or relational concerns which may be more common in certain homeschooling environments.

For instance, a therapist who finds themselves working with a couple where one or both partners were homeschooled may find it beneficial to explore whether safety was a major driving

factor in motivating either partner's family to homeschool. If one partner were to emphasize safety as a strong motivating factor, contrasting their partner's family's motivation, this may be an indicator that conflict could be arising between partners due to differing responses to relational stress. This could be explored through a number of techniques targeting differentiation-of-self specifically, or through exploring each partner's role in their cycle of argumentation (e.g. one partner takes on a "pursuer" role during conflict, while another partner by contrast appears to "withdraw."). As another example, therapists may be more likely to successfully be able to tap into homeschooling family members' connectedness and ability to communicate effectively if they emphasize familial bonds as a primary motivator for driving them to homeschool. That said, based on these results, a therapist ought to proceed with nuance and caution, as these resources may be less accessible if the family also espouses an equally powerful ideological rationale for choosing to homeschool, which may make them more vulnerable to poorer cohesion and greater rigidity. Overall, given the contrast this study paints between the views of homeschooled adults versus parents who conducted homeschooling on homeschooling's relational benefits, clinicians may find it particularly valuable in general to employ the use of circular questioning during interviews with families and couples, as doing so would allow them to gain valuable information about homeschooling is perceived at various levels in the system's hierarchy.

Specifically, with the current study's focus upon how diversity in homeschooling motivation and practice create varied systemic outcomes, a major clinical implication may be a simple increase in therapists' awareness of diversity amongst homeschoolers and homeschooling families. Although no extant literature exists to determine C/MFTs general attitudes towards homeschooling, pervasive stereotypes about homeschoolers as reclusive, ideologically rigid, white, conservative Christians may permeate into the clinician's culturally-formed ideas about homeschooling. Thus, bias into how clinicians respond to homeschooling families or conceptualize their cases from a systemic perspective may be introduced, which can potentially impact development of the therapeutic alliance or the development of effective treatment plans and systemic hypotheses. For example, while the present study indicates that there appears to be a salient lack of difference between homeschoolers and non-homeschoolers in outcomes related to differentiation-of-self, the extant stereotype of homeschoolers as socially-isolated and relationally inept may incorrectly guide a clinician to automatically perceive a homeschooled

client as having experienced an impaired process of differentiation. In summation, awareness of the diversity within homeschooling populations – as well as the salience of this diversity to homeschoolers relational outcomes, as highlighted in the present study – not only allows clinicians to make better informed decisions about how to guide therapeutic interviews with homeschooled clients, but may also help deconstruct preexisting stereotypes or prejudices that impact their approach to clinical practice with homeschoolers.

Methodological Limitations

Although the recruitment methods utilized for this study allowed for a large sample of potentially niche participants to be recruited, the limitations of a convenience sampling methodology limit its overall generalizability. Specifically, due to the probable occurrence of snowball sampling as participants from both subsamples shared the Facebook Advertisements with their own Facebook friends and followers, it is possible that only a very small pocket of homeschooling experiences were captured. We can see this plainly through the predominance of white ($N = 259$), Christian ($N = 194$), and female-identifying ($N = 238$) participants present in the overall sample, thus indicating that the present study is unlikely to be representative of the educational and familial experiences of racial, gender, and religious minority groups in the U.S. This is a particularly critical limitation to this study's utility within the current homeschooling context, due to the rise in homeschooling popularity among religious and racial minority populations within the United States (Hirsh, 2019). Additionally, without an effective way of determining whether participants were sharing this study with other family members, or with friends and connections who came from similar homeschooling backgrounds, it is possible that the number of total number of meaningfully distinct family systems surveyed may be lower than the actual participant count. Consequently, without further subcategorizing homeschoolers by homeschooling approach, it is also possible that certain styles or approaches to homeschooling may have been overrepresented.

This issue highlights another methodological weakness of the current study, in that homeschooling practice was framed as a single "binary" option. Although the definition of homeschooling presented to participants was inclusive of approaches which blended traditional homeschooling with some attendance of public or private out-of-home school, the study did not distinguish homeschoolers by their family's approach to homeschooling. The lack of distinction

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between different approaches to homeschooling, such as flexischooling, unschooling, and traditional homeschooling, poses a potential limit to the nuanced information that this study sought to provide about how diversity in homeschooling practice impacts family dynamics and relational outcomes.

Similar limitations exist regarding the study's operationalization around motivation and rationales that families connect with to homeschool. Although a diverse typology of commonly identified rationales were presented, the use of static ratings of prefabricated rationales are potentially problematic. For example, Neuman and Guterman (2019) observed that motivations for homeschooling shift across a family's lifespan. Thus, while the use of participants' ratings on static motivation statements presents itself as a sensible and straight-forward solution for quantitative analysis, the nuance of motivation can likely only truly be captured in qualitative form.

A final limitation of the present study lays in its handling of missing data and dummy coding of demographic categories. Although series mean imputation was appropriately utilized to handle MAR data from the FACES-IV and DSI-R subscales, the use of listwise deletion on cases with more than 5% missing data on a psychometric scale or single-point variable represents a potentially problematic limitation. Although listwise deletion of cases has been identified as the most common method of handling missing data in quantitative analysis in the social sciences, it remains a brute force method of data cleaning that can potentially skew the outcome of results (Lieberman-Betz et al., 2014; Myers, 2011). Although listwise deletion in this case did not compromise adequate statistical power in the current study, the exclusion of participants via listwise deletion still poses a potential confound to the present results.

Likewise, although consideration of demographic confounds between samples presents itself as a methodological strength in this study, the method of condensing demographic variables such as race, religious identity, and employment status into binary variables poses a potential bias point that may not accurately reflect nuance between demographic categories. For instance, while this study does allow us to infer that there does not appear to be a significant mediating role of religious affiliation – that is, whether someone identifies as religious or not – between homeschoolers and non-homeschoolers levels of D.O.S. or perceived familial functionality. However, this method does not allow us to examine specific differences between religious groups, preventing us from exploring whether variance exists within religiously

affiliated participants. Future studies could remedy this issue by employing more complex dummy coding methods that would allow for more rigorous and illustrative analysis of demographic variance between homeschoolers and non-homeschoolers.

Future Directions

To address the issues stated above, replication of the present study using a more diverse sample of homeschooling participants could prove fruitful in exploring how various demographic (e.g. race, religion, geographic region, income) characteristics may impact participants' perceptions of family functioning and relational outcomes. This could be achieved via Facebook Advertising using more specific population-targeting parameters in utilized ad sets, although this would likely significantly increase the time and resource investment required to recruit a sizable sample of participants.

Additionally, delving further into elements of diversity within homeschooling populations may evoke more information about homeschooling's unique systemic relationship to the dependent variables tested in the present study. For example, differentiating between various approaches to homeschooling (e.g. flexischooling, unschooling, traditional homeschooling), operationalizing the number of "gaps" that existed in homeschooling practice (i.e. individuals who were homeschooled for a period of time, attended an out-of-home school fully or part time, then returned to homeschooling), and distinguishing between a family's initial motivation for choosing to homeschool versus their motivating rationale for maintaining homeschooling practice over time, are some potential considerations that would increase the level of nuance able to be elicited about participants experiences as homeschoolers.

Future studies should also consider implementing other systemic or family dynamic-oriented scales into their analyses of within and between group differences among homeschoolers and non-homeschoolers. For studies interested in continuing to explore the intersection of family functionality with homeschooling, a short form version of the FACES-IV instrument (FACES-IV-SF) recently developed and validated by Priest et al. (2020) could be considered to reduce participant strain or to create more space for other instruments to be included. That said, although models of systemic "functionality," such as the Circumplex Model of Marital and Family Functioning or Bowen Family Systems Theory give family scholars and therapists a framework for conceptualizing the roots of behavioral and relational problems, such

models only provide a narrow perspective of the dynamics at play in a family's system. In practice, functional systemic dynamics such as of cohesion and adaptability are only the basic fundamentals of systemic family interaction which are then put into play through behavioral patterns, values, and orientations which families adapt over time (Moos & Moos, 2009). For example, it has been noted that a family's nurturance of religious identity and religiosity – a dynamic often ascribed to the archetypical homeschooling family – has been associated with positive psychosocial (see: Martin et al., 2015) and pro-social outcomes (see: Lindner Gunnoe et al., 1999). However, these positive effects have been found to be significantly mediated by factors such as emotional cohesion and the rigidity of familial hierarchy (Houltberg et al., 2011), thus indicating the importance of evaluating systemic mechanisms alongside evaluations of familial religiosity. Likewise, factors such as how a family balances engagement in and encouragement of achievement-orientated activities (e.g. academic success, competitive sports) with leisure-time activities (e.g. watching television together, casual forms of play) has also been explored as a salient factor for determining positive family outcomes (Mactavish & Schleien, 2004). Research previously mentioned in this paper on homeschoolers academic outcomes (see: Barwegen et al., 2004) and parental rationales for choosing to homeschool (see: Guterman & Neuman, 2017a) indicates that these two factors appear to be particularly salient to the ways in which homeschoolers experience family life and experience the successes often reported of them in outcome research, thus making them prime candidates for further analysis in the vein of the present study.

Conclusion

In conclusion, the practice of homeschooling presents itself as a universally significant, yet uniquely transformative, experience for families that carries both pedagogical and relational implications. Prior to the current study, no previous literature was available in systemic therapy literature to guide the field's conceptualization of homeschooling and homeschooled families. Because homeschooling inflicts a dual-institutional role upon family systems, it is often undertaken by families for a variety of reasons and through a variety of formats and modalities. It is absolutely critical for systemic family therapists to gain a holistic understanding about how this phenomena uniquely impacts individuals and families via a variety of systemic mechanisms in order to provide adequate and systemically-conscious treatment.

Likewise, research of this ilk is just as valuable for homeschoolers and interested members of the general public as it is for clinicians and scholars. By pausing to acknowledge, appreciate, and investigate the outcomes of homeschooling diversity on families, stereotypes, prejudice, and biased regard – be it positive or negative – toward of the practice can be more effectively challenged. At even broader levels, as nuanced insights into how homeschooling may impact family life and the relational health of homeschooled children as they develop into adulthood, so too should the general public's understanding of the systemic entwinement between family life and education.

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APPENDIX A. INFORMED CONSENT DOCUMENT

Research Participant Consent Form

Education, Relationships, and Family Dynamics

Dr. Christopher K. Belous

Department of Behavioral Sciences

Purdue University Northwest

Key Information

Please take time to review this information carefully. This is a research study. Your participation in this study is voluntary which means that you may choose not to participate at any time without penalty or loss of benefits to which you are otherwise entitled. You may ask questions to the researchers about this study at any time. If you decide to take part in the study, you will be asked to sign this form to ensure that you understand what you are consenting to do as a participant and any possible risks or benefits which may result from participating in this study.

What is the purpose of this study?

This study investigates the relationship between modes of education delivery, relationships in adulthood, and family-of-origin dynamics. The data for this research project will be collected until May 2022 or until the number of participants requested to have completed the survey have completed the survey.

You are being asked to participate in a study designed by Dr. Christopher K. Belous and Nicholas T. Triplett of Purdue University Northwest. We would like to enroll 300 participants in this study. We want to understand how individuals whose families engaged in the practice of homeschooling adapt and experience family life in comparison to those whose families utilized public or private out-of-home schooling. We also aim to understand how this decision between

in-home and out-of-home schooling impacts how individuals engage in relationships in adulthood.

What will I do if I chose to be in this study?

If you chose to participate, you acknowledge that you are a minimum age of 18 years old, that you were educated for the majority of your primary education (K-12th Grade) within the United States or on foreign lands within territory reserved for the United States (e.g. US Military Installation, Embassy, etc.), and that you currently reside within the United States. You will be instructed to complete a survey asking about your educational experiences during your primary education, characteristics of your family-of-origin, and your personal attitudes towards relationships. These questions reflect how you experienced family life and education during your primary education, as well as your beliefs and behaviors in relationships in the present day. You are free to not answer any particular questions if they make you feel uncomfortable, or withdraw your participation at any time without penalty.

How long will I be in this study?

This survey should take approximately 20-30 minutes to complete.

What are the possible risks or discomforts?

There are no greater risks present during the completion of the survey than you would encounter in daily life or during the performance of routine physical or psychological exams or tests. Breach of confidentiality is always a risk with data, but we will take precautions to minimize this as described in the confidentiality section. Only the researchers will access the data from this and no personally identifying information will be collected during the study.

The questions have the potential in making you feel uncomfortable which may result in emotional distress. To minimize this risk, you can choose not to answer any given question on this survey. You can go to https://openpathcollective.org/ or

https://www.psychologytoday.com/us/therapists to find someone to speak to about any distress that may come of participating in this survey.

Are there potential benefits?

You will not directly benefit from this study. By participating in this study, you will have a chance to take part in the research process, and your participation may, thus, contribute to the scientific understanding of how the choice to practice homeschooling or utilize out-of-home schooling impacts families and interpersonal relationships.

Will I receive payment of other incentive?

You will have the opportunity to enter your email for a randomized drawing to receive one of twelve $25 Amazon gift cards. At the end of the survey, you will be redirected to an external survey where you may enter your email address. Your answers to the survey will not be connected to your email.

Are there costs to me for participation?

There are no anticipated costs to participate in this research.

If you feel you have been injured due to participation in this study, please contact:

<div align="center">

Christopher K. Belous, PhD, LMFT

(219) 989-2938

ckb@pnw.edu

</div>

Purdue University Northwest will not provide medical treatment or financial compensation if you are injured or become ill as a result of participating in this research project. This does not waive any of your legal rights nor release any claim you might have based on negligence.

Will information about me and my participation be kept confidential?

There is no personally identifying information in this survey. All responses will remain anonymous and only used in combination of other participants. IP addresses will not be linked to identifying information. All data gathered from this study will be accessed by the researchers. The project's research records may be reviewed by the study sponsor/funding agency, Food and Drug Administration (if FDA regulated), US DHHS Office for Human Research Protections, and by departments at Purdue University responsible for regulatory and research oversight.

What are my rights if I take part in this study?

You do not have to participate in this research project. If you agree to participate, you may withdraw your participation at any time before the data is gathered without penalty or loss of benefits to which you are otherwise entitled.

Who can I contact if I have questions about the study?

If you have questions, comments or concerns about this research project, you can talk to one of the researchers. Please contact Dr. Christopher K. Belous at ckb@pnw.edu or Nicholas Triplett at ntriplet@pnw.edu.

To report anonymously via Purdue's Hotline, see www.purdue.edu/hotline

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to:
Human Research Protection Program - Purdue University Ernest C. Young Hall, Room 1032 155 S. Grant St. West Lafayette, IN 47907-2114

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above.

APPENDIX B. DEMOGRAPHICS SURVEY

Demographics & General Schooling Information Survey

Instructions: Please complete the following demographic information about yourself to the best of your ability.

Age (numerically, in years):

[Drop down: 18yrs to 120yrs]

Race/Ethnicity (select one)

American Indian or Alaska Native

Asian

Black

Hispanic or Latino/a/x

Middle Eastern

Native Hawaiian or Pacific Islander

North African

White

Bi/Multiracial

Not listed/Other

Legal Sex at Birth (select one)

Male

Female

Other/Rather not say

Gender Identity (select one)

Male

Female

Non-binary

Genderfluid

Genderqueer

Transgender

Agender

Unsure/Exploring

Not listed/Other

Sexual Orientation (select one)

Heterosexual

Gay

Lesbian

Bisexual

Pansexual

Asexual

Queer

Unsure/Exploring

Not listed/Other

Current Relationship Status (select one)

Single, and have never dated previously

Single, but have dated previously

Dating

Married or Partnered

Divorced

Widowed

Are you current engaged in a polyamorous or consensually non-monogamous relationship?

(select one)

Yes

No

Rather not say/Unsure

Religious Affiliation (select one)

Christian

Jewish

Islam

Hindu

Sikh

Buddhist

Atheist

Agnostic

Wiccan

Spiritual

None

Other/Not Listed

Highest Level of Education Attained (select one)

Pre-high school graduate (12th grade or lower, without graduation or equivalent)

High school graduate or equivalent (e.g. GED diploma)

Some college attended

Associate's degree or technical certification

Bachelor's degree

Master's degree

Doctoral degree

Estimated Annual Income (select one)

Less than $10,000

$10,000 - $19,000

$20,000 - $29,999

$30,000 - $39,999

$40,000 - $49,999

$50,000 ~ $59,999

$60,000 ~ $69,999

$70,000 ~ $79,999

$80,000 ~ $89,999

$90,000 ~ $99,999

$100,000 or more

Employment Status (select one)

Full-time

Part-time

Unemployed

Disabled or unable to work.

Volunteer worker

Caregiver/Stay-at-home parent

Retired

Student

What U.S. state, territory, or other location under U.S. jurisdiction do you live in?

(select one from drop down list)

Alabama

Alaska

Arizona

Arkansas

California

Colorado

Connecticut

Delaware

Florida

Georgia

Hawaii

Idaho

Illinois

Indiana

Iowa

Kansas

Kentucky

Louisiana

Maine

Maryland

Massachusetts

Michigan

Minnesota

Mississippi

Missouri

Montana

Nebraska

Nevada

New Hampshire

New Jersey

New Mexico

New York

North Carolina

North Dakota

Ohio

Oklahoma

Oregon

Pennsylvania

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Utah

Vermont

Virginia

Washington

West Virginia

Wisconsin

Wyoming

American Samoa

Guam

Northern Mariana Islands

Puerto Rico

U.S. Virgin Islands

I currently reside in another country on an installation operated by the U.S. government, such as a U.S. Embassy or U.S. Military Base

If you have been married previously, how many times have you been married?

[Drop down, 1 time to 10+ times]

-- DEMOGRAPHICS END --

APPENDIX C. GENERAL SCHOOLING INFO SURVEY

Instructions: We are interested in learning more about your experiences with school, education, and learning when you were younger. We are specifically interested in learning about where you received your "primary" K-12 (kindergarten, elementary school, middle school, and high school) education. We understand that some of these questions may ask for information about events that happened a long time ago, so we ask that you try to recall this information to the best of your ability.

In this study, we are interested in exploring differences between individuals who practiced "homeschooling" for at least part of their primary education (Kindergarten - 12th grade) from those who did not engage in homeschooling. Before continuing with this survey, please read the following definition we are using to define "homeschooling" and indicate whether you feel that your schooling experience meets our definition.

For the purposes of this study, we are defining "homeschooling" as an approach to education that involved at least some portion of your primary (K-12) education take place at home, rather than being enrolled full-time at an out-of-home school institution (e.g. public school, private school, charter school, Montessori school, college courses etc.).

"Homeschooling," as we are defining it, could still involve attending some courses or classes at an out-of-home school while still receiving a sizable portion of your education at home. If your education took place in a "homeschooling group" or tutoring pod, whether completely full-time or only part-time, you also meets this definition of "homeschooling."

For the purposes of this study, we are not including the use of at-home eLearning or similar methods that were implemented for reasons of public safety (ex. COVID-19 quarantine preventing face-to-face learning at a school), while still enrolled full-time at an out-of-home school in our definition of "homeschooling."

Based on our definition, do you feel that your primary (K-12) education included "homeschooling" at any point?

      Yes

      No

-- IF YES, FOR HOMESCHOOLERS –

How many years were you homeschooled, in total?

      [Drop down: Less than 1yr to 18+yrs]

Which grades were you homeschooled? Please select all grades that apply.

      All Grades (Kindergarten through 12th Grade)

      Kindergarten or earlier

      1st Grade

      2nd Grade

      3rd Grade

      4th Grade

      5th Grade

      6th Grade

      7th Grade

      8th Grade

      9th Grade (Freshman in high school)

      10th Grade (Sophomore in high school)

      11th Grade (Junior in high school)

      12th Grade (Senior in high school)

      Don't know, or would rather not say.

On an average homeschooling day, who would you consider to have been your primary instructor(s)? Please select all that apply. (For relatives, assume that this person could be related to you biologically, by marriage or partnership (step-relative), adoption, etc.)

      Mother

      Father

      Grandfather

      Grandmother

      Other adult relative (Aunt, uncle, cousin, etc.)

Older sibling

Younger sibling

Other non-adult relative (under 18yrs of age at time of instruction)

Professional teacher or tutor (non-relative)

Neighbor or family friend (non-relative)

Other non-relative adult

None of the above

Families are motivated to homeschool for a variety of reasons. Please rate how strongly you believe each of the following factors may have been in motivating your family to choose to homeschool.

(all items rated using the following Likert-type scale)

1	2	3	4	5
Not a motivator at all	Somewhat of a motivator	A moderate motivator	A strong motivator	A very strong motivator.

1. Concerns about the quality of the education or teaching being provided at local schools.

2. Concerns about the religious, political, or ideological education that may, or may not, be offered at local schools.

3. Concerns about the safety or potential dangers present at local schools.

4. A desire to strengthen or improve bonds within the family.

5. Concerns about the accessibility of local schools, due to you or a family member experiencing a physical, mental, or social disability, limited ability, or alternative ability circumstance.

How many hours, on average, per week did your family dedicate to homeschooling?

[Drop down, 1hr to 100+hrs]

Did your family have a schedule that outlined when you needed to be doing school work, or to generally be considered "in school?"

Yes

No

[IF YES TO PREVIOUS] How flexible would you say this schedule was on most days?

1	2	3	4	5
Very flexible	…	Somewhat flexible	…	Very inflexible

Did you use curriculum, textbooks, tests, or any other learning materials that were being used by a public school system as part of your regular homeschooling routine?

1	2	3	4	5
Never	…	About half of all days	…	Most days

Did you use any websites, online tutoring, or other internet-based learning materials as part of your regular homeschooling routine?

1	2	3	4	5
Never	…	About half of all days	…	Most days

Did you attend face-to-face classes at a public or private school or participate in an online "eLearning" program offered by a public or private school as part of your regular homeschooling routine?

1	2	3	4	5
Never	…	About half of all days	…	Most days

-- IF NO, FOR NON-HOMESCHOOLERS –

Which grades did you attend an out-of-home public or private school?

All Grades (Kindergarten through 12th Grade)

Kindergarten or earlier

1st Grade

2nd Grade

3rd Grade

4th Grade

5th Grade

6th Grade

7th Grade

8th Grade

9th Grade (Freshman in high school)

10th Grade (Sophomore in high school)

11th Grade (Junior in high school)

12th Grade (Senior in high school)

Don't know, or would rather not say.

While you were attending school, did you ever utilize an online "eLearning" program to complete your school work?

Yes

No

[IF YES TO PREVIOUS] Which grades did you complete the majority of the academic year via an eLearning program?

All Grades (Kindergarten through 12th Grade)

Kindergarten or earlier

1st Grade

2nd Grade

3rd Grade

4th Grade

5th Grade

6th Grade

7th Grade

8th Grade

9th Grade (Freshman in high school)

10th Grade (Sophomore in high school)

11th Grade (Junior in high school)

12th Grade (Senior in high school)

Don't know, or would rather not say.

[IF YES TO eLEARNING QUESTION] If you used this program to do school work from home, did you find it easier or harder to learn than while attending school in-person?

1	2	3	4	5
Much easier	…	Neither easier nor harder	…	Much harder

[IF YES TO eLEARNING QUESTION] If you used this program to do school work from home, do you think the general level of stress in your family changed at all while you were "eLearning?"

1	2	3	4	5
Much less stressed	…	Neither more or less stressed	…	Much more stressed

APPENDIX D. FACES-IV

For each item, please rate how much you agree or disagree with each statement regarding your *family-of-origin*. Your family-of-origin is the family you grew up in for the longest period of time prior to the age of 18. This family may consist of biological parents and/or siblings, adoptive parents and/or siblings, or other individuals who had legal guardianship over you. If you still live with this family currently, think of your experiences with them before your 18th birthday while answering these questions.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. Family members are involved in each other's lives.

2. Our family tries new ways of dealing with problems.

3. We get along better with people outside our family than inside.

4. We spend too much time together.

5. There are strict consequences for breaking the rules in our family.

6. We never seem to get organized in our family.

7. Family members feel very close to each other.

8. Parents equally share leadership in our family.

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

10. Family members feel pressured to spend most free time together.

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

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

13. Family members are supportive of each other during difficult times.

14. Discipline is fair in our family.

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

16. Family members are too dependent on each other.

17. Our family has a rule for almost every possible situation.

18. Things do not get done in our family.

19. Family members consult other family members on important decisions.

20. My family is able to adjust to change when necessary.

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

22. Family members have little need for friends outside the family.

23. Our family is highly organized.

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

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

26. We shift household responsibilities from person to person.

27. Our family seldom does things together.

28. We feel too connected to each other.

29. Our family becomes frustrated when there is a change in our plans or routines.

30. There is no leadership in our family.

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

32. We have clear rules and roles in our family.

33. Family members seldom depend on each other.

34. We resent family members doing things outside the family.

35. It is important to follow the rules in our family.

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

37. Our family has a good balance of separateness and closeness.

38. When problems arise, we compromise.

39. Family members mainly operate independently.

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

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

42. Our family feels hectic and disorganized.

43. Family members are satisfied with how they communicate with each other.

44. Family members are very good listeners.

45. Family members express affection to each other.

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

47. Family members can calmly discuss problems with each other.

48. Family members discuss their ideas and beliefs with each other.

49. When family members ask questions of each other, they get honest answers.

50. Family members try to understand each other's feelings.

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

52. Family members express their true feelings to each other.

For each item, please rate how **satisfied** or **dissatisfied** you are regarding your *family-of-origin*. Your family-of-origin is the family you grew up in for the longest period of time prior to the age of 18. This family may consist of biological parents and/or siblings, adoptive parents and/or siblings, or other individuals who had legal guardianship over you. If you still live with this family currently, think of your experiences with them before your 18th birthday while answering these questions.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

53. The degree of closeness between family members.

54. Your family's ability to cope with stress.

55. Your family's ability to be flexible.

56. Your family's ability to share positive experiences.

57. The quality of communication between family members.

58. Your family's ability to resolve conflicts.

59. The amount of time you spend together as a family.

60. The way problems are discussed.

61. The fairness of criticism in your family.

62. Family members concern for each other.

APPENDIX E. DSI-R

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is generally true of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

1	2	3	4	5	6
Not at all true of me	…	…	…	…	Very true of me

*1. People have remarked that I'm overly emotional.

*2. I have difficulty expressing my feelings to people I care for.

*3. I often feel inhibited around my family.

4. I tend to remain pretty calm, even under stress.

*5. I usually need a lot of encouragement from others when starting a big job or task.

*6. When someone close to me disappoints me, I withdraw from him/her for a time.

7. No matter what happens in my life, I know that I'll never lose my sense of who I am.

*8. I tend to distance myself when people get too close to me.

*9. I want to live up to my parents' expectations of me.

*10. I wish that I weren't so emotional.

11. I usually do not change my behavior simply to please another person.

*12. My spouse/partner could not tolerate it if I were to express to him/her my true feelings about some things.

*13. When my spouse/partner criticizes me, it bothers me for days.

*14. At times my feelings get the best of me and I have trouble thinking clearly.

15. When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.

*16. I'm often uncomfortable when people get too close to me.

*17. I feel a need for approval from virtually everyone in my life.

*18. At times I feel as if I'm riding an emotional roller-coaster.

19. There's no point in getting upset about things I cannot change.

*20. I'm concerned about losing my independence in intimate relationships.

*21. I'm overly sensitive to criticism.

*22. I try to live up to my parents' expectations.

23. I'm fairly self-accepting.

*24. I often feel that my spouse/partner wants too much from me.

*25. I often agree with others just to appease them.

*26. If I have had an argument with my spouse/partner, I tend to think about it all day.

27. I am able to say "no" to others even when I feel pressured by them.

*28. When one of my relationships becomes very intense, I feel the urge to run away from it.

*29. Arguments with my parent(s) or sibling(s) can still make me feel awful.

*30. If someone is upset with me, I can't seem to let it go easily.

31. I'm less concerned that others approve of me than I am in doing what I think is right.

*32. I would never consider turning to any of my family members for emotional support.

*33. I often feel unsure when others are not around to help me make a decision.

*34. I'm very sensitive to being hurt by others.

*35. My self-esteem really depends on how others think of me.

*36. When I'm with my spouse/partner, I often feel smothered.

37. When making decisions, I seldom worry about what others will think.

*38. I often wonder about the kind of impression I create.

*39. When things go wrong, talking about them usually makes it worse.

*40. I feel things more intensely than others do.

41. I usually do what I believe is right regardless of what others say.

*42. Our relationship might be better if my spouse/partner would give me the space I need.

43. I tend to feel pretty stable under stress.

*44. Sometimes I feel sick after arguing with my spouse/partner.

*45. I feel it's important to hear my parents' opinions before making decisions.

*46. I worry about people close to me getting sick, hurt, or upset.

[* = Item is reverse scored]