

INVESTIGATING FACTORS ASSOCIATED WITH SAME-SEX PARENTAL
INVOLVEMENT AND CHILDREN'S DEVELOPMENTAL, EARLY LITERACY, AND
EARLY NUMERACY OUTCOMES

A Dissertation

by

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ABSTRACT

Queer theory, in part, recognizes that the categorization of gender is a social construction (Butler, 2006). That is, society has passed on gender categories and have been given meaning through gender roles, clothing, mannerisms, etc. Current quantitative methods in demography measure dimensions of sexuality in various ways, but fall short of measuring elaborate educational outcomes. Quantitative methods in education research measure elaborate educational outcomes, but fall short of measuring sexuality. The purpose of this dissertation is to use nationally-representative data to identify if there are differences in educational outcomes between same-sex and non same-sex parental involvement. I examine, through three studies, elaborate educational outcomes through a critical queer lens in order to identify lesbian, gay, and heterosexual households. Study 1 is a meta-analysis investigating the effect that same-sex and non same-sex couples' parental involvement on their child's development. Study 2 is a quantitative study examining potential differences in parental involvement of same-sex and non same-sex couples testing Lareau's (2009) concept of "concerted cultivation" and Epstein's (2009) Model of Parental Involvement. Study 3 is a quantitative study that seeks to identify if there are differences in the early childhood educational outcomes of same-sex and non same-sex parents. Recognizing gender as a social construct has the ability to open a vast amount of data about marginalized communities, particularly LGBTIQ people and their needs. Policy and survey measurement recommendations are provided for each study.

DEDICATION

In memory of my mother, Maria de los Angeles Suárez, and grandmother, Juanita Garcia.

Your presence is missed every day.

To my *familia*:

For all your support and for instilling in me the value of my background
and the value of education.

To my LGBTQ *family*:

For being by my side and supporting my transition.

To all trans kids out there:

Be yourself, even if it feels like no one else wants you to.

To my wife, Guadalupe Marquez-Velarde:

You inspire me every day.

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A quote by an unknown person I once read as an undergraduate that has always stuck with me goes something like, “You cannot know where you are going if you do not know where you have been.” Truer words have not been said for my experience. While I am extremely thankful and grateful for the amount of support and knowledge I have gained during my studies here at Texas A&M University, I would not be here were it not for so many people who have contributed to my knowledge-base, both in high school, bachelor’s and master’s degree, and throughout my time teaching.

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This is for my mother and grandmother, who may rest in peace, and for my family. You came to the United States from México way before I was born in hopes of having your have a

life better than yours. I hope you are proud of the person I have become as a result of your guidance and support. I am proud to say I am a product of immigrants. Seeing them work harder than I ever have taught me that humility should always be a part of anything I do. I dedicate this to everyone who has mentored me in some way throughout my schooling, career, and throughout my transition.

This is also for LGBTIQ families out there. I know we are not always counted. I hope that my work can contribute to making us visible little by little. Finally, I would like to dedicate this dissertation to every single transgender child who sits in our classrooms, especially those of color that may be considering the alternative to living and being themselves for fear of not being allowed to go to the restroom, or worse—of being killed. To them, I say, as hard as it is, be yourself for I was once you. There are allies out there who are willing to use their privilege to help us. Trust them when they tell you they have your back. How does one thank everyone that has contributed to this journey? There simply are not enough words to say anything other than thank you from the bottom of my heart. I am here because of you. I am here for you. I am here with you.

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TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
CONTRIBUTORS AND FUNDING SOURCES	viii
TABLE OF CONTENTS.....	ix
LIST OF FIGURES	xi
LIST OF TABLES.....	xii
CHAPTER I INTRODUCTION AND LITERATURE REVIEW	1
Parental Involvement and Gender Negotiation.....	2
Dimensions of Sexuality	4
State of Measurement of Sexuality in Education.....	8
The Regnerus Study.....	9
The Context of the Dissertation	11
References.....	14
CHAPTER II THE RELATIONSHIP BETWEEN PARENTS' SEXUAL ORIENTATION AND CHILDREN'S DEVELOPMENTAL OUTCOMES: A META-ANALYSIS	22
Introduction.....	22
Literature Review.....	23
Research Questions	24
Methods.....	25
Results.....	30
Discussion	40
Conclusion	43
References.....	44
CHAPTER III EXAMINING SAME-SEX AND NON SAME-SEX PARENTAL INVOLVEMENT	53
Introduction.....	53

Literature Review.....	54
Theoretical Frameworks	57
Research Questions	60
Methods.....	61
Results.....	69
Discussion	85
Conclusion	89
References	90
CHAPTER IV A MEDIATION ANALYSIS OF EARLY CHILDHOOD OUTCOMES FOR CHILDREN OF SAME-SEX AND NON SAME-SEX PARENTS ..	97
Introduction.....	97
Literature Review.....	98
Research Questions	102
Conceptual Model	102
Methods.....	104
Results.....	107
Discussion	111
Conclusion	114
References.....	115
CHAPTER V CONCLUSION.....	121
Scholarly Significance of the Dissertation.....	121
Practical Significance of the Dissertation	123
References	124
APPENDIX A	126

LIST OF FIGURES

	Page
Figure 2.1 PRISMA diagram of included studies	27
Figure 2.2 Forest plot with fixed- and random-effects results using Hedges’ g effect sizes.....	32
Figure 2.3 Caterpillar plot of random-effects results	34
Figure 2.4 Random-effects model funnel plot of effect sizes	36
Figure 2.5 Sensitivity analysis plots.....	37
Figure 2.6 Funnel plots with trim-and-fill procedure.....	38
Figure 3.1 Epstein’s (2009) Model of Parental Involvement.....	59
Figure 4.1 Hypothesized conceptual mediation model	104

LIST OF TABLES

	Page
Table 2.1	Summary of fixed- and random-effects results.....30
Table 2.2	Moderator analysis results40
Table 3.1	Items used with variable name, NHES:2012 PFI Survey66
Table 3.2	Summary of the exploratory factor analysis and factor loadings: Varimax rotation67
Table 3.3	Results of regression models predicting parental involvement factors75
Table 3.4	Results of regression models predicting <i>childfun</i>78
Table 3.5	Results of regression models predicting <i>childschool</i>79
Table 3.6	Results of regression models predicting <i>childacademic</i>81
Table 3.7	Results of regression models predicting <i>parentschool</i>82
Table 3.8	Results of regression models predicting <i>externalstudent</i>83
Table 3.9	Results of regression models predicting <i>externalparent</i>84
Table 4.1	Odds ratios results of logistic regression models predicting early childhood outcomes109
Table 4.2	Mediation analysis results of effect of language and books on early childhood outcomes111

CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

The National Center for Education Statistics (NCES) collects longitudinal data in education that are nationally representative of the population. As of 2018, publicly-accessibly NCES datasets have yet to include items addressing sexual orientation, gender identity, or gender expression in their surveys of parents, students, teachers, and administrators (Espelage, 2015). As a result, quantitative research using nationally representative data about the lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) student, teacher, or parent population is quite small (Wright & Smith, 2015; Beaver, et al., 2016). Existing studies often have a major flaw, which involves the use convenience samples (Russell, McGuire, Sun-A, Larriva & Laub, 2008; Compton, 2015), which are not generalizable. Therefore, qualitative studies might more appropriately look at nuances relevant to that population through purposive sampling.

The current state of quantitative measurement for sexual minority youth (SMY) and adults is a much more complex issue than is often assumed, as the measurement of different dimensions of sexuality might not be appropriate for use in an educational context. Having an understanding of the diversity of the sexual and the gender human condition provides for a much more robust way of measuring these historically underrepresented populations whose language and identity markers continue to evolve. This dissertation examines the involvement of same-sex and non same-sex parents. It does not make an attempt to measure SMY, in part because there is not enough information from the collected data to be able to make such an inference and the datasets used are generally self-reported by the parents. Because many nationally-representative education datasets do not provide survey items that ask respondents to self-identify as gay,

lesbian, bisexual, transgender, or intersex, I also look at literature outside of education to answer my research questions.

Having invalid and unreliable ways of measuring these populations quantitatively results in a population that is not defined nor counted appropriately. Cimpian (2017) discusses this in depth in the measurement of SMYs and current challenges, though his work is highly relevant to sexual minority adults as well. Therefore, notions of what a modern family are no longer those that existed in the days when the nuclear family was the only definition of the family. In addition, the federal recognition of same-sex marriages through *United States v. Windsor* in 2013 and U. S. Supreme Court case, *Obergefell v. Hodges* in 2015, have paved the way for non-blood adoptions and second-parent adoptions. Since those two major cases, an estimated 1.1 million lesbian, gay, bisexual, and transgender people have married someone of the same sex out of the 10.7 million individuals that identify within that community (Romero, 2017). Needless to say, this is a substantial amount of people out of the U.S. population that is and will be enrolling their children in schools where teachers, administrators, and staff need to understand nuances that might be different for these families than for non same-sex families.

Parental Involvement and Gender Negotiation

For several decades now, literature has shown how children's educational outcomes benefit from a strong parental involvement and child-parent relationships (Hoover-Dempsey, Battiato, & Walker, 2001; Benner, Boyle, & Sadler, 2016; Gonzalez-Pienda et al., 2002; Domina, 2005; Jeynes, 2016; Griffith, 1996; Laroque, Kleinman, & Darling, 2011; Epstein, 2009). There are many factors that affect a parent's decision to be involved in the child's life, sometimes outside of the parents' control. Some of these factors are related to school, to parents, to the student (Jafarov, 2015; Jaeger, 2011), to substance abuse (Barnard & Mceganey, 2004),

and to society (Hoover-Dempsey & Sandler, 1995). Epstein (2009) attributes a child's academic success to parenting, communicating, volunteering, home learning, decision making, and collaborating with the community. Hawkins, Amato, and King (2006) attribute the gender of the parent to their involvement with their child and their outcomes. More specifically, McBride, Schoppe, and Rane (2002) found that the child's temperament was associated with the gender of the parent. Lareau (1987, 1992, 2002, 2011) attributes parental involvement to class and race (though to a less extent), as others since then have also found (Lareau & Horvat, 1999; Rockwell, 2011; Ndebele, 2015; McNeal, 1999). Jaeger (2011) found that parental involvement in the way of educational experiences centered around cultural and social capital such as visiting a museum, going to the theater, or having hobbies had a positive effect on scores. When comparing Black and White working- and middle-class families, Lareau (2002) found that working-class parents are less involved in their child's education and provide the bare necessities, while middle-class parents are more strategic in their involvement and provide more opportunities to build cultural and social capital, what she termed as "concerted cultivation" (2011).

Most of the literature on parental involvement concerns cisgender male and female couples. That is, couples where neither of the parents self-identify as transgender or intersex. Since males and females are, on average, socialized differently from childhood to adulthood, gender dynamics in a couple could have an impact in their parenting styles (Ryan & Berkowitz, 2009), in addition to navigating the already difficult legal and political environment with second-parent adoption (Arnup, 1999; Baumle & Compton, 2015; Gamson, 2015). Some female households want to have the involvement of some male figure for the child (Goldberg & Allen, 2007), while others might not. Chan, Brooks, Raboy, and Patterson (1998) found that lesbian

couples tend to have a more egalitarian household in the division of labor. In a synthesis of literature, Patterson (2006) and Patterson and Riskind (2010) found that much of the literature attributes a child's outcome to the strength of the familial bond, rather than the sexual orientation of the parents. Qualitative studies with in-depth interviews of lesbian and gay households have described ways in which sexual orientation is not a factor that affects the educational outcomes of the child (Sasnett, 2015; Ryan & Berkowitz, 2009).

Dimensions of Sexuality

There are at least seven dimensions of sexual orientation, though not all of them are easy to measure quantitatively and not all are feasible for use in educational survey instruments keeping minors and their parents involved. Some of these dimensions overlap or can be nested under other dimensions. These include: *sexual attraction*, which is often referred to as lust, *romantic attraction*, or the "love" feeling, *arousal*, which corresponds to sexual response/reaction or genital stimulation, *sexual behavior*, or how one acts, *cognition/scripts*, which correspond to a set of ordered thoughts or scripts that one follows when engaging in sexual or sensual acts, *desire*, or the "fantasizing"/sexual tension one feels, and *self-identification*, or one's definition themselves (Laumann, Gagnon, Michael, & Michaels, 1994; Durso & Gates, 2013; Bogaert, 2012). Having an understanding of these seven dimensions helps researchers identify LGBTIQ people in qualitative and quantitative studies. The more dimensions we are able to use in our research, the more certain we may be that a person is identified appropriately.

Demographers of sexuality have used nationally representative datasets to make inferences about sexual minorities, usually adolescents and adults (Compton, Farris & Chang, 2015). While other fields are able to use questions from national surveys regarding sexual

behavior, desire, and self-identification (Baumle, Compton & Poston, 2009), current survey questions from the National Center for Education Statistics (NCES) do not address these. Therefore, we must make some inferences about same-sex families. Psychologists tend to focus on the dimension of sexual attraction. Sexual attraction is defined and operationalized in different ways depending on the principal investigator. For example, Laumann et al. (1994) asked items such as “In general, are you sexually attracted to only men, mostly men, both men and women, mostly women, only women (p.293)?” Bogaert (2012) defines attraction as “that rather basic, even primal, lure that draws us to someone or something (p.11).” Bogaert (2012) makes a distinction between two kinds of attraction, sexual and romantic. Sexual attraction is characterized by the “lust” feeling that for psychologists in particular, might be deemed as the main indicator for one’s sexual orientation. On the other hand, romantic attraction, also according to Bogaert (2012), refers to the “love” feeling and notes that there is often a dramatic undertone to it. Romantic attraction is more difficult to measure and operationalize, as distinguishing between romantic and sexual attraction on a questionnaire could prove difficult.

The dimension of sexual *self-identification* is defined as the terminology/category the respondent self-identifies with. Laumann et al. (1994) ask just one question in their survey to ascertain this identity question. The item reads: “Do you think of yourself as heterosexual, homosexual, bisexual, or something else (Lauman et al., 1994, p.293)?” They note that this one item was problematic, since about 5% of the men and 6% of the women were not familiar with the terminology of heterosexual or homosexual, instead using words like “normal,” “straight,” “gay,” or “lesbian.” Bogaert (2012) points out that acknowledging self-identification “respects the way someone chooses to label him or herself (p.23),” but is contingent on exposure to language, sociopolitical context, and comfort with visibility. This dimension can sometimes be

difficult depending on the language used in the survey, as the whole population might not be familiar with some of the most recent terms used in certain subpopulations within the queer community (such as demisexual, pansexual, asexual, etc.).

Sexual behavior is operationalized by Laumann et al. (1994) as being “[T]he [number of] partners or practices in specific time frames (p.293).” Bogaert (2012) defines it as “not just the acts themselves but also with whom we do them that comprises our sexual behavior (p.16),” and notes that behavior can include individual and partnered sexual acts (such as masturbation, oral sex, intercourse, etc.). Bogaert (2012) notes that survey items asked of respondents could include frequencies of each of the sexual acts mentioned above and with whom (could be self or with someone else) those acts took place. One of the most notable studies that focused on sexual behavior is Kinsey et al.’s *Sexual Behavior in the Human Male* (1948) and *Sexual Behavior in the Human Female* (1953), which resulted in the conceptualization of sexual orientation/behavior as a scale from 0 to 6, where 0 referred to exclusively heterosexual and 6 referred to exclusively homosexual. Demographers tend to use this dimension the most in their work. For instance, Poston and Chang (2014) used the Person 1 and Person 2 relationship/unmarried partner item on the 2010 U.S. Census to determine prevalence of gay, lesbian, and heterosexual and cohabitating couples in major metropolitan areas in the U.S. *Genital stimulation/reaction* is one of the dimensions that can be measured easily with devices, common for sexologists. Bogaert (2012) refers to this dimension as arousal and defines it as “the physical aspects of one’s sexual response, or what happens in the genitals when sexual stimuli are encountered (p.15).” This dimension is usually measured using a small rubber device for cisgender male genitalia, that identifies changes in blood flow as different stimulus is encountered and measures enlargement of the genitalia as it is triggered via arousal, or a tampon-like device that can be inserted into

cisgender female genitalia to measure changes in temperature and/or fluid. Bogaert (2012) recommends that a survey item such as “How aroused or turned on are you by what you are watching?” can suffice, but might not fully measure differences in physical and psychological arousal. Bogaert (2012) notes that arousal (genital stimulation/reaction) can also be an indicator of one’s sexual orientation.

There are several things that we know about the use of these dimensions from nationally-representative surveys. For example, the General Social Survey (GSS) and the National Health and Social Life Survey (NHSLs) are able to measure behavior, self-identification, and to some level attraction with different questionnaire items. The GSS and National Survey of Family Growth (NSFG) (Black, Gates, Sanders, & Taylor, 2000; Poston & Baumle, 2006) ask questions like “Have your sex partners in the last 12 months been exclusively male, both male and female, exclusively female?,” “Now thinking about the time since your 18th birthday (including the past 12 months), how many male partners have you had sex with?” to measure behavior. The NHSLs and the NSFG have items like “Do you think of yourself as heterosexual, homosexual, bisexual, or something else?” to measure self-identification. The GSS identifies between 1.4-4.7% of men and women to have some sort of same-sex experience, while the NHSLs identifies (Black, Gates, Sanders, & Taylor, 2000). The GSS identified four definitions of sexual orientation using those items, which include: “Having ever had a same-sex partner, having had at least as many same-sex as opposite-sex sex partners since age 18, having had exclusively same-sex sex over the last year, and having had exclusive same-sex sex over the last five years” (Black, Gates, Sanders, & Taylor, 2000). Poston and Chang (2014) used the Person 2 relationship/unmarried partner on the 2010 United States Census to determine prevalence of gay, lesbian, and heterosexual and cohabitating couples in major metropolitan areas in the United

States. The U.S. Census only provides data pertaining to the sex of the individual, the sex of the partner, and how they are related. In general, others have found in that the same-sex community consists of between 2-6% of the United States population, and most researchers mention the measurement of the sexual orientation dimensions through proxy variables, which are not directly asked (Durso & Gates, 2013; Baumle & Compton, 2014; Gates and Ost, 2004; Laumann et al., 1994). For this dissertation, like Poston and Chang (2014), I will use the Person 2 sex and relationship information to identify same-sex parent status.

State of Measurement of Sexuality in Education

Currently, the state of quantitative data collection in major surveys is a challenging one in education research with SMYs. Cimpian (2017) makes a strong case for the need for a more robust way of measuring sexual minority youth (SMY) in education and discusses seven common sources of error that result in misclassification of SMYs. The seven sources of error are: fluidity, mischievous responders, inclusivity of dimensions, nondisclosure, respondent misunderstanding of terminology, random error, and thresholds for categorization. With regards to fluidity as a source of error, Cimpian (2017) notes that because sexual orientation tends to change over time for various reasons, many of them sociological factors, it is important to gauge changes over time with longitudinal datasets. With mischievous responders, it is import to note that because adolescents can be unpredictable at times, Cimpian (2017) recommends several screening questions that might help drop some of these cases. As mentioned in depth, all the dimensions of sexuality are difficult to measure, though having several items measuring each dimension could contribute in miscalculation of the population size. In addition, challenges dealing with SMYs not feeling comfortable enough to disclose their status could be alleviated by making the questionnaire completely anonymous (Cimpian, 2017). Misunderstanding of the

current terminology for SMYs could be fixed by adding definitions, pilot testing some items beforehand, and using simpler terminology (Cimpian, 2017). Cimpian (2017) also adds that random errors due to survey fatigue can be lessened by including the SMY items at the beginning of the questionnaire. Finally, agreeing on a threshold for categorizing someone as a SMY could result in an overestimation or underestimation of the population, which could be alleviated by having several items measure each dimension (Cimpian, 2017).

The Regnerus Study

Learning about the Regnerus (2012) New Family Structures Study (NFSS) was the impetus for this dissertation. In his article, Regnerus' (2012) research claims that children of lesbian and gay households will have negative outcomes. As a result, Regnerus' (2012) research has made its way into policy (Brief of Amicus Curiae, 2013) and misinformed the public about the lives of LGBTQ people. Regnerus (2012) claimed that children of same-sex parents fare less in level of education, employment, adult finances, have more sexual partners, are more apt to smoke and get in trouble with the law, compared to children from "biologically intact, stable marriages" (Beatty, 2012, p.52). Regnerus' (2012) main research question, "Do the children of gay and lesbian parents look comparable to those of their heterosexual counterparts (p.755)?" lends itself to a quantitative analysis.

The short literature review that leads to the methodology of the study is one-sided. Regnerus (2012) addresses the fact that most studies show no significant differences between children of homosexual and heterosexual parents. However, he points out that other studies cited range in sample sizes of 18-44 and can easily yield test results that are not significant. The author also mentions that he consulted with scholars from different major universities in different fields, some of whom potentially reviewed his paper for publication (Anderson, 2013).

Regnerus (2012) clearly describes the number of respondents in the study (N=2,988), ages 18-39, along with the summary statistics of the variables utilized.

With regards to the survey instrument, Regnerus (2012) uses several different dependent variables, each of which is an index created by several other items. The Cronbach's alpha is provided for reliability. However, there is no mention of how the author arrives at the decision to use those specific items for each factor, whether through an exploratory or a confirmatory factor analysis. The mean age in the summary statistics table concerns me, as the average age is a little over 28 years old. Given that the study was conducted in 2011, that means the average respondent was born approximately in 1983, within a standard deviation of a little over 6 years. This puts the respondents as children during the Reagan era and the AIDS epidemic, when homosexuality was deeply stigmatized. I would not be surprised if many respondents' parents did not disclose their homosexuality to their children as a result of the stigma related to being lesbian or gay at the time. That could also explain why he did not have enough cases that were gay fathers.

While all the analyses and interpretations appear to be statistically sound, I question the basis of their methods for data collection and coding. Regnerus (2012) makes use of different types of regression analyses depending on the outcome variable used. With regards the statistical regression results tables, only the mean scores were reported. The standard errors were not reported. Additionally, he only reported results that were $p < .05$, which is also suspicious, being that it is such a large sample and lower probability (e.g., $p < .001$) should have probably been chosen. To add, Regnerus (2012) compares unstable same-sex parent households to stable non same-sex parent households, after only finding two households with lesbian mothers that he deemed stable. Additionally, this study was funded by a conservative foundation and Regnerus

(2012) acknowledges that in the study, potentially biasing the design and outcomes of the study. Another probable conflict of interest results from being reviewed by conservative peers (Anderson, 2013).

The Regnerus (2012) study results have been adopted by a number of conservative pro-“family” groups that are against same-sex marriage and same-sex adoptions (Brief of Amicus Curiae, 2013), and denounced by his own field (American Sociological Association, 2013). His article has been cited in amicus briefs and even as part of cases that have the potential of appearing in front of the United States Supreme Court. Others have written, upon doing an open records request, that the article did not receive an unbiased peer review and appears that it was reviewed by scholars who contributed to the study (Anderson, 2013). This study has been scrutinized and analyzed from many viewpoints, from its methodology and analysis of the data and failure at being replicated, number of cases with same-sex parents, and the way it was peer reviewed (Anderson, 2013; Barrett, 2012; Iannone, 2013; Brief of Amicus Curiae, 2013; Osborne, 2012; Cheng & Powell, 2015). Regnerus (2016) himself admits that there are limitations to his study, as he claims that he had difficulty in identifying respondents who grew up in long-term same-sex parent households.

The Context of the Dissertation

The present dissertation uses queer and postmodern critical theoretical frameworks as its foundation for approaching the 2012 National Household Education Survey-Parent and Family Involvement in Education (NHES:2012 PFI) and the 2012 National Household Education Survey-Early Childhood Program Participation (NHES:2012 ECPP) datasets. At its core, queer theory attempts to disrupt and reject categories that reproduce rigid social constructs such as heteronormativity, sexuality, gender roles, and the construction of gender (DeLauretis, 1991;

Jagose, 1996; Butler, 2006). Using a nationally-representative dataset with specific categories of gender might seem counter-intuitive to what queer theory teaches us, which is why I want to approach this study with a critical theoretical lens. Similar to queer theory, critical theory, with roots in Marxism and the Frankfurt School, seeks to critique, reflect on, and analyze dominant societal paradigms (Slattery, 2015). Categorizing gay and lesbian parents based on answers to one or two questions on a survey can be problematic. However, it is important to have an idea as a society on how large this population might be for reasons noted earlier, since some of the major surveys in education do not address issues of gender and sexuality upfront with questionnaire items. There are very real implications to not counting them, and the Regnerus (2012) study is just one example. Simply put, sex, and for the same reason, gender, is very complex (Fausto-Sterling, 2000; Butler, 2006). Reducing the diversity of gender(s) and sexualit(ies) does not encompass one's full identity. However, for the reasons mentioned before, this dissertation attempts to do the work of queer theorists justice by addressing quantitative methods informed through their lens. It is my hope that this dissertation is not interpreted as means to reduce the diversity and fluidity that exists in the queer community. Rather, it is an attempt to better measure the voices of so many that have been silenced for so long in many quantitative studies.

Chapter II presents an overview of the quantitative literature on same-sex parenting through a meta-analysis. The meta-analysis compares the effect of same-sex and non same-sex parents on the developmental outcomes of their children. The purpose of Chapters III and IV are to use a queer theoretical and social constructionist lens from which to approach the datasets for those studies. Chapter III consists of a quantitative study using the 2012 National Household Education Survey (NHES: 2012), Parent and Family Involvement in Education dataset. In that study, I seek to identify if there are differences in parental involvement of lesbian, gay, and

heterosexual parents. Chapter IV consists of a quantitative study using the 2012 National Household Education Survey (NHES: 2012), Early Childhood Program Participation dataset. In that study, I seek to identify if there are differences in the early educational outcomes of children of same-sex and non same-sex (heterosexual) parents. Additionally, I attempt to identify if there are several factors that could mediate the effect of the parents' sexual orientation on their children's early educational outcomes.

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CHAPTER II

THE RELATIONSHIP BETWEEN PARENTS' SEXUAL ORIENTATION AND CHILDREN'S DEVELOPMENTAL OUTCOMES: A META-ANALYSIS

Introduction

The U. S. Supreme Court decision on *Obergefell v. Hodges* to make same-sex marriage the law of the land opened up the doors for a shift in societal views of parenting, provided that legal same-sex marriage could open the doors for legal same-sex adoption. Since the *Obergefell v. Hodges* decision, an estimated 1.1 million same-sex couples have legally married (Romero, 2017). According to latest reports using the 2016 American Community Survey, approximately 1.1% of coupled households (or 705,000) consist of same-sex couples (Goldberg & Conron, 2018).

While some studies have shown that children who live in same-sex parent households are not developmentally different from their counterparts (Bos, Knox, van Rijn-van Gelderen, & Gartrell, 2016; Bos, Kuyper, & Gartrell, 2017; Gartrell, Bos, & Koh, 2018), others have shown negative outcomes for children of same-sex parent households (Regnerus, 2012). Some of these studies have become so engrained into the political agendas of the U. S. House of Representative and the U. S. Senate, that they have made their way into major cases in favor of anti-LGBT adoption (American Sociological Association, 2013). As of 2018, some of the states that either had bills or had considered anti-LGBT adoption or anti-LGBT fostering legislation were: Kansas, Colorado, Oklahoma, Georgia, Texas, North Dakota, South Dakota, Virginia, Michigan, Alabama, and Mississippi (Miller, 2017; Allen, 2018a; Allen, 2018b). Some of these bills died upon arrival into their respective state House of Representatives or state Senates, but threats continue. Coupled with the current political climate where several states in the U. S. have

pushed for anti-gay adoption legislation, there is a need for an unbiased analysis of all available results on the topic. As Sears (1999) has mentioned, “Diversity is a human hallmark” (p. 5), and pre- and in-service teachers go into a classroom with pre-conceived notions of (a)gender and (a)sexuality, often masked through generations of null and hidden curriculum that is racialized and/or gendered (Pinar, 2001; Pinar, Reynolds, Slattery, & Taubman, 1996). Those preconceived notions affect children developmentally in different ways. Kosciw, Greytak, Giga, Villenas, and Danischewski (2016) report that approximately 56.2% of LGBTQ students hear homophobic remarks from school personnel and about 63.5% of them hear transphobic remarks. Additionally, 81.6% of the students surveyed reported that their schools had implemented some form of anti-LGBTQ discriminatory policy. As a result of these negative perceptions of teachers, administrators, and other school personnel, LGBTQ students were reported to have negative educational outcomes, such as being more likely to miss school, less likely to be motivated to pursue a higher education, and reported lower levels of self-esteem and higher levels of depression (Kosciw, et al., 2016). Therefore, it is the intent of this study to not only contribute to the literature on same-sex parenting, but to help educate those who may have these “sedimented perceptors”, which in effect, contribute to our (mis)understandings of social constructs via our socioeconomic status and cultural or religious backgrounds, among others (Slattery, 2013, p.311).

Literature Review

The Crowl et al. (2008) Meta-Analysis

Crowl, Ahn, and Baker (2008) published a meta-analysis 10 years ago that studied the effect of same-sex and heterosexual parents on six different developmental children’s outcomes: parent-child relationship quality, children’s cognitive development, children’s gender role

behavior, children's gender identity, children's sexual preference, and children's social and emotional development. Crowl et al. (2008) extracted effects sizes from 19 studies and showed that children of same-sex couples were no different than their heterosexual counterparts on the majority of the outcomes. Parent-child relationship quality was the only significant moderator, indicating that same-sex parents reported significantly higher parent-child relationship than their heterosexual counterparts. The present study is necessary due to the possibility of more recent studies since the Crowl et al. (2008) meta-analysis was published. A meta-analysis was preferred for the present study, as it summarizes all available quantitative results into a single effect size, and thus, adds greater understanding to any narrative about a particular topic (Allen, 2009; Sutton, Song, Gilbody, & Abrams, 2000).

Research Questions

The present study seeks to answer the following questions:

1. Is there between-study or within-group variation among outcome effect sizes?
2. What is the effect of the parents' sexual orientation on the child's developmental well-being (i.e., child gender role behavior, gender identity, sexual orientation, cognitive function, and psychological adjustment, or quality of parent-child relationship)?
3. Is publication bias present in the included studies? If so, will sensitivity analysis yield the need for removal of certain influential points?
4. Does children's gender, children's age, perspective of outcome, ethnicity, sampling method of study, sample size, matching of participant characteristics, type of publication, or publication year significantly moderate the effect of the parents' sexual orientation on the child's developmental well-being?

Methods

Inclusion/Exclusion Criteria

The search for studies ranged from 1979 through May of 2018. The search begins in the year 1979 as that was the same year when the search for the Crowl et al. (2008) meta-analysis started. An information science expert was consulted in order to try every possible combination of terms and search any relevant database. To be included in the present study, studies had to consist of both peer-reviewed and non peer-reviewed literature from the following databases that were included in the original meta-analysis: PsycInfo, Sociological Abstracts, ERIC, Web of Science, ProQuest Dissertations & Theses Global, Google Scholar, and Academic Search Ultimate. Due to it being a span of about ten years since the original meta-analysis, the additional databases were searched to identify more literature, some from gender and sexuality topic-specific: SocINDEX, Sociology Source, LGBT Life, and Gender Studies Database. In addition, Google and known LGBTQ advocacy organizations such as COLAGE, Gay & Lesbian Parents Coalition International, Parents & Friends of Lesbians and Gays (PFLAG), and the Human Rights Campaign (HRC), in attempts to find non peer-reviewed literature and reduce publication bias were searched, as mentioned in the Crowl et al. (2008) article. In addition to the original key terms on the search some other terms were added that contained parental involvement: (“*lesbian*” OR “*gay*” OR “*same-sex*” OR “*homosexual*” OR “*LGBT*” OR “*queer*”) AND (“*parent**” OR “*child**” OR “*involvement*”). For complete search term results by database, see Appendix A.

In order to be included in this meta-analysis, the study must have had enough relevant information supplied in the results that facilitated the extraction of an effect size and must have compares same-sex to non same-sex parents. For all intents and purposes of this study, same-sex

refers to self-identified male/male or female/female parents, while non same-sex refers to male/female parents. Studies that were qualitative in nature, those that did not have enough information to calculate an effect size, and those that were duplicate reports and/or studies were excluded from this meta-analysis. Rayyan was utilized as the major database to keep track of all the studies found from each source and to identify duplicates (Ouzzani, Hammady, Fedorowicz, & Elmagarmid, 2016). Figure 2.1 displays the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram at every step of the process, as recommended by Moher, Liberati, Tetzlaff, Altman, and The PRISMA Group (2009).

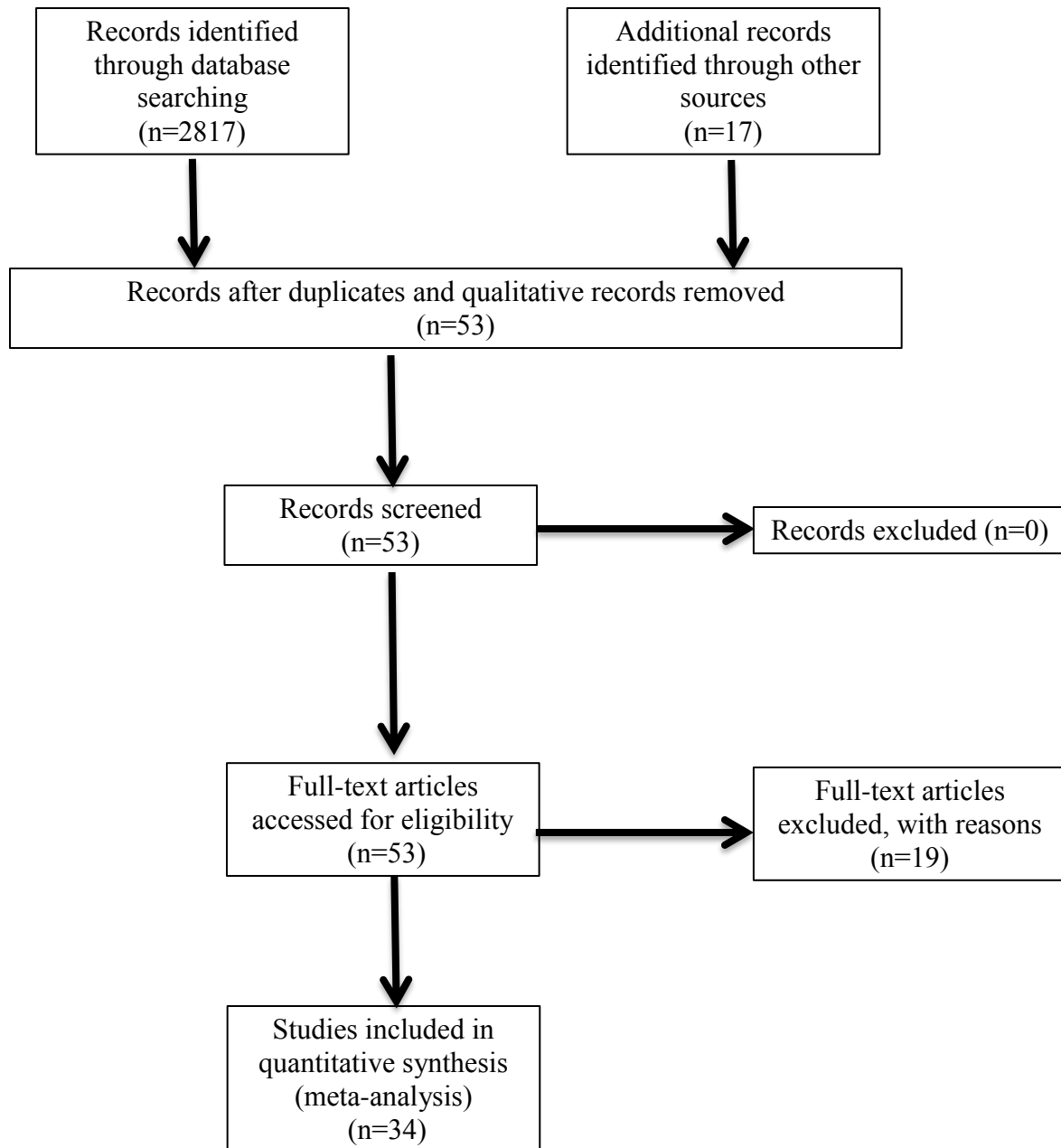


Figure 2.1 PRISMA diagram of included studies

Coding of the Studies

Studies were coded for the following moderators: publication type (peer-reviewed vs. non peer-reviewed), publication year, country where the study took place (U. S. or outside the U. S.), sampling method utilized in the study (convenience, purposive, cluster, random, stratified, or not indicated), type of relationships compared (lesbian, gay, heterosexual), sample size, mean age of children and parents (when available, by sexual orientation of the parent), socioeconomic status (when applicable), source of data collected (parent, teacher, or child), and the following outcome measures: child gender role behavior, gender identity, sexual orientation, cognitive function, and psychological adjustment, or quality of parent-child relationship.

Data Analysis

For research question one, the Q-statistic for both models was compared to assess effect-size homogeneity. In a meta-analysis, a Q-statistic that is larger than the critical value of a χ^2_{K-1} , for K effect sizes, provides justification for effect size heterogeneity. Additionally the I^2 index is another way of assessing effect size homogeneity. That is, it provides the percentage of variability in the effect sizes that is not explained by sampling error. Finally, the variance of true effects measure, or $\hat{\tau}^2$, using the restricted maximum likelihood estimate was a third way to assess effect size homogeneity, as it also provides the variability that may be explained by the model (Borenstein et al., 2009).

For research question two, three different independent, highly qualified, and trained researchers coded five studies individually in order to calculate intercoder reliability. Raters agreed 82% of the time. Unbiased Cohen's d effect sizes were calculated for all the studies. Additionally, for correlational studies that report the correlation coefficient r , Fisher's z were calculated for correlational studies, as reporting r itself as an effect size would have a biased

variance that depends on the sample size (Borenstein, Hedges, Higgins, & Rothstein, 2009).

While a fixed-effect model was run with all the effect sizes, random-effects model was preferred as recommended by Borenstein, Hedges, Higgins, and Rothstein (2009) since the studies were not equal and random-effects models give room for the variability in sample size, study conditions, among others (Borenstein, Hedges, Higgins, & Rothstein, 2010). The calculated effect size from the random-effects model was used to answer research question 1.

For research question three, publication bias was assessed via a funnel plot, Egger's regression test, and the trim-and-fill procedure (Sutton, et al., 2000; Anzures-Cabrera & Higgins, 2010). Funnel plots provide a scatterplot visual of the effect sizes and standard error, and if there is all results relevant to the topic have been reported, whether they be peer-reviewed or not, then the visual should assume a shape similar to that of a funnel. Egger's regression test provides a z-statistic and significance value for the null hypothesis indicating that there is funnel plot asymmetry. Finally, if there is some asymmetry, the trim-and-fill procedure iteratively removes small studies that are the cause for said asymmetry and creates a new funnel with new symmetric estimates (Borenstein et al., 2009). In the case that publication bias is found, a sensitivity analysis will be carried out using studentized residuals and Cook's distance. With each of these procedures, it is determined how small or large of an influence a particular effect size has on the overall effect size would have if it were removed. If it is an influential outlier, then it provides justification for removal from the full dataset.

For research question four, in the case that the chosen model (fixed-effect or random-effects model) is significant but does not explain all of the variation between the effect sizes, I will run an unconditional random-effects model, also known as a mixed-effects model. If used, the unconditional random-effects model will account for a fixed part, random part, and sampling

error (Borenstein et al., 2009). All statistical analyses for this study will be done with a combination of Comprehensive Meta-Analysis Version 3 software package (Borenstein, Hedges, Higgins, & Rothstein, 2013) and the metafor package in R Studio (Viechtbauer, 2010).

Results

Research Question One

Research question one sought to determine whether there was between-study or within-group variation among the effect sizes. A comparison of fixed- and random-effects results is shown in Table 2.1. A random-effects model was selected for several reasons: (a) The Q-statistic value shows that there is reason to believe that the effect sizes vary, (b) the I^2 index indicates that there is high effect-size variability, (c) variance of true effects ($\hat{\tau}^2$) indicates effect-size heterogeneity, and (d) a random-effects model is more generalizable compared to a fixed-effect model, as it accounts for the variability in sampling, etc. Therefore, we can conclude that there is effect-size heterogeneity and that a random-effects model is more appropriate for this study.

Table 2.1 Summary of fixed- and random-effects results

Fixed-effect	Random-effects
$\hat{\theta} = .008$	$\hat{\theta} = .049$
$var_{\hat{\theta}} = .023^2 = .0005$	$var_{\hat{\theta}} = .086^2 = .007$
CI = [-.037, .054]	CI = [-.119, .217]
Q(123) = 844.834, $p < .001$	Q(123) = 844.834, $p < .001$
	$I^2 = 92.49\%$
	$\hat{\tau}^2 = .812$

Research Question Two

Research question two sought to determine the effect of the parents' sexual orientation on the child's developmental well-being (i.e., child gender role behavior, gender identity, sexual orientation, cognitive function, and psychological adjustment, or quality of parent-child relationship). A total of 34 studies were included in the present study for a total of 124 effect sizes. The fixed- and random-effects results forest plot is shown on Figure 2.2. Due to the difficulty in being able to view a pattern due to the large amount of effect sizes, a caterpillar plot was created, as seen on Figure 2.3. A caterpillar plot is not very different from a forest plot, except it plots the effects sizes from smallest to largest effect size, and focuses on the overall pattern and shape of the plot rather than on individual study effect sizes. The overall effect size for all the outcomes is plotted with a diamond and shows that for this study, same-sex parents have an overall positive effect on their children's developmental outcomes. On average, same-sex parents have an overall effect on the developmental outcomes of their children of .049 standard deviation higher than heterosexual parents, which is not statistically significant ($p=.568$).

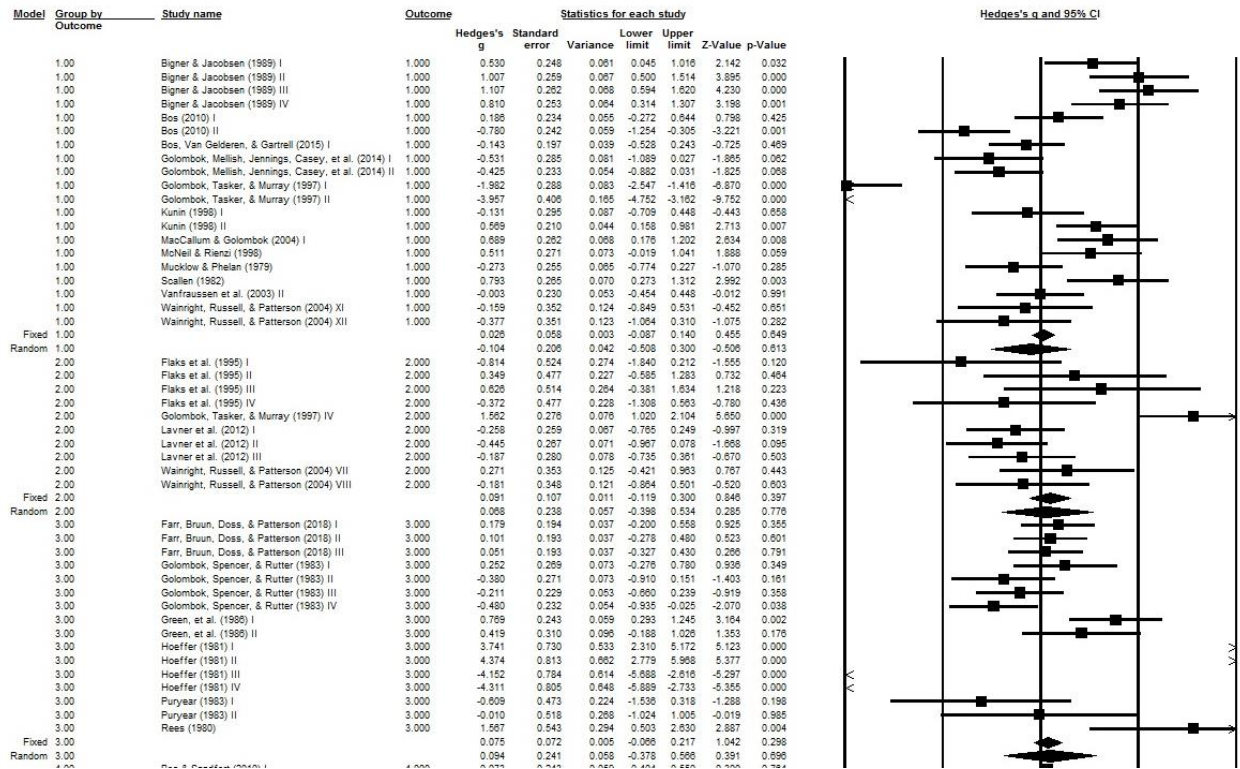


Figure 2.2 Forest plot with fixed- and random-effects results using Hedges' g effect sizes, by outcome

Note. Outcome 1 represents parent-child relationship quality, outcome 2 represents children's cognitive development, outcome 3 represents children's gender role behavior, outcome 4 represents children's gender identity, outcome 5 represents children's sexual preference, and outcome 6 represents children's social and emotional development.

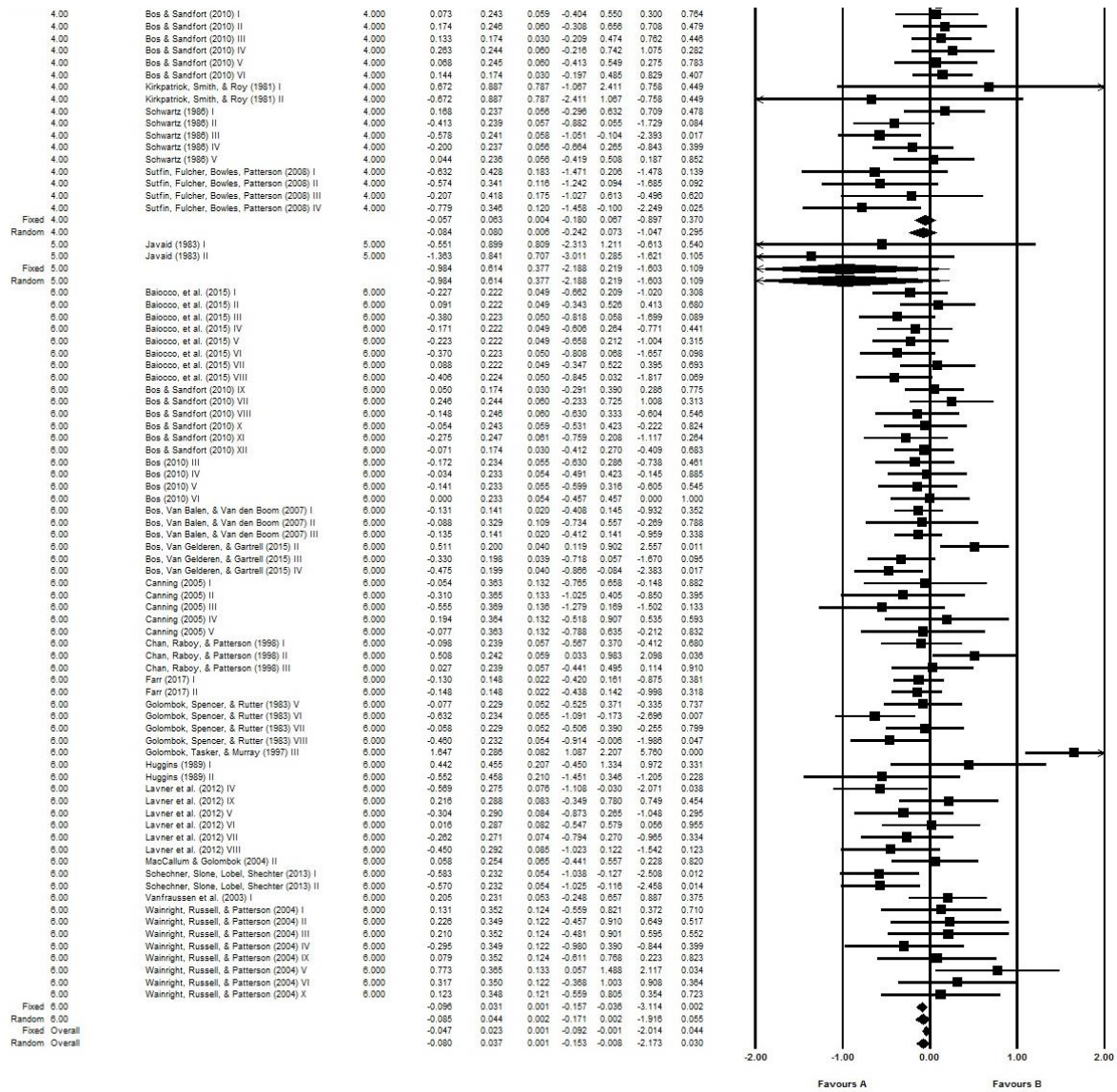


Figure 2.2 Continued.

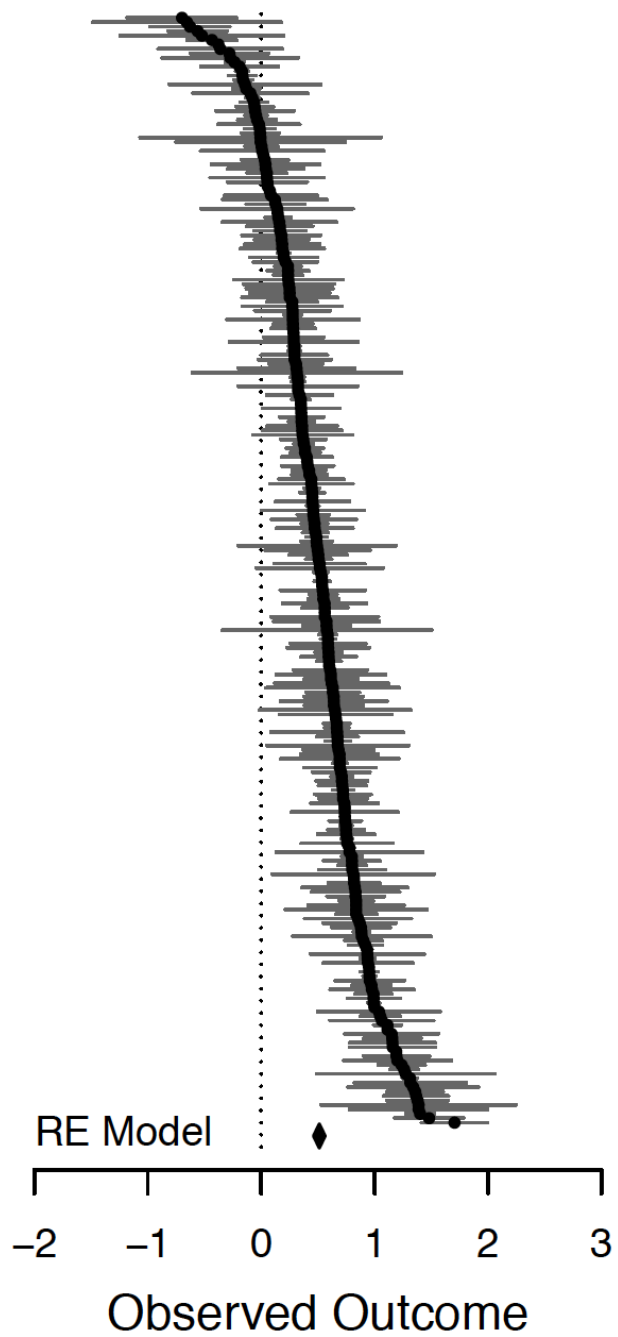


Figure 2.3 Caterpillar plot of random-effects results

Research Question Three

Research question three sought to determine whether there was publication bias present in the included studies, and if so, whether a sensitivity analysis necessitated the removal of any influential points. The funnel plot of plotted effect sizes is displayed on Figure 2.4. Though fairly symmetrical, based on the funnel plot alone, it seems that several studies may justify publication bias, as some of the studies fall outside of the “funnel” shape. Egger’s regression test was conducted to determine funnel plot asymmetry, which was determined to not be statistically significant ($z=2.622, p=.410$). Sensitivity analysis using studentized residual, Cook’s d , and $dffits$ found some possible influential points, plotted on Figure 2.5. This was confirmed by the trim-and-fill procedure showed that there were an estimated zero studies missing to the left size of the mean and an estimated 40 effect sizes missing to the right of the mean, as displayed on Figure 2.6. After the trim-and-fill procedure, if those 40 effect sizes replaced the original effect sizes to make the funnel plot symmetrical, the new effect size estimate would be .397 and significant ($SE=.088, p<.001$). Using the leave-one-out method, effect size estimates ranged from .0164 to .0697. Therefore, based on the evidence, it can be concluded that there may be publication bias (Rothstein, 2008).

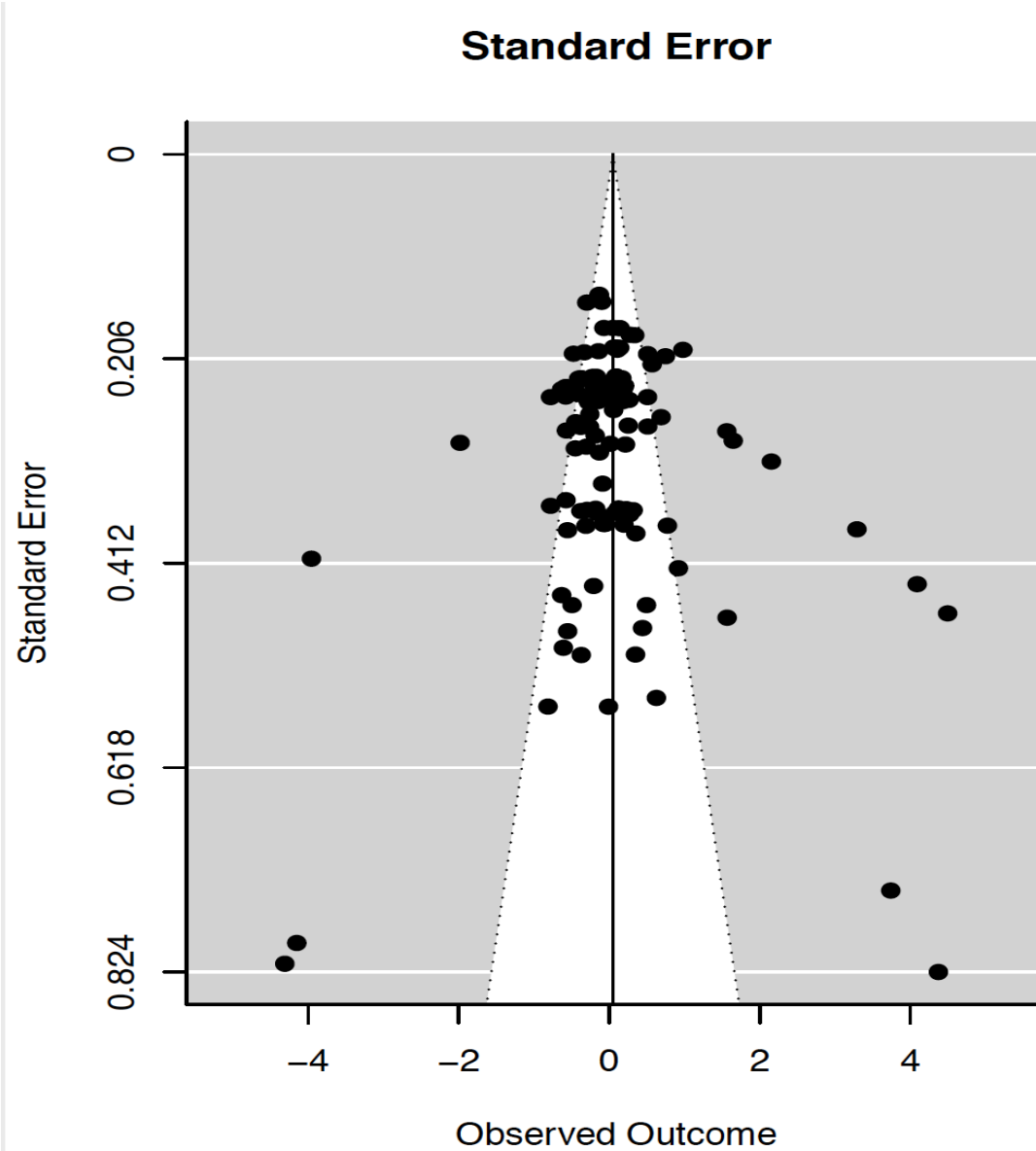


Figure 2.4 Random-effects model funnel plot of effect sizes

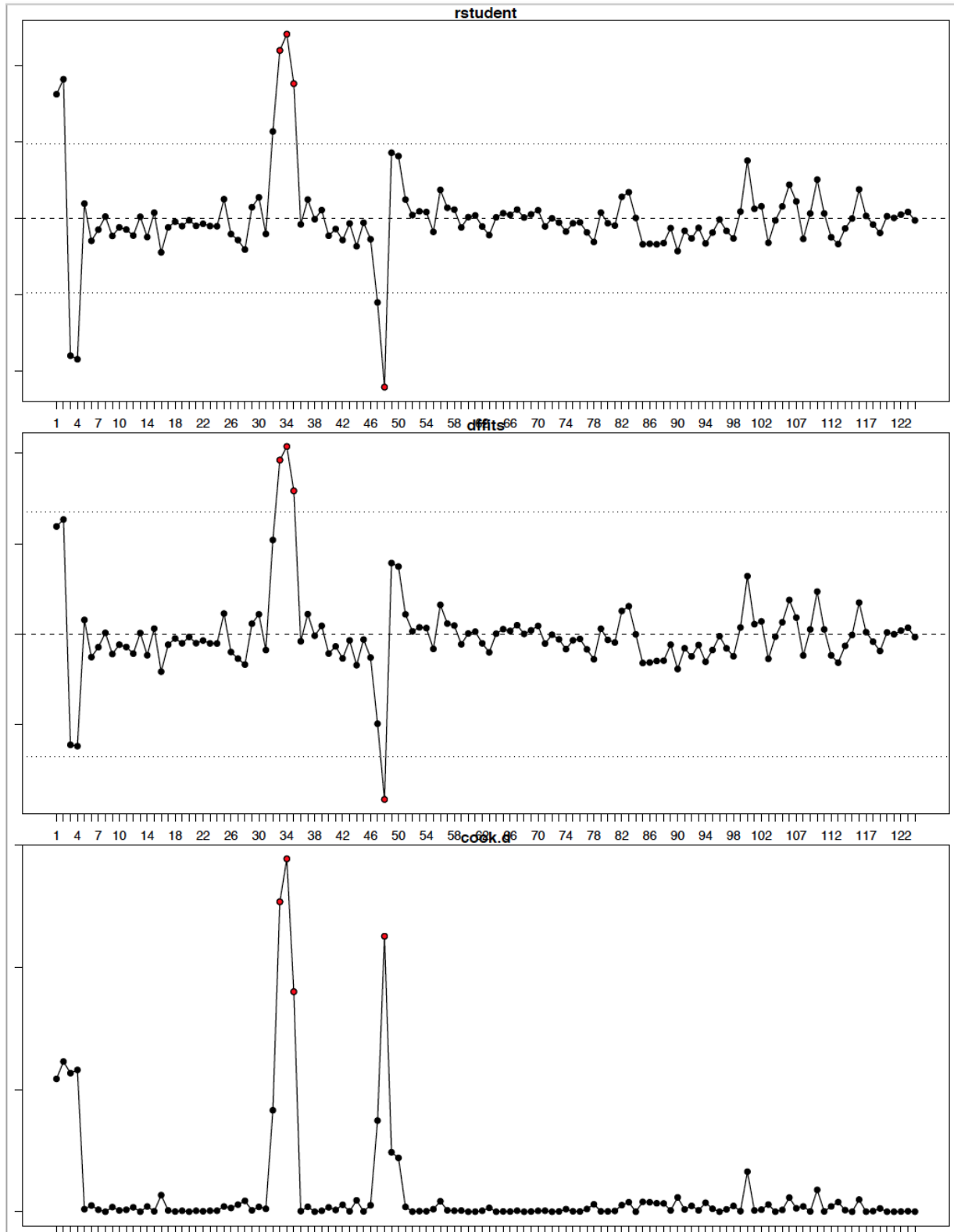


Figure 2.5 Sensitivity analysis plots

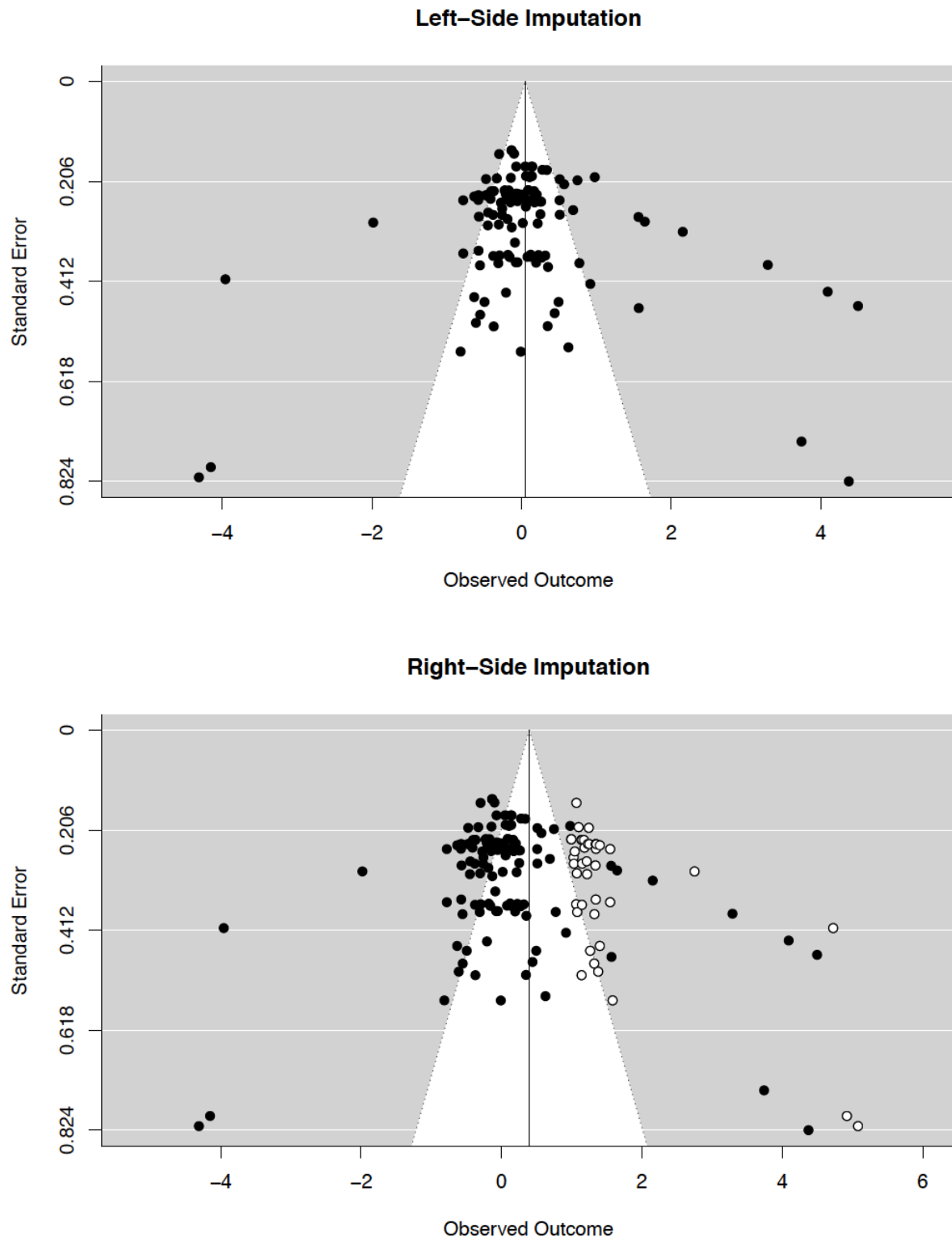


Figure 2.6 Funnel plots with trim-and-fill procedure

Research Question Four

The fourth research question sought to determine whether publication year, the child's gender, type of publication, location, socioeconomic status, race, children's age, perspective of outcome, ethnicity, sampling method of study, sample size, matching of participant characteristics, type of publication, or publication year significantly moderated the effect of the parents' sexual orientation on the child's developmental well-being. Results of the moderator analysis are displayed on Table 2.2. The following variables were determined to be significant moderators of the overall effect size: location, mean age of same-sex parents, mean age of children of same-sex parents, and mean age of children of heterosexual parents. Effect sizes extracted from studies outside of the U. S. have a negative association with the overall effect size. Each additional mean age unit of same-sex parents has a positive effect, the mean age unit of the children of same-sex parents is negatively associated, and each additional mean age unit of heterosexual parents is positively associated with children's developmental outcomes.

Table 2.2 Moderator analysis results

Moderator	Estimate	SE	z-value	p-value
Publication year	-.012	.026	-.454	.650
Gender	.033	.049	.669	.504
Type of publication	.146	.244	.599	.549
Location	-1.029	.391	-2.632	.009**
Person reported	-.117	.105	-1.111	.267
SES	.101	.068	1.485	.138
Race	.068	.042	1.604	.109
Mean age of same-sex parents	.156	.059	2.662	.008**
Mean age of heterosexual parents	-.141	.084	-1.665	.096†
Mean age of children of same-sex parents	-.957	.326	-2.941	.003**
Mean age of children of heterosexual parents	1.091	.349	3.125	.002**
Intercept	22.287	51.226	.435	.664

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

The present study addressed four research questions in this synthesis of literature in search of any possible differences between same-sex and heterosexual parents' effect on their children's developmental outcomes. Results from the first research question determined that a random-effects model was more suitable for this study, as it accounts for greater variability in study samples and procedures, among other things. Research question number two determined that the overall effect of the parents' sexual orientation on the child's developmental well-being, though higher for children of same-sex parent, it was not significantly different from the children of heterosexual parents. Research question number three determined that though every possible effort was made to eliminate publication bias, there is evidence to support that there were some influential effect sizes and thus, publication bias might play a factor in the overall results.

Finally, research question number four determined that there were several significant factors that

moderated the effect of same-sex parents' influence on their children's developmental outcomes. Specifically, studies outside of the U. S. had a significant negative association for the overall effect sizes, the mean age of same-sex and heterosexual parents had a positive correlation, while the mean age of the children of same-sex parents had a negative relationship. A possible reason for the positive association of older same-sex and heterosexual parents on their children's outcomes could be that older parents may simply have more experience than younger parents with respect to the needs of their children.

Recommendations

Results of this meta-analysis showed that though the number of studies on the subject since the Crowl et al. (2008) study increased, only one study explicitly mentioned using a nationally-representative sample (Wainright, Russell, & Patterson, 2004). If the research community is to appropriately measure any marginalized or historically underrepresented population in survey research, we must move beyond convenience samples and consider approaches that are more inclusive and that take into account the diversity in that population using the proper terminology. While there is an understanding that a single category cannot fully encompass an identity, there is also a very real consequence to undercounting or not counting a population at all (Butler, 2006; Durso & Gates, 2013; Michaels, 2013; Compton, 2015; Cimpian, 2017). Moreover, research could benefit from random samples. However, considering the difficulty in recruiting lesbian and gay parents to participate in studies where they have to disclose possibly vulnerable information, it is understandable why most of these samples are not randomly selected.

Furthermore, only one study addressed children where at least one of the parents was a transgender person (Cameron, 2006). However, the Cameron (2006) study was not included as it

did not compare these parents to heterosexual parents. While there is a difference between sexual orientation and gender identity, often times, these two are lumped into the same acronym: LGBT, as is the case in many of the anti-LGBT adoption bills. There very well might be some transgender parents in the mix that might either identify as homosexual or heterosexual. Therefore, the field could benefit from more research comparing lesbian, gay, bisexual, and/or transgender parents to heterosexual and/or cisgender parents.

Implications

One of reasons for this study was the current climate with the rise in states that are considering anti-LGBT adoption or fostering legislation, which necessitated an updated perspective on same-sex parenting. As with the Cowl et al. (2008) study, this study found that the sexual orientation of the parents did not have a significant effect on their children. This information is relevant for policy, as it dispels the notion that same-sex parents have a negative effect on the developmental outcomes of their children, as mentioned in the Regnerus (2012) study. In spite of the research that exists that show that children of same-sex parents are not significantly different from their counterparts, societal views continue to show otherwise (Becker & Todd, 2013; Gato & Fontaine, 2016; Ioverno et al., 2017). That being said, it should be no surprise that the children of LGBT parents report higher levels of instances of bullying, depression, and feelings of safety, among others (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016; Peter, Taylor, & Edkins, 2016). School administration, teachers, and school staff should be aware that while being a child of same-sex parents does not differ developmentally from children of heterosexual parents, that does not mean that societal stigmas do not have an effect on these children. Therefore, they should strive to provide a more inclusive environment free of bullying and discrimination.

Furthermore, Schumm (2014) mentions several challenges implied in using “snapshot” data to predict outcomes involving children of same-sex parents. One of these challenges involved is in the criteria involved in operationalizing family structure. People “come out of the closet” at very different times. That is, a person might be in a heterosexual marriage at one point in their life and have children, but may possibly “come out” at some later point in life. Therefore, implications for the research community would suggest that the field would benefit from more longitudinal studies, as some of the studies included in the analysis (Farr, 2017; Farr et al., 2018).

Conclusion

In conclusion, the present study sought out to determine the effect of same-sex parents on the developmental outcomes of their children, utilizing a total of 34 studies and 124 effect sizes. No significant differences were found on the overall effect size. The next chapter seeks to identify differences between same-sex and non same-sex parents on children’s educational outcomes using a nationally-representative education data set.

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CHAPTER III

EXAMINING SAME-SEX AND NON SAME-SEX PARENT INVOLVEMENT

Introduction

According to the United States Census Bureau and United States Bureau of Labor Statistics, an estimated 69%, or 73.7 million children under the age of 18 live in two-parent households. Based on the 2016 Current Population Survey, an estimated 2.8 million children live with no parent present, even when the parents do not always identify as being in a legal marriage (U.S. Census, 2016). That is, there is a possibility that some of these two-parent households result in partners living together in a domestic partnership, civil union, or just cohabitating. Through the help of adoptions in some states, civil unions, foster-care, and the legalization of same-sex marriage after *Obergefell v. Hodges* by the U.S. Supreme Court, same-sex couples who are unable to reproduce could fill the parent gap for many of the 2.8 million children living without a parent. The University of California at Los Angeles (UCLA) Williams Institute estimates that there are approximately 547,000 married same-sex couples in the United States as of June 2017 (Romero, 2017). While it is probable that not all of the 547,000 married same-sex couples are seeking parenthood, some are, whether biologically, fostering, or through adoption. As a result, it is crucial that current educational surveys address the need to not only measure sexual orientation appropriately, but do so in order to meet the educational needs of diverse households and their children. Once the field can agree on a set of guidelines with which to operationalize sexuality in surveys, a myriad of data in a K-12 context will open for education research.

Measurement of sexual diversity is a complex undertaking for any entity that attempts to understand the lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) community.

The National Center for Educational Statistics (NCES) collects longitudinal data in education that are nationally-representative of the population, but does not collect data on sexual diversity of parents, teachers, or students (Espelage, 2015). While qualitative research exists rich in narratives and perspectives that has laid the groundwork for conceptualizing identities and categories, it does not function to generalize to the larger population. Additionally, quantitative research that exists about the LGBTIQ student, teacher, or parent population is small and as such not easily generalized (Wright & Smith, 2015; Beaver, et al., 2016; Russell, McGuire, Sun-A, Larriva & Laub, 2008; Compton, 2015). The present study seeks to fill that gap that exists in the lack of quantitative studies with nationally-representative data in a K-12 context by using available public-access NCES data to examine differences in parental involvement for heterosexual, gay, and lesbian two-parent households.

Literature Review

Measurement of Sexual Diversity

There are at least seven dimensions of sexual orientation, though not all of them are appropriate or feasible in educational survey instruments, especially when youth and their parents are involved. These dimensions consist of: sexual attraction (often referred to as lust), romantic attraction (“love” feeling), arousal (sexual response), sexual behavior (actions), cognition/scripts (ordered thoughts), desire (“fantasizing”/sexual tension), and self-identification (definition of one’s self) (Laumann, Gagnon, Michael, & Michaels, 1994; Durso & Gates, 2013; Bogaert, 2012). Kinsey was perhaps one of the first to conceptualize the measurement of sexual behaviors quantitatively, while conceiving of sexual identity as being on a spectrum, though not always employing rigorous data collection and statistical analyses that were generalizable (Baumle, 2013; Kinsey, Pomeroy & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953).

Bogaert (2012), a psychologist primarily focused on asexuality, contributed to the measurement of sexuality by expanding on ways in which the absence of arousal, sexual and romantic attraction, etc. could be analyzed in quantitative studies. Together, Kinsey and Bogaert establish that the more dimensions that studies utilize, the more appropriately subjects can be identified.

Demographers of sexuality in sociology have used nationally representative datasets to make inferences about sexual minorities, usually adolescents and adults (Compton, Farris & Chang, 2015). However, LGBTIQ topics in education lack quantitative research. Being unable to measure this population, especially LGBTIQ parents, teachers, and students prevents us from being able to help our LGBTIQ students and their parents succeed because we are unable to identify if there are differences in the educational needs for this particular population. While other fields are able to use questions from national surveys regarding sexual behavior, desire, and self-identification (Baumle, Compton & Poston, 2009), survey questions from NCES surveys do not address these topics. Because the NCES does not include self-identification, some extrapolation from the data allows for making some inferences about same-sex families. Michaels (2013) mentions sources of measurement error, such as trying to convince a person to report very personal issues about their sexual behaviors to a stranger and sampling errors regarding coverage and response rates. Having an understanding of the seven dimensions helps researchers identify LGBTIQ people in qualitative and quantitative studies the dimension being measured. This study identifies households in which parent 1 and parent 2 self-reported same gender and chose either “married,” “in a registered domestic partnership or civil union,” or “living with a partner”, similar to the method used by Poston and Baumle (2010).

Same-Sex Parenting

The New Family Structures Survey has caused a great deal of controversy in the field of sociology. Regnerus (2012) claimed that being a part of a same-sex household significantly and negatively affected children when compared to children from “biologically intact, stable marriages” (Beaty, 2012, p.52). This particular study has been scrutinized and analyzed by researchers in various disciplines due to its lack of sound methodology and analysis, as well as the method in which it was peer reviewed (Anderson, 2013; Barrett, 2012; Iannone, 2013; Brief of Amicus Curiae, 2013; Osborne, 2012; Cheng & Powell, 2015). However, there are studies that exist with more sound methodological results. For instance, Rosenfeld (2010) found that children of same-sex couples were just as likely to progress through school as those of non same-sex couples. In addition, using a representative sample of Dutch data, Bos, Kuyper, and Gartrell (2017) found no significant differences between same-sex and non same-sex parent children’s well-being. Unlike Regnerus, the present study uses a multi-stage nationally-representative dataset from the United States that is rich in parental involvement in education outcomes from the National Center for Education Statistics.

Parental Involvement

Parental involvement in children’s education has shown to have positive effects on children’s educational outcomes (Hoover-Dempsey, Battiato, & Walker, 2001; Benner, Boyle, & Sadler, 2016; Jeynes, 2016). Several factors seem to affect a parent’s decision to become involved, such as those related to school, to parents, to the student (Jafarov, 2015), and to social norms (Hoover-Dempsey & Sandler, 1995). Parental involvement is positively associated with socioeconomic status, meaning that the more education and financial status the parent has

achieved, the more involved they will likely be, on average in their child's school and educational experiences (Rockwell, 2011; Ndebele, 2015).

This study uses social class based on total household income as one of the control variables. Social and cultural capital, a larger vocabulary brought about as a result of a higher education, and access to rich experiences that parents provide for their children are significantly different for working-class, middle-class, and upper-class families. When comparing Black and White working- and middle-class families, Lareau (2002) found that working-class parents are not fully involved in their child's education and provide the bare necessities, while middle-class parents are more strategic in their involvement and provide more opportunities to build cultural and social capital. Jaeger (2011) found that educational experiences that centered around cultural and social capital provided by parental involvement, such as visiting a museum, going to the theater, or having hobbies had a positive effect on scores.

Theoretical Frameworks

This study uses a queer theoretical framework as its foundation for approaching and analyzing the dataset. At its core, queer theory attempts to disrupt and reject categories that reproduce rigid heteronormative social constructs (DeLauretis, 1991; Jagose, 1996; Butler, 2006). Using a nationally-representative dataset then, with specific categories of gender, might seem counter-intuitive to what queer theory teaches us, which is that categories are not inherently inclusive of all identities. Therefore, I approach this study with a critical queer theoretical lens. While I understand how categorizing gay and lesbian parents based on answers to one or two questions on a survey can be problematic, I also find it necessary. It is important to have an idea as a society on how large this population might be for reasons noted earlier since some of the major surveys in education do not address issues of gender and sexuality upfront.

Epstein's Model of Parental Involvement

After observing schools and families and the relationships between them throughout her career, Epstein (1987, 2009) developed a framework of six key parental involvement categories, shown in Figure 3.1. These six involvement categories consist of parenting, communicating, volunteering, home learning, decision-making, and collaborating with the community. According to Epstein (2009), each category has its own practices, challenges, and leads to different results. For example, parenting consists of helping families to create home environments conducive for learning and supporting the child. Practice relevant to parenting would include parent education programs and courses and workshops, home visits from the school, and nutrition programs, among others. A challenge that comes with parenting programs would be in finding the families that really need the help, who likely are not able to make it for different reasons. Results for the student come in the way of a positive socio-emotional state and academic success, while for parents and teachers it may be a feeling of mutual support in a relationship that partners to help the child succeed. The outcomes used in this study were carefully chosen from the survey because they specifically address some of these six involvement categories.

Parenting	<ul style="list-style-type: none"> • Helps families to create home environments conducive for learning and supporting the child • Examples: Home visits, workshops for parents, etc.
Communicating	<ul style="list-style-type: none"> • Effective and efficient ways of communication between school and parents • Examples: Parent-teacher conferences, language translators, regular emails/phone calls, etc.
Volunteering	<ul style="list-style-type: none"> • Recruitment and retention of parental support • Examples: Classroom volunteer programs, parent phone trees, etc.
Learning at Home	<ul style="list-style-type: none"> • Ways of helping students with homework or other school-based activities at home • Examples: Homework schedule sent home, school activity calendar for family, family nights, etc.
Decision Making	<ul style="list-style-type: none"> • Development of parent leaders and in school's decision-making • Examples: PTO/PTA organizations, committees, etc.
Collaborating with the Community	<ul style="list-style-type: none"> • Identification of school-based resources for community partnerships • Examples: Information to families about community events

Figure 3.1 Epstein's (2009) Model of Parental Involvement. Adapted from Epstein, J. L. (2009). School, family, and community partnerships: Caring for the Children we share. In J. L. Epstein (Ed.), *School, family, and community partnerships: Your handbook for action* (3rd Ed.) (p. 16). Thousand Oaks, CA: Corwin Press.

Concerted Cultivation in the Middle Class

Lareau (1987, 1992, 2002, 2011) contends that parents that come from a low socioeconomic status are less involved than parents from a middle- and high- socioeconomic

status due to various sociological factors. Lareau's (1987, 1992, 2002, 2011) work has concentrated on how middle-class social status greatly affects parental involvement. While her work also looks at race and ethnicity, she suggests that it does not have as big of an effect as class. In her work, middle-class parents, as a result of having more money and being more educated, engage in what she terms "concerted cultivation" (Lareau, 2011) that affects the social and cultural capital of the household, which translates into parents that make greater effort at engaging their children in athletic, musical, and academic extracurricular activities. As a result, the present study measures for social class mirror a lower-, middle-, and upper-class to examine if middle-class parents engage in this concerted cultivation. I use Thompson, Hickey, and Thompson's (2017) operationalization of class for the total household income variable.

Research Questions

The purpose of this study is to examine whether there are differences between same-sex and non same-sex parental involvement. Due to the limited sexual behavior data and survey questions that exist addressing the seven dimensions in this dataset, it is not possible to identify families with bisexual, transgender, or intersex individuals. I use the social construction definition of sexuality, as addressed in Laumann et al. (1994) to examine how one might be able to extrapolate non-heterosexual households through the organization of data from a socially constructive lens to identify gay and lesbian two-parent households. Specifically, I explore the following items regarding sexual behavior for Parent 1 and Parent 2 on the National Household Education Survey (NHES): 2012 - Parent and Family Involvement in Education (PFI) Section:

Is this parent or guardian the child's...biological parent, adoptive parent, stepparent, foster parent, grandparent, other guardian?

Is this parent male or female?

What is the current marital or partner status of his parent or guardian? (McPhee et al., 2015).

I chose to approach this NCES dataset through a critical lens, which is important because there is a gap in the use of quantitative analyses using nationally-representative data for sexual diversity in education. The approach taken in this study is unique in its application of Poston and Baumle's (2010) similar technique for identifying asexuals in the United States. That is, this study uses survey items to identify whether there is a significant difference in same-sex and non same-sex parental involvement. This present study attempts to answer the following questions:

- 1) Is there a significant difference in the parental involvement (operationalized as *childfun*, *childscool*, *childacademic*, *parentscool*, *externalstudent*, and *externalparent*) by type of relationship (heterosexual, gay, and lesbian), controlling for factors such as parent's highest level of education, social class, race/ethnicity, and total number of people in the household?
- 2) Which factors significantly predict parental involvement (operationalized as *childfun*, *childscool*, *childacademic*, *parentscool*, *externalstudent*, and *externalparent*) for heterosexual, gay, and lesbian parents?

Methods

The data used for this study come from the 2012 National Household Education Survey (NHES:2012), a two-stage, stratified sample that began on January of 2012. Phase 1 was collected using a questionnaire that identified 159,994 households with children under age 20, also referred to as the screener stage. Response rate for Phase 1 was 73.5%. Phase 2 consisted of two surveys addressing different aspects of parental involvement and early childhood child outcomes. These two surveys are known as The Parent and Family Involvement in Education

(PFI) Survey and the Early Childhood Program Participation (ECP) Survey. PFI had a response rate of 78.4% and the ECP had a response rate of 78.7%. The present study only utilizes the dataset for the NHES:2012 PFI Survey. Two questionnaires, in English or Spanish, were disseminated to eligible households. Parents either filled out the PFI-Enrolled questionnaire if their children were enrolled in a public or private school, or the PFI-Homeschooled questionnaire if their children were homeschooled. Survey items address topics ranging from parental and family involvement to other factors affecting school involvement with administration, teachers, and the community (McPhee, Bielick, Masterton, Flores, Parmer, Amchin, Stern, & McGowan, 2015).

Participants

The NHES:2012 PFI Survey includes data from 17,563 children grades K-12 under 20 years old reported by one of the parents or legal guardians in the household. Of that sample, 17,166 were in public or private schools and 397 were homeschooled. Black and Hispanic households were oversampled in order to provide reliable information on these two populations (McPhee et al., 2015). Only those respondents who were identified as “parents” were used in this study, explained in detail later in the analysis section. Respondents in households with two parents were utilized for this study, as single-parent households were difficult to identify as same-sex or non same-sex households. Thus, this study consists of a subsample of 407 same-sex parent households and 11,161 non same-sex parent households. Same-sex partnered parent households were separated into gay parent households (two male partners), with 236 men, and lesbian parent households (two female partners), with 171 women. Out of the full sample, approximately half of the households made under \$60,000. For heterosexual households, median

income was between \$60,001-\$75,000, gay households had a median household income of \$40,001-\$50,000, and lesbians had a median household income of \$50,001-\$60,000.

Variables

Independent variables. Individual parent's gender, marital status, relationship status variables were recoded into new variables in order to identify same-sex partnered households and non same-sex partnered parent households, similar to the method used by Poston and Baumle (2010) to identify asexuals. A variable first identified all parents. People who chose biological parent, adoptive parent, step-parent, or foster parent were identified as a parent. Those who chose grandparent or other guardian were identified as non-parents. Second, respondents choosing relationship status as either married, domestic partner, or living with a partner became "partnered," and those who self-reported as separated, divorced, widowed, or never married became identified as "not partnered." Couples with Parent 1 and Parent 2 identifying as males, or females and were "partnered", were identified as a "gay couple" or a "lesbian couple," respectively. Gay and lesbian partnered couples combined to create "same-sex partnered couple." Those that were same-sex couples, partnered, and were parents, were identified as "same-sex partnered parent households". Approximately 2.04% (236 cases) of the households were classified as gay partnered parent households, 1.48% (171 cases) as lesbian partnered parent households, and 96.48% (11,161 cases) as non same-sex partnered parent households. For all intents and purposes in this study, I assume that all participants in this sample are cisgender. Though likely that there could be some transgender and gender nonconforming participants in this sample, gender identity other than self-reported male or female, cannot be determined based on the data provided. Control variables include the parent's highest level of education (1=Less than high school, 2=High school graduate or equivalent,

3=Vocational/technical school after high school, 4=College graduate, 5=Graduate or professional school), social class (1=Lower-class, 2=Working class, 3=Lower-middle class, 4=Upper-middle class, 5=Upper class) as defined by Thompson, Hickey, and Thompson (2017), race (1=White, 2=Black, non-Hispanic, 3=Hispanic, 4=Asian or Pacific Islander, non-Hispanic, 5=All other and multiple races, non-Hispanic), and total number of people in the household (continuous).

Dependent variables. This study examined individual factors created out of an exploratory factor analysis as the outcomes. First, parental involvement items were recoded to reflect a dichotomous variable (0=No, 1=Yes) if the parent took part in that particular activity. A list of individual items from the 2012 NHES:PFI Survey can be found in Table 3.1. An exploratory factor analysis using varimax rotation was run on the 22 items, yielding six unique factor loadings with eigenvalues greater than one that accounted for 46.439% of the total variance. Eigenvalues for each of the unique factors ranged from 1.019 to 3.825. Factor 1, called *childfun*, consisted of five items with inter-item correlations ranging from .200 to .345 and a combined Cronbach's alpha value of .612, and contained events that parents participated in that seemed more fun in general, such as working on projects, telling stories, doing crafts, playing board games, or going to sporting events. Factor 2, called *childscool*, consisted of four items with inter-item correlations ranging from .199 to .363 and a combined Cronbach's alpha value of .607, and contained events that parents attended that were more school-centered, such as attending meetings, parent-teacher conferences, and fundraisers. Factor 3, called *childacademic*, consisted of five items with inter-item correlations ranging from .123 to .281 and a combined Cronbach's alpha value of .528, and contained items dealing with more social academic events, such as attending the library, bookstore, plays, concerts, museums, or the zoo. Factor 4, called *parentscool*, consisted of three items with inter-item correlations ranging from .237 to .368 and

a combined Cronbach's alpha value of .523, which contained events that were more parent-centered such as volunteering, attending parent-teacher association meetings, or serving in committees. Factor 5, called *externalstudent*, consisted of two items with inter-item correlation of .195 and a combined Cronbach's alpha value of .326, and contained student-centered events that were outside of school such as religious, community, ethnic, or athletic events. Factor 6, called *externalparent* consisted of three items with inter-item correlations ranging from .094 to .262 and a combined Cronbach's alpha value of .353, which contained events that were parent-centered, but did not have a specific theme. Factor loadings for each particular variable utilized in the study is displayed on Table 3.2.

Table 3.1 Items used with variable name, NHES:2012 PFI Survey

Item	Survey Item
E26	<p>Since the beginning of this school year, has any adult in this child's household done any of the following things at this child's school?</p> <ul style="list-style-type: none"> a. Attended a school or class event, such as a play, dance, sports event, or science fair <i>fssportx</i> b. Served as a volunteer in this child's classroom or elsewhere in the school <i>fsvol</i> c. Attended a general school meeting, for example, an open house, or a back-to-school night <i>fsmtng</i> d. Attended a meeting of the parent-teacher organization or association <i>fsptmtng</i> e. Gone to a regularly scheduled parent-teacher conference with this child's teacher <i>fsatcnfn</i> f. Participated in fundraising for the school <i>fsfundrs</i> g. Served on a school committee <i>fscommte</i> h. Met with a guidance counselor in person <i>fscounslr</i>
E38	<p>In the past week, has anyone in your family done the following things with this child?</p> <ul style="list-style-type: none"> a. Told him/her a story (Do not include reading to this child) <i>fostory2x</i> b. Done activities, like arts and crafts, coloring, painting, or using clay <i>focrafts</i> c. Played board games or did puzzles with him/her? <i>fogames</i> d. Worked on a project like building, making or fixing something <i>fobuildx</i> e. Played sports, active games, or exercised together <i>fosport</i> f. Discussed with him/her how to manage time <i>forespon</i> g. Talked with him/her about the family's history or ethnic heritage <i>fohistx</i>
E40	<p>In the past month, has anyone in your family done the following things with this child?</p> <ul style="list-style-type: none"> a. Visited a library <i>folibrayx</i> b. Visited a bookstore <i>fobookstx</i> c. Gone to a play, concert, or other live show <i>foconcrtx</i> d. Visited an art gallery, museum, or historical site <i>fomuseumx</i> e. Visited a zoo or aquarium <i>fozoox</i> f. Attended an event sponsored by a community, religious, or ethnic group <i>fogroupx</i> g. Attended an athletic or sporting event outside of school in which this child was not a player <i>fosprrtex</i>

Note. Each item was coded as 0=No, 1=Yes.

Table 3.2 Summary of the exploratory factor analysis and factor loadings: Varimax rotation

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
<i>fobuildx2</i>	.525	.009	.064	.058	.160	.215
<i>fosport2</i>	.524	.132	-.029	-.021	.433	.006
<i>fostory2x2</i>	.512	.134	.116	.029	.053	.133
<i>focrafts2</i>	.699	.046	.200	.086	-.073	-.138
<i>fogames2</i>	.619	.086	.166	.026	.052	-.105
<i>fsportx2</i>	.013	.633	.111	.102	.314	-.096
<i>fsmtng2</i>	.078	.736	.054	.030	.049	.106
<i>fsatcnfn</i>	.301	.575	.017	.170	-.210	.127
<i>fsfundrs2</i>	.071	.501	.065	.291	.304	-.130
<i>folibrary2</i>	.183	.218	.546	-.097	-.112	.046
<i>fobookstx2</i>	.072	.172	.588	-.037	.082	.108
<i>foconcrx2</i>	-.034	.068	.472	.099	.406	.044
<i>fomuseumx2</i>	.130	-.037	.664	.152	.071	.033
<i>fozoox2</i>	.294	-.182	.495	.136	.010	-.013
<i>fsvol2</i>	.109	.383	.148	.537	.227	-.147
<i>fsptmtng2</i>	.238	.191	.027	.580	-.095	.220
<i>fscommte2</i>	-.030	.035	.051	.783	.190	-.017
<i>fogroupx2</i>	.088	.195	.185	.053	.430	.210
<i>fosprtevx2</i>	.128	.042	-.014	.108	.682	.072
<i>forespon2</i>	-.035	.065	.037	-.076	.210	.676
<i>fohistx2</i>	.225	-.130	.122	-.020	.090	.655
<i>fscounslr2</i>	-.134	.102	.033	.302	-.157	.503
Eigenvalue	3.825	1.730	1.397	1.145	1.099	1.019
% Variance	17.387	7.865	6.351	5.206	4.998	4.632

Note. Boldface indicates highest factor loadings.

Analysis

The data met all the assumptions for multiple regression analysis. More specifically, normality of residuals assumption was checked using a Kernel density plot, a qnorm plot, and a Shapiro-Wilk test for normal data. Constant residual variance, or the homoscedasticity assumption was checked using an rvf plot and the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity. The correct specification of a linear relationship assumption was checked using a two-way scatterplot fitted with the Lowess line. Additionally, independence of residual

and predictors, independence of observations, and no measurement error in predictors were checked. Missingness of the data was also checked. Only eight of the variables were found to have missing data (*fs sportx2*, *fsmtng2*, *fsatcnfn2*, *fsfundrs2*, *fsvol2*, *fsptmtng2*, *fscommte2*, and *fs counslr2*), though because data was missing due to valid skips, it was found to not affect the results. Therefore, listwise deletion was conducted on valid missing data. Allison (2009) writes, “Somewhat surprisingly, listwise deletion is very robust to violations of MCAR (or even MAR) for predictor variables in a regression analysis (p.75).”

Multiple regression analysis was utilized for this study as it yields raw and standardized effect sizes, as well as different measures of proportion variance. Multiple regression analysis “may be used whenever a quantitative variable, the dependent variable (Y), is to be studied as a function of, or in relationship to, any factors of interest, the independent variables (IVs)” (Cohen, Cohen, West, & Aiken, 2003, p. 1). All regression analyses run for this study used STATA 15 while the exploratory factor analysis and reliability analyses used SPSS 24. While the PFI is a national-representative survey, Black and Hispanic households were oversampled. Thus, we cannot treat the sample as completely random. Poston and Chang (2014) recommend using the “svy” suite of commands on STATA because the statistical methods make adjustments that take into account the complex sampling design implemented in nationally-representative multi-stage surveys. As a result, all findings reported in this study are adjusted for survey design using this feature on STATA 15.

For ease throughout the study, all numerical and categorical are interpreted in the same manner, respectively. For numerical variables, each coefficient represents the amount increase or decrease for a one-unit increase in that variable, holding all else equal. For categorical variables, each coefficient represents the amount increase or decrease for that specific variable.

For instance, if interpreting the Hispanic ethnicity variable, the coefficient would represent the effect, whether negative or positive, that being Hispanic has on the parental involvement of the couple, holding all else equal.

Results

Research Question One

Table 3.3 shows six different multiple regression models predicting parental involvement among partnered parents with heterosexual partnered parent households as the reference group. Model 1 uses *childfun* as the dependent variable. Overall, 1.5% of the variance in *childfun* is accounted for by the predictors in the model. The following variables showed significant associations: lesbian, vocational/technical school after high school (HS), college graduate, graduate or professional school, lower-middle class, upper-middle class, upper class, and all the categories of total number of people in the household. On average, lesbian parent households are .082 units more involved compared to heterosexual parents. Additionally, having an education past high school seems to have a significant relationship with *childfun*. Specifically, completing vocational/technical school after high increases parental involvement in *childfun* by .052 units, being a college graduate increases parental involvement in *childfun* by .067 units, and completing graduate or professional school will increase parental involvement in *childfun* by .102 units. Social class also has an effect on parental involvement in *childfun*. Compared to lower class parents, being of lower middle class decreases parental involvement in *childfun* by .062 units, being of upper middle class decreases parental involvement in *childfun* by .091 units, and being upper class decreases parental involvement in *childfun* by .091 units. The race and ethnicity of the child has no significant effect on *childfun*. Finally, the total number of people in the households has a significant effect on *childfun*. Compared to the smallest household with 3

members, having four people in the household increases parental involvement by .032 units, having five people increases parental involvement by .054 units, having six people increases parental involvement by .060 units, having seven people increases parental involvement by .059 units, and having eight total people in the household increases parental involvement by .052 units.

Model 2 on Table 3.3 uses *childdschool* as the dependent variable. Overall, 13.5% of the variance in *childdschool* is accounted for by the predictors in the model. The following variables showed significant associations: lesbian, HS graduate or equivalent, vocational/technical school after high school (HS), college graduate, graduate or professional school, lower-middle class, upper-middle class, upper class, Hispanic, Asian/Pacific Islander, and 4-6 total number of people in the household. On average, lesbian parent households are .079 units less involved than heterosexual parents in *childdschool*. Having an education past high school seems to have a significant relationship with *childdschool*. Specifically, being a high school graduate or equivalent increases involvement in *childdschool* by .092 units, completing vocational/technical school after high school increases parental involvement in *childdschool* by .185 units, being a college graduate increases parental involvement in *childdschool* by .224 units, and completing graduate or professional school increases parental involvement in *childdschool* by .248 units. Compared to lower class parents, being of lower middle class increases parental involvement in *childdschool* by .061 units, being of upper middle class increases parental involvement in *childdschool* by .080 units, and being upper class increases parental involvement in *childdschool* by .109 units. Race/ethnicity seems to have a significant effect on *childdschool*. Parents of a Hispanic child are .035 units less involved in *childdschool* than parents of a White child, while parents of an Asian/Pacific Islander child are .123 units less involved. Finally, the total number

of people in the households has a significant effect on *childscool*. Compared to the smallest household with 3 members, having four people in the household increases parental involvement by .037 units, having five people increases parental involvement by .037 units, and having six people increases parental involvement by .038 units.

Model 3 on Table 3.3 uses *childacademic* as the dependent variable. Overall, 5.7% of the variance in *childacademic* is accounted for by the predictors in the model. The following variables showed significant associations: lesbian, HS graduate or equivalent, vocational/technical school after HS, college graduate, graduate or professional school, upper-middle class, Black, Hispanic, and Asian/Pacific Islander. On average, lesbian parent households are .153 units more involved compared to heterosexual parents in *childacademic*. Additionally, having an education past high school seems to have a significant relationship with *childacademic*. Specifically, being a high school graduate or equivalent increases involvement in *childacademic* by .034 units, completing vocational/technical school after high school increases parental involvement in *childacademic* by .086 units, being a college graduate increases parental involvement in *childacademic* by .140 units, and completing graduate or professional school increases parental involvement in *childacademic* by .194 units. Being of upper middle class, compared to lower class, decreases parental involvement by .044 units. Race/ethnicity of the child seems to have a significant effect on *childacademic*. Parents of a Black child are .032 units more involved in *childacademic* than White parents, parents of a Hispanic child are .034 units more involved, and parents of an Asian/Pacific Islander child are .051 units more involved. The total number of people in the household does not seem to have a significant relationship with parental involvement in *childacademic*.

Model 4 on Table 3.3 uses *parentschool* as the dependent variable. Overall, 5.7% of the variance in *parentschool* is accounted for by the predictors in the model. The following variables showed significant associations: vocational/technical school after high school (HS), college graduate, graduate or professional school, working class, upper class, Asian/Pacific Islander, and 4-6 total number of people in the household. The type of relationship does not seem to have a significant relationship with parental involvement in *parentschool*. Additionally, having an education past high school seems to have a significant association with *parentschool*. Specifically, completing vocational/technical school after HS, all else equal, will increase parental involvement in *parentschool* by .059 units, being a college graduate will increase parental involvement by .112 units, and completing graduate or professional school will increase parental involvement by .150 units. Compared to lower class parents, holding all variables constant, being in the working class decreases parental involvement in *parentschool* by .048 units, while being in the upper class decreases parental involvement by .060 units. Additionally, parents of an Asian/Pacific Islander child are .064 units less involved in *parentschool*. Controlling for all the other variables, compared to the smallest household with 3 members, having four people in the household increases parental involvement by .029 units, having five people increases parental involvement by .041 units, and having six people increases parental involvement by .055 units.

Model 5 on Table 3.3 uses *externalstudent* as the dependent variable. Overall, 4.3% of the variance in *externalstudent* is accounted for by the predictors in the model. The following variables showed significant associations: vocational/technical school after high school (HS), college graduate, graduate or professional school, upper-middle class, upper class, Black, Asian/Pacific Islander, and all the categories of total number of people in the household. The

type of relationship does not seem to have a significant relationship with parental involvement in *externalstudent*. Additionally, having an education past high school seems to have a significant association with *externalstudent*. Specifically, completing vocational/technical school after HS, increases parental involvement in *externalstudent* by .102 units, being a college graduate increases parental involvement by .147 units, and completing graduate or professional school increases parental involvement by .176 units. Being in the upper middle class increases parental involvement in *externalstudent* by .070 units, while being in the upper class increases involvement by .086 units. Being the parents of a Black child increases parental involvement in *externalstudent* by .067 units on average compared to parents of a White child, while being the parents of an Asian/Pacific Islander child decreases parental involvement by .100 units. Controlling for all the other variables, compared to the smallest household with 3 members, having four people in the household increases parental involvement by .050 units, having five people increases parental involvement by .078 units, having six people increases parental involvement by .128 units, having seven people increases parental involvement by .126 units, and having eight total people in the household increases parental involvement by .096 units.

Model 6 on Table 3.3 uses *externalparent* as the dependent variable. Overall, 3.6% of the variance in *externalparent* is accounted for by the predictors in the model. The following variables showed significant associations: HS graduate or equivalent, all ethnicities, and 4-6 total number of people in the household. The type of relationship does not seem to have a significant relationship with parental involvement in *externalparent*. Additionally, being a high school graduate or equivalent compared to less than high school credential decreases parental involvement in *externalparent* by .046 units. Social class does not seem to have a significant relationship with *externalparent*. Being the parents of a Black child increases parental

involvement in *externalparent* by .171 units on average compared to parents of a White child, being the parents of a Hispanic child increases involvement by .086 units, being the parents of an Asian/Pacific Islander child increases parental involvement by .076 units, and being the parents of any other race/multiple races child increases involvement by .064 units. Compared to the smallest household with 3 members, having four people in the household decreases parental involvement by .029 units, having five people decreases parental involvement by .039 units, and having six people decreases parental involvement by .032 units.

Table 3.3 Results of regression models predicting parental involvement factors.

Individual Level Variable	1 (N=11,568)	2 (N=11,257)	3 (N=11,568)	4 (N=11,257)	5 (N=11,568)	6 (N=11,257)
<i>Type of Relationship</i> [Heterosexual]						
Gay	.029 (.035)	-.017 (.027)	.011 (.021)	.012 (.030)	.044 (.031)	.015 (.024)
Lesbian	.082* (.037)	-.079* (.035)	.153*** (.036)	.018 (.031)	.063 (.044)	.055 (.034)
<i>Parent's Highest Level of Education</i> [< HS credential]						
HS graduate or equivalent	.010 (.022)	.092*** (.022)	.034* (.017)	.009 (.020)	.031 (.025)	-.046* (.022)
Vocational/technical school after HS	.052* (.020)	.185*** (.021)	.086*** (.017)	.059** (.022)	.102*** (.025)	-.017 (.022)
College graduate	.067** (.021)	.224*** (.022)	.140*** (.017)	.112*** (.021)	.147*** (.025)	-.018 (.022)
Graduate or professional school	.102*** (.021)	.248*** (.021)	.194*** (.017)	.150*** (.022)	.176*** (.025)	.013 (.023)
<i>Social Class</i> [Lower]						
Working	-.013 (.025)	.019 (.024)	-.023 (.021)	-.048* (.024)	.026 (.036)	.033 (.026)
Lower-middle	-.062** (.023)	.061** (.022)	-.026 (.020)	-.037 (.023)	.040 (.034)	.006 (.025)
Upper-middle	-.091*** (.023)	.080*** (.023)	-.044* (.021)	-.010 (.023)	.070* (.035)	-.006 (.025)
Upper	-.091*** (.024)	.109*** (.023)	-.017 (.022)	-.060* (.025)	.086* (.037)	.012 (.027)

Table 3.3 Continued

Individual Level Variable	1 (N=11,568)	2 (N=11,257)	3 (N=11,568)	4 (N=11,257)	5 (N=11,568)	6 (N=11,257)
<i>Detailed Race/Ethnicity of the Child [White, non-Hispanic]</i>						
Black, non-Hispanic	-.024 (.017)	-.024 (.015)	.032* (.014)	-.011 (.015)	.067*** (.019)	.171*** (.018)
Hispanic	-.015 (.011)	-.035** (.011)	.034** (.010)	-.009 (.023)	.019 (.014)	.086*** (.013)
Asian or Pacific Islander, non-Hispanic	-.026 (.016)	-.123*** (.017)	.051** (.016)	-.064*** (.017)	-.100*** (.021)	.076*** (.018)
All other and multiple races, non-Hispanic	.002 (.020)	-.026 (.020)	-.0004 (.016)	-.031 (.019)	.009 (.027)	.064** (.019)
<i>Total people in household [3]</i>						
4	.032*** (.009)	.037*** (.008)	.007 (.008)	.029** (.009)	.050*** (.011)	-.029** (.009)
5	.054*** (.011)	.037*** (.010)	.006 (.009)	.041*** (.011)	.078*** (.013)	-.039** (.011)
6	.060*** (.015)	.038** (.014)	-.009 (.013)	.055*** (.016)	.128*** (.018)	-.032* (.015)
7	.059** (.022)	.039 (.020)	.010 (.022)	.011 (.021)	.126*** (.029)	-.020 (.023)
8	.052* (.025)	.033 (.033)	-.035 (.021)	.081 (.053)	.096** (.037)	-.063 (.049)
R-squared	.015	.135	.057	.057	.043	.036

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis; HS=high school, 1=*childfun*, 2=*childschoo*, 3=*childacademic*, 4=*parentschoo*, 5=*externalstudent*, 6=*externalparent*

Research Question Two

This research question further disaggregates models for each type of relationship to examine which factors significantly predict parental involvement in each of the six outcomes, only looking at parent's highest level of education and social class, since models for research question one showed these two predictors to be consistently significant across the models. Table 3.4 shows the results of parental involvement in *childfun*. For heterosexual parents, having an education past high school seems to have a significant relationship with *childfun*. Specifically, being a heterosexual couple that completes vocational/technical school after high school increases involvement in *childfun* by .059 units, being a college graduate increases involvement by .074 units, and completing graduate or professional school increases parental involvement by .111 units. Being a lower-middle class heterosexual parent decreases involvement in *childfun* by .073 units, being in the upper-middle class decreases involvement by .105 units, while being in the upper-class decreases involvement by .104 units. Overall, 1.2% of the variance in *childfun* is accounted for by the predictors in the model for heterosexual parents. For gay parents, the only significant predictor of involvement in *childfun* was being an upper class gay household, which increases involvement by .326. Overall, 5.4% of the variance in *childfun* is accounted for by the predictors in the model for gay parents, while 2.7% of the variance was accounted for by the predictors in the lesbian parent model. There were no significant predictors of involvement in *childfun* for lesbian households.

Table 3.4 Results of regression models predicting *childfun*

Individual Level Variable	Heterosexual (N=11,161)	Gay (N=236)	Lesbian (N=171)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	.014 (.022)	-.051 (.105)	.018 (.134)
Vocational/technical school after HS	.059** (.020)	-.127 (.103)	.021 (.130)
College graduate	.074*** (.020)	-.038 (.102)	.029 (.132)
Graduate or professional school	.111*** (.021)	-.121 (.110)	-.010 (.122)
<i>Social Class</i> [Lower]			
Working	-.019 (.025)	.120 (.118)	-.164 (.100)
Lower middle	-.073** (.023)	.092 (.098)	-.078 (.121)
Upper middle	-.105*** (.024)	.132 (.109)	-.018 (.111)
Upper	-.104*** (.025)	.326* (.098)	-.106 (.128)
R-squared	.012	.054	.027

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Table 3.5 displays results for parental involvement in *childdschool*. For heterosexual parents, being a HS graduate or equivalent, compared to less than a HS education, increases involvement in *childdschool* by .102 units, completing vocational/technical school after high school increases their involvement in *childdschool* by .199 units, being a college graduate increases involvement by .236 units, and completing graduate or professional school increases parental involvement by .258 units. Being a lower-middle class heterosexual parent increases involvement in *childdschool* by .061 units, being in the upper-middle class increases involvement by .080 units, and being in the upper class increases involvement by .113 units. Parent's highest

level of education seems to significantly predict involvement in *childscool* for gay households. Particularly, completing vocational/technical school after HS, compared to gay parents with less than a HS credential, increases involvement in *childscool* by .239 units, being a college graduate increases involvement by .275, and completing graduate or professional school increases involvement by .259 units. Social class for gay households does not significantly predict involvement in *childscool*. There were no significant predictors of involvement in *childscool* for lesbian households. The predictors explained between 11.5% and 20.5% of the variance in *childscool* for each of the models.

Table 3.5 Results of regression models predicting *childscool*

Individual Level Variable	Heterosexual (N=10,855)	Gay (N=235)	Lesbian (N=167)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	.102*** (.023)	.167 (.108)	.047 (.146)
Vocational/technical school after HS	.199*** (.021)	.239* (.106)	.124 (.135)
College graduate	.236*** (.021)	.275* (.111)	.126 (.159)
Graduate or professional school	.258*** (.021)	.259* (.116)	.265 (.156)
<i>Social Class</i> [Lower]			
Working	.015 (.025)	.093 (.106)	.033 (.137)
Lower middle	.061** (.023)	.035 (.112)	.130 (.131)
Upper middle	.080** (.023)	.137 (.126)	.308 (.158)
Upper	.113*** (.024)	.207 (.112)	.150 (.153)
R-squared	.115	.174	.205

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Table 3.6 displays results for parental involvement in *childacademic*. For heterosexual parents, completing vocational/technical school after high school increases their involvement in *childacademic* by .074 units, being a college graduate increases involvement by .134 units, and completing graduate or professional school will increase parental involvement by .187 units. Being an upper-middle class heterosexual parent decreases involvement in *childacademic* by .056 units on average. Parent's highest level of education seems to significantly predict involvement in *childacademic* for gay households. Particularly, a gay household where the highest level of education is graduate or professional school increases parental involvement in *childacademic* by .214 units. There were no significant predictors of involvement in *childacademic* for lesbian households. The predictors explained between 4.9% and 10.4% of the variance in *childacademic* for each of the models.

Table 3.6 Results of regression models predicting *childacademic*

Individual Level Variable	Heterosexual (N=11,161)	Gay (N=236)	Lesbian (N=167)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	.028 (.178)	.038 (.054)	-.083 (.123)
Vocational/technical school after HS	.074*** (.017)	.129 (.069)	.080 (.129)
College graduate	.134*** (.017)	.091 (.059)	-.028 (.121)
Graduate or professional school	.187*** (.018)	.214** (.069)	.045 (.121)
<i>Social Class</i> [Lower]			
Working	-.023 (.022)	-.012 (.077)	.022 (.113)
Lower middle	-.033 (.022)	-.030 (.074)	.177 (.124)
Upper middle	-.056* (.022)	-.023 (.075)	.184 (.110)
Upper	-.028 (.023)	-.067 (.098)	.129 (.132)
R-squared	.049	.056	.104

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Table 3.7 displays results for parental involvement in *parentschool*. For heterosexual parents, completing vocational/technical school after HS increases their involvement in *parentschool* by .060 units, being a college graduate increases involvement by .111 units, and completing graduate or professional school will increase parental involvement by .150 units. Social class does not significantly predict involvement in *parentschool* for heterosexual households. For gay parent households, the only significant predictor of involvement in *parentschool* was being in the upper class, which increased involvement by .230 units. There were no significant predictors of involvement in *parentschool* for lesbian households. The

predictors explained between 5.2% and 11.5% of the variance in *parentschool* for each of the models.

Table 3.7 Results of regression models predicting *parentschool*

Individual Level Variable	Heterosexual (N=10,855)	Gay (N=235)	Lesbian (N=167)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	.005 (.020)	.073 (.073)	-.050 (.123)
Vocational/technical school after HS	.060** (.020)	.078 (.088)	-.053 (.108)
College graduate	.111*** (.019)	.059 (.101)	-.033 (.121)
Graduate or professional school	.150*** (.020)	-.018 (.096)	.077 (.120)
<i>Social Class</i> [Lower]			
Working	-.048 (.025)	-.075 (.066)	-.035 (.189)
Lower middle	-.041 (.024)	.066 (.066)	-.031 (.109)
Upper middle	-.015 (.024)	.081 (.081)	.068 (.117)
Upper	.054 (.026)	.230* (.126)	.072 (.137)
R-squared	.052	.115	.061

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Table 3.8 displays results for parental involvement in *externalstudent*. For heterosexual parents, completing vocational/technical school after HS increases their involvement in *externalstudent* by .081 units, being a college graduate increases involvement by .120 units, and completing graduate or professional school will increase parental involvement by .151 units. Social class does not significantly predict involvement in *externalstudent* for heterosexual

households. There were no significant predictors of involvement in *externalstudent* for gay households. For lesbian households, being a HS graduate or equivalent increases involvement in *externalstudent* by .329 units, completing vocational/technical school after HS increases their involvement by .278 units, and completing graduate or professional school increases involvement by .311 units. Additionally, compared to lower class lesbian households, being in the working class decreases involvement in *externalstudent* by .283 units. The predictors explained between 2.6% and 10.1% of the variance in *externalstudent* for each of the models.

Table 3.8 Results of regression models predicting *externalstudent*

Individual Level Variable	Heterosexual (N=11,161)	Gay (N=236)	Lesbian (N=171)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	.123 (.026)	-.146 (.109)	.329* (.134)
Vocational/technical school after HS	.081** (.024)	.069 (.116)	.278* (.134)
College graduate	.120*** (.025)	.0003 (.130)	.195 (.158)
Graduate or professional school	.151*** (.025)	.056 (.123)	.311* (.138)
<i>Social Class</i> [Lower]			
Working	.029 (.039)	.0007 (.107)	-.283* (.138)
Lower middle	.035 (.037)	.077 (.112)	-.224 (.126)
Upper middle	.057 (.037)	.118 (.133)	-.199 (.145)
Upper	.071 (.039)	.162 (.122)	-.236 (.146)
R-squared	.026	.085	.101

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Table 3.9 displays results for parental involvement in *externalparent*. For heterosexual parents, being a high school graduate or equivalent compared to less than a high school credential decreases involvement in *externalparent* by .068 units. There were no significant predictors of involvement in *externalparent* for gay households. Finally, completing vocational/technical school after high school for lesbian households decreased involvement in *externalparent* by .288 units. The predictors explained between .8% and 12.7% of the variance in *externalparent* for each of the models.

Table 3.9 Results of regression models predicting *externalparent*

Individual Level Variable	Heterosexual (N=10,855)	Gay (N=235)	Lesbian (N=167)
<i>Parent's Highest Level of Education</i> [< HS credential]			
HS graduate or equivalent	-.068** (.023)	-.004 (.077)	-.136 (.099)
Vocational/technical school after HS	-.039 (.022)	.124 (.078)	-.288** (.109)
College graduate	-.043 (.022)	-.0005 (.088)	-.069 (.085)
Graduate or professional school	-.005 (.022)	.035 (.086)	-.194 (.105)
<i>Social Class</i> [Lower]			
Working	.034 (.027)	-.062 (.120)	.096 (.162)
Lower middle	-.006 (.026)	-.105 (.111)	.173 (.159)
Upper middle	-.032 (.026)	-.110 (.116)	.132 (.152)
Upper	-.023 (.027)	-.062 (.138)	.120 (.163)
R-squared	.008	.037	.127

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; reference group in brackets; standard error in parenthesis

Discussion

Many sexuality researchers have found a need for the inclusion of more LGBTIQ-friendly items in nationally-representative surveys (Baumle, 2013; Beaver et al., 2016; Compton, 2015; Durso & Gates, 2013; Espelage, 2015; Poston & Chang, 2014; Russell et al., 2008; Wright & Smith, 2015; Cimpian, 2017). This study examined different variables that predicted different aspects of parental involvement in heterosexual, gay, and lesbian two-parent households. The results of research question one shows us that for the first three educational outcomes (*childfun*, *chilschool*, *childacademic*), being in a lesbian household was correlated with parental involvement. Specifically, lesbian couples had greater parental involvement compared to heterosexual couples in events that were deemed more fun and academic in nature. However, they were significantly less involved than their heterosexual counterparts in school-related activities, such as attending meetings, parent-teacher conferences, and fundraisers. Parents' level of education, social class, and race/ethnicity of the child all were significantly associated with parental involvement in varying levels. The results of research question two show that Lareau's concept of "concerted cultivation" of the middle class and Epstein's Model of Parental Involvement are more concentrated within heterosexual parents. These two frameworks do not seem to hold as well for gay or lesbian households. There were a couple of exceptions. In particular, important activities that seem to get lesbian parents more involved are events that are more external in nature and that do not necessitate their child's attendance, such as religious, community, ethnic, athletic events, or engaging with the child's heritage, time management, or meeting with the counselor. For gay parents, a higher level of education seemed important for involvement in school-oriented and academically-inclined activities, whereas upper class gay parent households seemed to engage more in fun and school-oriented service activities. It is

important to note that the predictability of the models was small, ranging from .8% to 20.5%, meaning that there are a variety of factors that contribute to parental involvement not found in the data.

Recommendations for Future Research

The results from this study identified a little over 3.5% of the households as same-sex parent households. This is consistent with what other nationally-representative studies have found in that the same-sex community consists of between 2-6% of the United States population (Durso & Gates, 2013; Baumle & Compton, 2014; Gates & Ost, 2004; Laumann et al., 1994). As stigmatized as sexuality is in the United States, we need to attempt to count everyone in our society in order to make appropriate inferences about our LGBTIQ community and their needs. I built a same-sex parent household variable that provided a rough estimate of gay and lesbian households in the United States in 2012 using PFI. However, other datasets such as the National Survey of Family Growth (NSFG), Add Health, the U.S. Census, among others capture sexual diversity measurement (Durso & Gates, 2013), though do not contribute information on educational outcomes. The United States Supreme Court ruled same-sex marriage to be legal in July of 2016 and survey questions need to reflect same-sex lawful marriages, as well as include civil same-sex partnerships as appropriate categories under marital status.

Understanding gender as a social construction (Laumann et al., 1994), surveys need to have more categories under “gender/sex” reflecting the diversity of the LGBTIQ community. Transgender, gender nonconforming, or intersex people exist with varying sexual orientations. Again, surveys do not reflect this. Currently, PFI has only two options for gender of child and the parents. I recommend including at least intersex, transgender, and/or an open “write-in” option that should not be kicked out in analysis or deleted when released to the public. Instead, it

should be left to the researcher as to how they would like to collapse that option. Additionally, I also understand the inherent problem in “othering” a group, but it is a necessary category in a population where language is evolving at a fast pace. The 2012:NHES PFI did not include any of the seven dimensions of sexuality (Laumann et al., 1994; Durso & Gates, 2013; Bogaert, 2012). While it is difficult, almost taboo, to gauge sexual attraction, arousal, and desire, I believe that romantic attraction, behavior, cognition/scripts, and self-identification would not present a major challenge for some of the pre-existing items in NCES questionnaires.

Limitations

Limited by the survey items, only households with two parents counted as same-sex households. Even then, the lack of self-identification survey items prohibits us from knowing whether these households self-identified as heterosexual, gay, or lesbian, even when steps were taken in the methodology to extrapolate such populations with confidence. It is not possible to identify same-sex single-parent households. In addition, identifying transgender and gender nonconforming partnered households with individuals and couples that identify as gay or lesbian are also not possible, as the categories do not provide us with sufficient information to make such an estimate. Additionally, though steps were taken to weigh the dataset properly, the small sample of gay and lesbian households did not allow for further disaggregation as statistical power would be lost.

Implications

Having the resources available to being able to better understand and research the needs of our LGBTIQ students and their parents will allow district, state, and federal governments to create appropriate policy decisions. Citizens should have research that addresses the needs of this population, as the estimate of 3% is a substantial part of the population. While this study

only delves into a small portion of the LGBTIQ community, there are several political implications. Regnerus' (2012) research has been adopted by many right-wing organizations because of the ammunition it provides the right against equality and has made its way to state and federal legislation (Human Rights Campaign, 2013). Being that a same-sex partnered parent household is not significantly different from non same-sex parent households on parental involvement, all else equal, has important implications. Right-wing organizations and the politically inclined cannot and should not claim with certainty that children of same-sex parent households are significantly different.

Recognizing gender as a social construct that has the ability to evolve just as language evolves, (Butler, 2006; Laumann et al., 1994) has the ability to open a vast amount of data about marginalized communities, particularly LGBTIQ people and their needs. Thurer (2005) summarizes the conundrum with categories and queerness well:

Gender is not quite over, but sex/gender categories are well on their way out. They are no longer accurate organizers of life. Any explanation of gender identity and/or sexual orientation built on the false premise of an infallible binary must be reevaluated. Desire can no longer be reduced to instincts, or objects, or biological spasms, or linguistic points in the ether...Perhaps we may never make sense of it. But because desire is hard to commandeer and dissect does not mean that we should abandon the inquiry into its determinants and meaning. Our past failure to question our presumptions about sex/gender has resulted in intellectual sloppiness and gross injustice (Thurer, 2005, p.189).

The implications that this has for policy are immense, especially within the current political climate. However, it requires researchers that are open-minded, empathetic and willing

to contribute to further research in sexuality research in education. Ultimately, as educators, we want all our children and their parents to succeed, not just some.

Conclusion

While this chapter used the PFI section of the 2012:NHES, which only looked at parental and family involvement, the next chapter makes use of the Early Childhood Program Participation (ECPPE) dataset. The next chapter will cover early childhood educational outcomes more in depth and whether there are differences for the children between same-sex and non same-sex families.

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CHAPTER IV

A MEDIATION ANALYSIS OF EARLY CHILDHOOD OUTCOMES FOR CHILDREN OF SAME-SEX AND NON SAME-SEX PARENTS

Introduction

The legalization of same-sex marriage as a result of *Obergefell v. Hodges* by the United States Supreme Court paved an avenue for children without biological parents to have a family in some states. Moreover, some states have considered anti-LGBT adoption and/or fostering, making it more difficult for same-sex households to become parents (Allen, 2018a, 2018b). Past work has shown that parental involvement and higher socioeconomic status have a positive effect on a child's educational outcomes throughout the course of their schooling (Epstein, 1983, 1986, 1987, 2009; Lareau, 2002, 2011; Calarco, 2011). However, most of the literature does not examine whether the sexual orientation of the parents plays a role in the educational outcomes of their children. Studies that do exist focus on the developmental outcomes of the child, such as socioemotional development (Lavner, Waterman, & Peplau, 2012; Bos, 2010), sexual orientation and/or gender identity (Golombok, Spencer, & Rutter, 1983; Javaid, 1983; Bos & Sandfort, 2010), and cognitive development (Golombok, Tasker, & Murray, 1997; Wainright, Russell, & Patterson, 2004; Flaks, Ficher, Masterpasqua, & Joseph, 1995), among others. As a result, we are left with research that has only addressed the needs of the children of heterosexual families, or that explores differences in developmental outcomes of the children of same-sex parent households. There is a gap in the literature that does not examine whether there are differences in the educational outcomes of same-sex in comparison to non same-sex parents. This is of particular importance considering that several states have made attempts in their respective legislatures to block same-sex parents from adopting or fostering children on the basis that these

children will be negatively affected, in large part as a result of a major study that gained traction by Regnerus (2012). This Regnerus (2012) study has made such an impact in policy that it has been cited in different amicus briefs that have gone up to the Supreme Court (Amicus Brief No. 16-111; Brief of Amicus Curiae, 2013). Therefore, there is a need to understand same-sex parenting and their children's outcomes from nationally-representative data. The present study seeks to extrapolate same-sex parent households in the 2012 National Household Education Survey and measure the early educational outcomes of their children using demographic methods from other disciplines in an effort to explore whether there are differences in the children's outcomes.

Literature Review

Demography of Sexuality

Measuring sexual and gender diversity is a difficult undertaking for any researcher. There is no strict consensus from the social science academic community as to how many dimensions of sexuality there are. However, some of the most commonly used in demography, psychology, and sex research are sexual attraction, romantic attraction, arousal, sexual behavior, scripts, desire, and self-identification (Laumann, Gagnon, Michael, & Michaels, 1994; Durso & Gates, 2013; Bogaert, 2012). The most commonly relied upon, it seems then, is self-identification. It goes without saying, though, that some of these would not be appropriate dimensions to measure with a child or in an educational setting, as some of these (such as arousal) are measured through the placement of specific tools on sexual organs.

Historically, Kinsey might be one of the first researchers to introduce instrument items that measured sexuality, with the understanding that there was a gamut of sexual behaviors (Kinsey, Pomeroy & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). His

contributions to the field of sexuality research consist of what is known as the Kinsey Scale, where a person is identified as being anywhere on the spectrum of exclusively heterosexual to exclusively homosexual, with bisexual being in the middle. However, Kinsey's scale (1948, 1958) did not take into account those that identify as being asexual, and his research has also been critiqued for not using a random sample of participants (Baumle, 2013; Cochran, Mosteller, & Tukey, 1953), which Kinsey and his associates rebutted (Kinsey et al., 1955). Since then, the Kinsey Scale has been used in different studies, some of them nationally-representative, though few in education. It is crucial to be able to measure sexual orientation and/or gender identity quantitatively in order to meet the educational needs of LGBTIQ parents and children. Because few nationally-representative datasets measure sexuality, the present study makes some inferences based on the use of three questionnaire items from the NHES: 2012 Early Childhood Program Participation survey:

Is this parent or guardian the child's...biological parent, adoptive parent, stepparent, foster parent, grandparent, other guardian?

Is this parent male or female?

What is the current marital or partner status of his parent or guardian? (McPhee et al., 2015).

Every possible attempt was made to be able to reduce bias in identification, such as excluding households with two female-identified individuals, where one could be an aunt or a grandmother, for example. Because the NHES: 2012 surveys do not allow for measurement of any of the dimensions explicitly, this study had to make some inferences using the above items.

Same-Sex Parent Families

Research on same-sex parenting has shown contradictory outcomes at times. Rosenfeld (2010) had found that children of same-sex couples were just as likely to progress through school as those of non same-sex couples. In a retrospective study of adults that asked about childhood outcomes, Regnerus (2012) associated same-sex parenting with negative outcomes, such as higher likelihood of depression. However, Regnerus' (2012) work since then, has been scrutinized and analyzed by researchers in various disciplines, hinting at its lack of sound methodology and analysis, as well as the method in which it was peer reviewed (Anderson, 2013; Barrett, 2012; Iannone, 2013; Brief of Amicus Curiae, 2013; Osborne, 2012; Cheng & Powell, 2015). Using nationally-representative Dutch data, Bos, Kuyper, and Gartrell (2017) found no significant differences between same-sex and non same-sex parent children's well-being. Additionally, a meta-analysis by Cowl, Ahn, and Baker (2008) examined same-sex parental effects on six outcomes (parent-child relationship quality, cognitive development, gender role behavior, gender identity development, sexual preference, and psychological adjustment). Cowl et al. (2008) only found significant differences in parent-child relationship quality, indicating that same-sex parents reported having a better relationship with their children than their heterosexual counterparts. The present study contributes to the literature through the use of a multi-stage nationally-representative dataset from the United States that includes several parental involvement in education outcomes.

Parental Involvement and Early Childhood Outcomes

Parental involvement has been associated with positive effects on the educational outcomes of children. Several researchers have conceptualized the notion of parental influence and involvement in a child's education. Particularly, Epstein's (1983, 1987, 2009) research has

been used as a foundation that has shown how different parental characteristics influence educational outcomes of the children, with each category providing specific outcomes. Specifically, these categories are: parenting, communication, volunteer work, home learning, decision-making, and community collaboration. Additionally, Shaver and Walls (1998) accounted for socioeconomic status of Title 1 students and found that parental involvement increased reading comprehension and overall mathematics fluency, which was later confirmed by Jeynes (2003, 2005) in a meta-analysis of minority and urban elementary school student achievement outcomes. A five-year longitudinal study by Sénéchal and LeFevre (2003) with middle- and upper-class children found that having when parents provide access to books, it directly impacts their ability to reading fluency, with the foundation set forth by the parents' teachings. Others have come to similar conclusions when exploring the effects of parental involvement on achievement (Xu, Benson, Mudrey-Camino, & Steiner, 2009; Park & Holloway, 2017). The present study contributes to this literature because it examines differences in child's color identification, letter recognition, counting skills, ability to write first name, and read by him/herself of gay, lesbian, and heterosexual parents.

Class Influence on Educational Outcomes

Research has indicated that socioeconomic status might be a better predictor of educational outcomes later in life, compared to other demographic variables such as race or gender. Lareau (1987, 2000, 2002, 2011) has shown that middle-class parents tend to display characteristics in parenting that make them more involved, known as "concerted cultivation." Horvat, Weininger, and Lareau (2003) add that the network of the parents contributes to the influence that concerted cultivation has on the outcomes of the children. For instance, middle-class parents would have access to friends, neighbors, or coworkers with knowledge within their

network that help broker the access to extracurricular activities that could contribute towards educational outcomes. Heckman and Mosso (2014) added to this notion by arguing that the timing of this “intervention” is crucial, pointing to early intervention as providing the most successful outcomes. The reasoning for this, according to Lareau, is that middle-class parents might have a greater understanding of how specific extracurricular activities might raise the odds of educational success for their children. The present study explores race and socioeconomic status of parents as control variables in order to see if there are differences by type of relationship.

Research Questions

This present study attempts to answer the following questions:

- 1) Controlling for demographic characteristics, are there significant differences by type of relationship in a child’s color identification, letter recognition, counting ability, ability to write their first name, and read by him/herself?
- 2) Are number of books a child owns and the language spoken by the child significant mediators for success in the child’s color identification, letter recognition, counting ability, ability to write their first name, and read by him/herself?

Conceptual Model

This present study is focused on examining differences between same-sex and non same sex parents and their effect on a child’s color identification, letter recognition, counting skills, ability to write first name, and read by him/herself. The mediators for this study were selected based on literature that shows that access to educational material significantly mediates writing skills in children (Frijters, Barron, & Brunello, 2000), and that child’s language significantly mediates school readiness (Forget-Dubois et al., 2009). Another study found two of five

measures of executive functions, one of consisted of identifying colors, among other tasks, significantly mediated school readiness (Bierman et al., 2008). The hypothesized mediation model is shown in Figure 4.1. In the model, $a1$ represents the effect of the type of relationship (X) on the first mediator variable (M1), the language spoken by the child while $a2$ represents the effect of the type of relationship on the second mediator variable, the number of books owned by the child. The effect of the first mediator variable (M1) on the dependent variables (Y) is shown using $b1$, while the effect of the second mediator variable (M2) on the dependent variables (Y) is shown using $b2$. The direct effect of the independent variable (X) on the dependent variables (Y) is shown using the letter c .

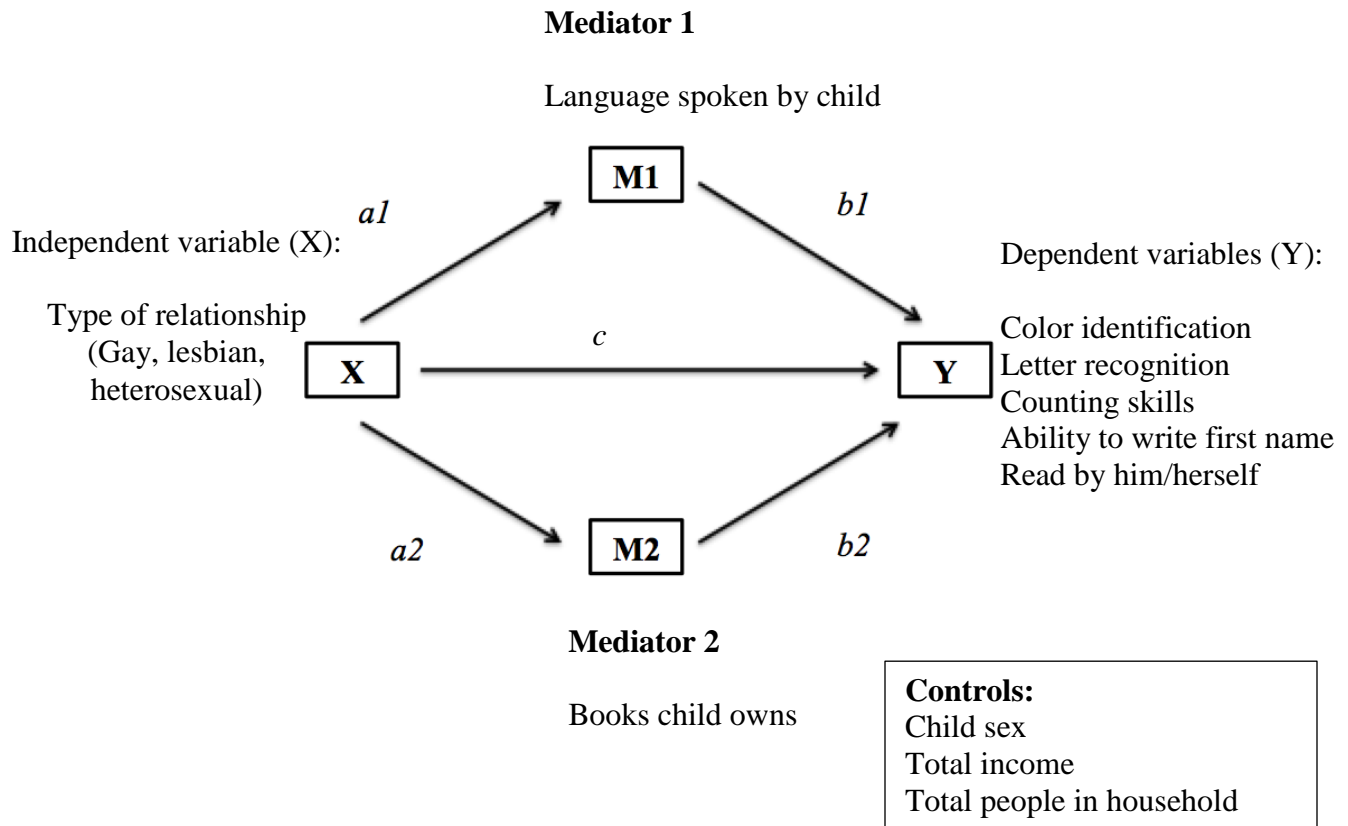


Figure 4.1 Hypothesized conceptual mediation model

Methods

Participants

The present study uses the 2012 Public-Use National Household Education Survey (NHES:2012). In particular, I use the Early Childhood Program Participation (ECP) section, which includes data from 7,893 children ages 6 or younger, filled out by the parents or guardians, and that were not yet enrolled in kindergarten. Black and Hispanic households were oversampled in order to provide reliable information on these two populations.

Only those respondents who were identified as “parents” were used in this study, explained in detail later in the analysis section. Respondents in households with two parents

were utilized for this study, as single-parent households will be difficult to identify as same-sex or non same-sex households. Thus, this study consists of a subsample of same-sex parent households and non same-sex parent households. Overall, the data used for this study consists of 61 gay (two males), 47 lesbian (two females), and 3,403 heterosexual two-parent households. Since the gay and lesbian sample consisted of 3.12% of the total sample of 3,511 used for this study, I collapsed gay and lesbian sample into a variable called “same-sex parent”. The median income for the full sample was between \$40,001-\$50,000, while the median income for heterosexual was between \$50,001-\$60,000, and between \$30,001-\$40,000 for gay and lesbian households.

Individual parent’s gender, marital status, relationship status variables were recoded into new variables in order to identify same-sex partnered households and non same-sex partnered parent households, similar to the method used by Poston and Chang (2014) to identify same-sex couples in the U.S. Census. People who chose biological parent, adoptive parent, step-parent, or foster parent were identified as a parent. Those who chose grandparent or other guardian were identified as non-parents. Second, respondents choosing relationship status as either married, domestic partner, or living with a partner were coded as “partnered,” and those who self-reported as separated, divorced, widowed, or never married were identified as “not partnered.” Couples with Parent 1 and Parent 2 identifying as males, or females and that were found to be “partnered” were identified as a gay couple or a lesbian couple, respectively. Due to the small sample in the dataset of gay and lesbian partnered couples, I combined them to create “same-sex partnered couple.” Those that are same-sex couples, partnered, and parents, were then be identified as “same-sex partnered parent households”. For all intents and purposes, it is assumed that all participants in this sample are cisgender, that is, that all the respondents’ gender identity aligns

with their gender assigned at birth since there is no survey item that could be used to extrapolate such information. Though it is likely that there are some transgender and gender nonconforming participants in this sample, gender identity (other than self-reported male or female) cannot be determined based on the data provided.

Variables

Independent variables consist of type of relationship (0=Non same-sex parents, 1= Same-sex parents), the sex of the child (1=Boy, 2=Girl), total household income (1=\$0 to \$20000, 2=\$20001 to \$40000, 3=\$40000 to \$60000, 4=\$60001 to \$100000, 5=\$100001 or more), and total number of people in the household (continuous from 2 to 8). Dependent variables consist of ability to identify colors (0=No, 1=Yes), ability to recognize letters of the alphabet (0=No, 1=Yes), ability to count (0=Up to 10, 1=Up to 20 or more), ability to write his/her first name (0=No, 1=Yes), and ability to read by him/herself (0=No, 1=Yes). Outcomes that were not originally coded as dichotomous variables were re-coded as such. Mediator variables used were the number of books the child owns (continuous) and the language spoken by the child at home (1=Child has not started to speak, 2=English, 3=Spanish, 4=Language other than English or Spanish, 5=English and Spanish equally, 6=English and another language equally).

Analysis

For this study, research question one is analyzed using multiple logistic regressions due to the dichotomous nature of the responses provided (Long & Freese, 2014). Research question two is analyzed using indirect effect mediation analysis with bias-corrected bootstrapping confidence intervals (Preacher & Hayes, 2008), as it is widely recommended because the confidence interval will have higher power than the Sobel test, for example (Hayes, 2018). Moreover, Hayes (2018) recommends that though percentile bootstrap confidence intervals are

recommended, they must be used with data where the samples are representative of the population in question, which in this case, it is. The purpose of a mediator variable is to “represent the generative mechanism through which the focal independent variables is able to influence the dependent variable of interest” (Baron & Kenny, 1986). Additionally, Hayes (2018) points out that methodologists agree that a total effect is not necessary in order to test for indirect effects, as relying solely on the test of total effects before testing for indirect effects risks false. Therefore, the mediator variables were carefully chosen based on results of prior studies (Frijters, Barron, & Brunello, 2000; Forget-Dubois et al., 2009; Bierman et al., 2008). The variables were checked for missingness. No missing data was found in the independent variables, though some of the outcomes had valid skips. All statistical analyses for this study were completed using STATA 15 and used the “svy” suite of commands in order to account for the complex survey design of the 2012:NHES ECPP dataset.

Results

Research Question One

Logistic regression models for each of the outcomes (child’s color identification, letter recognition, counting skills, ability to write first name, and read by him/herself) are shown on Table 4.1. The logistic regression predicting the child’s ability to write their first name is shown in Model 1. Female children were 1.252 times as likely to write their first name as males, holding all else constant. Compared to a household income of \$0 to \$20,000, being in a household with income of \$60,001 to \$100,000 increased the odds of being able to write their first name by 1.420, while being in a household where the income was more than \$100,000 increased the odds by 1.748. The logistic regression predicting the child’s color identification is shown in Model 2. However, there seem to be no significant predictors of the child’s ability to

identify colors other than being in a household with seven people, compared to three, where they were .229 times as likely to identify colors. The logistic regression predicting the child's letter identification is shown in Model 3. Compared to a household income of \$0 to \$20,000, being in a household with income of \$60,001 to \$100,000 increased the odds of being able to identify letters of the alphabet by 1.526, while being in a household where the income was more than \$100,000 increased the odds by 2.664. Compared to a household with three people, being in a household with four people reduced the odds of being able to identify letters by .287, being in a household with five people reduced the odds by .586, a household of six reduced the odds by .563, a household of seven reduced the odds by .686, and being in a household of seven reduced the odds by .633, all else equal. The logistic regression predicting the child's reading ability is shown in Model 4. Controlling for all the other variables, female children were 2.193 times as likely to read by themselves as males. Compared to a household income of \$0 to \$20,000, being in a household with income of \$40,001 to \$60,000 increased the odds of being able to read by themselves by 1.853, being in a household with a combined income of \$60,001 to \$100,000 increased the odds of being able by 2.031, while being in a household where the income was more than \$100,000 increased the odds by 2.096. Being in a household with seven people, compared to three, decreased the odds of being able to read by themselves by .645. The logistic regression predicting reading ability is shown in Model 5. Controlling for all the other variables, female children were 1.263 times as likely to read by have the ability to count. Compared to a household income of \$0 to \$20,000, children in a household with income of \$40,001 to \$60,000 were 1.412 times as likely to count, children in a household with income of \$60,001 to \$100,000 were 2.080 times as likely to count, and children in a household with income of \$100,001 or more were 2.822 times as likely to count. There were no other notable significant predictors.

Table 4.1 Odds ratios results of logistic regression models predicting early childhood outcomes

Individual Level Variables	1 (N=3,511)	2 (N=3,511)	3 (N=3,511)	4 (N=3,823)	5 (N=3,511)
<i>Same-sex parent</i>	1.081 (.262)	.483 (.208)	.884 (.295)	.533 (.192)	1.030 (.267)
<i>Sex of child [Male]</i>					
Female	1.252* (.109)	1.151 (.238)	1.245 (.165)	2.193*** (.395)	1.263* (.114)
<i>Income [\$0 to \$20,000]</i>					
\$20,001 to \$40,000	1.197 (.226)	.878 (.272)	1.214 (.273)	.982 (.276)	1.381 (.252)
\$40,001 to \$60,000	1.111 (.199)	.905 (.269)	1.411 (.314)	1.853* (.531)	1.412* (.244)
\$60,001 to \$100,000	1.420* (.234)	1.459 (.483)	1.526* (.322)	2.031** (.535)	2.080*** (.335)
\$100,001 or more	1.748** (.281)	1.791 (.629)	2.664*** (.572)	2.096** (.536)	2.822*** (.451)
<i>Total number of people in household [3]</i>					
4	1.667*** (.177)	1.020 (.262)	.713* (.117)	.819 (.178)	1.020 (.110)
5	1.654*** (.212)	.717 (.211)	.414*** (.078)	.708 (.170)	.936 (.125)
6	1.466* (.249)	.631 (.223)	.437** (.104)	.679 (.200)	.669* (.115)
7	1.090 (.318)	.229*** (.087)	.314** (.105)	.355** (.129)	.538* (.153)
8	.694 (.209)	.435 (.202)	.367** (.121)	.465 (.189)	.173*** (.054)

Note. *p<.05, **p<.01, ***p<.001; reference group in brackets; standard error in parenthesis; 1=fname, 2=idcolor2, 3=idletter2, 4=readself, 5=count_20

Research Question Two

Results for research question two are displayed on Table 4.2. Based on these results, there seems to be a significant indirect effect of number of books owned by the child on the ability to write their first name, identify colors, identify letters of the alphabet, read by him/herself, and counting ability. There also seems to be a significant indirect effect of the language spoken by the child on their ability to read by him/herself. There were no significant total effects on any of the five outcomes.

Table 4.2 Mediation analysis results of effect of language and books on early childhood outcomes

	b	SE	L 95% CI	U 95% CI
Bias-corrected bootstrap results for indirect effect of <i>chldlang</i> on <i>fname</i>	.002	.002	-.001	.008
Bias-corrected bootstrap results for indirect effect of <i>books</i> on <i>fname</i>	-.021	.005	-.032	-.012
Bias-corrected bootstrap results for indirect effect of <i>chldlang</i> on <i>idcolor2</i>	-.0003	.001	-.004	.002
Bias-corrected bootstrap results for indirect effect of <i>books</i> on <i>idcolor2</i>	-.010	.002	-.015	-.006
Bias-corrected bootstrap results for indirect effect of <i>chldlang</i> on <i>idletter2</i>	-.0005	.002	-.005	.002
Bias-corrected bootstrap results for indirect effect of <i>books</i> on <i>idletter2</i>	-.016	.004	-.024	-.009
Bias-corrected bootstrap results for indirect effect of <i>chldlang</i> on <i>readself</i>	-.003	.002	-.008	-.0002
Bias-corrected bootstrap results for indirect effect of <i>books</i> on <i>readself</i>	-.009	.002	-.015	-.005
Bias-corrected bootstrap results for indirect effect of <i>chldlang</i> on <i>count_20</i>	-.001	.002	-.007	.002
Bias-corrected bootstrap results for indirect effect of <i>books</i> on <i>count_20</i>	-.023	.005	-.035	-.014

Note: L = lower limit, U = upper limit, CI = confidence interval. Bootstrap sample size 5,000.

Discussion

Results of the present study did not find any significant differences between same-sex and non same-sex parents' effects on their children's early childhood educational outcomes.

That, in it of itself, is a contribution, as the dataset is representative of the population of interest

and proper caution was taken to make sure that the results were weighted accordingly. In almost every model, being a female increased the odds of having a successful outcome, holding all the other variables constant. Additionally, income played a big factor in having successful outcomes. The larger the total household income, the more likely the student was to succeed in most cases. These findings are consistent with research that has shown that socioeconomic status plays a role in educational outcomes (Lareau, 2002; Rockwell, 2011, Ndebele, 2015). The opposite was true in most cases for total number of people in the household. Even though there were no significant total effects, the number of books owned by the child and the language spoken by the child were significant mediators for the majority of the outcomes measured. This is also consistent with research that shows that language and books significantly mediate educational outcomes (Frijters, Barron, & Brunello, 2000; Bierman et al., 2008; Forget-Dubois et al., 2009).

Limitations of the Study

There are several limitations of this study. One of the major limitations is the lack of self-identification items or appropriate measurements of the dimensions of sexual orientation in the 2012:NHES ECPP Survey. I took proper precautions to have an approximation that was consistent with estimates for same-sex population from other studies in different disciplines. However, the lack of survey items that appropriately gathers information on this population is discouraging when this particular population has generally been undercounted and not adequately represented in research. Moreover, because of the lack of self-identification on the survey, I was only able to estimate that a small number in the sample was lesbian or gay. Though this is a large, nationally-representative sample, the 3% of same-sex parents in the

dataset is too small to perform more elaborate and advanced statistical analyses with further disaggregation.

The children involved in this study are in an early childhood stage, resulting in them going through elementary schooling within the next couple of years. This is important as having an understanding of diverse family structures for teachers and students could have an impact on how students view themselves and how society views them. The elementary education experiences of these children are crucial as they grow developmentally and cognitively, and shielding them from this diversity contributes to the silencing of anything different from what they know (Bickmore, 1999; Sears, 1999).

Recommendations for Future Research

The limitations of this study set this area of research up for various recommendations, both for future research and for policy. As mentioned before, being able to appropriately measure dimensions of sexuality through more items than one will make it easier to identify respondents that are anywhere on the sexual orientation spectrum (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). The field could benefit from future research in this area. Additionally, research in other areas has shown that with heterosexual parents, the social networks they belong contribute to their ability to maneuver complex knowledge needed to increase their child's odds of success (Horvat et al, 2003; Stanton-Salazar, 2010). Though beyond the scope of this study, future research might consider exploring if social networks of same-sex parents play a role in the educational outcomes of their children. The field is in need of advanced quantitative analyses of this demographic. In cases where there are not random samples, a Bayesian approach may contribute more than a frequentist statistical approach (Kaplan, 2014). Furthermore, this study showed that, contrary to Regnerus' (2012) claim that

children of same-sex parents had negative outcomes throughout their lives, children of same-sex parents did not have significantly different early childhood educational outcomes. Therefore, any education policy that may be discriminatory in nature should be reconsidered and changed to reflect this finding.

Implications for Policy and Schooling

The findings of this study are of importance to legislators and others that create policy at the local, state, or federal-level. Particularly, the findings showed that there were no significant differences between the early educational outcomes of children of same-sex and heterosexual parents. This finding contradicts research that has shown negative effects and consequently has led to inappropriate policies that have been implemented (Regnerus, 2012). The results of this study should inform those states that are considering anti-LGBT adoption or fostering bills. The finding that showed that number of books owned and language spoken by the child were significant mediators for the early educational outcomes can be used by schools and community-based educational programs. Specifically, the addition of extracurricular programs that might add to the number of books the child owns, and by extension reads, and programs that contribute to the learning of different languages are of particular importance.

Conclusion

This chapter used the ECPP section of the 2012:NHES, which explored early childhood educational outcomes of the children. The next and final chapter summarizes the outcome of the three studies presented in this dissertation. Additionally, the last chapter explains the scholarly and practical significance of this dissertation, as well as theorizes possible next steps in the field.

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CHAPTER V

CONCLUSION

The purpose of this dissertation was to explore the effects that same-sex parents had (if any) on the developmental and educational outcomes of their children. Chapter II presented an overall picture of what the quantitative literature on same-sex parenting reports with regards to the child's developmental outcomes. Though same-sex parents seemed to have an overall positive effect on the developmental outcomes, it was not significantly different from heterosexual parents. Chapter III presented the results of several regression models predicting factors that had an effect on parental involvement, disaggregated by type of relationship. Results showed that household with lesbian parents were significantly more involved, compared to gay and heterosexual parents. Chapter IV presented the results of a mediation analysis that considered the possible mediating effects of books owned and language spoken on early educational outcomes of the children. There were no significant mediators or differences by type of household.

Scholarly Significance of the Dissertation

The present dissertation expands on research relevant to both the fields of education, queer studies, and demography. Particularly, the results of the three studies show the large need there is in the field of education for nationally-representative datasets that measure sexuality as a variable. Until that happens, the LGBTIQ community will be invisible for all intents and purposes in that literature and policy. In addition, this dissertation has shown, especially with the last two studies, how given responses to a series of survey items, one can reasonably estimate lesbian and gay populations. This is important, as other researchers may be able to look at other datasets with similar items as this dissertation did to estimate the LGBTIQ population and

explore outcomes in their disciplines. Additionally, as a result of the research of this study, it might be interesting to explore reasons as to why lesbian parent households might be significantly more involved, and based on other work (Horvat et al, 2003; Stanton-Salazar, 2010), whether social networks might play a factor. Primarily, I would like to theorize on what I would call the “lesbian parent paradox” that expands on the notion of the “lesbian worker paradox” (Peplau & Fingerhut, 2004). Peplau and Fingerhut (2004) have explained that since women make less money than men, by extension, one should be able to assume that a household with two women would make less than two men, or a man and a woman. However, that is not the case for lesbians, as they have greater income than their heterosexual women counterparts. Peplau and Fingerhut (2004) consider that it is possibly due to independence and self-sufficiency without having to rely on a man for financial survival, and possibly as a result of stereotypes related to heterosexual women having a male breadwinner. Along that note, I think it would make sense to have an understanding as to why two lesbian females are more involved in their child’s education than two gay males or heterosexual parents, in spite of the popular fact that two women make considerably less money than two males or a man and a woman. It is true that women make less than men, however, as a result of Peplau and Fingerhut’s (2004) work, they found that a two-woman household had a larger income than a two-man household. One would think the archaic overgeneralization that because women make less than men, they would not be as involved since they would either be at home taking care of the children or out at work trying to provide for their children. However, I think it is important to note that women are generally socialized as the nurturers of the family since childbirth. For example, borrowing from Butler’s (2006) theory of performativity that understands gender as a social construct, girls are given dolls to play “house” with and dress up, so it follows that women might subconsciously be

socially constructed as the nurturers of society. This finding could inform future theoretical frameworks for research in queer studies in education.

Practical Significance of the Dissertation

The present dissertation has various implications for the lives of same-sex parents. Though these have been explained in each individual chapter, it is worthwhile mentioning it again, particularly as it relates to the current political climate. Given that the state of same-sex parenting is being contested in different states across the U. S. (Miller, 2017; Allen, 2018a; Allen, 2018b). Having an understanding of what the facts as legislators create laws that affect this already vulnerable population is crucial, particularly because while there may be some studies (Regnerus, 2012) that may show negative effects of same-sex parents, overall, there is a positive effect that is not significantly different from heterosexual parents. Therefore, policy-makers should be provided the unbiased facts necessary to make complex decisions about the future of same-sex parents that want to adopt or foster children.

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APPENDIX A

PsycINFO Search on 4/12/18

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role") OR TI (parent* OR child*) OR AB (parent* OR child*)

5/2/18

PsycINFO (EBSCO) - 957 limited to 1979 to present

TI (heterosexual* OR other-sex) OR AB (heterosexual* OR other-sex) OR DE "Heterosexuality"

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

5/4/18

ERIC - 90 limited 1979 to present

TI (heterosexual* OR other-sex) OR AB (heterosexual* OR other-sex) OR DE "Heterosexuality"

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

Academic Search Ultimate - 626 limited 1979 to present

TI (heterosexual* OR other-sex) OR AB (heterosexual* OR other-sex) OR DE "Heterosexuality"

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

5/7/18

Web of Science - 83 limited 1979 to present

lesbian or gay or same-sex or homosexual* or queer

AND

parental involvement or parent child relations or parental role or father child relations or mother child relations or parental attitudes or parent*

AND

heterosexual* or other-sex

TOPIC: (lesbian or gay or same-sex or homosexual* or queer) *AND* TOPIC: (parental involvement or parent child relations or parental role or father child relations or mother child relations or parental attitudes or parent*) *AND* TOPIC: (heterosexual* or other-sex)
Timespan: 1979-2018. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.
Sociological Abstracts - 20 limited 1979 to present

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MAINSUBJECT.EXACT.EXPLODE("Homosexuality") OR
MAINSUBJECT.EXACT.EXPLODE("Homosexual Parents")

AND

MAINSUBJECT.EXACT.EXPLODE("Parent Child Relations") OR
MAINSUBJECT.EXACT.EXPLODE("Parental Influence")

AND

MAINSUBJECT.EXACT.EXPLODE("Heterosexuality")

Proquest Dissertations & Theses Global - 105 limited 1979 to present

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noft(queer) OR noft(homosexual*) OR noft(homosexual parents)) AND (noft(parent child
relations) OR noft(parental influence) OR noft(parental involvement) OR noft(parental role) OR
noft(father child relations) OR noft(mother child relations) OR noft(parental attitudes)) AND
(noft(heterosexual*) OR noft(other-sex))

SocINDEX - 467 limited 1979 to present

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AND

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DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or
same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE
"Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex
Marriage"))

Sociology Source Ultimate - 468 limited 1979 to present

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AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

Gender Studies Database - 818 limited 1979 to present

TI (heterosexual* OR other-sex) OR AB (heterosexual* OR other-sex) OR DE "Heterosexuality"

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))

LGBT Life - 583 limited 1979 to present

TI (heterosexual* OR other-sex) OR AB (heterosexual* OR other-sex) OR DE "Heterosexuality"

AND

(DE "Parental Involvement" OR DE "Parent Child Relations" OR DE "Parental Role" OR DE "Parent Child Relations" OR DE "Father Child Relations" OR DE "Mother Child Relations" OR DE "Parental Attitudes") OR TI (parent*) OR AB (parent*)

AND

TI (lesbian or gay or same sex or homosexual or lbgt* or queer) OR AB (lesbian or gay or same sex or homosexual or lbgt* or queer) OR ((DE "Homosexual Parents" OR DE "Lesbianism" OR DE "Male Homosexuality") OR (DE "Same Sex Couples" OR DE "Same Sex Marriage"))