EXPLORING THE EXPERIENCES OF GIFTED ADOLESCENT GIRLS THROUGH

QUALITATIVE INQUIRY, WITH METHODOLOGICAL IMPLICATIONS FOR FUTURE

RESEARCH

by

KATE HOBGOOD GUTHRIE

(Under the Direction of Bonnie Cramond)

ABSTRACT

The purpose of this dissertation was to explore the lives and experiences of gifted adolescent girls through qualitative inquiry. Qualitative inquiry with adolescents is challenging, especially in educational research in which they see adults as the gatekeepers of 'right' and 'wrong' answers. To help diminish power dynamics, group interviews are a common method for inquiry; however, the intense desire to fit in with a group of peers (Erickson, 1980) and the risks associated with confidentiality can influence how adolescents respond in a group setting. The first study summarizes common obstacles to group interviews with adolescents followed by strategies qualitative researchers can employ to foster richer meaning making among adolescent participants. Implications for researchers and teachers of qualitative research methods are addressed.

For many gifted and high ability adolescent girls, navigating the social terrain of peer acceptance in classrooms can be challenging. The second study employed some of the suggested strategies discussed in the first study to understand the influence of an all-girls advanced math class from the perspectives of a class of gifted adolescent girls and their teacher. Data included student written reflections, two group interviews with students, two interviews with the teacher,

and two small group follow-up discussions with the students. Through deductive and inductive analyses, I identified four key themes of influence. The findings indicate that single-sex classes may benefit gifted girls, especially in STEM classes, by supporting meaningful engagement in the classroom. The chapter begins with a poetic transcription that I composed, based on the work of Glesne (1997), representing the participants' collective voice.

Inspired by narrative inquiry methodology, the purpose of the third study was to explore how gifted adolescent girls experience giftedness and belonging through the perspectives of their mothers. Participants were three mothers who were invited to be shared narrative inquirers and co-negotiators of their daughters' narratives. Their perspectives provided unique insight that can be difficult to capture through direct inquiry with adolescents. Three narratives are presented that demonstrate the complexity of how giftedness can influence a girls' sense of belonging, focusing primarily on the social landscapes of adolescence and school.

INDEX WORDS: Qualitative inquiry, Gifted adolescent girls, Group interviews, Threats to group interviews, Narrative inquiry, Poetic transcription, Girls in STEM, Classroom engagement, Sense of Self, Belonging

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DEDICATION

I dedicate this dissertation to my son, Athens Gabriel. May you continue to grow in your own unique gifts.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

My interest in studying gifted adolescent girls began my first year as a high school math teacher. At the time, I was completing my Gifted Endorsement Certificate at the University of Georgia after graduating from the Secondary Mathematics Education department. I was interested in obtaining the certificate, because from my student teaching experience, I noticed how my teaching style and mathematical perspective resonated with the mathematically gifted students in the class. I empathized with the ways they poured over problems and asked higher-order questions about complex mathematical concepts. They understood mathematical relationships differently from their peers. I was also aware of how some of them held their breath after expressing their advanced ideas aloud, as if they were not completely comfortable sharing their insights in front of their peers. I saw how some of the gifted girls in my classes doubted their abilities, despite their track records of having high achievement. They were not comfortable being known as the 'smart one.' These behaviors perplexed me, and as I began to study more about giftedness and how giftedness and gender norms interact, I found myself devouring the works of Barbara A. Kerr and Sally M. Reis, women known for their work in studying the lives and experiences of gifted females.

My studies inspired me to design a six-week enrichment group for mathematically gifted girls at a public high school in Georgia to fulfill my M.Ed. Internship. Once a week, I met with eight gifted girls who were sophomores in high school on an accelerated math track during a flex class period in the middle of the school day. They were currently taking both Advanced Placement (AP) Calculus AB and BC, courses typically reserved for juniors and seniors, in

addition to a rigorous academic course load of other AP classes. Together, we explored what being *gifted* meant to them, how they saw their giftedness impacting their relationships, achievement, and well-being. I learned about the pressure they felt to meet the high expectations of their parents, their teachers, and themselves. To this day, I remember one girl commenting, "I feel guilty when I have fun"–because in her mind, she should be spending time studying instead of going out to eat to celebrate a friend's birthday. Her statement never left me, and when I applied for my current Ph.D. program, I knew I wanted to continue studying the lives and experiences gifted adolescent girls.

In the footsteps of Kerr and Reis–and from my own experiences working with gifted adolescent girls–I have developed overarching research questions to guide my program of research. Essentially, these questions relate to how gifted adolescent girls makes sense of their world *and* how researchers can access their sense-making. These guiding questions include:

- What does being gifted mean to gifted adolescent girls? What messages do they receive? How do their interpretations of their giftedness influence their sense of self? In what way does their giftedness influence the ways in which they experience and make meaning of their world?

- How do adolescent participants engage and respond to qualitative inquiry? How can group interviews and group interaction support efforts of qualitative inquiry and meaning-making? How can we encourage rich meaning-making among adolescents in group interviews? In what ways might group interviews benefit gifted adolescent girls in their search for meaning and understanding?

These questions do not necessarily have clear-cut answers. Instead, they invite a sense of exploring, interpreting, and wondering and are thus best situated in a qualitative paradigm that

recognizes the complexity of realities, interpretations, and constructions of meaning. Thus, I have found qualitative research to be particularly suited for exploration of these questions.

This Introduction chapter is organized into three parts. Part 1 describes my qualitative paradigm and acknowledges my subjectivities as a qualitative researcher. Part 2 introduces the three studies in this dissertation, highlighting how they align with my program of research. Lastly, the state of qualitative inquiry with or about American gifted adolescent girls is presently lacking. Part 3 supports this claim with an overview of the state of qualitative inquiry with or about American gifted adolescent girls from 2008-2018 as published in peer-reviewed academic journals. Thus, readers gain a broad perspective on how this dissertation can contribute to the field of gifted education.

Part 1: My Qualitative Paradigm

The ways in which we experience the world shape our understanding. We create stories that attempt to make our experiences cohesive, and we live in the midst of these stories (Clandinin, 2013). I understand the world through my own familial stories (of being a daughter, a wife, and a mother), institutional stories (of being a working parent, a graduate student, and a product of public education), cultural stories (of being White, American, and female), and others. There are times when these stories fit together nicely, but there are also times when they bump against each other. All of these stories, and the ways in which they overlap and interact, influence the *stories we live by*, our sense of self.

Qualitative researchers are interested in these stories. They are interested in "understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam & Tisdell, 2016, p. 6). Adopting a qualitative paradigm to explore my overarching research questions means that my research adheres to a "shared set of ontological and epistemological assumptions that unites a community

of scholars and prescribes specific guidelines for conducting research" (Prasad, 2005, p. 8). To be more specific, my research embraces an *interpretive paradigm.* This lens of viewing the world assumes reality is socially constructed with a variety of interpretations and meanings (Merriam & Tisdell, 2016). Creswell and Poth (2018) explained:

> These meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrow the meanings into a few categories or ideas. The goal of research, then, is to rely as much as possible on the participants' views of the situation. Often these subjective meanings are negotiated socially and historically. In other words, they are not simply imprinted on individuals but are formed through interaction with others…and through historical and cultural norms that operate in individuals' lives. (p. 24)

Qualitative researchers using an interpretive paradigm thus see the world in terms of complex and overlapping influences and connections among people, situations, events, and processes (Maxwell, 2004; 2013).

Within this interpretive paradigm my overarching *theoretical perspective* is symbolic interactionism (Blumer, 1969; Mead, 1934). Symbolic interactionism believes that we live a world of 'objects' (e.g. relationships, institutions, values, physical objects, etc.) and we are guided by the *meanings* we place on those objects (Blumer, 1969). Rooting my research within this framework is appropriate because I am interested in understanding how gifted adolescent girls make meaning of their *giftedness* and how their meaning-making influences their sense of self. Qualitative methodologies (e.g. narrative inquiry) and methods (e.g. interviews) help me to further explore the lives and experiences of gifted adolescent girls. According to Coleman, Guo, and Dabbs (2007), the field of gifted education is need of qualitative lines of inquiry in order to

deepen our understandings of phenomena related to giftedness, and my program of research answers this call.

Subjectivity Statement: The Stories I Carry with Me

When designing, conducting, and interpreting qualitative research, Peshkin (1988) advocated for systematic "monitoring the self" (p. 20). This means that as the researcher, I should be aware of how my personal subjectivities influence my own understandings of the research. I am a part of every aspect of this study–from the theoretical perspective to the study design, data collection, data analysis, interpretation, and representation of findings (Roulston, 2010). Or in the words of Clandinin (2013), I am a part of the "storied landscapes" I study. Here I present my own subjectivities and stories of growing up gifted.

My journey to research in gifted education began with growing up as a gifted girl, but if I am honest, I have never really identified with the term gifted. I was first tested for gifted program services in first grade at my local public elementary school. I did not meet the cut off scores, and reflecting back on my experience, I am not sure I even knew what the testing was for. The following school year, I transferred to a new school due to rapid growth in my county's public-school system. I began second grade at a school with brand new facilities and eager teachers, awestruck that the student body got to vote on the school mascot. I adored my new teacher and quickly made a new best friend, with whom I stay in contact with to this day. I was a bright student who got excited about school supplies, organizing my folders, and always being the first one to complete our timed math worksheets. I was a hard worker, but a large portion of the academic curriculum came easy to me.

Towards the middle of second grade, my awareness of my academic abilities started to shift. I remember answering the phone one evening at home to hear my second-grade teacher on the other line, requesting to speak with my parents. After several minutes, my mother came into

my bedroom, sat on my bed with me, and queried as to whether or not I would be interested in moving up to third grade in the coming week. The change sounded exciting, and with butterflies in my stomach, I was soon escorted from the second-grade hallway at one end of the school, past the office, past the cafeteria, past the media center, and to the exact opposite end of the school building to my new third grade classroom. I started to see myself as 'uniquely smart'–as I learned of only one other peer in the school who received grade level acceleration. Procedures for my second attempt to be identified as gifted came shortly after my transition to third grade. This time, I was eligible, but only after being pulled aside after testing to discuss why I had selected certain answer choices. (My impression was that I answered many simple questions incorrectly, and the testing administrator wanted to ensure that I indeed knew the correct answers.)

As my schooling progressed, being gifted meant that I received pull-out services in elementary school and advanced content in middle and high school. The school's program was set up so that in 6th grade, we had gifted science, and in 7th-10th grade, we had gifted English/language arts. Seeing as how my strengths were in math, I sometimes doubted my abilities, especially as I entered high school. For me, being a gifted adolescent girl just meant I was smart and that I took harder classes than my peers, often without the weighted grade point average that is a more recent practice. I envied some of my peers who made A's in the general education English classroom, while I made my first C in a highly rigorous and time-consuming pre-AP English class. And due to my grade acceleration, it meant I was the last of my friends to get a driver's license. I had always been told that I 'seemed older than I was' or that I was 'very mature' for my age. As an adolescent girl trying to find her place, neither of these traits felt helpful.

It was not until I began studying gifted and creative education in graduate school that I could look back on my childhood and adolescent years and understand how my abilities set me apart from many of my peers in school. I had always thought I was different from most of my classmates, but I could never fully describe *how* I was different. I just knew that I saw the world differently, often in patterns and mathematical relationships. I never had an adult talk with me about what it meant to be gifted. My parents admit to not knowing anything about gifted education, although they always supported and celebrated my academic achievements.

Today, I still question as to whether or not 'gifted' feels appropriate for me, or rather, for the younger version of me in K-12 school. Knowing what I know about teacher referral bias and underrepresentation of minority students, I cannot help but question as to whether or not I was just a bright, White, high-achieving child who did an excellent job at fulfilling the role of the model student. I do believe that grade acceleration was an appropriate curricular intervention for me as young student, but my advanced cognitive abilities did not interfere with my ability to socialize with others nor did they result in potential misdiagnosis (see Assouline, Nicpon, & Doobay, 2009). If anything, I grew up with unhealthy socially prescribed perfectionism which is no stranger to gifted children (see Christopher & Shewmaker, 2010; Worley, 2015). Considering the four levels of giftedness (moderate, highly, exceptionally, and profoundly; Carolyn, n. d.), I considered my younger self to be at the lowest level.

After graduating, I then began to work with gifted girls in my new career as a math teacher. I graduated college with a B.S.Ed. in Secondary Mathematics Education, and I spent one year in the high school math classroom before returning to graduate school to earn an M.Ed. in Gifted and Creative Education. Many of my graduate school projects focused on gifted girls in math. With my advanced degree, I went back in the math classroom, teaching in both North Carolina and Georgia. I taught in public, private, and charter schools, and I worked with

adolescents with a variety of backgrounds and ability levels. With my advanced knowledge of gifted and creative education, I paid particular attention to how my gifted students, especially gifted girls, performed the roles of *gifted* and *girl* in my classes. I knew the importance of supporting the social and emotional needs of my gifted students, but it often seemed impossible to do. Our instructional time was filled with data-driven assessments and preparing for Advanced Placement exams. I assumed many of the gifted adolescents in my classroom knew they were *smart*, but I sensed no one had ever spoken with them about what it meant to be *gifted* and the complex experiences that often accompany giftedness (e.g., asynchronous development, precocious development, unique social and emotional needs, etc.). When I began my Ph.D. studies in 2015, I knew I wanted to continue my study of exploring the lives of gifted adolescent girls.

Now, as a budding researcher, I have found a 'epistemological home' in qualitative inquiry. Despite my talent and love for mathematics, I feel drawn to the ways in which we place meaning on phenomena and how these meanings shape our storied lives. I bring with me stories of my own experiences as a gifted girl and how my giftedness has influenced my experiences in schools. I also bring with me stories learned from literature on giftedness, interactionist perspectives, and feminist approaches to conducting research. Engaging in self-reflexivity and personal introspection, as conveyed in this subjectivity statement, enhances my ability to create trusting relationships with my participants and acts as a "springboard for interpretations and more general insight" (Finlay, 2002, p. 215) into the stories of gifted girls.

Part 2: Dissertation Overview

My aims in designing the current dissertation studies were to (1) contribute inquiry studies, marked by qualitative quality, that prioritized the lives and experiences of gifted adolescent girls, and (2) provide innovative suggestions for qualitative researchers for how to

conduct qualitative inquiry with adolescent participants. This dissertation is organized into three different articles. Broadly speaking, the first is a methodological article that highlights qualitative inquiry with adolescents (Chapter 2), the second is a qualitative inquiry study *with* gifted adolescent girls in an all-girls math classroom (Chapter 3), and the third is a qualitative inquiry study *about* gifted adolescent girls' sense of belonging (Chapter 4).

Chapter 2 discusses strategies to support rich qualitative inquiry with adolescents in general. Qualitative inquiry with adolescents can be challenging, and one-on-one interviews with an adult researcher may feel awkward to an adolescent. Therefore, the group interview is a common approach to interviewing this population because adolescents may be more comfortable in a group environment (Eder & Fingerson, 2001). In this chapter, I first discuss obstacles to group interviews as they relate to threatening a sense of cohesion among the group. Then, I present several strategies for enhancing cohesion as a path to rich meaning making in the group interview. I conclude the chapter with pedagogical suggestions for teaching these strategies to novice researchers. The ideas presented in this chapter represent a synthesis of concepts presented in qualitative inquiry literature, group work/counseling literature, and my own experiences in working with adolescents. I intend to submit this article to a qualitative journal dedicated to methodological considerations for qualitative research in education.

Chapter 3, which used some of the strategies mentioned in Chapter 2, presents a qualitative inquiry study that explored the influence of an all-girls advanced high school math class from the perspectives of the students and their teacher. Through group interviews (large and small), written reflections, and one-on-one interviews with the teachers, I used inductive and deductive analytic approaches to uncover four key themes of influence relating to how the all-girl environment influenced the gifted adolescent girls' sense of self and engagement in the classroom. I also analyzed my data using an alternative, poetical approach. The chapter is

introduced with a poetic transcription representing the girls' collective voice. I conclude the chapter with a discussion of how they study's findings relate to concepts found in gifted education literature and implications for educators, counselors, and parents. I intend to submit this article to a gifted education journal.

Chapter 4, the final article, presents a narrative inquiry study that explored three gifted adolescent girls' stories of belonging through the perspectives of their mothers. I adapted narrative inquiry methodology (Clandinin, 2013) to include mothers as shared narrative inquirers to their daughters' storied lives. Through one-on-one interviews and follow-up discussions, the mothers participated in shaping the final research texts. The findings of our shared inquiry are presented as three separate narratives that highlight the girls' complex stories of school, relationships with peers, and sense of self. I conclude the chapter with a discussion of the methodological approach, connections to literature on gifted adolescent girls, and reflections that prioritizing wondering over generalizing. I intend to submit this article to a qualitative journal or a gifted education journal.

Part 3: The Current State of Qualitative Inquiry with or About American Gifted

Adolescent Girls

To conclude this Introduction, awareness of the current state of qualitative inquiry with or about gifted adolescent girls is helpful in understanding how this dissertation contributes to the field of gifted education. The current state of qualitative inquiry with or about American gifted adolescent girls, as published in peer-reviewed academic journals, is lacking. To support this claim, I present readers with findings and a discussion of an online search for such studies published from 2008 to 2018.

Procedures

In my examination of current qualitative inquiry studies with or about American gifted adolescent girls, I first conducted an online search using the databases Education Research Complete, ERIC, and PsycINFO with combinations of the following keywords: gifted, girl, female, qualitative, inquiry, interview, narrative, grounded theory, case study, ethnography, observation, action research, focus group, and document analysis. Results were then refined using filters that allowed me sort results by publications in scholarly (peer-reviewed) journals from 2008-2018. Guided by Cannady's (2015) review of current gifted education journals, I was first interested in locating studies published in top American gifted education journals. These included: *Gifted Child Quarterly*, *Roeper Review*, *Journal for the Education of the Gifted*, *Journal of Advanced Academics*, and *High Ability Studies*. I also included the publication *Gifted and Talented International*, as some studies published involve participants from the United States.

To refine my search, I read the titles and abstracts of each article in order to determine if the study (a) inquired with or about the lives of American gifted adolescent girls/females, and (b) engaged in qualitative inquiry according to four characteristics delineated by Merriam and Tisdell (2016). These four characteristics are: (1) there is a focus on meaning and understanding, (2) the researcher is the primary instrument, (3) the research process is inductive rather than deductive, and (4) the product of qualitative inquiry is richly descriptive. I omitted quantitative studies, mixed methods studies, studies with both male and female participants, and studies about non-American gifted adolescent girls. This search resulted in only six qualitative studies for review.

Next, I conducted another online search because I wondered, "Why are there so few recent studies about gifted adolescent girls in gifted education journals? Perhaps authors are

simply publishing elsewhere?" I expanded the search beyond publications in gifted education journals. I reconducted my database and keyword search, and after re-reading titles and abstracts discovered, only two additional studies met my search criteria. Thus, a total of eight studies were included for review.

Findings

Full citations of the eight qualitative inquiry studies, six from gifted education journals and two from non-gifted education journals, can be found in the Appendix. Table 1.1 provides an overview of the articles, including the authors, publication dates, titles, publications, and participants.

Table 1.1

Overview of Articles in Literature Search

Author(s) (Year)	Publication	Title	Keywords/Descriptors	Participants
Hyatt, L. (2010)	*Journal for the Education of the Gifted*	A case study of the suicide of a gifted female adolescent: Implications for prediction and prevention	suicide, gifted female adolescent, prediction, personal variables, environmental variables, cultural variables	Mother and father of one gifted adolescent girl (subject of study)
O'Shea, M., Heilbronner, N. M., Reis, S. M. (2010)	*Journal of Advanced Academics*	Characteristics of academically talented women who achieve at high levels on the scholastic achievement test-mathematics	Scholastic Achievement Test	23 female high school students scoring in the top 5% on the quantitative section of the SAT
Pepperell, J. L., & Rubel, D. J. (2009)	*The Qualitative Report*	The experience of gifted girls transitioning from elementary school to sixth and seventh grade: A grounded theory	gifted girls, middle school girls, identity development, gifted girls development, grounded theory girls	7 gifted girls, grades 5-12
Peterson, J. S. (2012)	*Roeper Review*	The asset-burden paradox of giftedness: A 15-year phenomenological, longitudinal case study	case study, development, eating disorder, family conflict, gifted, intensity, longitudinal, overexcitabilities, positive disintegration, PTSD, qualitative, resilience, sensitivity, trauma	1 gifted female, from the ages of 15-30 years
Peterson, J. S. (2014)	*Journal for the Education of the Gifted*	Giftedness, trauma, and development: A qualitative, longitudinal case study	case study, gifted, development, trauma, longitudinal, qualitative	1 gifted female, from the ages of 15-30 years

Table 1.1

Overview of Articles in Literature Search (Continued)

Author(s) (Year)	Publication	Title	Keywords/Descriptors	Participants
Sayman, D. (2015)	*Multiple Voices for Ethnically Diverse Exceptional Learners*	"I was scared to be the stupid": Latinas in residential academies of science and math	Hispanic American students, females, STEM education, residential schools, state schools, student experience, enrollment, school holding power, academically gifted, special education, resilience (psychology), self esteem, interviews, student motivation	12 young women who were currently enrolled in or had graduated from a state-supported residential STEM school, Ages 16-19
Stutler, S. L. (2011)	*Gifted Child Quarterly*	Gifted girls' passion for fiction: The quest for meaning, growth, and self-actualization	verbally gifted girls, intellectual, imaginational, emotional intensities, growth motivation, youthful self-actualizers	8 verbally gifted preadolescent girls, Ages 11-12
Willard-Holt, C. (2008)	*Gifted Child Quarterly*	"You could be doing brain surgery": Gifted girls becoming teachers	gifted, female, careers, teaching	18 female teachers who demonstrated giftedness or had been identified as gifted; Ages 20-50

Of these eight articles, I would like to address aspects of three of the articles. First, the two publications by Peterson (2012; 2014) are articles resulting from the same study. One article primarily focused on the asset-burden paradox of giftedness, and the other highlighted giftedness, trauma, and development. Although related, the two articles provide unique insights into the life of a gifted adolescent girl. It can be difficult to publish the analyses and findings of a complex longitudinal study in one article, and therefore I chose to consider these as two separate contributions. Second, the publication by Willard-Holt (2008) interviewed gifted females ages 20-50. In the midst of the inquiry, some of the participants spoke of their experiences as an adolescent; therefore, I chose to keep this study as part of the review.

Summary and Discussion

To further explore the qualitative nature of these studies, Table 1.2 provides a summary of the purpose of the inquiry and/or corresponding research questions, theoretical perspective(s), methodology, and method(s). Table 1.2 is followed by a discussion of each of these components of qualitative inquiry and how they are demonstrated in the eight articles under review. I chose to not address the studies' approaches to data analysis and findings. Findings of qualitative studies are intended to be complex and rich, unable to provide generalizations. A summary of study findings is thus not provided in order to avoid generalizations and trite assumptions.

Table 1.2

Summary of Literature Search

Author(s) (Year)	Purpose/Research Question(s)	Theoretical Perspective(s)	Methodology	Method(s)
Hyatt, L. (2010)	To determine what factors (personal, environmental, and cultural) led a gifted adolescent girl to end her pain by choosing death over life.	Symbolic Interactionism (Blumer, 1986; Crotty, 1998)		interview with parents; documents and artifacts (photographs, videotapes of daughter as a child); researcher journal
O'Shea, M., Heilbronner, N. M., & Reis, S. M. (2010)	To investigate: (1) What affective characteristics (such as confidence, perceptions of math usefulness, and causal attributions) do these gifted females believe helped them to achieve at such high levels on the quantitative section of the SAT test? (2) What contextual characteristics do these gifted females attribute to their high achievement on the quantitative section of the SAT test?		Comparative case study (Yin, 2002)	semi-structured interviews (2-3 hours); document review of participants' permanent files; observations in classes; field notes; tape recordings and transcripts; concluding focus group
Pepperell, J. L., & Rubel, D. J. (2009)	To explore the experiences of gifted girls transitioning from elementary school to sixth and seventh grade. Research Question: What is the experience of gifted girls transitioning from elementary school to sixth and seventh grade?	Feminist perspective	Grounded theory	Interviews; focus groups; researcher journal

Table 1.2

Summary of Literature Search (Continued)

Author(s) (Year)	Purpose/Research Question(s)	Theoretical Perspective(s)	Methodology	Method(s)
Peterson, J. S. (2012)	To address gaps in literature (how high-ability individuals subjectively experience development over time) by exploring the social and emotional development of a female adolescent with exceptional ability.	Phenomenology	Phenomenological case study	unstructured interviews with participant; unstructured interviews with gifted teacher, former employer, graduate student peers, husband, mother, sister, all 20-60 minutes
Peterson, J. S. (2014)	To explore how a gifted female experienced various life events and aspects of development during adolescence and young adulthood, particularly as it related to traumatic experiences.	Phenomenology	Phenomenological case study	written letters; e-mails; face-to-face interviews; full-day interviews; unstructured interviews with mother, friends, teacher
Sayman, D. (2015)	To understand the experiences of Latinas enrolled in residential STEM academies. Research questions: (1) What are the experiences of Latinas in state-supported residential STEM academies? (2) What roles does resilience play in their academic self-concept?	Critical, multicultural feminist theories		interviews; focus groups; direct observation of classes; follow-up interviews

Table 1.2

Summary of Literature Search (Continued)

Author(s) (Year)	Purpose/Research Question(s)	Theoretical Perspective(s)	Methodology	Method(s)
Stutler, S. L. (2011)	To explore and understand the meanings that reading fiction holds for a group of verbally gifted 6th grade girls.	Characteristics and qualities of verbally gifted children; Common themes in the early lives of eminent women; Dabrowski's Theory of Overexcitabilities (OEs); Dabrowskis' Theory of Positive Disintegration; Flow and peak experiences and self-actualization		group book discussions; reading journals; parent interviews; observational field notes; narrative vignettes
Willard-Holt, C. (2008)	To investigate: (1) the reasons female teachers who have been identified as gifted choose teaching as a career, (2) the encouragement and discouragement they have received regarding their career choice, and (3) the interactions between their own giftedness and their teaching experiences.			Semi-structured interviews, 30-60 minutes; focus groups

The *purpose of the inquiry* and/or corresponding *research questions* help orient the reader to the authors' overarching purpose and perspective. The studies primarily situated the purpose of inquiry around understanding, exploring, and investigating the lives and inner worlds of gifted girls. Pepperell and Rubel (2009) explored experiences of transition between elementary and middle school. Hyatt (2010) and Peterson (2012; 2014) studied gifted adolescent girls that had experienced difficult life experiences and trauma. O'Shea et al. (2010), Sayman (2015), and Stutler (2011) investigated characteristics related to affect and achievement in gifted girls with high abilities in the areas of STEM (science, technology, engineering, and mathematics) and reading, with Sayman (2015) also exploring the experiences of gifted girls who identify with an underrepresented minority population. Willard-Holt (2008) studied the influences and experiences related to a career choice in education. To summarize, all of the studies inquired about topics related to affect in gifted girls, but the research differed based on sub-populations of gifted girls and topics related to affect.

Theoretical perspectives underlie all qualitative research "because no study could be designed without some question being asked (explicit or implicitly)" (Merriam & Tisdell, 2016, p. 85). They shape how questions are phrased and the sense through which we interpret our data. In my own qualitative paradigm, I value theoretical perspectives that specifically relate to qualitative theories, frameworks, and philosophical underpinnings instead of general literature reviews on gifted girls. And according to Tracy (2010), informing readers of the theoretical perspective(s) underlying one's inquiry approach provides evidence of rich rigor and enhances the quality of the research.

Five of the eight studies (Hyatt, 2010; Pepperell & Rubel, 2009; Peterson, 2012; Peterson, 2014; Sayman, 2015) provided reviews of literature related to the topic of inquiry and clearly addressed theoretical perspectives underpinning the research conducted. These included

perspectives stemming from symbolic interactionism, phenomenology, critical, feminist, and multicultural theories. Stutler (2011) explained an array of concepts related to giftedness under a section titled 'theoretical perspectives,' and after careful review, I determined the author's perspectives aligned more with the idea of a conceptual framework than one that represents a qualitative paradigm with shared ontological and epistemological underpinnings. The remaining three studies each provided a review of literature that provided conceptual frameworks for the reader, although there was no mention of a broader theoretical perspective that shaped the study design and data analyses. The reader would therefore assume that the concepts presented in the literature review provided the lens through which the qualitative study was conducted.

According to Merriam and Tisdell (2016), basic qualitative studies – studies that are designed as 'general' and 'interpretive' without noting a specific *type* of research design – may very well be the most common form of qualitative research in education. However, qualitative studies that take on a specific design (e.g. phenomenology, ethnography, narrative inquiry) have additional dimensions that relay a particular aspect of richness to the research. These dimensions not only influence design, but they may also include unique details related to theoretical perspectives to which they align, data collection methods, and approaches to data analyses and interpretation. I refer to the type of research design as *methodology*, and the ways in which the design is carried out as *methods*.

Four of the studies situated their research methods within specific methodologies: O'Shea at al. (2010) adopted a comparative case study design, Pepperell and Rubel (2009) used a grounded theory design, and Peterson (2012; 2014) adhered to an "open-ended exploration" phenomenological case study design to her longitudinal study. The remaining four studies, although appropriate qualitative methods were listed, did not clearly state a methodological framework for inquiry. All studies included more than one method of data collection and

included interviews as a primary source of data collection. Other data methods included focus groups, researcher journal/field notes, participant observation, and document review.

Considering these findings, the current state of qualitative inquiry with or about American gifted adolescent girls is deficient. Qualitative research is rich with a variety of theoretical perspectives and methodological designs. With a vast amount of literature on gender and giftedness and the complexities of the interactions of giftedness and adolescence, where are the studies providing specific lines of inquiry into the lives and experiences of gifted adolescent girls of recent generations? When published, two of the studies in this dissertation (Chapters 3-4) will indeed contribute unique insights and perspectives into the lives of gifted adolescent girls of today's generation.

References

Assouline, S. G., Nicpon, M. F., & Doobay, A. (2009). Profoundly gifted girls and Autism

Spectrum Disorder. *Gifted Child Quarterly, 53*, 89-105.

https://doi.org/10.1177/0016986208330565

Blumer, H. (1969). *Symbolic interactionism: Perspective and method.* Englewood Cliffs, NJ:

Prentice Hall.

Cannady, J. (2015). A review of current gifted education journals: Information for new faculty.

International Journal of Education and Social Science, *2*(11), 1-8.

Carolyn, K. (n. d.). *What is highly gifted? Exceptionally gifted? Profoundly gifted? And what

does it mean?* Retrieved 2/14/2019 from

https://www.hoagiesgifted.org/highly_profoundly.htm

Christopher, M. M. & Shewmaker, J. (2010). The relationship of perfectionism to affective

variables in gifted and highly able children. *Gifted Child Today, 33*(3), 20-30.

Clandinin, D.J. (2013). *Engaging in narrative inquiry.* London: Routledge.

Coleman, L. J., Guo, A., & Dabbs, C. S. (2007). The state of qualitative research in gifted

education as published in American journals. *Gifted Child Quarterly, 51,* 51-63.

https://doi.org/10.1177/0016986206296656

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among

five approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Eder, D., & Fingerson, L. (2001). Interviewing children and adolescents. In J. F. Gubrium & J.

A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 181–201).

Thousand Oaks: SAGE Publications, Inc.

Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in

    research practice. *Qualitative Research, 2*, 209-230.

    https://doi.org/10.1177/146879410200200205

Galvan, J. L. (2014). *Writing literature reviews: A guide for students of the social and behavioral*

    sciences (6th ed.). New York, NY: Routledge.

Institute for the Study of Advanced Development. (n.d.). *The Columbus Group.* Retrieved

    4/30/2017 from http://www.gifteddevelopment.com/isad/columbus-group.

Maxwell, J. A. (2006). Literature reviews of, and for, educational research: A commentary on

    Boote and Beile's "Scholars Before Researchers." *Educational Researcher*, *35*(9), 28-31.

Maxwell, J. A. (2004). Causal explanation, qualitative research, and scientific inquiry in

    education. *Educational Researcher, 33*(2), 3-11.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand

    Oaks, CA: SAGE Publications, Inc.

Mead, G. H. (1934). *Mind, self & society.* London: The University of Chicago Press, Ltd.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and*

    implementation (4th ed.). San Francisco, CA: John Wiley & Sons, Inc.

Paulus, T. M., Lester, J. N., & Dempster, P. G. (2014). *Digital tools for qualitative research.*

    London: SAGE Publications Ltd.

Peshkin, A. (1988). In search of subjectivity–One's own. *Educational Researcher, 17*(7), 17-21.

    https://doi.org/10.2307/1174381

Prasad, P. (2005). *Crafting qualitative research.* Armonk, NY: M. E. Sharpe, Inc.

Renzulli, J. S. (1978). What makes giftedness? Reexamining a definition. *The Phi Delta Kappan,*

    60, 180-184. https://doi.org/10.1177/003172171109200821

Roulston, K. J. (2010). *Reflective interviewing.* London: SAGE Publications Ltd.

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*, 837-851. https://doi.org/10.1177/1077800410383121

Worley, C. (2015). The perfect girl syndrome: Perfectionism and self-esteem in gifted girls. *Parenting for High Potential,* Fall, 6-7, 15.

Appendix

Hyatt, L. (2010). A case study of the suicide of a gifted female adolescent: Implications for

    prediction and prevention. *Journal for the Education of the Gifted, 33*, 514–535.

    https://doi.org/10.1177/016235321003300404

O'Shea, M., Heilbronner, N. N., & Reis, S. M. (2010). Characteristics of academically talented

    women who achieve at high levels on the Scholastic Achievement Test-Mathematics.

    Journal of Advanced Academics, 21, 234–271.

Pepperell, J. L., & Rubel, D. J. (2003). The experience of gifted girls transitioning from

    elementary school to sixth and seventh grade: A grounded theory. *The Qualitative

    Report, 14*, 341–360.

Peterson, J. S. (2012). The asset-burden paradox of giftedness: A 15-year phenomenological,

    longitudinal case study. *Roeper Review, 34,* 244–260.

    https://doi.org/10.1080/02783193.2012.715336

Peterson, J. S. (2014). Giftedness, trauma, and development: A qualitative, longitudinal case

    study. *Journal for the Education of the Gifted, 37,* 295–318.

    https://doi.org/10.1177/0162353214552564

Sayman, D. (2015). "I was scared to be stupid": Latinas in residential academies of science and

    math. *Multiple Voices for Ethnically Diverse Exceptional Learners, 15*(2), 22–35.

Stutler, S. L. (2010). Gifted girls' passion for fiction: The quest for meaning, growth, and self-

    actualization. *Gifted Child Quarterly, 55,* 18–38.

    https://doi.org/10.1177/0016986210383979

Willard-Holt, C. (2008). "You could be doing brain surgery": Gifted girls becoming teachers.

    Gifted Child Quarterly, 52, 313–325. https://doi.org/10.1177/0016986208321807

CHAPTER 2

QUALITATIVE INQUIRY WITH ADOLESCENTS: STRATEGIES FOR FOSTERING

RICH MEANING MAKING IN GROUP INTERVIEWS[1]

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[1] Guthrie, K. H. To be submitted to *Qualitative Inquiry.*

ABSTRACT

Qualitative inquiry with adolescents is challenging, especially in the field of educational research in which adults are often the gatekeepers of 'right' and 'wrong' answers. To help diminish power dynamics, group interviews are a common method for inquiry into the experiences and perspectives of adolescents. However, the intense desire to fit in with a group of peers (Erickson, 1980) and the risks associated with confidentiality can influence how adolescents respond in a group setting. In this article, I first summarize common obstacles to group interviews with adolescents (experienced in the field as well as grounded in literature) followed by strategies qualitative researchers can employ to foster richer meaning making among adolescent participants. Suggestions include strategies that foster group cohesion and trust, such as incorporating introductory activities, defining your leadership style, encouraging effective group norms, and incorporating written reflections in data collection. These strategies can help a qualitative researcher create a space suitable for discussion of personal or sensitive topics (Yalom, 2005; Norris et al., 2013) and capture the rich, shared meaning making that can happen as a result of the group's social interaction in the group interview (Morgan, 2012). I conclude with implications for researchers and teachers of qualitative research methods.

Keywords: Qualitative inquiry, Adolescent participants, Group interviews, Group cohesion, Group trust, Interview activities, Educational research, Teaching qualitative research

Introduction

Qualitative inquiry with adolescents can offer the field of education insight into adolescents' experiences as students and stakeholders in education. Educational research involving adolescent participants often relies heavily on adult interpretation, but because they are situated with little power in researcher-researched relationships, adolescents are known to be a challenging population to engage in qualitative inquiry.

To combat some of the challenges of interviewing adolescents, group interviews[2] are recommended as a favorable method of data collection among this population. Compared to one-on-one interviews, group interviews may feel more natural to adolescents as they regularly construct collective meanings with their peers in group environments (e.g., classroom, friendship circles; Eder & Fingerson, 2001), and they may feel more comfortable responding in a group environment when the researcher is outnumbered. Group interview settings often elicit *different* participant responses than one-on-one environments (Barbour, 2007; Eder & Fingerson, 2001; Roulston, 2010; Wilkinson, 1998; 2008). Interaction of group participants can trigger memories, stimulate discussion, and encourage disclosure and detailed accounts of shared responses (Wilkinson, 1998; 2008). However, because adolescence is a period where youth experience an intense desire to fit in with their peers (Erickson, 1980), there are obstacles to facilitating group environments in which adolescents feel comfortable sharing their thoughts, feelings, and experiences aloud.

Norris, Aroian, and Warren (2013) listed the following as challenges of conducting group interviews with adolescents: (a) there is a declining social trust among adolescents that can affect

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[2] Although the field of qualitative inquiry notes the differences between focus groups and group interviews, I have chosen to use the term *group interview* to represent a scenario in which the number of participants interviewed outnumber that of the researchers. Thus, some of the literature cited here refers to literature about both focus groups (e.g. Barbour, 2007; Wilkinson, 2008) and group interviews (e.g. Roulston, 2010).

the quality and quantity of information shared, (b) adolescents have an intense need for peer approval and may show discomfort with answering direct questions in front of peers, (c) adolescents may find it difficult to talk about sensitive topics, (d) adolescents often have a short attention span which can create restless energy, and (e) adolescents may only share socially desirable responses with the group. Although some of these challenges may be apparent to educators, parents, or other adults who work closely with adolescents, they may not be as obvious to researchers who have had little access or experience in working with adolescent participants or who have been removed from working in educational environments for some time.

The purpose of this article is two-fold: (1) to discuss obstacles to group interviews with adolescents and (2) offer suggestions for how to design and facilitate effective group interviews with adolescents inspired by concepts from the field of group work (e.g., group counseling). Although some of the ideas presented in this article are well-known in the field of group work and group psychotherapy, in general, interviewers should avoid establishing a therapeutic relationship (Seidman, 2013). Rather, I encourage the reader to consider how skills and strategies from the field of group work can strengthen one's ability to facilitate effective group interactions and discussions. My aim is for the reader to consider these strategies as stepping stones for reflection and practice of qualitative inquiry among groups of adolescents in schools.

This article is organized into four parts. Part one introduces the reader to the theoretical underpinnings of meaning making in the group context. Part two describes how meaning making in group interviews is influenced by group cohesion and trust. Part three summarizes three primary threats to group cohesion and trust when interviewing groups of adolescents: power dynamics, peer influence, and confidentiality. And, part four presents several strategies to help researchers overcome these obstacles inspired by literature and my own experiences in working

with groups of adolescents. I conclude with implications for researchers and teachers of qualitative research methods.

An Interactionist Perspective of Meaning Making

Based in the symbolic interactionism tradition (Mead, 1934), an interactionist perspective provides the framework for understanding how adolescent participants make meaning in social situations. In this tradition, meaning is not created in one's individual experiences but instead, it is created out of the social interaction with others (Blumer, 1969; Mead, 1934). According to Mead (1934), we are social beings, and in the midst of social interaction, there is a giving and receiving of certain gestures. We then undergo a state of self-interaction in order to interpret those gestures into *meanings*. Through this process, we collect, analyze, discard, or fuel aspects of 'meaning' and then interpret and respond accordingly. Thus, we are guided by the meanings we place on our experiences with others (Blumer, 1969).

In group settings, we have the capacity to view ourselves as others see us. We can define a situation and organize ourselves to confirm our socially defined role or expectation of behavior (Prasad, 2005). By seeing how we fit into certain situations, we are then able to decide how to act in those situations. From this perspective, everything adolescent participants say during a group interview is influenced by their sense of how the other participants, and the adult researcher, will react to what they say (see Morgan, 2012).

By applying this interactionist perspective, qualitative researchers can shape the way meaning is constructed in group interviews. The study design, methods, the ways in which a researcher attends and responds to participants' conversations, and if or how the researcher encourages participants to attend to and respond to each other all have potential influence on the shared meaning created by participants. Fostering a group environment where meaning making can take place is thus a priority in conducting group interviews with adolescents, and one of the

primary requirements for facilitating rich meaning making is enabling the group's ability to establish group cohesion and trust.

The Foundation for Rich Meaning Making: Group Cohesion and Trust

What is *rich meaning making*? In qualitative inquiry, researchers use a variety of methods to gather insights into participants' thoughts and feelings regarding their lived experiences. When asking adolescent participants to *make meaning* of their experiences, we are asking them to reconstruct their experiences by bringing those experiences to their attention, reflect on them, and then assign meaning to them (Schutz, 1967). *Richness* is characterized by details, thick descriptive, and careful construction. Collecting rich data enhances the credibility of qualitative research (Tracy, 2010).

One method of capturing rich meaning making is through qualitative interviews, either one-on-one or with groups of participants. More than just a verbal exchange of information through a stimulus (i.e. an interviewer's question) and response (i.e. an interviewee's answer), qualitative interviews can be viewed as a discourse between the interviewer and interviewee in an attempt to reach a joint construction of meaning (Mishler, 1986). An interview is an activity in which both the interviewer and interviewee(s), "through repeated reformulations of questions and responses, strive to arrive together at meanings that both can understand" (Mishler, 1986, p. 65). Together, they engaged in *shared meaning making*. To be clear, in the group interview context, this shared meaning is not the same as all of the participants in a group agreeing with each other (Morgan, 2012). Through sharing and comparing their responses with each other, group interview participants create a shared understanding of the complexity of meaning through discourse and reflection. As deMarrais (2004) reminded us, the researcher participates in the construction of the group's shared meaning experience by entering into this discourse by attending and responding to the conversation. Since shared meaning making within group

interviews can be risky for adolescents (Norris et al., 2013), we look to the field of group work to learn about how fostering a sense of group cohesion and trust can create a space in which adolescents feel comfortable sharing rich details of their lived experiences.

Group cohesion has a variety of definitions in the field of group work. Yalom (2005), in his work with group psychotherapy, defined group cohesiveness as a sense of "groupness" or "we-ness" that translates to attractiveness towards the group and its members. Johnson and Johnson (2013) also described group cohesiveness as attraction and a "desire to remain in the group" (p. 97). In the context of group interviews, if adolescent participants experience the group as being welcoming and a source of belonging, the group's cohesiveness can encourage the "affective sharing of one's inner world" (Yalom, 2005, p. 56). Cohesion here does not mean that the participants desire to be the same–which is neither the goal in group work nor the goal of qualitative inquiry. Instead, group cohesion is a characteristic of group dynamics that influences the setting of the interview and the adolescent participants' comfortability in reflecting, exploring, and sharing their experiences aloud.

In order for a group to be cohesive, there must be a sense of *trust* among the group members. Johnson and Johnson (2013) claimed the crucial elements to developing and maintaining trust in group work are openness, sharing, acceptance, support, and cooperative intentions. One must not forget–acceptance among adolescents is a big deal. They are most often motivated by peer acceptance, while at the same time, beginning the journey of self-acceptance. Acceptance in terms of group work or group interviews, does not translate to agreement, but rather the group's ability to listen attentively without expressing judgement or criticism towards each other. The more trustworthy group members are, including the group leader, the more likely they are to disclose their thoughts, feelings, and experiences with the group.

In qualitative research, the term *trustworthiness* describes a research study's quality (Freeman, deMarrais, Preissle, Roulston, & St. Pierre, 2007), or more specifically, a study's credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). However, in the current context, I am using trustworthiness to describe not only the qualitative researcher's ability to maintain confidentiality, but also the ability to respond to an adolescent participant's risk-taking (e.g. sharing their thoughts, feelings, and experiences within the group interview) in a way that ensures the participant benefits from your acceptance and support in the inquiry. Trustworthy interviewers are respectful, nonjudgmental, and non-threatening (Merrian & Tisdell, 2016). They listen more and talk less, aware that too much or ill-timed exploration of participants' responses can make participants respond defensively (Seidman, 2013). If an interviewer exhibits these characteristics with a positive attitude and orientation, in addition to encouraging adolescent participants to adopt similar behaviors, then group cohesiveness is more likely. Groups that are highly cohesive have higher levels of engagement (MacKenzie, Dies, Coché, Rutan, & Stone, 1987) and greater levels of self-disclosure (Yalom, 2005). Thus, a researcher's ability to encourage and establish group cohesion and trust can influence the group's ability to co-construct meaning through sharing and comparing their thoughts, feelings, and experiences (Morgan, 2012).

Threats to Group Cohesion and Trust in Group Interviews with Adolescents

Unfortunately, rich meaning making, group cohesion, and trust are not always easily accessible to adolescent participants. Researchers who gather adolescents for group interviews, without considering the obstacles that may prevent adolescents from being able to co-construct meaning making, may well be disappointed in the poor quantity and quality of data collected. Therefore, this section includes a discussion of three primary obstacles to rich meaning making in group interviews: power dynamics, peer influence and group norms, and confidentiality. These

'threats' to group cohesion and trust are complex and often overlap in the midst of adolescent development and social interaction.

Unequal Power Dynamics

Power dynamics, either between the researcher and participants or among the group of participants, can threaten the group's ability to be cohesive and build a sense of trust. In the context of qualitative inquiry, Seidman (2013) described power as "who controls the direction of the interview, who controls the results, [and] who benefits" (p. 101) and claimed the researcher-participant relationship has the potential to be power-laden and unequal. Group interviews are thus often recommended as a method to address power imbalances in the researcher-participant relationship. Compared to one-on-one interviews, group interviews can help minimize the power differential as the number of participants outweighs the number of researchers (Dixon, 2015; Eder & Fingerson, 2001; Roulston, 2010). However, group interviews with adolescents does not instantly guarantee a more equitable power relationship simply because the interviewer is outnumbered.

Power can be experienced directly, primarily through the relationships and interactions of those in the group (Johnson & Johnson, 2013). This includes the direct researcher-participant relationship and the participants' relationships to each other. According to Mayall (1999), children and adolescents are regarded as a "minority group in their social positioning within local and national power structures" (p. 10), and even within the family, children and adolescents have little power to participate in decision making. In traditional educational settings, adults tend to hold the most power and decision-making responsibilities. Throughout their years of schooling, adolescents' day to day activities are guided by a strict bell schedule, and they have learned that the adults in the classrooms are the ultimate judges of right and wrong answers. Power can also be experienced directly through participants' relationships and interactions with their peers in the

group. For example, the 'popular' students may hold more power in certain groups, and if the participants know each other, they carry with them their past experiences in classrooms, on the playgrounds, or in the hallways.

On the other hand, adolescents in schools also experience power indirectly through group norms and values (Johnson & Johnson, 2013). They spend most of time at school in groups (e.g. classes, clubs, teams, groups of friends, etc.), and there often exists a hierarchy of power in each of the different groups to which they belong. Some students hold more power, or privilege, compared to their peers due to academic, social, cultural, socioeconomic, or some other socially prescribed status. Depending on the composition of the group, adolescents are often quick to note which of their peers holds power or privilege and which of their peers do not. For a group of adolescents who already know each other, these power roles have likely already been established outside of the group interview.

Peer Influence

Another threat to group cohesion and trust in group interviews with adolescents is the increased emphasis of obtaining peer approval that naturally develops in adolescence (Erikson, 1980). Berg, Landreth, and Fall (2013) claimed adolescence as a stage of development "characterized by conflict, questioning of values, a bewildering array of choices, confusing physiological changes, and an overwhelming need for approval by peers" (p. 171), and these characteristics influence the ways in which adolescents interact and respond in group environments. Conforming to a group's "rules of the game" is usually a requirement for acceptance and continued membership in the group (Johnson & Johnson, 2013), and yet, adolescents often oscillate – breaking the "rules" of one group in order to find belonging in another group.

As summarized by Forsyth (2006), there are three sources of group influence on members: informational influence, normative influence, and interpersonal influence. Informational influence describes the interpersonal processes that promote change by challenging the correctness of a group members' beliefs or the appropriateness of their behavior directly or indirectly. Normative influence describes the personal and interpersonal processes that cause individuals to feel, think, and act in ways that are consistent with social norms, standards, and conventions. Interpersonal influence describes the social influence that results from other group members selectively encouraging conformity and discouraging nonconformity (Forsyth, 2006). In Table 2.1, I present possible scenarios of how these three sources of group social influence may be experienced by an adolescent participant in the midst of a group interview. Although the messages portrayed by these sources of influence may be positive, messages that are negative or intimidating in nature have the potential to threaten group cohesion, thus hindering participants' comfort and willingness to share aloud in the group interview.

Table 2.1

Scenarios of Group Social Influence from the Perspective of an Adolescent Participant

Source of Group Social Influence	Possible Scenarios
Informational influence	When Mariah shared her experience, everyone seemed to nod their heads in agreement with her. The group must agree with her more than they agree with Sam. Jeremy answered the interviewer's question with disagreement. I should take a second to consider if I disagree with the interviewer, too.
Normative influence	Everyone raised their hand to agree with Veronica, and I accept that her response is a reflection of my own. I am tired of always answering adults' questions. Most of the group is slouching in their seats with their arms crossed. If I participate fully, I risk not fitting in.
Interpersonal influence	When Raphael spoke in favor of Plan A, the group laughed in disbelief and called him a 'traitor.' When Trey spoke in favor of Plan B, the group agreed with him.

Note. Scenarios have been adapted from Forsyth (2006) to the context of group interviews with adolescents.

These sources of social influence may already be established as group norms among participants. Berg et al. (2013) defined *group norms* as "implicit or explicit agreed-upon standards that govern behavior in the group" (p. 182). In the case that your adolescent participants know each other and/or have been grouped together in the classroom or other educational environment, paying particular attention to the group's norms can help you better understand how shared meaning making and disclosure of information are expressed in the group. For example, you may have a participant who has always been looked to as being the spokesperson of the group. Or, you may have two participants who are especially quiet and have learned that speaking up in opposition of their classmates leads to being ostracized. Disrupting the group norms may or may not play to the advantage of facilitating richer meaning making in

the group, and strategies related to establishing group norms for your group interview are discussed later in this article.

Ultimately, recognizing that adolescents gain most of their understanding of the world in the midst of social interaction at school, in the classroom, and amongst their peers should have bearing on how a researcher designs and implements group interviews as a way of collecting data. Ignorance of how adolescent participants may experience the group interview may result not only in poor data quality but also the increased chance that the participants may experience unnecessary risks or discomforts.

Confidentiality

The final threat to group cohesion and trust is that of confidentiality. Confidentiality is directly linked to establishing a sense of trust within the group. When working with human subjects in research contexts, and with minors in particular, maintaining confidentiality of participants' identities and disclosures is critical. Conducting group interviews in the context of schools may pose certain risks to students who may hesitate to share their thoughts, feelings, and experiences as they relate to authority figures or peers they see on a daily basis. Additionally, researchers are held to ethical standards of reporting situations or responses from minors that elicit statements related to abuse, mistreatment, neglect, drug use, or other criminal behaviors (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

When conducting group interviews with adolescents, the concept of confidentiality is broadened to also include the notion of holding the conversations shared within the group privately. Confidentiality is challenged as participants voluntarily offer responses in front of other participants, and although the researcher encourages group members to hold the groups' conversations private, the researcher cannot guarantee that participants will keep what is shared

within the group private (Roulston & Liljestrom, 2010). When working with adolescents, it is possible that a participant may share what is said in the group interview with others (e.g., peers, adults, etc.) who were not present, thus breaking the confidentiality of the group. If adolescent participants believe their peers may break confidentiality of the group, they may be more reluctant to self-disclose and participate in shared meaning making. If you plan to discuss sensitive topics with your adolescent participants, reconsider as to whether the group interview method is the most appropriate and beneficial for your participants.

Strategies for Fostering Rich Meaning Making in Group Interviews with Adolescents

As additions to typical group interview strategies in the field of educational research, these suggestions have been influenced by the fields of group work and my own experiences of working with adolescents in a variety of contexts, primarily as a middle and high school math teacher. I spent the majority of my waking hours each weekday immersed in a sea of teenagers–as a classroom teacher, hallway and lunch room monitor, after school club organizer, and athletic coach. In addition, I have conducted several studies which included group interviews with adolescents. One study incorporated a series of five group interviews with two groups of adolescent girls as part of an academic residential summer program, and another study involved four group interviews with adolescent girls conducted before and during school hours at a public high school. From the literature and from my experiences, I have developed the following strategies, which can be used in designing and conducting group interviews with adolescents to help encourage and build group cohesion and trust.

Strategies include:

- Understanding stages of group development

- Paying attention to the influence of the school setting

- Defining your leadership style

- Using introductory activities

- Encouraging effective group norms

- Incorporating humor

- Encouraging written reflections in data collection

- Designing your study to benefit participants

You will find that these strategies can be implemented independently or in conjunction with others in order to enhance rich meaning making among adolescent participants.

Understand Stages of Group Development

Throughout the history of group work and group dynamics, there have been several models proposed that demonstrate the stages of group development. I have found Tuckman and Jensen's (1977) stages of small group development to be easy to follow and appropriate for application to qualitative inquiry with group interviews. They described five sequential stages of development: Forming, Storming, Norming, Performing, and Adjourning. In Table 2.2, I summarize these stages and provides suggestions for how they can be applied to a single group interview or series of group interviews. Understanding each stage of group development can be particularly helpful in the research context when forming groups of participants that do not already know each other (Finch, Lewis, & Turley, 2014).

Table 2.2

Applications of the Stages of Group Development to Group Interviews

Stage	Description	Application(s) to Group Interview(s)
Forming	This stage often takes place at the beginning of the group formation, including the time the facilitator designs and initiates the group. The facilitator focuses on creating the group and helping group members get settled and comfortable with the purpose of their group.	This stage reflects the period of time the researcher begins to design the group interview study, contact and recruit participants, and any other introductory communications that take place before or at the initial start of the group interview(s).
Storming	In this stage, the group focus shifts from wanting acceptance, approval, and commitment to one that has tension, conflict, and even competition as some group members may try to assert dominance or power in the group.	This stage can be viewed as the beginning moments or periods of time in which participants adjust to the environment of the group interview. This can include questions and conversations regarding the introduction and review of the purpose of the group interview(s), individual introductions of the participants, and beginning interview questions that are introductory in nature.
Norming	This stage describes the process of developing a feeling of cohesion within the group. Cohesive groups are more likely to be honest, have better trust, have higher emotional closeness, seek out intimacy, and manage conflicts respectfully.	This stage is when groups begin to trust each other, through a statement of group expectations, through activities, or through the beginning stages of group discussion. The interviewer will need to pay careful attention that the 'norming' of the group does not mask diverse attitudes and perspectives from being shared.
Performing	This stage is often referred to as the 'working' stage in which the bulk of the 'work' or 'process' take place. The goals and purpose of the group are often referring to the work that takes place during this stage.	This is when participants feel comfortable with each other and engage in sharing and comparing. This stage is the phase of rich meaning making among participants.
Adjourning	This stage describes the final stage of group development where the adjourning is the transition between the experiences within the group and the experiences that come after the group ends.	In this final stage, the researcher starts to bring closure to the group interview(s), debriefs the participants, and informs the participants of the next steps in the research study or how to contact the researcher should any questions arise.

Note. The stages and descriptions of group development presented are summarized from the work of Tuckman and Jensen (1977).

Although these stages are presented linearly, they vary in duration and some stages can reoccur throughout the formation of the group, and each stage may vary in duration. In other words, if group interviews are conducted across multiple sessions, the group may experience some of the stages (e.g. Forming, Storming, Norming) repeatedly over time. Each session may begin with brief experiences of Norming before settling into the Performing stage. Recall that adolescence is a turbulent time of development and conducting group interviews across multiple sessions means that the participants will have had multiple opportunities to be socially influenced outside of the group.

As noted in Table 2.2, the Performing stage is considered the time that rich meaning making occurs in group interviews. The Performing stage is when the group has reached a level of cohesion and trust that participants voluntarily share perspectives of their experiences, thoughts, and feelings. Rich meaning making happens because this is the phase of group development that in which groups reach a state of cohesiveness (Tuckman & Jensen, 1977). However, neglecting to recognize the early stages of group development (e.g., Forming, Storming, and Norming) may cause a researcher to prematurely assume a group of adolescent participants is primed for rich meaning making. This can result in reluctant participants and weak data collection.

Suggested Strategies. Finding ways to guide participants through the Forming, Storming, and Norming stages in addition to being aware of how these stages influence the Performing stage, or rich meaning-making stage, can help provide a roadmap for researchers as they design research studies and moderate group interviews. Although addressing issues that occur in the beginning stages of group development take time, it may result in an environment in which adolescent participants are more willing or feel safer in offering their perspectives and stories aloud to the group. Some strategies you can implement include: designing introductory

activities that welcome the group and provides space for them to get to know you and one another (Forming stage), monitoring discussion and modeling expected behaviors in the group (Storming stage), and working with adolescent participants to create group guidelines (Norming stage). When implemented thoughtfully, each of these suggested strategies can foster group cohesion and are addressed later in this section.

Pay Attention to the Influence of the School Setting

When conducting educational research with adolescent participants in schools, researchers should be mindful of how the school setting may influence a participant's responses in a group interview. Adolescents are used to sitting amongst a group of peers, listening and responding to an all-knowing authority figure at the front of the room. Although a researcher may try to dislodge herself from playing the role of a teacher, it is still important to realize that adolescents have been conditioned to respond to adults in classrooms in certain ways. Researchers should consider ways of conducting group interviews that avoid mimicking classroom lessons based on "known-answer" questions (Eder & Fingerson, 2001).

Furthermore, when researching in the school setting, adolescent participants may have more negative associations with some particular classrooms or school spaces than others. For example, hosting group interviews in the front office with adolescents who are part of a study exploring combative behaviors would be a poor choice for the setting of the interviews. Similarly, a particular teacher's classroom may have been the class in which the student made her first failing grade or had been bullied by the boy behind her. Ensuring that the environment is comfortable and safe for participants is, by default, a good practice, and although it is impossible for researchers to know which spaces may trigger participants to feel certain ways, some suggestions can be made to help create a safe space for reflection and sharing with others.

Suggested Strategies. If interviewing in a classroom, try situating the desks or tables in a new orientation different from which they would expect to be in if attending class in the room. For example, placing the desks or chairs in a circle or moving furniture and sitting on the floor can help send a message to participants that this is not Algebra class. Situating yourself amongst the participants is another simple strategy that can help prevent the participants from viewing you as the teacher or an 'outside researcher' who is only interested in collecting and analyzing your data. Ensuring that you and the group of participants can make easy eye contact with each other can enhance the frequency of interaction, friendliness, and cooperation (Johnson & Johnson, 2013). Lastly, if you are conducting multiple group interviews, try your best to keep the location and setting the same with each interview. This will help your adolescent participants settle into the space more quickly or easily over time.

Define Your Leadership Style

When conducting qualitative inquiry, adult researchers ultimately want adolescent participants to see them as different from other adults in their lives (e.g., a parent, a teacher, etc.). Yet, since adult researchers are likely much older than adolescent participants, Seidman (2013) cautioned that it takes a special type of sensitivity to be able to connect with young participants without being patronizing. Berg et al. (2013), known for their expertise in the field of counseling and group work, emphasized that the facilitator should consider positioning themselves as different from other adults in the ways in which they treat and interact with the adolescent group members. The authors warned that if you try to be "cool" and act like an adolescent in order to gain their approval, then this may create resistance from adolescents as they can "see right through" your attempt. You are not an adolescent. Acting like one is counterproductive to gaining their trust.

Similarly, your style of moderating the group discussion can also influence how adolescent participants respond to interview questions. In the field of group work, there are three general leadership styles a facilitator can embody. Initially described by Lewin, Lippitt, and White (1939), these styles are autocratic, democratic, and laissez-faire. An *autocratic* leader dictates the order of the group and determines all group policies and expectations without the involvement of the group members in decision making. A *democratic* leader sets group policies and expectations through group discussion and decision making and, in general, encourages group cohesiveness. Under this style of leadership, group members are encouraged to interact, cooperate, and be considerate of others. A *laissez-faire* leader plays a more passive role and does not participate in the group's decision-making processes (Berg et al., 2013; Johnson & Johnson, 2013). They simply sit back and watch how interaction unfolds. Adolescent participants will respond to each style of leadership differently, which will in turn, influence data collection.

Suggested Strategies. In order to facilitate a group interview environment that lends itself to eliciting rich responses, and especially if they are inquiring into sensitive topics, facilitators of group interviews should be genuine, caring, and open. When working with adolescents, Dillon (2010) encouraged participants to call her by her first name in order to help diminish her participants as seeing her as a figure of authority, and I, too, have adopted this strategy in my own work. I also pay careful attention to choosing attire that is non-intimidating and not too formal, and I avoid wearing an official name tag other than the school's official visitor pass.

Additionally, a researcher should reflect on the appropriate leadership style for facilitating a group interview with adolescent participants. Researchers should avoid autocratic leadership exclusively. Although the direct leadership of a researcher is necessary in order to execute each phase of research, when communicating with adolescent participants, a more

democratic approach may be helpful in establishing group cohesion and trust. With this approach, you can encourage participants to see you as a leader who values their experiences and acknowledges the risks they take in sharing their experiences aloud amongst their peers. Some of the additional strategies suggested later in this section, such as encouraging group members to collaborate to determine appropriate group expectations (i.e. group norms), lend themselves to a more democratic style of leading a group of adolescents.

Use Introductory Activities

In general, incorporating creative introductory actives can help adolescents gain insight into themselves and express their emotions (Veach & Gladding, 2006), create a safe and consistent environment, and provide opportunities for self-exploration. Facilitated as warm-up exercises, structured activities can promote interaction among members and can help speed up the group's cohesion by bypassing the hesitant, uneasy feelings of introducing oneself to the group (Yalom, 2005). Introductory activities need not be directly related to the research topic of the interview nor does data need to be collected in order for the activity to be meaningful and successful. However, activities that set the tone for the topic of group discussion can help participants ease into the interview. The quicker a group can reach the Performing stage, the stage of cohesion and shared meaning making, the more likely the researcher will be able to collect rich data in a timely manner.

Suggested Strategies. Some examples of introductory activities include movement exercises, written reflection prompts, and group rituals. Movement exercises can help to "alleviate tension, break down barriers, and energize the group as a whole in an expedient manner" (Veach & Gladding, 2006, p. 73). In my own experience in working with children and adolescents, I have found younger children to be more open to movement activities. Adolescence is a time of development in which youth are generally more awkward or uncomfortable in their

bodies. Their movements are more reserved, risking disproval of their peers. However, when carefully implemented and with appropriate humor, movement activities with adolescents can help create a group experience of purposefully feeling awkward and silly. I also encourage you, the researcher, to participate alongside your participants. This can create a shared, collective feeling of being awkward and silly together. It helps the group acknowledge and release feelings of nervous tension that typically accompany forming a group in which they may be asked to share their personal thoughts, feelings, and experiences with others.

Written reflection prompts can help promote self-reflection among adolescents (Peterson, 2008) and can help group members acknowledge their unique contributions to the group interview. An introductory writing activity can be focused on the topic of the interview in order to transition the participants to the interview experience and stimulate rich discussion (Colluci, 2007). In order to encourage reflection, the prompt should be open ended in nature and brief enough so that the participants do not experience fatigue or get the impression that they are completing an assignment (as they often do in a classroom). In order to avoid mimicking the classroom setting, the researcher can encourage participants to respond to a prompt in whatever ways are most comfortable for them (e.g., sentences, fragments, bullet points, poems, letters, drawings, etc.) and should remind participants that their responses will not be graded.

If the inquiry takes place over a series of group interviews, establishing group rituals can also support group cohesion as repetitive activities can promote a sense of unity among adolescents (Malekoff, 2004). They can act as buffers from the 'outside world' they were involved in before arriving to the group interview. In my own research with groups of gifted adolescent girls (Guthrie, Accepted), I spent the beginning 2-3 minutes of each session leading the participants through a short centering exercises in which they were invited to close their eyes, take a few deep breaths, and choose a few words to describe how they were feeling in the

moment. Participants recorded their responses silently and a few volunteered to share their reflections. This ritual helped create a sense of togetherness as they transitioned from their previous activities to our research setting.

Regardless of the type of activity, giving adolescent participants time to adjust to the group interview setting is crucial for promoting an environment in which they feel comfortable sharing responses aloud with the group. Gladding's (2016) *The Creative Arts in Counseling* (5th edition) offers an array of creative activities that can be adapted for group interviews in order to promote group cohesion, trust, and individual reflection. For example, Gladding (2016) shares how having adolescents make up skits that address topics in humorous ways can help promote a sense of empowerment and empathy among group members. Used as an introductory activity, the researcher can gain insight into adolescent perspectives and at the same time, promote a sense of togetherness and bonding among the group members. Lastly, involving adolescent participants in setting group expectations (see below) could serve as another introductory activity that promotes cohesion and trust among participants.

Encourage Effective Group Norms

As mentioned earlier, group norms amongst adolescents can be complex. However, regardless of whether or not the group of adolescents have pre-established group norms, encouraging appropriate behaviors and expectations at the beginning and throughout group interviews will support the group in working towards cohesion and trust. One of the most effective ways of implementing group norms is to define the group members' roles and expectations though group discussion (Johnson & Johnson, 2013). Issues of confidentiality and strategies for sharing and listening are some examples of expectations that can be stated directly and accepted by participants in the early stages of the research.

Suggested Strategies. In qualitative inquiry, establishing behavioral expectations is often covered in the consent stage of the interview. With groups of adolescent participants, having a group discussion about appropriate behaviors early on in the research is an effective way of encouraging and managing group norms that support rich meaning making. For example, when I have interviewed groups of adolescents, after I have re-introduced the purpose of the interview and confirmed minor assent to participation, we discuss and agree upon a set of *group guidelines* for participation. Inspired by Delisle and Galbraith (2002), I distribute copies of a list of suggested group guidelines that include statements such as, "Anything that is said in the group, stays in the group. We agree to keep things confidential," "We respect everyone's need to be heard," and "We realize that feelings are not 'bad' or 'good.' They just are. Therefore, we don't say things like, 'You shouldn't feel that way.'" As a group, we take turns reading these guidelines out loud to each other. Then, we discuss whether or not we would like to re-word, remove, or add any statements. Allowing participants to shape the group's expectations of behavior helps to diminish the power imbalance between myself, the adult researcher, and the adolescent participants. Once we have our final list of group guidelines, I encourage each participant to sign their name in recognition of their intention to uphold the group guidelines as best they can.

Regardless of how many interview sessions are scheduled, reminding participants of the group guidelines (i.e. group norms) before, during, and after each interview session can help participants uphold their commitment and feel safe under your leadership. If the topic of discussion brings up emotions in the participants, it is not uncommon for them to forget some of the guidelines stated days or weeks before. I suggest you keep a copy of the signed group guidelines on hand. If the behaviors of the participants start to shift away from those deemed necessary for cohesion and trust, a simple gesture to the document may be all you need to remind participants of appropriate ways to interact within the group setting. And, recall that in schools,

adolescents are used to adults setting and enforcing the rules. It is the administrators, teachers, and coaches that ultimately have control. But in qualitative inquiry, we ultimately want the power to be more balanced between interviewer and interviewee. Reminding participants of their co-constructed group guidelines can help prevent you from being seen as an adult who has more power and authority over the group.

Incorporate Humor

Incorporating humor is another strategy that can be helpful in promoting group communication and cohesiveness (Johnson & Johnson, 2013) and can be an asset in working with groups of adolescents (Malekoff, 2004). In general, humor has been found to promote group cohesion, provide insight into group dynamics, and reduce group tension (Bloch, Browning, & McGrath, 1983). It can enhance a sense of intimacy, belonging, warmth, and friendliness (Bloch et al., 1983). With respect to the group facilitator, Smith and Powell (1988) found that when group leaders engaged in self-disparaging humor (i.e. when the group leader was the target of her own humor), there was a decrease in group tension and an increase in participation and willingness for group members to share their opinions with the group. Similarly, Denison and Sutton (1990) claimed that the use of humor is most effective when it is initiated by higher-power members of the group. However, one should be careful to only incorporate humor that is appropriate and directed towards the goal of promoting group cohesion and trust. Humor that resembles teasing or belittling of a group member should be avoided as it may send mixed or harmful messages to the group that impede group's ability to connect or see the group leader as trustworthy (Smith & Powell, 1988).

Suggested Strategies. Especially with adolescents, the use of humor in group interviews can be a powerful tool to ease group related tensions and encourage group cohesiveness. Adolescents appreciate humor, and as Malekoff (2004) cautioned, an adult group facilitator

should be careful not to try to manipulate adolescents into behaving as "little adults," nor should facilitators "abandon the youthful spirit within themselves" (p. 26). Coming alongside adolescents' natural tendencies towards engaging in humor may help an interviewer facilitate cohesion amongst a group of participants. As the adult with the most power in the group interview setting, consider initiating self-disparaging or group related humor can promote transparency by helping adolescent participants see your "human-ness" (Bloch et al., 1983). Poking fun at yourself in front of the group may help the participants see you as an adult that is open and accepting towards imperfections. Depending on the topic of conversation, this may be particularly helpful.

Encourage Written Reflections in Data Collection

One method of increasing rigor in qualitative inquiry involves collecting data through a variety of methods (e.g., participant observation, interviews, surveys, etc.). When interviewing groups of adolescents–especially because their experiences are often socially rooted in their peers' experiences–using additional methods of data collection can help validate participants' responses and strengthen the analysis of the interview (Eder & Fingerson, 2001; Tracy, 2010). These can include field observations and single interviews (in conjunction with group interviews) as additional methods (Eder & Fingerson, 2001). Written reflections can serve as an additional method of data collection. Written reflections can serve as prompts for group discussion and help adolescents ease into sharing their thoughts, feelings, and experiences with the group. Additionally, it is likely that there will be times in which some participants are hesitant to share their thoughts, feelings, or experiences aloud with the group. They may feel comfortable writing them down on paper.

Suggested Strategies. Written reflections can be encouraged and collected at the beginning, during, or at the conclusion of a group interview. If encouraged prior to the group

discussion, a researcher can capture individual responses that have not yet been influenced by the group discussion. However, written reflections that are collected later, either during or after a group discussion, can also provide rich insight. Recall that social interaction in the group environment has the potential to create "high quality, interactive data" (Wilkinson, 1998) because participants often naturally build off each other's conversation through agreement, disagreement, or adding elaborated details to each other's comments. In practice, I have listened as participants commented, "I didn't write this down, but so-and-so's comment reminded me of a time when…" I have also watched participants write down additional thoughts as they listened to their peers share aloud with the group. Capturing adolescents' reflections prior to, during, and/or after interactions with others can help support robust data collection. In my experience, if the group displayed evidence of cohesion and trust, reflections that are written down during or after the group discussion are more elaborate and self-disclosing.

Before proceeding, I would also like to reiterate that when interviewing in the context of schools, it is important for the interviewer to remind participants that their written responses will not be judged for proper grammar. As stated earlier, I encourage adolescents to respond in any way they would like (e.g., sentences, fragments, bullet points, poems, letters, drawings, etc.). This helps to alleviate their conditioned response to assuming that I, the adult, will be grading what they submit to me.

Design Your Study to Benefit Participants

Another way to respond to the power dynamics between researcher and adolescent participants is to emphasize reciprocity, or in other words, a giving back to the participants in return for data collected. Eder and Fingerson (2001) claimed that a researcher's desire to collect participants' information without giving anything in return is a reflection of the researcher's privilege and power. When working with adolescents in schools, I encourage educational

researchers to avoid giving incentives or rewards for participation, unless the purpose of offering an incentive or reward is to support group cohesion[3]. The following suggestions, although simple in nature, can be enough to help increase reciprocity and decrease the researcher's privilege and power and increase group cohesion and trust.

Suggested Strategies. Reciprocity can take on many forms. For example, interviewers can begin to offer reciprocity with interviewees by being the kind of listener that takes participants seriously and values what they say (Seidman, 2013). Participants benefit from researchers that honor the details of their lives and experiences not only in the midst of the interview, but also in the writing up and dissemination of findings (Seidman, 2013). Group interviews and shared meaning making can also create experiences that benefit participants. Participants may leave with a greater sense of altruism or universality (Yalom, 2005).

For example, in my own past research with adolescent girls, at the conclusion of our five group interview sessions, I reserved time for participants to reflect and record what participating in the group interviews was like for them. In one study, (Guthrie, 2018), I simply provided the prompt "What I Know Now" to as a way of encouraging them to reflect and integrate the content that was shared in the group discussions. In sharing their responses with the group, participants thanked me for the opportunity to reflect on and share their experiences with others. In hearing their peers share aloud with the group, they reported feeling less alone in their experiences.

Consider how the overall design of your group interview study, your role and facilitation style, and the activities you incorporate into the group interviews may benefit adolescent

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[3] For example, I once gave t-shirts to participants of one of my studies (Guthrie, 2018). The study was imbedded in a five-session evening activity of an academic residential summer program and involved teen-friendly yoga, relaxation, journaling, and group discussions. The t-shirts displayed the activity's logo and were intended to (1) give the participants something comfortable to wear during our five-sessions and (2) create a tangible sense of connection and belonging among the participants.

participants. Being an adult who listens and shows deep interest in their thoughts, feelings, and experiences can create a sense of validation and worth that they may not experience in interactions with adults in academic settings. Depending on the topic, making connections among participants by linking their experiences to one another has the potential to create a sense of belonging amongst adolescents.

Implications for Researchers and Teachers of Qualitative Research Methods

For researchers and teachers, the strategies mentioned in this article serve as suggestions for designing qualitative inquiry with adolescents that go beyond introductory approaches often included in introductory qualitative research texts. Some of the suggestions would undoubtedly be included in a research proposal (e.g., using introductory activities), but others may go overlooked in the design process (e.g., leadership style and incorporating humor). In my work with adolescents, I have found it is *both* the formal, research designed activities *and* the small, more nuanced gestures that create space for rich meaning making.

Teachers of qualitative research methods in education can use information presented in this article to inform their qualitative pedagogy. According to Preissle and deMarrais (2011), qualitative pedagogy should incorporate "learning-by-doing" experiences that mirror the ways qualitative research is practiced. Class activities such as personal reflection activities and engaging in ethnographic exercises can encourage graduate students to consider their roles as qualitative researchers inquiring into the lives of adolescents in schools.

Personal reflection activities can challenge adult researchers to reflect back on their own adolescent experiences in school contexts. These reflections can then inform their subjectivity statements. A researcher's subjectivities, according to Preissle (2008), "may bias, unbalance, and limit endeavors, but they may also motivate and illuminate inquiry" (p. 846). The following questions may be helpful in guiding graduate students preparing to conduct qualitative inquiry

with adolescents: What did the notion of school and learning have for them when they were adolescents in school? What were their relationships like with teachers? How comfortable did they feel sharing their thoughts, feelings, and experiences with their peers? With adults? What type of 'power' did they experience in schools? Reflection activities that help adult researchers put themselves in the mindset of what it was like to be an adolescent may help them empathize with their participants. As the group interviewer, the more you can empathize with a participant, while at the same time remaining open and non-judgmental, the greater the potential the participants will trust you and self-disclose amongst the group.

Ethnographic activities can take on many forms. Researchers who do not spend a lot of time with adolescents may be far removed from adolescent culture. Finding time to volunteer at schools and observe students in the hallways, in classrooms, or in school parking lots can help researchers becom more familiar with current adolescent behaviors, mannerisms, and interests. Even observing adolescents off school grounds can provide insight into how they may respond to peers and adults differently (e.g., coffee shops, sports events, church groups). Or, after gaining permission from school personnel, graduate students can be assigned to observe adolescent students with their peers and adults in the classroom, in the hallway, or in the lunchroom. These activities can be embedded throughout the course as a way of teaching qualitative research methods through immersive experiences that have them acting as qualitative researchers (see Fontes & Piercy, 2000). Teachers can increase the rigor of these activities by requiring graduate students to record observational field notes (see Merriam & Tisdell, 2016) and write reflexive memos (see Annink, 2016). Then, graduate students can begin to make inferences by analyzing their observations. Guiding questions can include: How do adolescents respond differently to different adults? Where do you see power imbalances in their interactions with administrators, teachers, or peers? How do adolescents behave in different settings? How might the makeup of

the participants in the group influence participation, cohesiveness, and trust? These observations and inferences can help a researcher attend to how participants may interact and behave in a group interview.

Conclusion

Keeffe and Andrews (2015) proposed that when working with adolescents, a "greater depth of understanding is required for the researcher to listen carefully to the spoken and the unspoken, to identify and balance power relations, to collaborate with students as partners in research" (p. 357). Group cohesion and trust are essential to rich meaning making among group interviews with adolescents. Threats to cohesion and trust include unbalanced power in the relationships (either between researcher-participant or amongst the participants themselves), the presence of peer influence, and the risk of breaking confidentiality. However, the strategies mentioned in this article, when implemented carefully, can guard against these threats and ultimately create a group environment that supports social interaction and shared meaning making.

The suggestions from my own personal experience should be taken as just that–my own experience. My comfort level in working with adolescents has been influenced by my own experiences of working with students in the middle and high school classrooms, lunchrooms, and hallways, in addition to my responsibilities as an extra-curricular club leader and coach as well as from my research with groups of adolescents. Every group of adolescents is different, and you, the reader, have your own experiences from which to draw. Strategies suggested in this article should be considered as starting points for designing effective group interviews with adolescents and should be adapted and modified appropriately for the purpose of the research and topic of discussion.

References

Annink, A. (2017). Using the research journal during qualitative data collection in a cross-cultural context. *Entrepreneurship Research Journal, 7*(1), 1–17. https://doi.org/ 10.1515/erj-2015-0063

Barbour, R. S. (2007). *Doing focus groups.* London: SAGE Publications.

Berg, R. C., Landreth, G. L., & Fall, K. A. (2013). *Group counseling: Concepts and procedures* (5th ed.). New York, NY: Routledge.

Bloch, S., Browning, S., & McGrath, G. (1983). Humour in group psychotherapy. *British Journal of Medical Psychology, 56*(1), 89–97. https://doi.org/10.1111/j.2044-8341.1983.tb01535.x

Blumer, H. (1969). *Symbolic interactionism: Perspective and method.* Englewood Cliffs, NJ: Prentice Hall.

Colucci, E. (2007). "Focus groups can be fun": The use of activity-oriented questions in focus group discussions. *Qualitative Health Research, 17*(10), 1422–1433.

Delisle, J., & Galbraith, J. (2002). *When gifted kids don't have all the answers: How to meet their social and emotional needs* (2nd ed.). Minneapolis, MN: Free Spirit Publishing, Inc.

deMarrais, K. (2004). Qualitative interview studies: Learning through experience. In K. deMarrais & S. Lapan (Eds.), *Foundations for research: Methods of inquiry in education and the social sciences* (pp. 51–68). Mahwah, NJ: Lawrence Erlbaum Associates.

Denison, D., & Sutton, R. (1990). Operating room nurses. In J. Hackman (Ed.), *Groups that work (and those that don't): Creating conditions for effective teamwork* (pp. 293–308). San Francisco, CA: Jossey-Bass.

Dillon, L. (2010). Writing the self: The emergence of a dialogic space. *Narrative Inquiry, 21*(1), 213–237. https://doi.org/ 10.1075/ni.21.2.03dil

Dixon, C. S. (2015). Interviewing adolescent females in qualitative research. *The Qualitative Report*, *20*, 2067–2077.

Eder, D., & Fingerson, L. (2001). Interviewing children and adolescents. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 181–201). Thousand Oaks: SAGE Publications, Inc.

Erickson, E. H. (1980). *Identify and the life cycle.* New York: W. W. Norton & Company, Inc.

Finch, H., Lewis, J., & Turley, C. (2014). *Focus groups.* In J. Ritchie, J. Lewis, C. M. Nicholls, & R. Ormston (Eds.), *Qualitative research practice: A guide for social science students and researchers* (2nd ed., pp. 211–242). London: SAGE Publications Ltd.

Fontes, L. A., & Piercy, F. P. (2000). Engaging students in qualitative research through experiential class activities. *Teaching of Psychology, 27*, 174–179. https://doi.org/ 10.1207/S15328023TOP2703_03

Forsyth, D. R. (2006). *Group dynamics* (4th ed.). Belmont, CA: Thomson/Wadsworth.

Gladding, S. T. (2016). *The creative arts in counseling* (5th ed.). Alexandria, VA: American Counseling Association.

Guthrie, K. H. (2018). The weight of expectations: A thematic narrative of gifted adolescent girls' reflections of being gifted. Manuscript submitted for publication.

Johnson, D. W., & Johnson, F. P. (2013). *Joining together: Group theory and group skills* (11th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Keefe, M., & Andrews, D. (2015). Towards an adolescent friendly methodology: Accessing the authentic through collective reflection. *International Journal of Research & Method in Education, 38*, 357–370. https://doi.org/10.1080/1743727X.2014.931367

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *The Journal of Social Psychology, 10,* 271–299.

Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

MacKenzie, K. R., Dies, R. R., Coché, E., Rutan, J. S., & Stone, W. S. (1987). An analysis of AGPA Institute groups. *International Journal of Group Psychotherapy, 37*(1), 55–74. https://doi.org/ 10.1080/00207284.1987.11491041

Malekoff, A. (2004). *Group work with adolescents: Principles and practice* (2nd ed.). New York, NY: The Guilford Press.

Mayall, B. (1999). Children and childhood. In S. Hood, B. Mayall, & S. Oliver (Eds.), *Critical issues in social research: Power and prejudice* (pp. 10–24). Buckingham: Open University Press.

Mead, G. H. (1934). *Mind, self & society.* London: The University of Chicago Press, Ltd.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: John Wiley & Sons, Inc.

Mishler, E. G. (1986). *Research interviewing: Context and narrative.* Cambridge, MA: Harvard University Press.

Morgan, D. L. (2012). Focus groups and social interaction. In J. Gubrium, J. Holstein, A. Marvasti, & K. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (2nd ed., pp. 161–176). Thousand Oaks, CA: SAGE Publications, Inc.

Norris, A. E., Aroian, K. J., & Warren, S. (2013). Interactive performance and focus groups with adolescents: The power of play. *Research in Nursing and Health*, *35*(6), 671–679. https://doi.org/10.1002/nur.21509.Interactive

Peterson, J. S. (2008). *The essential guide to talking with gifted teens: Ready-to-use discussions about identity, stress, relationships, and more.* Minneapolis, MN: Free Spirit Publishing Inc.

Prasad, P. (2005). *Crafting qualitative research.* Armonk, NY: M. E. Sharpe, Inc.

Roulston, K. J. (2010). *Reflective interviewing.* London: SAGE Publications Ltd.

Roulston, K., & Liljestrom, A. (2010). Interviews with groups. In K. Roulston, *Reflective interviewing* (pp. 33–50). London: SAGE Publications Ltd.

Schutz, A. (1967). *The phenomenology of the social world.* Northwestern University Press.

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (4th ed.). New York, NY: Teachers College Press.

Smith, C. M., & Powell, L. (1988). The use of disparaging humor by group leaders. *Southern Speech Communication Journal, 53,* 279–292. https://doi.org/ 10.1080/10417948809372729

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. Bethesda, MD: The Commission.

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*, 837–851. https://doi.org/10.1177/1077800410383121

Tuckman, B. W., & Jensen, M. C. (1977). Stages of small-group development revisited. *Group and Organization Management, 2*, 419–427. https://doi.org/ 10.1177/105960117700200404

Veach, L. J., & Gladding, S. T. (2006). Using creative group techniques in high schools. *The Journal for Specialists in Group Work*, *32*(1), 71–81. https://doi.org/10.1080/01933920600978570

Wilkinson, S. (1998). Focus groups in feminist research: Power, interaction, and the co-construction of meaning. *Women's Studies International Forum*, *21*(1), 111–125.

Wilkinson, S. (2008). Focus groups. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 196–206). London: SAGE Publications Ltd.

Yalom, I. (2005). *Theory and practice of group psychotherapy* (5th ed.). New York, NY: Basic Books.

CHAPTER 3

"I HAVE MY CONFIDENCE…WHICH I DIDN'T HAVE BEFORE": THE INFLUENCE OF AN ALL-GIRLS ADVANCED MATH CLASS ON GIFTED ADOLESCENT GIRLS[4]

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[4] Guthrie, K. H. To be submitted to *The Journal for the Education of the Gifted.*

ABSTRACT

For many gifted and high ability adolescent girls, navigating the social terrain of peer acceptance

in classrooms can be challenging. Using symbolic interactionism and women's voice/experience

feminism, the purpose of this qualitative study was to understand the influence of an all-girls

advanced math class from the perspectives of a class of gifted adolescent girls and their teacher.

Data included student written reflections, two group interviews with students, two interviews

with the teacher, and two small group follow-up discussions with the students. Through

deductive and inductive analyses, I identified four key themes of influence: (1) the power of an

influential teacher, (2) an environment that encouraged supportive communication, (3) a sense of

freedom to struggle, and (4) a complex sense of confidence in math ability. These findings

indicate that single-sex classes may benefit gifted girls, especially in STEM classes, by

supporting meaningful engagement in the classroom. Additional comments from follow-up

discussions with the participants the following school year are included. The article begins with a

poetic transcription that I composed, based on the work of Glesne (1997), representing the

participants' collective voice. Direct quotes appear Tin italics.

Keywords: Gifted girls in STEM, Single-sex classroom, Sense of self, Classroom engagement,

Qualitative research, Interviews, Group discussions, Written reflections, Poetic analysis

Introduction

Before,
a math problem to be solved,
and others' opinions were voiced louder than mine.
Unsure if I would get the answer right or wrong,
I retreated.
Quietly.
  They know what to do! Just let them do it.

But what about me?
My ideas,
my methods,
my answers?
I kept them to myself.
I kept them quiet.
  I'll take my own idea off the table so that you can feel good.
You, the
  very, very smart
    boys in the class.
But, not just me.

Together, we kept quiet.
Our ideas.
Our methods.
Our opinions.
We kept them to ourselves
in order to be
  polite.

            But now,
            it is different.
            You are not in this class anymore.
            Now, I am surrounded by other girls.
            At first, I thought
              What are we going to do without the boys?

            But then I realized the *gift* of this space.
            This time to come together,
            to share similar experiences,
            to let go of having to prove myself.

Now,
I feel

> *comfortable.*
> *secure.*
> *equal.*

I am challenged.

> *There isn't anybody to default to.*

I take more *ownership* of my learning.
I have found how to challenge others respectfully
without worrying about being polite.

Now,
I have confidence,

> *confidence that I'm good in math.*
> *which I didn't have before.*

But, not just me.

Together

> *we're more confident.*

We are

> *freed up.*

We share
Our ideas,
our methods,
our opinions.
As a team, *we work together.*
We have learned how to

> *speak up with confidence.*

That is what I want to take with me
moving forward.
I have proved something to myself.

> *Yeah.*

I have proved something to myself.

Will I be able to keep this confidence next year?
I'm not sure.
I hope so.

The field of gifted education has a history of encouraging ability grouping for its positive

influence on gifted students' achievement, but there has been concern for how ability grouping

may affect students' academic self-concept. Gifted students grouped in advanced-level classes may experience a decrease in academic self-concept compared to being placed in an on-level class. Often referred to as the Big Fish Little Pond Effect (BFLPE), this theory describes how equally able peers may experience a *decreased* academic self-concept when they compare themselves to more able students, but an *increased* academic self-concept when they compare themselves to less-able students (Marsh, 1987; Marsh & Parker, 1984). The BFLPE emphasizes how gifted students may derive their self-concept by comparing themselves to their classmates (Rinn et al., 2010), and when gifted students are grouped together, there are fewer 'less-abled' peers with whom to compare themselves. Although the BFLPE is a common phenomenon addressed in gifted education, there is little mention of its effect in single-sex classrooms. How might both ability-grouping and single-sex grouping influence gifted adolescent girls' learning and sense of self?

In the Spring of 2017, I met Laura[5] at a local gifted education conference. She was a high school math teacher who happened to be teaching a math class of all gifted and high-ability girls. The girls had been accepted into their school district's innovative programming for gifted and high-ability students during elementary or middle school. The all-girls class itself happened by accident. There was no intention to have an all-girls math class at the school, even after trying to rearrange schedules to create a co-ed classroom. At the conference, Laura shared her experience of how having a class of all-girls was different from the other math classes she taught in the past. And not only was the class all-girls, but it was also an advanced math class in which the 9th grade students were gifted and high ability students taking mathematics that more closely aligned with 11th grade standards. I approached Laura after her presentation, and we discussed my

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[5] All names in this article have been replaced with pseudonyms.

research interests of the lives of gifted adolescent girls. We quickly acknowledged that deeper

inquiry with this group of students would be of interest for me and my research program. This

study was of particular interest to me, the researcher, because I was once a mathematically gifted

adolescent girl *and* a high school math teacher.

The purpose of this study was to better understand the unique influence of an all-girls

advanced math class from the perspectives of those involved, the teacher and the class of gifted

and high-ability adolescent girls. Each of the girls in the class had been accepted into one of the

local school district's enrichment programs–programs designed to emphasize students'

individual strengths and interests through rigorous coursework. In the district, these programs

served both gifted and high-ability students who were accepted via a competitive application

process. All of the participants were students who had been accepted into an individualized

program and had been identified as gifted[6] or having high-ability in certain academic areas. For

the sake of consistency, the term *gifted* will be used to describe all of the participants in this

study.

Through one-on-one interviews with the teacher and group discussions and written

reflections with the girls, the following research questions guided my inquiry: (1) How does an

all-girls advanced math class support or impede gifted adolescent girls' sense of themselves as

gifted learners?, (2) In what ways does a group of gifted adolescent girls perceive the classroom

environment of an all-girls advanced math class to enable learning?, and (3) In what ways do

gifted adolescent girls perceive an all-girls advanced math class to be different from co-ed

classes?

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[6] Gifted identification for the school district adopted a multiple criteria approach that considered
mental ability, achievement, creativity, and motivation. Documenting each participant's
individual scores and strengths were beyond the scope of this study.

The use of the first-person narrative throughout the article is purposeful, as the researcher plays an integral role in qualitative inquiry (Walcott, 2009). Wolcott (2009) posited, "Recognizing the critical nature of the observer role and the influence of his or her subjective assessments in qualitative work makes it all the more important to have readers remain aware of that role, that presence" (p. 17). In addition to following the American Psychological Association (APA) guidelines to writing clearly and concisely (APA, 2010) which dictates using "I" instead of the more formal "the researcher," I use the first person pronoun to enhance sincerity (Tracy, 2010) and help readers remain aware of my own subjectivity and placement in the midst of the experiences of the girls and their teacher.

Review of Literature

The following review provides context for this study by discussing literature on gifted girls' sense of self, gifted girls in STEM, and gifted girls in single-sex classrooms.

Gifted Girls' Sense of Self. Situated in the context of self-actualization, I use the phrase *sense of self* to describe the idea or set of ideas a gifted girl has about herself. Maslow (1962) characterized self-actualization as implying an "acceptance and expression of the inner core of self" (p. 36) and later described self-actualized youth as being those who can experience their selves fully, vividly, and selflessly (Maslow, 1965). For a gifted adolescent girl, self-actualization is the process of identifying who she is, her preferences, her potentials, and her gifts and talents. This happens over time and results in the revelation of her authentic self.

For gifted girls, getting to know their authentic selves can be difficult in the midst of adolescent development. Parents and educators may assume gifted adolescents who are high achieving have a high sense of self, but that is not necessarily the case. Gifted adolescents often have heightened internal comparisons that might not match up with how they appear to be

performing in class (Plucker & Stocking, 2001), and Tolan and Piechowski (2012) argued the

need to support gifted youth's sense of self, outside of academic achievement:

> Caught in an education culture that values only recognizable talents in specific domains,
> the unusually intelligent young person may lose track of other aspects of [herself] that are
> of critical importance to developing a sense of wholeness and a deeper understanding of
> [her] developing identity. (p. 5)

For many gifted adolescents, overwhelming attention on gifts and talents can leave them feeling

as if their performance in the classroom is all that matters.

A wavering sense of a self can inhibit a gifted girl from realizing her full potential. Reis

(2002) explored internal barriers, priorities, and personal decisions among gifted females and

found most gifted girls develop through adolescence without an understanding of self. Compared

to gifted boys, gifted girls have been found to have a lower self-concept (Reis & Park, 2001),

with their self-concept declining with each increase in grade level (Rudasill, Capper, Foust,

Callahan, & Albaugh, 2009). Gifted girls may also be more likely to deny their giftedness

(Swiatek, 1998). Some have found that gifted girls are more likely to attribute success to luck

rather than ability (Reis, 2002; Reis & Hébert, 2008; Reis & Park, 2001), whereas other research

has found gifted girls attribute success to reasons such as long-term effort and ability and failure

to a lack of effort and task difficulty (Assouline, Colangelo, Ihrig, & Forstadt, 2006). Knowing

that a positive sense of self is important to healthy social and emotional development, this study

investigated how gifted girls perceived an all-girls environment to be of influence.

Gifted Girls in Science, Technology, Engineering, and Math (STEM). Once an area

of study dominated by males, enrollment of females in STEM education has increased over the

years, but a gender gap still exists in some areas. The National Science Foundation (NSF; 2016)

found women earn the majority of bachelor's degrees in the biological, agricultural, social

sciences, and psychology, and men earn the majority of degrees in engineering, computer science, mathematics and statistics, and physics. The proportion of women receiving bachelor's degrees the computer sciences, mathematics, physics, engineering, and economics declined over these years 2000-2013 (NSF, 2016). Why are our talented girls not choosing STEM careers?

Underrepresentation of female students in STEM programs has been linked to females' lack of self-efficacy, or the belief in one's abilities. In a quantitative study with high achieving adolescents in math and science, Reis and Park (2001) found high achieving males felt better about themselves than high achieving females; high achieving females were more likely to regard hard-work as the reason for their success, and high achieving females believed teachers were more important in helping them decide to take advanced math courses than did high achieving males. Heilbronner (2013) surveyed participants ($N = 360$) who had competed in the nationally prestigious Science Talent Search. The author found that as undergraduates, males reported significantly higher self-efficacy scores in STEM than females.

Girls may also avoid STEM areas in education because of pressure to conform to traditional gender roles, and gifted girls are no exception (Sayman, 2015). Factors contributing to a gifted girl's interest and achievement in science and technology have been found to include differences in treatment and perceived expectations of girls compared to boys (Meadows, 2016). The desire for social acceptance and the need to 'fit in' is prominent in adolescence, thus creating a sense of tension between academic performance in the classroom and social capital among peers. Similarly, Kerr and McKay (2014) described how talented adolescent girls often fall victim to a "culture of romance" in which attention is focused more on attractiveness than intelligence. Yet, history's most eminent gifted women were found to have resisted the culture of romance (Kerr & McKay, 2014).

Two recent qualitative studies have explored how talented girls from diverse backgrounds describe their experiences in STEM education, highlighting reflections on participants' sense of self. In a qualitative study with adolescent Latinas attending a STEM academy, Sayman (2015) interviewed participants to better understand the role of resilience in their academic self-concepts. Working within a critical feminist framework, Sayman found the participants had lower self-esteem, compared their abilities to their male peers, and continued to struggle for academic equity despite the privileged environment of the STEM academy. One participant reported how she was scared to be "the stupid" one, and how it had always been the boys who were "really, really, really, really good at math and science" (p. 30).

Carlone, Johnson, and Scott (2015) conducted a qualitative study on science engagement among 13 girls over the span of three years (4th to 7th grade). The authors were interested in how the girls performed femininity, or proper ways of being a girl, in science class as influenced by ideological, organization, institutional, and interpersonal structures. They found participants minimized their differences to fit in amongst their peers, felt the pressure to please adults, and attempted to make themselves submissive and invisible. The authors also presented a longitudinal case study of one of the participants, Maribel (pseudonym), who was a first-generation immigrant to the United States. In 4th grade, Maribel was at the top of her science class, and although she desired to fit in amongst her peers, she was viewed as being successful as both "girly" and "scientific"' However, with each passing year, and despite her precociousness in science, Maribel's performance dropped. By the time she reached 7th grade, the authors concluded that it was more important for Maribel to perform "girl" than it was for her to perform "science." Although these qualitative studies (Carlone et al., 2015; Sayman, 2015) are not generalizable for a large population, their findings present unique student perspectives of what it is like to be a talented girl in STEM.

Gifted Girls in Single-Sex[7] Classrooms. Research on the impact of single-sex classrooms for gifted students is sparse, but two studies conducted in the 1990's explored the influence of an all-girls class on gifted or high achieving girls. Subotnik and Strauss (1995) compared classroom participation and achievement on the Advanced Placement Calculus BC exam among five groups of high school seniors at two schools: a publicly funded laboratory school for the gifted and an all-female independent school. The experimental groups were as follows: an all-female experimental group, females in co-ed classes, males in co-ed classes, an all-male experimental group, and females from an independent all-female school. Results found no significant differences in achievement among the all-female experimental group and students in co-educational settings. Yet, females from the all-female independent school were the most active in the classroom and scored significantly higher than females in the all-female experimental group. The authors noted differences in expectations and atmospheres between the all-female independent school and the laboratory school, and that simply grouping females together was not enough to increase achievement. The authors recommended an ethnographic study of the independent school's ambiance and instructional strategies to better understand the academic success of its female students.

In the second article, Stutler (1997) compared perspectives and behaviors of an all-girls advanced middle school algebra class to an all-boys class. Girls in the single-sex math class perceived a more nurturing environment, were not afraid to be competitive with each other, and the teacher found no evidence of the fear of success syndrome. The fear of success syndrome, or the Horner Effect (Horner, 1972), describes a case in which a female unconsciously and consistently lowers her ability in order for the male to 'win.' In the single-sex math class, the

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[7] For the purposes of this article, the terms *sex* and *gender* may be used interchangeably to describe *girls* and *females* to be consistent with the terms used in the research cited. Although I acknowledge the differences between sex and gender identification, the literature in review does not.

girls were often observed exhibiting un-feminine behaviors, including untucking their shirts, pinning up their hair, leaning back in their desks, and working on the floor. They were louder in the all-girls class than observed in co-educational settings. However, before walking out the door, they were quick to tuck in their shirts, smooth out their hair, and check their appearance in the mirror. The results of a self-report questionnaire found the girls in the single-sex math class were more comfortable asking questions and believed their overall understanding of math concepts was greater in a single-sex setting. The qualitative purpose of this study study seeks to contribute additional understandings of how gifted adolescent girls perceive an advanced all-girls math class.

Methods

The following section discusses this study's design, theoretical perspectives, procedures, and participants. To enhance qualitative transparency, I then discuss my role and relationship to participants as the researcher, data collection procedures, my multiple analytic approaches, and how I have addressed qualitative quality.

Research Design

The primary methods for this study were semi-structured interviews and group interviews[8]. A semi-structured interview approach with the teacher allowed for me to ask questions out of order or initiate questions and follow-up questions based on her responses (Roulston, 2010). Group interviews are often recommended when interviewing children and adolescents for many reasons. Eder and Fingerson (2001) recommended group interviews with children and adolescents because the group environment reflects how they experience peer culture, encourages interaction among group members to elicit more accurate accounts since they have to defend their statements in front of their peers, and can help decrease power differentials

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[8] In this article, I use the terms *group interviews* and *group discussions* interchangeably. With the adolescent participants, I referred to our time as 'group discussions' in order to minimize research jargon.

with the adult researcher since the number of participants outnumbers the researcher. Group interviews were appropriate methods because they allowed for more interaction among participants rather than simply asking questions of each group participant in turn (Wilkinson, 2008). The decision to include written reflections from student participants was intended to be an additional method of data collection and increase the validity of the participants' responses.

Theoretical Perspectives

This study was informed primarily by interpretivist and feminist perspectives: symbolic interactionism and women's voice/experience feminism.

Symbolic interactionism. Stemming from the interpretive tradition, symbolic interactionism claims people respond to objects and symbols based on the meanings they place on those objects and symbols. How we interpret the world defines how we interact with it, and in turn, our interactions inform additional interpretations and meanings (Mead, 1934). Because we are social beings, we can define and organize ourselves to confirm our socially defined roles or expectation of behavior (Blumer, 1969; Mead, 1934). To a symbolic interactionist, meaning is a product of social interaction (Blumer, 1969; Mead, 1934). Adolescence is a period of development in which the awareness and influence of peer groups is strong. An adolescent girl often defines herself in relation to her peers, and thus her belief in herself is interpreted in the midst of social interaction. For this study, how the participants made meaning of the intersection of being *gifted* and a *girl* served as the primary perspective through which the study was designed, carried out, and interpreted.

Women's voice/experience feminism. From the critical traditions, women's voice/experience feminism has been heavily influenced by the work of Simone de Beauvoir and others who believed women's notions of self and relationships to the social world are fundamentally different from men's (Bernard, 1987). Prasad (2005) summarized two of the goals

of the tradition as: (1) to recognize women's experiences are different from men's and (2) to privilege women's voices and identities. Taking this feminist perspective also influenced my methodological strategies by increasing the researcher/researched connection (Sprague, 2016). Sprague (2016), known for her work with feminist methodologies, claimed that instead of working to maintain a sharp dichotomy between the researcher and the researched, feminist qualitative researchers choose to emphasize the connections between them. Since I, too, had been a mathematically gifted adolescent girl and a female high school math teacher, I chose to disclose some of this information to participants in order to help me be seen as less of an 'outsider.' By recognizing our connections, I was less likely to objectivity my participants throughout the design, data collection, data analysis, and writing stages of this study (Sprague, 2016).

Participants

Participants included the teacher of the class and all ten 9th grade gifted and high-ability students in the class. The teacher, a veteran in her field, had been teaching for 28 years. With multiple advanced degrees in mathematics education, she had experience of both teaching middle and high school mathematics and once held an administrative role when she helped open a non-traditional school. Previously, Laura had taught middle school mathematics at one of the high school's feeder schools. She had taught all of the students who made up the all-girls class the year before, but in middle school, the classes were larger and mixed gender. Her relationship with these students was unique, as she was able to compare her perspectives of how the all-girls class had influenced the students compared to her experience of having them in a co-ed classroom the previous year.

The student participants were girls who participated in the school district's enrichment programs for gifted and high-ability students through the district's application process. In middle

school, all but one of the participants were a part of a STEM program for gifted and high-ability students that focused on infusing creativity into the curriculum in addition to the emphasis of science, technology, engineering, and mathematics. At the high school level, the girls were able to choose between continuing in a STEM program, choosing a program more geared towards Advanced Placement and International Baccalaureate diplomas, or both. Nine of the ten girls were White, and one was of Lebanese origin.

Procedures

After gaining approval from my institutional review board and the board of education to which Laura's school belonged, a recruitment video and email were distributed to the students and parents of Laura's class during the last week of the 2016-2017 academic school year. Consent forms were distributed and collected by Laura, and upon turning in their consent forms, student participants received a voluntary written reflection handout that they could fill out prior to our group discussions. The written reflection handout mirrored the group discussion questions (Appendix) and gave participants an opportunity to respond to questions individually prior to our group discussions. The handout included a warm-up activity on the 'ups and downs' of being gifted (see Delisle & Galbraith, 2002), and a list of the reflection prompts is provided in the Appendix.

Over two consecutive days, I conducted two interviews with Laura and two group discussions with the students in her class. Each day, I first interviewed Laura in her classroom during her planning period, a time where we could talk privately, uninterrupted. Then, I interviewed the group of girls the following class period as that was the time they were regularly scheduled to be in Laura's class. Since this was the last week of school, many of the students had already completed their course examinations, and thus the research study did not interrupt instructional time.

The two one-on-one semi-structured interviews I conducted with the teacher each lasted approximately 45 minutes. An interview guide was created (Appendix) that included specific topic questions and probes. The two student group discussions lasted approximately 45 minutes. Because the girls had been with each other for the entire school year, they knew each other well, and interaction among the participants came naturally. I acted as a moderator and encouraged discussion amongst the participants. A group discussion guide (Appendix) was used to help stimulate discussion in addition to prompting the girls to consider on what they wrote in the written reflection handout. Each participant wrote her chosen pseudonym on her written reflection handout, and I collected the handouts at the end of the second group discussion. In the case that a student did not care to choose a pseudonym, I selected one for her.

Later, during the following 2017-2018 academic school year, I had the opportunity to revisit the participants and talk with them about what it was like to transition back into a co-ed advanced math class. Permission was granted to revisit the participants via the school district, and additional consent forms were collected. Two follow-up discussions, lasting approximately 35-45 minutes, took place mid-way through the following school year with six of the original ten adolescent participants. These follow-up discussions were broken into smaller groups (e.g. two groups of three) so that I could probe more deeply into their experiences. I wanted to ensure that each girl had time to share their reflections aloud in the time we had allotted. I prepared a follow-up discussion guide (Appendix) to use in each discussion. The discussions were scheduled before and after school in Laura's classroom so that the girls would not miss any instructional time.

Researcher Role and Relationship

I came to this study with my own experiences of being a high school math teacher. By coming into relation with my participants, I acknowledge that I, too, was part of the study's landscape (Clandinin, 2013). The ways in which I have witnessed how gifted adolescent girls

behave in co-ed classrooms and my past experiences of conducting qualitative inquiry into the lives of gifted adolescent girls have shaped how I approached the study and how I interacted with the teacher and participants.

My role and relationship with Laura resembled that of a colleague. Our discussions were shaped by our shared experiences of teaching high school math and working with gifted adolescent girls. My role and relationship with the student participants were different. In order to minimize the power differential between myself and participants, I conducted my inquiry in a group environment in which I played the role of non-expert. I was also less concerned about getting all of my interview questions answered and more concerned about understanding the students being interviewed (Eder & Fingerson, 2001). After reviewing the purposes of the study and confirming minor assent to participate in the study, I encouraged each participant to create her own pseudonym and only volunteer responses they were comfortable sharing. I sat amongst the girls during the group discussions, and they were encouraged to call me by my first name which helped minimize the girls seeing me as a teacher who might judge their responses as being right or wrong.

Data Collection Procedures

Audio files from the teacher interviews, student group interviews, and small group follow-up discussions were transcribed verbatim except in the case that several girls spoke at the same time in response to a question or in talking with each other. When this happened, which was seldom, a summary of what was shared was noted on the transcript. Adolescent idioms were included in the transcription except for cases in which too many idioms (e.g., "like") made the statements difficult to read. To enhance credibility (Tracy, 2010), the transcripts from the two interviews with Laura were sent to her to review, and she did not request any changes. Due to the summer break, I was unable to meet with the girls in order to member check the group discussion

transcripts. The written reflection handouts, that included a brief introductory reflection on the 'ups and downs' of being gifted and six open-ended questions that mirrored the group discussion questions, were collected at the end of the second group discussion and electronically scanned. Data also included reflexive research memos recorded after each set of interviews and group discussions.

After data were collected, data were imported into MAXQDA 12 for Mac (VERBI Software, 2016), a qualitative data analysis software, to help manage the organizing, exploring, interpreting, and integrating of the data (Gilbert, Jackson, & Gregorio, 2014). Additional reflexive memos were recorded throughout coding and analysis. All reflexive memos were created in or imported into MAXQDA 12 for Mac.

Analysis Procedures

My analytic process first began in the field when I interacted with participants. Since memos have been found to help clarify thinking, articulate assumptions, and facilitate the study design (Birks, Chapman, & Francis, 2008), at the end of each afternoon with participants, I recorded a reflexive memo of my experience that included initial impressions, curiosities and questions, and big ideas. I also recorded memos after transcribing the data that contained initial notes of patterns and ideas of potential themes. The following analytic procedures describe my process for making sense of the initial group discussions with the participants, their written reflections, and the interviews with their teacher. The follow-up discussion data was not included in this analysis as the purpose of following-up with the participants was meant to provide insight as to how the initial findings of the influence of the all-girls math classroom re-surfaced among the participants during the following school year.

After the data were imported into my qualitative data analysis software, I began several rounds of open coding that included value, description, and in-vivo codes (Saldaña, 2013). Then,

I referred to Freeman's (2017) categorical mode of thinking and Galman's (2013) method of creating deductive and inductive *buckets*, or categories, to both code data items and organize codes. Deductive buckets were drafted after I re-examined the study's conceptual and theoretical frameworks. Inductive buckets were created after my rounds of open-coding, and these buckets included categories of potential codes and patterns. Both sets of buckets were operationalized, and after re-reading the data, the buckets were revised, and codes were organized according to each bucket. The buckets then became thematic categories representing the data. Table 3.1 provides descriptions of the revised deductive and inductive buckets or thematic categories. Table 3.2 displays a coding map that includes the thematic categories (or buckets), codes, and sub-codes and their relations to one another.

Table 3.1

Descriptions of Final Deductive and Inductive Buckets

Type of Bucket	Bucket Title	Description: Bucket may include…
Deductive	Symbolic understanding of "gifted"	Teacher and student statements that reflect how participates relate to, understand, or describe what it means to be "gifted."
	Shared meaning making	Examples of interactions or statements of the student participants that reflect their shared meaning. This may be when others agree, disagree, or add on to others' responses.
	Classroom environment	Statements about the class norms, the small class size, the teacher's approach to teaching, and the students' perceptions of how student learning is valued by this teacher. Statements about how students feel they can express themselves, statements related towards boys, how the smart boys are no longer in the class, and how the participants are not worried about how others will view them when they solve problems on the board.
	Perspectives of gender	Statements from teacher or students relating to gender, gender norms, and expectations of being female. Includes statements related specifically to giftedness and gender, traits and behaviors of gifted girls (examples or counterexamples), and gifted girls and attribution theory.
	Lessons learned	Statements about teacher reflections, influence on teaching, learning, self-concept.
	Sense of self	Statements about how students viewed math in middle school, now during/after experiencing this class, and related to future academic experiences. Statements about how students view themselves as gifted girls and/or gifted students. Teacher's statements about how she sees the girls viewing themselves.

Table 3.1

Descriptions of Final Deductive and Inductive Buckets (Continued)

Type of Bucket	Bucket Title	Description: Bucket may include…
Inductive	School programs	Statements about how the middle school program influenced teaching, how the middle school program influenced student learning, and the stigma between belonging to the different middle school programs. Statements about high school gifted programs of choice.
	Feelings of future	Statements about stress about future academic planning, determining programs of choice, wanting to be on the 'right track' for certain college programs, careers, etc. Statements about parental attitudes/influence on future decision.
	Student traits, behaviors, and relations	Statements that discuss the traits, aptitudes, and behaviors of the students. Statements of how participants relate to each other, how they communicate, and how they support one another. Statements about the students' abilities to think "creatively" in math.
	Reactions to all-girls class	Statements used to describe teacher, student, or others' reactions to an all-girls class.

Table 3.2

Coding Map of Thematic Categories, Codes, and Sub-Codes

Second Iteration: Potential Themes		
A. Lessons Learned	D. Symbolic Understanding of "Gifted"	H. Student Traits, Behaviors, and Relations
B. Perspectives of Gender	E. Feelings about Future	I. Classroom Environment
C. Students' Beliefs in Self	F. Reactions to All-Girls Class	J. School Programs
	G. Shared Meaning Making	K. Miscellaneous Codes

First Iteration: Codes (sub-codes are listed in parentheses)		
A. influence (on learning, on teaching, on sense of self, on attitude towards math)	D. teacher perspectives of "gifted (home and family, teacher feels students feel pressure)	H. adolescent drama
A. transition	D. stressful being gifted	H. communication
A. change	D. restrictions due to talents	H. creativity
A. fairness	D. see things differently	H. girls' achievement
A. advice for other teachers	D. effort/work (sub-codes include:	H. girls' relation to each other
A. confidence	(work load/hard work, "we just	H. imposter syndrome
A. feelings of being in the class (relational, comfortable, wants co-ed, equal, weird, accepted, cared for, smart, confident, strong, secure, connection)	try harder")	H. peer relations
	D. respect	
	D. expectations (expectations in this class vs. others)	I. unique classroom characteristics (unique classroom environment, relaxed, challenged)
A. emotional needs	D. learning opportunities (better future, challenged, better education)	I. support (from parents, from other educators)
A. next year (teacher reflection of the year, student thoughts of next year)	D. grouping	I. relationships (teacher relationship to students, student relationship with teacher)
A. relationship	D. up of being gifted	I. class size (student belief of class size, class size and student behavior)
A. the teacher matters	D. down of being gifted	
	D. stigma of being gifted (separation, gifted and normal, label)	I. competition (lack of competition in here, competition from other peers)
B. awareness (student awareness, teacher awareness)	D. student perspectives of gifted girls	I. setting norms
B. opportunity		I. students' perspectives of teacher
B. compared to boys		I. teamwork
B. gender perspectives	E. mapping out future (so many options, closing the wrong door, choosing enjoyment or academics)	
B. girls in STEM		
B. how class is different than co-ed classes		J. high school program (extending experiences beyond math class, program of choice, scheduling of class, support for students in program, choice in high school)
B. obstacles for gifted girls	E. teacher hopes confidence sticks	
B. worry about all-girls	E. influence on future career	
	E. uncertainty	
	E. stress about future	J. past experiences of schooling (middle school program)
C. not better than anyone	E. social expectations in future	
C. pride		
C. student self-concept		
C. teacher belief of students	F. teacher/adult reactions	K. teacher background (professional development, teacher attitude, teacher's experience, timeline of schooling)
C. teacher beliefs of self	F. student reactions (jealous, chosen)	
C. teacher perspective of student self-concept		
C. attitude towards math	G. student agreement	
C. what others think	G. student disagreement	

To answer the study's research questions, thematic analysis was chosen as the primary analytical approach since themes represent patterned responses or meanings from the data in relation to the research questions (Braun & Clarke, 2006). The defining and naming of potential themes was influenced by Ryan and Bernard's (2003) recommended strategies of looking for repetitions, transitions, and similarities and differences. Once themes had been defined and redefined, I created a conceptual cluster matrix (Miles, Hubrium, & Saldaña, 2013) to organize quotes from transcripts and written reflections by theme. To support the feminist underpinnings of my research, I preserved the voices of the girls, adding little of my own interpretation, and prioritized their voices in the dissemination of my findings.

Lastly, I conducted an alternative poetic analysis to the data, one strategy for increasing rigor in a qualitative study (Tracy, 2010). Some analytical approaches, including the categorical and thematic approaches mentioned above, are more reductionist in nature where inquirers attempt to break apart data to smaller and smaller pieces to understand the essential building blocks of meaning. A poetical approach, on the other hand, reaches "beyond a search for knowledge or meaning into the sensual, efferent and afferent, difficult-to-grasp, or to put into words, experiential world" (Freeman, 2017, p. 73). With the introductory poem, readers were invited to join in, placing their own feelings, reflections, and experiences alongside the poetic transcription (Glesne, 1997). I predicted that some female readers may be able to relate to the participants' collective voice and experience regarding how they felt as adolescents in the classroom. This form of re-presentation can offer a space where researchers, participants, and audiences can relate and make sense of lived experiences together (Freeman, 2017).

Before constructing the introductory poem, I created two rules. First, I could pull quotes from anywhere in the transcripts and written reflections. Second, I wanted to highlight direct quotes in italics in order to preserve my participants' words. With these guidelines, I aimed to

create a poem that represented the collective voices of the girls and their teacher. As a result, the poetic transcriptions create a third voice that represents a combination of myself, the researcher, and Laura and her students, the participants (Glesne, 1997).

Qualitative Quality

Traditional topics of quality research, such as objectivity, reliability, and generalizability, are often irrelevant to qualitative inquiry (Tracy, 2010). Instead, the quality or validity of the present study is reflected in its worthy topic, rich rigor, sincerity, credibility, resonance, and ethical considerations–criteria that represent quality and the 'end goal' of qualitative research as described by Tracy (2010). These criteria have also been described by others in the field (e.g. Creswell & Miller, 2000) as ways to increase validity in qualitative research.

Worthy topic. Tracy (2010) deems a worthy topic as a topic of research that is relevant, timely, significant, and interesting. Gifted girls have been considered an at-risk subpopulation of gifted students, and chapters dedicated to the underachievement of gifted females can be found in introductory gifted education textbooks (e.g. Davis, Rimm, & Siegle, 2011). Some scholars have dedicated their efforts to studying gifted girls (e.g. Kerr, 1997; Kerr & McKay, 2014; Reis, 2002; Reis, 2003) however, there is limited recent research dedicated specifically to voicing the needs of gifted adolescent girls.

Rich rigor, credibility, and resonance. Rich rigor was achieved through complexity of the study's theoretical perspectives, the variety of data collection to include multivocality, and alternative approaches to analysis. I avoided taking a critical feminist approach with the initial design of the study in an attempt to distance myself from a priori assumptions (Freeman, deMarrais, Preissle, Roulston, & St. Pierre, 2007) of the experiences of the girls. However, after data collection and initial analysis, approaching analysis using a critical feminist framework was appropriate in order to place significance on the girls' voiced perspectives. Multiple analytic

approaches enhanced my analysis of the data (Freeman, 2017) and the study's credibility and resonance (Tracy, 2010). The poetic transcription introducing this article was included to promote empathetic validity. Dadds (2008) described empathetic validity as "the potential of the research in its processes and outcomes to transform the emotional dispositions of people towards each other, such that more positive feelings are created between them in the form of greater empathy" (p. 280).

Sincerity. To increase sincerity, I kept the narrative in first person in order to remind the reader of my own subjectivity and placement in the landscape of the study. Sincerity was also enhanced by being transparent about the study's methods and limitations (Tracy, 2010) in addition to including my own personal interest in conducting the study and my personal reflections of the study's findings (Creswell & Miller, 2000).

Ethics. All procedures were approved and deemed ethical by an institutional review board and the board of education to which the high school belonged. My role among the participants was one that provided a safe space for the participants to reflect and share their experiences with me and the other participants. Taking measures to decrease power dynamics and increase reciprocity among the adolescent participants was considered in the design of this study. These choices reflect attention to relational ethics in which I was not simply a researcher out to simply collect data and get a 'great story' (Tracy, 2010).

Findings

Through deductive and inductive analysis, four key themes were found that described how an all-girls advanced math classroom influenced the group of girls' learning and sense of self compared to a co-ed environment. The themes included: (1) the power of an influential teacher, (2) an environment that encouraged supportive communication, (3) a sense of freedom to struggle, and (4) a complex sense of "confidence" in math ability. It may be helpful for the

reader to note that themes, although often presented separately from each other, are often interconnected and overlapping. The assemblage of themes identified represent structures that move, collide, and fold into one another (Freeman, 2017), thus, the reader will find traces of themes woven throughout others. A model of how the four themes interacted is displayed in Figure 1.
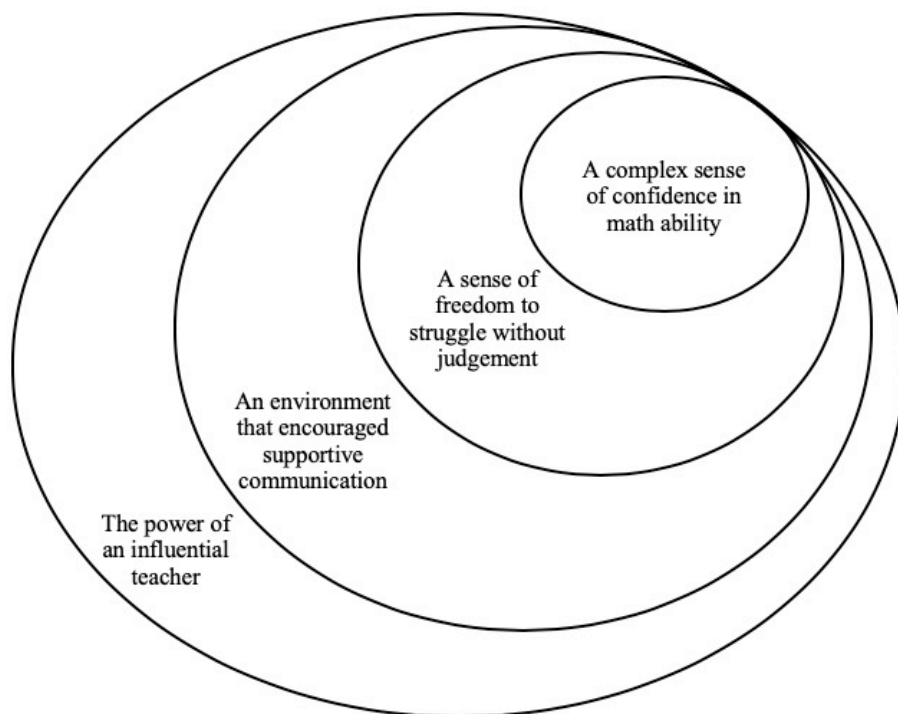

Figure 1. Visual Model of Themes

In addition, the classroom environment was a convergence of many influential factors including the fact that the girls had been together the previous school year in middle school, their teacher followed them to their 9th grade math classroom, and the class size of ten students was significantly smaller than usual for their school (typically 30 students). These additional influential factors contribute additional layers and webs of connection to the students' experiences of being surrounded by only girls and should not be dismissed from the context of this study.

The Power of an Influential Teacher

A common thread throughout all of the girls' responses and reflections was the positive influence of their teacher. When Laura first learned that the class schedule was not able to add any other students into the class, she prepared the girls to be aware of the unique opportunity they had been given. Part of her own dissertation research had been on observing how females work together in groups in math classrooms. She shared how she found her participants' abilities to problem solve were hindered by social constraints such as thinking that being polite meant that they had to let everyone else talk, they had to be nurturing, and in order to work together, everyone had to come to agreement. Laura shared how she found women are often quick to respond passively. She provided an example:

> "I'm sorry! You speak! I'll take my own idea off the table so that you feel good about your work." Literally. I will take my idea off the table and you put yours on there…When I came in here, I thought, "We can't have that. We can't have what we think is socially acceptable for most women in here. Like, this is the *one place* where all that shouldn't come into play. We should be able to think about manners and support and nurturing in a different way. (emphasis original; Teacher interview, May 17, 2017)

With Laura's guidance, the girls were encouraged to be aware of times in which they were 'taking their idea off the table' in order to avoid conflict and times in which it was okay to let others take the lead. She continued,

> I mean, sometimes it is okay to say, "Alright, I'm good with that. But I really would like to hear what everybody else has to say." And sometimes you miss an opportunity for your own ideas to go in a different direction. They stay aware of that. I try to stay aware of what's going on. (Teacher interview, May 17, 2017)

Laura clearly understood the challenges gifted girls often face in the math classroom, and she encouraged them to approach problem solving using mature communication.

Not only did Laura help support their social development as gifted girls, but Laura's teaching style influenced the girls' appreciation of learning. One example of Laura's pedagogy provided by the girls revolved around how the learning environment was less tense in the classroom because Laura was not a teacher who would move on with content if a student scored poorly on a test. One girl claimed, "She never gives up when we don't understand something; she helps us until we get it right" (Written reflection, May 18, 2017). The girls admitted to having high expectations for themselves, and at the same time, recognizing the high expectations of others including those set by Laura or their parents. In this class, they felt assured that no matter what, they would be able to reach those high expectations even if it took several attempts. Many[9] of the girls expressed anxious feelings about the likelihood that future math teachers may be complacent with students scoring poorly and not care enough about the student to stop and help her master the content.

In addition to teacher pedagogy, many of the girls felt the relationship with the teacher mattered. They were able to grow in "confidence" because Laura was a safe and nurturing mentor. For example, one girl shared how she believed Laura was different from other teachers: "She cares about us. Anything that we're going through. She cares about us individually… There's a lot of teachers who would not go out of their way in the way that she does. For every single student she has" (Group discussion, May 17, 2017). It seemed as though the level of care Laura extended to her students was reciprocated by the endearing ways the girls spoke of her. As

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[9] In the group discussions, the group of girls would often nod their heads or express words of agreement aloud. Adjectives such as *many* and *most* are used to indicate a perspective that was expressed as typical for the majority of the group, either through verbal, non-verbal, or written agreement. Adjectives such as *few*, *some*, and *a handful* are used to represent a perspective that was expressed by less than half of the group.

a result, the girls credited an increased sense of confidence in their math ability to Laura's influence.

An Environment that Encouraged Supportive Communication

The small, all-girl environment fostered more honest interaction among the girls. Despite the fact that some of these girls were not close friends outside of the classroom, they openly shared how much they respected each other. Augusta voiced, "All of us are really nice to each other. We're really open, we're really accepting to everyone's ideas. And we, like, challenge everyone else's ideas without being rude or just harsh" (Group discussion, May 17, 2017). She learned how to help people without being "pushy or trying to prove yourself better" (Group discussion, May 18, 2017). Laura agreed the girls were "really *supportive* of each other and really honest with each other–(short pause) about math" (emphasis original; Teacher interview, May 17, 2017).

Having supportive relationships was bolstered by their ability to communicate with each other. The girls seemed highly aware of how their communication was different in this class compared to other classes, and they were eager to share their observations. They reported being able to communicate "better" in an all-girls class since "there isn't as much intimidation" (Written reflection, May 18, 2017). When asked how this class of girls compared to some of her other advanced math classes, Laura shared:

> I think it's their communication. It's the way they talk to each other. It opens up this creativity for them. They don't shut each other down. Ever. And they don't do that to each other and they don't let each other do that to them. So, they just have these really rich conversations. (Teacher interview, May 27, 2017)

Many of the girls used the term "team" or "teamwork" to describe how they worked together in class. A handful of participants wanted to take "collaboration" and the importance of "teamwork" with them to their next year's co-ed math class (Written reflections, May 18, 2017).

Moreover, the girls had found ways to be supportive of each other without feeling the pressure to be overly polite and passive. The girls challenged each other in ways that might seem to 'shut each other down', but yet the girls did not take such statements as judgements and criticisms. Laura explained,

> …They're kind to each other, but if you didn't know that and walked in here, you could think, "Oh, these girls are being kind of rude." I mean, they snatch the pen from each other and [say], "That's not how to do it!" But that's just because they've worked hard to create some of those norms. (Teacher interview, May 17, 2017)

Even though their behavior could have been interpreted as rude, the girls' relationships had matured to a point where they could push past the boundaries of being 'polite' without having their feelings hurt.

A Sense of Freedom to Struggle without Judgement

When asked to describe how their all-girls class differed from other classes, the participants were quick to share how they felt they were under less pressure to be perfect. Being able to make mistakes without criticism from peers was a common thread throughout the group discussion and written reflections. In co-ed classes, the girls reported being more hesitant to share their answers or methods to solving a problem. They often feared getting something wrong, claiming boys in the class would be quick to judge or tease them. The following dialogue demonstrates how the girls described this sense of freedom to make mistakes and struggle:

Celeste: But this year, all the girls are together, and we work together as a team.

Clarissa: We struggle together.

Celeste:	Instead of a guy being like, "Oh no. No, no, no. That's not how you do – " I don't know.
Carmen:	We don't shut down an idea. We keep it open (other participants agree).
Celeste:	Yeah, we keep an idea open. [Rather than] listening to a guy who - who we think is more intelligent than us.
	…
Cinthya:	If you're doing it one way, we're like, "You could do it this way. But, can't you do it this way?"
Carmen:	We think more similarly–More similar than we do to guys…We don't have the exact same train of thought or anything, but it's… more like, we can see it better because we're talking with all girls. (Group discussion, May 17, 2017)

For Ivy and her classmates, the all-girls environment helped them feel that "it's okay to be wrong the first time" (Group discussion, May 17, 2017). This translated into willingness to solve problems in front of their peers. Several, including Laura, commented how going to the front of the classroom to solve a problem at the board seemed easier in the all-girls class.

Laura mentioned the girls behaved differently this year than the year before. In their middle school class, there were a few boys with strong personalities who often dominated conversations. But, in this class, she disclosed how the girls were no longer "quiet" as they had been the previous year: "…To watch them come *this* year with this new sort of way of thinking about math and be *freed up* from other people talking over them. Or, I don't know, not letting other people have the power" (emphasis original; Teacher interview, May 17, 2017). Laura noted that part of this growth may have been simply because the girls were getting older and maturing, but she also credited it to the all-girl environment.

In their co-ed middle school advanced math classes, the girls voiced how they felt other students were quick to criticize each other. They shared how there were a few boys who were often quick to judge and put-down others' work because the boys had made higher grades than the girls. The girls shared how they often had to remind the boys, "This isn't a competition" (Group discussion, May 17, 2017). When I asked if similar competition with grades happened in their all-girls class, they were quick to respond, "No! Not at all" (Group discussion, May 17, 2017). The pressure they felt to be the 'best' in other classes was absent from the all-girls class.

A Complex Sense of Confidence in Math Ability

Learning advanced math concepts is challenging, even for gifted and high-ability students. But in this class, the girls shared how they felt learning advanced concepts was easier in the all-girls class compared to other classes. With encouragement from Laura, they found ways of communicating with each other that supported an inclusive and safe classroom environment where they felt free to make mistakes. One participant shared, "I think it's just good to have people with similar minds that are girls in the same class. It makes me more comfortable and feel like I can do math" (Group discussion, May 17, 2017). Participants felt that being in this class helped them feel intelligent. One girl wrote, "In other classes, there are a lot of guys that make me feel like I'm not as smart as them" (Written reflection, May 18, 2017). When I asked the girls to reflect on one lesson or "big idea" they wanted to take with them in the future, many of them chose "confidence."

The small class size also helped the girls feel more confident. They cited the ability to have one-on-one help with Laura as helpful in discovering their own ways of exploring and understanding advanced concepts. For example, one participant spoke for the group and claimed,

> [The small class size] makes math so much easier. I feel like in 7th grade, I was in such a
> big classroom, and maybe math was more difficult, but now…we get that individual

attention and, I don't know, just the smaller classroom setting makes you feel like maybe

math is easier. And I don't know why. I don't know if any of y'all feel that way, but it's

easier to *me* being in a small environment… (Group discussion, May 17, 2017).

Her classmates agreed, with another girl stating that one of her biggest fears going into the next

school year was being in a class of thirty people and not being able to understand what was going

on.

Even though the girls claimed to have more confidence, they did not want their

confidence to be interpreted as arrogance. They attributed their success to dedication and hard

work, both with the math content and their interpersonal relationships. When comparing

themselves to other students in the school, the girls were adamant that they were not better than

anyone else, a criticism they felt was directed towards gifted students. Ivy opened up in the

second group discussion and shared,

I don't think anybody in this room is smarter than anybody in any other classroom in the

school. I think that we just try harder…we push ourselves harder. We have that mindset

to work… I mean, I come in here and I don't think I'm smarter than anybody or that I'm

talented in math. I think I work at math. I try hard with math. I go home, I do research. I

try to look up how to do it and make sure I know it. And if I get a 93 on a test and

somebody else gets a 100, I don't think, "Oh, they're smarter than me." I think, "I need to

try harder," because they obviously study more or paid attention more in class. (Group

discussion, May 18, 2017)

Another participant, Clarissa, chimed in stating, "For me, I really honestly don't see myself as

smart *at all*," and contributed most of her success in math to work ethic rather than a talent that

came "more natural" (Group discussion, May 18, 2017).

From the girls' comments, and additional statements in the written reflections, it was clear that their sense of confidence was dynamic and changed in different situations. For example, the girls seemed especially proud to share of times when Laura helped them venture outside of their assigned content standards to higher levels of mathematics. Yet, the girls confessed to being surprised they could understand advanced material. One participant told of how teachers or administrators would often visit their class for scheduled observations and added,

> I feel people are liked shocked when they come in here–and I don't know why, because it feels normal to me. I'm like, "We're not that smart!" (another participant chuckles) and [Dr. Laura] will be like, "You're doing Calculus now!" and it's like, "What?! Oh really?!" Ha ha ha. (Group discussion, May 17, 2017)

Laura, too, acknowledged how the girls' confidence seemed to waver despite the encouragement of other teachers and administrators. She commented on how the girls still doubted their abilities despite the progress they had made over the year:

> I think they worry a lot about what other people think. And they worry about–This is what they say, "People think we're smarter than what we really are." Yeah–Where does that come from?! Like, "They think you're smart because you *are* smart." But this–As *brilliant* as they are, and as *talented* as they are in *this* class–People brag on them and praise them and come by to see them–They *still* think there's a whole bunch of people out there better than them… [They think that] somebody's going to find out that, "Well, I didn't do well on this test." They just still have that anxiety around it with, I just–I just want them to be so confident. (emphasis original; Teacher interview, May 18, 2017)

Laura recognized that the participants were still adolescent girls who valued the opinions of others more than they should. "I try to be the opposite voice," she added (Teaching interview, May 18, 2017).

In summary, the girls both claimed to have a renewed sense of confidence, but were honest in sharing that at times, they still doubted themselves. As gifted adolescent girls, they wanted others to know that they were still "*normal*" girls (Augusta, Group discussion, May 17, 2017). And with watery eyes, Laura concluded our second interview by stating,

> I hope that when they go to their next math class, the don't give that power away to somebody else. I hope that they hang onto how awesome they are, and they know how smart they are, and they know they can do it. They don't let someone take over for them. That, as their math teacher, I hope that the level of math knowledge that–"I can do this. No matter what. I can do this."–doesn't go anywhere. (Teacher interview, May 18, 2017)

The following section discusses the meanings of these findings in how they relate to gifted education research and literature.

Discussion

The small, all-girl environment had a positive influence on the class of gifted adolescent girls. The central findings from this study can be summarized as:

- The teacher was purposeful about encouraging the girls, and she brought awareness to how they performed gender roles in the classroom. In turn, the girls were appreciative of the teacher's teaching style and her ability to create a non-threatening environment.

- The girls learned how to communicate effectively with each other. They learned how to respect others' ideas and challenge each other about how they approached advanced mathematical concepts.

- The girls felt a sense of freedom to make mistakes and struggle with challenging content. In previous classroom experiences, they were more afraid to go to the board, get a problem wrong, or score poorly on a test for fear of being teased or put down by others.

- The girls felt their confidence in their ability to work hard and excel in advanced math classes increased as a result of the all-girl environment, but the girls still doubted their talents and abilities at times.

From these findings, it is clear that the small, all-girl environment led by a supportive teacher encouraged more meaningful engagement in the classroom.

Laura's influence on the girls was significant. When addressing how their all-girls class was different from other classes, the girls sometimes struggled to share their opinions without mention of Laura's contributions. Her influence was interwoven throughout the study's findings. They girls seemed to look up to Laura not only as a teacher, but also as a mentor. Mentors and role models have been found to play critical roles in identity and talent development of gifted girls (Fahlman, 2004; Kauffman, Harrel, Milam, Woolverton, & Miller, 1986; Noble, Subotnik, & Arnold, 1999; Ryan, 2016; Speirs Neumeister, 2002). Having a teacher who not only understood common gender biases in STEM education but who also took initiative to influence the girls' mindsets should not be dismissed from the study's context.

But, as influential as the teacher was, she was not the sole factor influencing their perceptions. Despite the fact that Laura was the girls' 8th grade math teacher the previous year, they still felt the all-girl environment in 9th grade was more comfortable and relaxed. For example, one participant shared, "We can relax without having to worry…It's also so much calmer so we can actually ask questions and get work done without loud and annoying guys" (Written reflection, May 18, 2017). Numerous comments were made about how the girls valued their ability to work as a team and "go after it together" (Group discussion, May 18, 2017). In

adolescence, engaging in constructive criticism with peers can be challenging. Sometimes, gifted girls tone down their giftedness by speaking less in class or not answering questions even though they may know the answer (Mendaglio, 2012). But in this specific environment, the girls felt they did not experience the same pressures as they did in other classes. Their ability to communicate and challenge each other in the context of an advanced mathematics class facilitated an environment in which they were open to new and different ideas. The girls in this study seemed to behave similarly to the participants mentioned in earlier gifted studies of all-girl classrooms (e.g., Subotnik & Strauss, 1995; Stutler, 1997) in which they were more un-feminine in their behaviors, such as snatching pens out of each other's hands, being active and 'louder' during class, and not always resorting to being 'polite.'

Gifted adolescent girls do not often feel the freedom to make mistakes and struggle with advanced academics. For some gifted students, perfectionism in adolescence is an unfavorable outcome to their level of success in past performances. Spiers Neumeister, Williams, and Cross (2009) conducted an interview study with high school students attending a gifted residential academy. Participants shared how their earlier experiences of success in academics, often due to the lack of challenge, followed them as they grew older. One female participant in the study shared the following:

> After awhile everyone just expects you to be first. And suddenly when you have a hard day, or when you roll out of bed without make up on, everyone automatically thinks that there's something wrong with you. And that's difficult, that's very difficult, and then all of a sudden it seems like you're in a cycle or you're stuck in a trap of just having to be what you've always been. (p. 204)

Socially prescribed perfectionism, the internalization of the perfectionistic expectations set by others, has been linked to depression in children and adolescents (Christopher & Shewmaker,

2010). In this study, the participants found the small, all-girl environment to be an oasis from such judgement, and thus were not afraid to be vulnerable in their problem-solving attempts.

The girls' increased engagement translated into their beliefs that learning advanced concepts were easier in this class compared to others. The girls no longer felt 'dumb' in math, and with the right mindset, they realized they could learn anything as long as they worked hard. Some of the participants reported how their interest in math as a subject grew from being in the all-girl class. One girl told the group how the class had helped shape her change in career goals to work in fields that were more "math driven," such as economics and accounting (Group discussion, May 18, 2017).

The girls in this study were aware of how hard they worked to achieve good grades in this class as well as others. Their reasons for their success were contradictory to common research findings among gifted girls and attribution theory. Attribution theory (Weiner, 1985) describes the case in which a student attributes her successes and failures to ability, effort, task difficulty, and luck. The field of gifted education has a history of supporting the belief that gifted girls often attribute success to luck and failure to ability. However, the findings here support more recent research on attribution theory and gifted students (Assouline et al., 2006). The girls in this study attributed success to long-term effort and having a "knack" for it (Group discussion, May 18, 2017) and failure to not working hard enough.

Lastly, the girls' comments of how they felt they gained confidence from being in the class were often contradicted at other times in our discussions. Although the all-girl environment enhanced their confidence at times, the single-sex makeup of the class was not a 'magic ticket' to enhancing their sense of self. The participants were still adolescent girls, and they reported facing many obstacles outside of their all-girl math classroom (e.g., high academic expectations, social stigmatization for being gifted, and separation from their non-gifted peers; Written

reflections, May 18, 2017). Adolescents, in their constant search for belonging and acceptance, define themselves in relation to others (Erikson, 1980), and questioning themselves is part of the process.

In summary, with the support of their teacher and their fellow classmates, most of the girls ended the school year feeling that they had learned how to work hard and succeed in the advanced math classroom. Since many gifted youths begin to find their passions in adolescence, finding new ways to support adolescent girls who are talented in math or other STEM domains may be essential to increasing the presence of eminent women in STEM careers.

The Following School Year: Follow-Up Discussions with the Girls

After concluding the initial study and data analysis, the opportunity arose for me to revisit the participants the following school year when they were back in more traditional co-ed advanced math classes. In revisiting the participants, I wanted to see how the study's findings resonated with the girls the following school year. I was curious, did the girls still have their "confidence" and "teamwork" that they had wished to take with them? Now that they were 10th graders, how do they look back on their time in the all-girls class?

Six of the ten original adolescent participants participated in these follow-up discussions. Of the remaining four original participants who did not participate in the follow-up discussions, three parents neglected to respond to the additional recruitment email and one participant had moved away.

Findings. In January of 2018, the girls were quick to share how their new math class was much different than their class with Laura. For some, the classes had over 30 students, but others commented how their classes had around 20 and one said her class was small. They all had the same teacher, not Laura, but they all had the class at different times during the day. The culture of the classroom was different, and the girls described it as being more competitive and fast-

paced. Since the class was typically for 11th and 12th graders, the girls were quick to note that they were the youngest students in the class. Natasha shared how she remembered what it felt like to walk into the new class during the first week of school: "I went into it not knowing anybody and being like, 'Okay. I'm at the bottom of the totem pole here. Just like, keep your mouth shut.' It's not as comfortable of a classroom setting [compared to our class last year]" (Small group discussion, January 9, 2018). Others shared how they still felt scared to ask questions in front of the class for fear of looking "stupid" or "dumb." They did not want to be perceived as "annoying" to the older students in the class.

Hearing these statements led me to ask the girls to reflect back on our discussions we had had at the end of the previous school year. I asked them to rate how confident they felt *then*, in May 2017. I clarified 'confidence' as not just confidence in math but confidence in their ability to learn and perform complex mathematics or self-efficacy. I prompted them to rate themselves on a scale of 1 to 10, with 1 being low and 10 being high. All of the girls reported feeling as thought their confidence was at an 8, 8.5, or a 9. Then, I asked if their confidence was still the same, and I was met with several resounding "No's!" and nervous laughter. The girls rated their confidence as now being a 4, 5, 6 or 6.5. They knew the math content was challenging, but the added factors of feeling afraid to look stupid in front of others and having more "drama-filled" competitive classmates influenced their beliefs in their own abilities.

The girls described the "drama-filled" competitiveness as classmates being overly prideful and "show off-y" when they made good grades and condescending when the girls did not quickly understand a concept as easily as their classmates. In their new class, there was a "right" and "wrong" way to solve a problem, whereas in Laura's class, they were encouraged to find multiple ways of solving the same problem (Small group discussion, January 10, 2018). Augusta reiterated this as she compared this to the classroom culture they were able to create the previous

year in which the girls had found healthy ways of supporting one another while challenging each other at same time. Only one girl, Cinthya, reported that her class was different than this. Her class was very small, and she said how she instead had one older student whose questions took up so much time that she felt she was not getting all of the content she needed. She claimed, "I feel like it holds me back sometimes" (Small group discussion, January 9, 2018).

Ultimately, the girls reported how this environment uprooted the confidence they had worked so hard to build the year before. Clarissa commented, "It's crazy that we have to think about college when we're sophomores, but they want to go to the *same place* I want to go to. And I'm like, 'Do I have to be *that good* to get where I want to go?' Because I'm not" (Small group discussion, January 9, 2018). Augusta shared, "It's just kind of sad this year. I don't really have that confidence" (Small group discussion, January 10, 2018). It seemed as though they were constantly comparing themselves to others in their classes, especially in relation to the older boys.

To conclude our small group discussions, I asked the girls if they reflected on their time in their all-girls class, to which they admitted that they felt like they did not because they did not have time to. Their rigorous academic schedules and afterschool commitments kept them busy. However, after a few minutes of talking about how busy they were, the girls began to realize some insights and shared them aloud. Amanda shared how she felt she and another participant had been able to reproduce a "teamwork" mentality at their table with one other female student. Natasha felt she was able to take with her the ability to communicate and learn in different ways. Both Natasha and Clarissa commented how they felt they were inspired to set healthy boundaries when it came to home work and school work. Natasha elaborated:

> I learned it's okay to relax. That you might have to make sacrifices and push harder at certain times, but then you also get that time to calm down…Before [that class last year],

I used to think "No. That's not okay. I have to do it all *right now* and self-care and mental

health comes last." (Small group discussion, January 10, 2018)

They "cherished the memories" of the all-girls class, but they also vocalized how they knew that

future high school and college classes were not going to be like their all-girls class.

Implications and Conclusion

Increased engagement in areas of talent are important for supporting the development of

gifted adolescent girls. For many, early engagement can give gifted girls a head-start on the path

towards excellence and expertise, preparing them for their futures (Kerr & McKay, 2014). In

Kerr and McKay's (2014) summary of lessons learned from eminent women, they posited that

early academic and intellectual engagement in a field of study was critical for developing talent

into adulthood. And more strikingly, they claimed all of the eminent women began developing

their talents early in adolescence. Yet, in relation to the follow-up discussions, it is clear that

continued support for smart girls is critical for talent development.

Adult stakeholders should seek to understand the challenges gifted adolescent girls face

in the classroom, especially STEM classrooms that have traditionally been dominated by boys.

For gifted girls who have their sights set on pursuing careers in STEM, educators should

consider exploring, developing, and implementing best practices for increasing self-efficacy

among talented girls. Additionally, we should consider if and how these practices are sustainable

and lasting for gifted girls as they progress through adolescence.

The findings of this study suggest grouping gifted students by gender, assigning smaller

class sizes, and having an informed and encouraging teacher are key to increasing engagement

and supporting the confidence of gifted adolescent girls. The findings from the follow-up

discussions suggest that providing long-term interventions may also be key to sustaining

increased engagement. Although the girls made no mention of Laura's gender as being an

influential component, one can assume gifted adolescent girls, in general, may be more able to relate to influential women mentors. The amount of influence Laura had on the girls was significant to the participants. Kerr and McKay (2014) proposed that every smart adolescent girl needs an *other mother*–"a woman who shares her parents' values and dreams for her future but is often perceived as much cooler, smarter, and more sophisticated than her parents" (p. 156). Female mentors, or 'other mothers', who also have a passion for STEM related fields may be hard to find for many gifted adolescent girls. Educators, counselors, and administrators should consider entering into conversation with gifted girls to discover their unique needs. In my experience, I have found that these students are highly reflective of their experiences and aware of their needs.

Future research should consider experimental designs of grouping gifted adolescents not only by ability, but also by gender. Longitudinal studies may be able to better assess the impact of interventions and talent development of gifted adolescents.

Lastly, I cannot help but feel troubled when I re-read the concluding stanzas of the introductory poem of the girls' collective voice:

> Now
> I have confidence,
> > *confidence that I'm good in math.*
> > *Which I didn't have before.*
> But, not just me.
>
>
> Together
> > *we're more confident.*
> We are
> > *freed up.*
> We share
> Our ideas.
> Our methods.
> Our opinions.
> As a team, *we work together.*
> We have learned how to
> > *speak up with confidence.*

> That is what I want to take with me
> Moving forward.
> I have proved something to myself.
> > *Yeah.*
> I have proved something to myself.
>
>
> Will I be able to keep this confidence next year?
> I'm not sure.
> I hope so.

My follow-up discussions with the girls found that they did not admit to having the same confidence that they found in their all-girls advanced math class. Everything about me wanted the girls to be able to take what they had learned, practiced, and embodied during their time with Laura into other math classrooms. However, by taking time to meet with the girls the following school year, I hope that our discussions served as a reminder to them about how much they are truly capable of.

References

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Assouline, S. G., Colangelo, N., Ihrig, D., & Forstadt, L. (2006). Attributional choices for academic success and failure by intellectually gifted students. *Gifted Child Quarterly, 50*, 283–294. https://doi.org/10.1177/001698620605000402

Bailey, S., Burbidge, L., Campbell, P. B., Jackson, B., Marx, F., & McIntosh, P. (1992). The American Association of University Women report: How schools shortchange girls. Washington, DC: National Education Association.

Bernard, J. (1987). *The female world from a global perspective*. Bloomington, IN: Indiana University Press.

Bigler, R. S., & Signorella, M. L. (2011). Single-sex education: New perspectives and evidence on a continuing controversy. *Sex Roles, 65*, 659–669. https://doi.org/10.1007/s11199-011-0046-x

Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and processes. *Journal of Research in Nursing, 13*(1), 68–75. https://doi.org/10.1177/1744987107081254

Blumer, H. (1969). *Symbolic interactionism: Perspective and method.* Englewood Cliffs, NJ: Prentice Hall.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Carlone, H. B., Johnson, A., & Scott, C. M. (2015). Agency amidst formidable structures: How girls perform gender in science class. *Journal of Research in Science Teaching, 52,* 474–488. https://doi.org/10.1002/tea.21224

Christopher, M. M., & Shewmaker, J. (2010). The relationship of perfectionism to affective variables in gifted and highly able children. *Gifted Child Today*, *33*(3), 20–30.

Clandinin, D. J. (2013). *Engaging in narrative inquiry.* New York, NY: Routledge.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Qualitative Inquiry, 39*, 124–130.

Cribb, V. L., & Haase, A. M. (2016). Girls feeling good at school: School gender environment, internalization and awareness of socio-cultural attitudes associations with self-esteem in adolescent girls. *Journal of Adolescence, 46,* 107–114.

Dadds, M. (2008). Empathetic validity in practitioner research. *Educational Action Research, 16,* 279–290. https://doi.org/10.1080/09650790802011973

Davis, G., Rimm, S., & Siegle, D. (2011). *Education of the gifted and talented* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Department of Labor (n.d.). *Title IX: Education amendments of 1972*. Retrieved from https://www.dol.gov/oasam/regs/statutes/titleix.htm

Dixon, C. S. (2015). Interviewing adolescent females in qualitative research. *The Qualitative Report, 20*, 2067–2077.

Eder, D. & Fingerson, L. (2001). Interviewing children and adolescents. In J. Gubrium & J. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 181–201). Thousand Oaks, CA: SAGE Publications, Inc.

Erikson, E. H. (1980). *Identity and the life cycle.* Toronto: George J. McLeod Limited.

Fahlman, S. A. (2004). Perceptions of giftedness among gifted females in emerging adulthood. *Qualitative Research in Psychology, 1*, 285–306. https://doi.org/10.1191/1478088704qp019oa

Freeman, M. (2017). *Modes of thinking for qualitative data analysis.* New York, NY: Routledge.

Freeman, M., deMarrais, K., Preissle, J., Roulston, K., & St. Pierre, E. A. (2007). Standards of evidence in qualitative research: An incitement to discourse. *Educational Researcher, 36*(1), 25–32. https://doi.org/10.3102/0013189X06298009

Galman, S. C. (2013). *The good, the bad, and the data: Shane and the lone ethnographer's basic guide to qualitative data analysis.* New York, NY: Routledge.

Gilbert, L., Jackson, K., & Gregario, S. (2014). Tools for analyzing qualitative data: The history and relevance of qualitative data analysis software. In M. Spector, M. Merrill, J. Elon, & M. Bishop (Eds.), *Handbook of research on educational communications and technology* (4th ed., pp. 221–236). New York, NY: Springer Science and Business Media, LLC.

Glesne, C. (1997). That rare feeling: Re-presenting research through poetic transcription. *Qualitative Inquiry, 3*, 202–221.

Hart, L. C. (2015). Benefits beyond achievement? A comparison of academic attitudes and school satisfaction for adolescent girls in single-gender and coeducational classrooms. *Middle Grades Research Journal, 10*(2), 33–48.

Hart, L. C. (2016). When "separate" may be better: Exploring single-sex learning as a remedy for social anxieties in female middle school students. *Middle School Journal, 47*(2), 32–40. https://doi.org/10.1080/00940771.2016.1124660

Heilbronner, N. (2013). The STEM pathway for women. *Gifted Child Quarterly, 57*, 39–55. https://doi.org/10.1177/0016986212460085

Horner, M. S. (1972). Toward an understanding of achievement-related conflicts in women. *Journal of Social Issues, 28*, 157–175.

Kauffman, F. A., Harrel, G., Milam, C. P., Woolverton, N., & Miller, J. (1986). The nature, role, and influence of mentors in the lives of gifted adults. *Journal of Counseling and Development, 64*, 575–578. https://doi.org/10.1002/j.1556-6676.1986.tb01208.x

Kerr, B. A. (1997). *Smart girls: A new psychology of girls, women, and giftedness.* Scottsdale, AZ: Great Potential Press.

Kerr, B. A. & McKay, R. (2014). *Smart girls in the 21st century: Understanding talented girls and women.* Tucson, AZ: Great Potential Press, Inc.

Kessels, U., & Hannover, B. (2008). When being a girl matters less: Accessibility of gender-related self-knowledge in single-sex and coeducational classes and its impact on students' physics-related self-concept of ability. *British Journal of Educational Psychology, 78,* 273–289. https://doi.org/10.1348/000709907X215938

Kommer, D. (2006). Boys and girls together: A case for creating gender-friendly middle school classrooms. *The Clearing House*, *79*, 247–252. https://doi.org/10.3200/TCHS.79.6.247-251

Marsh, H. W. (1986). The big-fish-little-pond-effect on academic self-concept. *Journal of Educational Psychology, 79*, 280–295. https://doi.org/10.1017/CBO9781107415324.004

Marsh, H. W., & Parker, J. W. (1984). Determinants of student self-concept: Is it better to be relatively large fish in a small pond even if you don't learn to swim as well? *Journal of Personality and Social Psychology, 47*, 213–231.

Maslow, A. (1962). Some basic propositions of a growth and self-actualization psychology. In *Perceiving, behaving, belonging: A new focus on education* (pp. 177–200). https://doi.org/10.1037/14325-004

Maslow, A. (1965). Self-actualization and beyond. *Conference of the Training of Counselors of Adults*, 1–27.

Mead, G. H. (1934). *Mind, self & society.* London: The University of Chicago Press, Ltd.

Meadows, M. (2016). Where are all the talented girls? How can we help them achieve in science technology engineering and mathematics? *Journal for the Education of Gifted Young Scientists, 4*(2), 29–42. https://doi.org/10.17478/JEGYS.2016222219

Mendaglio, S. (2012). Self-concept of gifted students: A multi theoretical perspective. In T. L. Cross & J. R. Cross (Eds.), *Handbook for counselors serving students with gifts and talents: Development, relationships, school issues, and counseling needs/interventions.* Waco, TX: Prufrock Press Inc.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

National Science Foundation (2016). *National science board: Science & engineering indicators 2016*. Retrieved from https://www.nsf.gov/statistics/2016/nsb20161/#/report

Noble, K. D., Subotnik, R. F., & Arnold, K. D. (1999). To thine own self be true: A new model of female talent development. *Gifted Child Quarterly, 43*, 140–149. https://doi.org/10.1177/001698629904300302

Pahlke, E., Hyde, J., & Allison, C. (2014). The effects of single-sex compared with coeducational schooling on students' performance and attitudes: A meta-analysis. *Psychological Bulletin, 140*, 1042–1072. https://doi.org/10.1037/a0035740

Pipher, M. (1994). *Reviving Ophelia.* New York, NY: Penguin Group (USA) Inc.

Plucker, J. A., & Stocking, V. B. (2001). Looking outside and inside: Self-concept development of gifted adolescents. *Exceptional Children*, *67*, 535–548.

Prasad, P. (2005). *Crafting qualitative research.* Armonk, NY: M. E. Sharpe, Inc.

Reis, S. M. (2002). Internal barriers, personal issues, and decisions faced by gifted and talented females. *Gifted Child Today*, *25*(1), 14–28.

Reis, S. M. (2003). Gifted girls, twenty-five years later: Hopes realized and new challenges found. *Roeper Review, 25*, 154–157.

Reis, S. M., & Hébert, T. P. (2008). Gender and giftedness. In S. I. Pfeiffer (Ed.), *Handbook of Giftedness in Children* (pp. 271–291). New York, NY: Springer Science and Business Media, LLC.

Reis, S. M., & Park, S. (2001). Gender differences in high-achieving students in math and science. *Journal for the Education of the Gifted, 25*(1), 52–73.

Roulston, K. (2010). *Reflective interviewing: A guide to theory and practice.* London: SAGE Publications Ltd.

Ryan, G., & Bernard, H. (2003). Techniques to identify themes. *Field Methods, 15*(1), 85–109. https://doi.org/10.1177/1525822X02239569

Rudasill, K. M., Capper, M. R., Foust, R. C., Callahan, C. M., & Albaugh, S. B. (2009). Grade and gender differences in gifted students' self-concepts. *Journal for the Education of the Gifted*, *32*, 340–367.

Sadker, M., & Sadker, D. (1995). *Failing at fairness: How America's schools cheat girls.* New York, NY: Touchstone.

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). London: SAGE Publications Ltd.

Sayman, D. (2015). "I was scared to be stupid": Latinas in residential academies of science and math. *Multiple Voices for Ethnically Diverse Exceptional Learners, 15*(2), 22–35.

Sax, L. (2005). *Why gender matters: What parents and teachers need to know about the emerging science of sex differences.* New York, NY: Doubleday.

Speirs Neumeister, K. L. (2002). Shaping an identity: Factors influencing the achievement of newly married, gifted young women. *Gifted Child Quarterly, 46*, 291–305.

Speirs Neumeister, K. L., Williams, K. K., & Cross, T. L. (2009). Gifted high-school students'

perspectives on the development of perfectionism. *Roeper Review*, *31*, 198–206.

https://doi.org/10.1080/02783190903177564

Sprague, J. (2016). *Feminist methodologies for critical researchers: Bridging differences* (2nd

ed.). Lanham, MD: Rowman and Littlefield.

Stutler, S. (1997). Breaking down the barriers: Adventures in teaching single-sex Algebra

classes. *Gifted Child Today, 20*(6), 12–17.

Subotnik, R., & Strauss, S. (1995). Gender differences in classroom participation and

achievement: An experiment involving Advanced Placement Calculus classes. *Journal of

Secondary Gifted Education, 6*(2), 77–85.

Swiatek, M. A. (1998). Helping gifted adolescents cope with social stigma. *Gifted Child Today*,

21(2), 42–46.

The College Board (2012). *AP report to the nation 2012*. New York, NY. Retrieved from

https://research.collegeboard.org/programs/ap/data/nation/2012

The College Board (2013). *AP report to the nation 2013*. New York, NY. Retrieved from

https://research.collegeboard.org/programs/ap/data/nation/2013

The College Board (2014). *AP report to the nation 2014*. New York, NY. Retrieved from

https://research.collegeboard.org/programs/ap/data/nation/2014

Tolan, S. S., & Piechowski, M. M. (2012). Giftedness: Lessons from Leeuwenhoek. In C. S.

Neville, M. M. Piechowski, & S. S. Tolan (Eds.), *Off the charts! Asynchrony and the

gifted child* (pp. 1–9). Unionville, NY: Royal Fireworks Press.

Tracy, S. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research.

Qualitative Inquiry, 16, 837–851. https://doi.org/10.1177/1077800410383121

VERBI Software (2016). MAXQDA 12 for Mac [computer software]. Berlin, Germany: VERBI

      Software. Available from https://www.maxqda.com

Wilkinson, S. (2008). Focus groups. In J. Smith (Ed.), *Qualitative psychology: A practical guide*

      to research methods (pp. 196–206). London: SAGE Publications Ltd.

Wolcott, H. F. (2009). *Writing up qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE

      Publications Inc.

Appendix

Student Group Discussion Guide (Questions and Probes)

- Take a moment to look at your "ups and downs" chart. Choose a "branch" of your chart to share with the group.
- Describe how your all-girls math class differs from your other classes with guys and girls.
    - o Peer relations?
    - o Enjoyment of class?
    - o Pressure/expectations?
- How do you see this experience impacting you as you continue with advanced mathematics courses in the future?
- What challenges do you think girls (in general) face in STEM fields?
    - o Do you face those challenges here in this all-girls class?
    - o In other classes?
- How does being in this all-girls math class make you feel?
    - o As a gifted girl?
    - o Mentally?
    - o Emotionally?
- What do you hope to take with you next year in a mixed classroom?
    - o Academic/Non-academic?
- Is there anything else you would like to share?
- Is there anything you wish I had asked about that I didn't?

Student Reflection Handout Questions

- Describe how your all-girls math class is different than other STEM classes with guys and girls?
- How do you see this experience of an all-girls math class impacting you as you continue with advanced mathematics courses in the future?
- What challenges do you think girls (in general) face in STEM fields?
- How does being in this all-girls math class make you feel? Choose 3 words or phrases that come to mind.
- Choose one of the words/phrases you wrote above. Can you describe this feeling in more detail?
- What do you hope to take with you next year – especially into STEM classes that have both guys an girls in them?
- Is there anything else about your experiences in your 7th period class that you'd like to tell me about?

Teacher Interview Guide (Questions and Probes)

- Tell me a little bit about how you came to be a high school math teacher.
- Tell me about how this all-girls math class came about.

- Tell me about the girls you have in your 7th period class.
  - Achievement?
  - Motivation?
  - How they interact with each other?
- Describe what it is like to be a teacher of an all-girls math classroom.
  - How is it different than teaching heterogeneous math classes?
- Tell me about the most challenging aspect of teaching an all-girls advanced math class.
  - The most rewarding?
- How do you think the learning environment of an all-girls advanced math class compares to one that is heterogeneous?
  - Achievement?
  - Peer relations?
  - Motivation?
- How do you see this experience impacting these students as they continue with advanced mathematics courses in the future?
- Describe the support you have as being the teacher to this group of gifted girls.
  - Administration?
  - Department?
  - Parents?
- What challenges do you think gifted girls (in general) face in STEM fields?
  - Do you think this group faces those challenges?
  - In this classroom?
  - Other classrooms?
- How do you think this class influences their self-concept as gifted adolescent girls?
  - Or identity?
  - Motivation?
- How do you think this experience is shaping their future as talented females?
  - High school
  - College
  - Dreams
- What do you hope these girls take with them next year in a heterogeneous classroom?
  - Academic/Non-academic?
- After teaching an all-girls math class for this entire school year, what would you like to share with others who might be skeptical of offering an all-girls math class in the future?
- Is there anything else you would like to share?
- Is there anything you wish I had asked about that I didn't?

Follow-up Discussion Guide (Questions and Probes)

- In what ways does your current advanced co-ed math environment differ from your all-girls environment you had last year?
  - You mentioned __. Can you tell me more about that?
  - You mentioned __. Can you give an example?
- How does having boys in the classroom impact your learning experience?
  - Bigger class size?
  - Different teacher?

- How do you experience "competition" in this classroom environment compared to your experience last year?
  - You mentioned __. Can you tell me more about that?
  - You mentioned __. Can you give an example?
- How do you experience "confidence" in this classroom environment compared to your experience last year?
  - You mentioned __. Can you tell me more about that?
  - You mentioned __. Can you give an example?
- In what ways are these two environments similar?
- Are there any other ways you think your all-girls class influenced the way you see yourself that you might not have recognized when we talked at the end of last school year
- Is there anything you'd like to share that I didn't ask about?

CHAPTER 4

STORIES OF GIFTEDNESS AND BELONGING: A SHARED NARRATIVE INQUIRY

WITH THREE MOTHERS OF GIFTED ADOLESCENT GIRLS[10]

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[10] Guthrie, K. H. For submission to *Qualitative Research Journal.*

ABSTRACT

We live our lives in stories–narratives we gather along the way that inform us of who we are and our place in the world. These narratives are complex, interconnected, and come from a variety of sources such as our families, institutions, and cultures. For many of us, our lives have been shaped by our experiences of *belonging*, particularly in schools. Inspired by narrative inquiry methodology, the purpose of this study was to explore how gifted adolescent girls experience giftedness and belonging through the perspectives of their mothers. Participants were three mothers who were invited to be shared narrative inquirers and co-negotiators of their daughters' narratives. Their perspectives provided unique insight that can be difficult to capture through direct inquiry with adolescents. Three narratives are presented that demonstrate the complexity of how giftedness can influence a girls' sense of belonging, focusing primarily on the social landscapes of adolescence and school.

Keywords: Narrative inquiry, Giftedness, Gifted adolescent girls, Belonging, Stories of school, Mothers' perspectives

Introduction

The ways in which we experience the world shape our understanding–our understanding of ourselves, others, and the landscapes around us. In order to make sense of our experiences, we create stories, or narratives, that attempt to make our experiences cohesive. We live in the midst of these stories. Our identity and sense of self is thus created by *the stories we live by*. These stories are often complex, interconnected, and come from a variety of sources. For example, we live in familial and generational stories–stories that are shaped by our parents, our grandparents, and even our siblings or children. We live in cultural stories shaped by where we live, our community values, and the messages we receive from those around us. We live in socio-political stories informed by our ways of living and being in the world. We also live in institutional stories in which our stories of school are shaped by our teachers, our peers, and the day-to-day experience of living and being within school walls.

Belonging, as considered in this study, is the social desire for one to create and maintain lasting, positive, interpersonal attachments. Human beings are naturally driven to establish and sustain a sense of belonging (Baumeister & Leary, 1995). According to Maslow (1943; 1962), basic human needs, including a sense of love and/or belonging, must be met in order for more complex needs, such as self-concept and self-actualization, to be addressed. For a gifted girl, belonging reflects her ability to fit in and establish meaningful relationships with her peers and feel valued in those relationships. Because gifted learners are qualitatively different from their same-aged peers, as described in the next section, there is a smaller portion of the general population to which they can relate. Their advanced or precocious intellectual development can sometimes far surpass those of their classmates. Paired with a heightened awareness of their differences, increased sensitivities, and unique social and emotional development, aspects of giftedness can create experiences in which their stories of being gifted bump up against stories of

relationally connecting with their peers. Or, depending on whether or not a state or school district has funding for gifted education, a child may or may not have the opportunity to be served in ways commensurate to their potential or be purposefully grouped in learning environments with like-minded peers. Thus, those who wonder where they fit into the scheme of school and social cliques may have trouble developing a strong sense of self (Ferguson, 2015).

The purpose of this study was to explore how gifted girls experience a sense of belonging, focusing on the developmental period of adolescence, through the perspectives of their mothers. Narrative inquiry served as the methodological design, and thus, I framed my inquiry around a *research puzzle* rather than a research question. Acknowledging the complexity of inquiry into one's experience, a research puzzle does not have a precise definition nor definite answer. Instead, it carries with it a sense of a continual *searching* or *wondering* (Clandinin, 2013). My research was thus guided by puzzling questions such as: What might I learn by inquiring into the experiences of gifted adolescent girls? How might inquiring into their stories of belonging deepen my understanding of how school and social narratives shape the stories they live by (i.e., their identities)? Where do their stories of belonging intersect and bump against institutional and social stories? How might inviting mothers to come alongside me in my inquiry provide deeper insight into the temporality, sociality, and place of gifted adolescent girls' sense of belonging? How might my inquiry help adults mentor and provide talent development for gifted adolescent girls inside and outside of the classroom? By engaging in this narrative inquiry study, I hoped the stories presented would be used as channels through which these questions could be explored.

Before addressing the study's methods and findings, I first provide the reader with context of giftedness and the storied experiences of gifted girls, as presented in literature and from my own experiences of working with gifted girls in middle and high school classrooms. I

do not intend to represent the entirety of literature on gifted girls, but rather provide context for how I have come to be interested in researching their experiences. I conclude the article with a discussion and personal reflections of how belonging intersects the stories gifted girls live by.

Gifted Girls: An Orientation to Giftedness and the Stories They Live By

There are many definitions of *giftedness*. For instance, definitions of giftedness in schools across the United States vary depending on how gifted identification procedures and gifted education program services are implemented, if they are mandated or implemented at all. Gifted characteristics that are most commonly addressed in state definitions include demonstration of high mental ability, achievement, creativity, motivation, and sometimes, non-academic gifts and talents. For the purpose of this study, I subscribed to a general, holistic definition of giftedness that finds its roots in the qualitative aspects of giftedness. Introduced by the Columbus Group (Institute for the Study of Advanced Development, n.d.), the following definition prioritizes asynchronous development, or a sense of uneven and out-of-sync development (Silverman, 1997):

> Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally.

This definition is unique in that it speaks to aspects of giftedness that are often overlooked through traditional mental ability and achievement assessments.

When situated in the midst of adolescent culture, being different from the norm is not always easy. The dominant teenage culture values the "ironclad golden rules" of "don't go

against the group" and "do whatever it takes to be *in* rather than *out*" (Assouline & Colangelo, 2006, p. 66). For gifted adolescents, their academic gifts and talents are often unrecognized as important characteristics among teenage culture (Assouline & Colangelo, 2006), and their social and emotional development are layered with complexity. Because of their advanced intellect, they may experience "cognitive adolescence" earlier than their peers (Moon & Dixon, 2006), which can make relating to their same-aged classmates challenging as a young child. A child may have the intellectual capacity of a 24-year-old but feel trapped in the biological body of a 14-year-old. You can imagine how finding like-minded friendships might be challenging for this child and how parenting this child could be perplexing! With these perspectives in mind, the field of gifted education recognizes how gifted adolescents often experience the social landscapes of school much differently than their non-gifted peers.

For gifted adolescents, stories of school and what it means to be *gifted* can influence the ways in which they navigate their social landscapes, positively or negatively. Access to a differentiated academic curriculum may be seen as a prized status symbol of achievement among some students, but some gifted adolescents have reported that giftedness carries a *social stigma* (Coleman, 1985; Coleman & Cross, 2014; Coleman, Micko, & Cross, 2015; Cross, Coleman, & Terhaar-Yonkers, 2014), which in turn makes social interactions and interpersonal relationships difficult. Along these lines, other gifted adolescents have been known to hide their differences in order to fit in (Silverman, 2012), alter their behaviors in order to mask their abilities (Eddles-Hirsch, Vialle, McCormick, & Rogers, 2012), and be faced with a "forced choice" in which they are faced with either pursuing excellence at the cost of friendships or sacrificing their interests to gain peer approval (Gross, 1989).

Juggling the social terrain of being both gifted and a *girl* can create additional challenges. For example, Delisle and Galbraith (2002) claimed gifted girls are often unable to pursue

excellence as aggressively as boys due to gendered expectations that girls should be well-mannered and conforming in the classroom. Ryan (1999) wrote,

> Gifted girls are at special risk for emotional instability due to the mixed messages they receive from family, peers, teachers, and society. Praised for their accomplishments as children, they are often told to negate those accomplishments as adolescents. (p. 14)

As gifted girls enter adolescence, they are often more aware of the social do's and don'ts of being a smart girl. They feel the pressure to be more mature than boys, polite and 'mousy,' and in general, less assertive in the classroom (Guthrie, 2018).

Likewise, Kerr and McKay (2014) wrote at length of how gifted girls have to navigate social relationships of being a smart female among their peers. The adolescent 'culture of romance' can leave a gifted girl feeling torn between prioritizing the search for a romantic relationship and pursuing her academic or intellectual interests. The energy once directed to intense interests in reading, writing, math, science, music, or art is often (mis)directed to the pressure of being pretty and popular (Kerr, Vuyk, & Rea, 2012). Similarly, but later in life, eminent women have shared how challenging it can be to pursue both career interests while raising a family or choosing non-traditional female professions (Kerr & McKay, 2014). For example, in the area of science, technology, engineering, and mathematics (STEM), recent research has found that high achieving and talented girls' sense of belonging in the STEM fields is deterred by a variety of factors. These factors include stereotypes that women have less mathematical ability compared to males (Good, Rattan, & Dweck, 2012; Sayman, 2015), beliefs that one's mathematical abilities are fixed (Good et al., 2012), poor self-efficacy in STEM (Heilbronner, 2013), and the extent to which females feel that they belong in the STEM field (see Boston & Cimpian, 2018). Furthermore, a gifted girl's sense of belonging can be further complicated by identification with one or more marginalized populations (e.g. racially diverse,

low socio-economic status, or gifted students with learning disabilities). Intersectionality across multiple identities may mean that she received mixed messages about how her giftedness interacts with other aspects of herself.

Another aspect of giftedness that can impact a girl's sense of belonging is her creativity. Creative girls tend to be highly original, curious, open, intuitive, independent, empathetic, and perceptive (Kerr & McKay, 2016; Lovecky, 1995; Torrance, 1962). However, the ways in which these behaviors manifest may be seen as unfavorable or disruptive. For example, creative individuals who express high degrees of originality tend to be unconventional, divergent, and "have an unusual talent for disturbing existing organization" (Torrance, 1963, p. 225). They may be stubborn, impatient, critical of others, and persistently question rules/authorities (Tardif & Sternberg, 1988; Torrance, 1962). These behaviors–which are indicative to creative individuals– are not always welcome in classrooms that, perhaps blindly, value conformity and sameness (see Torrance, 1963; Paek, Sumners, & Sharpe, 2019; Westby & Dawson, 1995).

Furthermore, for girls in particular, these behaviors can be interpreted as unruly and offensive. The gifted girl who speaks her mind and challenges conventional notions often experiences pushback from her peers, teachers, or parents (Kerr & McKay, 2014). Highly creative girls are therefore often overlooked for gifted programming due to their tendency to specialize in an intense interest early on, be less well-rounded, and sometimes lack social and emotional strengths that foster deep interpersonal relationships (Csikszentmihalyi, 1996). Creatively gifted girls may then lack access to educational environments in which they are grouped with like-minded peers. As Torrance (1963; 1979) proclaimed, they must become comfortable being "a minority of one" (p. 40).

All of this considered, the cultural underachievement of gifted girls has been a concern for those in the field of gifted education (see Davis & Rimm, 2004). Throughout my own

research, I have listened to gifted adolescent girls share stories of how they were afraid to speak up in class for fear of 'looking dumb' in front of their male peers. And, despite the growing number of females represented in advanced STEM classes, they have shared with me stories of how their male peers consistently questioned their abilities (Guthrie, 2018). On the other hand, I have also learned that gifted girls can and do find deep connections with peers. Some of their most meaningful social connections take place at gifted summer camps and other specialized opportunities designed specifically for gifted children and adolescents. From my experiences of teaching and interacting with gifted girls in middle and high school math classrooms, I have sensed that throughout their experiences of being gifted in schools, their giftedness influences their ability to feel a deep sense of belonging.

Methods

The current study design was inspired by and adapted from Clandinin's (2013) approach to narrative inquiry. Although narrative research and narrative analysis are known for using stories and narratives to represent findings, narrative inquiry expands the view of *experience* and *narrative* to acknowledge the layered complexity of human experience. In this section, I will first address the theoretical commitments of narrative inquiry followed by an overview of narrative inquiry, including its definition and this study's adaptations.

Theorizing the Stories We Live By: A Deweyan Approach to Experience

Narrative inquiry finds its roots in a Deweyan theory of experience. According to Dewey (1938), experiences can be understood through two criteria: continuity and interaction. The quality of one experience has both an immediate affective effect and an influence on future experiences. Or in other words, "every experience lives on in further experiences" (Dewey, 1938, p. 27). Context also influences experience, and Dewey (1938) claimed that any normal experience is an interaction between objective and internal conditions. He wrote, "Experience

does not occur in a vacuum" (p. 40), meaning that people cannot be understood as individuals alone, but only in relation to others and in a social context (Clandinin, 2006). Continuity and interaction are thus longitudinal and lateral aspects of experience (Dewey, 1938).

Narratives have ways of linking our experiences together to form a meaningful whole (Polkinghorne, 1988). Clandinin and Rosiek (2007) described the Deweyan approach to narrative inquiry as the following:

> Beginning with a respect for ordinary lived experience, the focus of narrative inquiry is not only a valorizing of individuals' experience but also an exploration of the social, cultural, and institutional narratives within which individuals' experiences were constituted, shaped, expressed, and enacted–but in a way that begins and ends that inquiry in the storied lives of the people involved. (p. 42)

As narrative inquirers, we believe that experience is "always more than we can know and represent in a single statement, paragraph, or book" (Clandinin & Rosiek, 2007). Most often, our inquiry as researchers provides only a snapshot of a participant's experiences. Narrative inquiry therefore promotes the belief that the experiences of others cannot be fully or completely grasped. We must recognize that we enter, inquire, and leave in the midst of one's continuum of experience.

Study Design: Adapting Narrative Inquiry Methodology

In general, narrative inquiry is a pragmatic approach to the study of experience (Clandinin, 2006; 2013). Although the following definition may seem lengthy, I find it important to situate narrative inquiry in the following context described by Connelly and Clandinin (2006):

> Arguments for the development and use of narrative inquiry come out of a view of human experience in which humans, individually and socially, lead storied lives. People share their daily lives by stories of who they and others are and as they interpret their past

> in terms of these stories. Story, in the current idiom, is a portal through which a person enters the world and by which his or her experience of the world is interpreted and made personally meaningful. Viewed this way, narrative is the phenomena studied in inquiry. Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomena. To use narrative inquiry methodology is to adopt a particular view of experience as phenomena under study. (p. 477)

Narrative inquiry thus uses the living, telling, retelling, and reliving of stories as both the method and the phenomenon under study (Clandinin, 2013). In other words, it is the "process" and the "object" of inquiring into experience (Kramp, 2004). The everyday experience is where narrative inquiry begins and ends, and it is in the complexity of the everyday experience that researchers are encouraged to temper the urge to *explain* experience (Kramp, 2004) and generalize stories or impose theoretical concepts (Clandinin & Rosiek, 2007). Instead, narrative inquiry's goal is to come alongside participants relationally in order to better *understand* experience in a way that acknowledges how experience in constantly shifting and changing in the midst of one's personal and social experiences (Clandinin, 2013). Narrative inquiry also challenges the dominant story of inquiry and adopts a research *puzzle* rather than research question, as mentioned earlier. To a narrative inquirer, the complexity of one's experience often does not have one precise answer (Clandinin, 2013). This provides a pragmatic approach to the Deweyan perspective of the continuum of experience.

In narrative inquiry, the relationship of the inquirer and the participant is of great importance. Narrative inquirers come alongside their participants relationally and stories are co-composed in the spaces between the inquirers and participants (Clandinin, 2013). Clandinin (2013) elaborated on the idea of narrative inquiry as *relational inquiry*:

…the relational between the person and his/her world; a temporal understanding of the

relational between past, present, and future, including the relational in the

intergeneration; the relational between person and place; the relational between events

and feelings; the relational between us as people; the relational between the physical

world and people; the relational in our culture, institutional, linguistic, and familial

narratives; and so on. Thinking relationally, then, is part of thinking narratively and of

thinking narratively as a narrative inquirer. (p. 23)

It is this notion of *relational living alongside* (Clandinin, 2013) that inspired this study's shift in perspective of narrative inquiry.

In this study, I came alongside mothers to explore their stories of their gifted daughters' sense of belonging. I did this for two primary reasons: (1) access by outside researchers to gifted adolescent girls in schools is often limited, and (2) inquiring about gifted girls' belonging with adolescent participants is challenging due to adolescent development and their ability to critically reflect on their own past, present, and future experiences. Thus, I invited mothers to be *shared narrative inquirers* in this study. Shifting the perspective to a shared role of narrative inquiry allowed me to access gifted girls' stories of belonging from individuals who had relationally lived alongside them from infancy to adolescence and beyond. In our interviews, which I will refer to as conversations, I guided mothers to think narratively by encouraging them to think and reflect *with* stories of their daughter's sense of belonging rather than *about* stories of their daughters (Clandinin, 2013). The mothers of this study were indeed part of the storied landscape of their gifted daughters' experiences of belonging.

Participants

Participants were recruited using purposeful sampling in which I was interested in interviewing mothers who were considered to be information-rich cases (Merriam & Tisdell,

2016; Patton, 2015). I recruited four initial participants using two methods: (1) three mothers had gifted daughters who participated in a previous research study with me, and they (mothers) indicated interest in participating in this study when submitting a parent permission form, and (2) one mother participated in a professional development workshop I was leading, and after sharing my research, volunteered to speak with me about her gifted daughter. After I conducted initial interviews with all four mothers, I chose to continue narrative inquiry with the three most information-rich cases of the three of the women. I wanted to present narratives of gifted adolescent girls with rich, varied experiences of giftedness and belonging. Thus, follow-up communications and negotiations of narratives only involved three final participants.

Participants and their daughters were White and lived in the Southeastern United States. The mothers valued education, had completed one or more college degrees, had a career, and were involved in their family units as wives and mothers. Coincidentally, all three were in the field of counseling or psychology and worked with children and teens. I mention this because the construct of *belonging* was thus familiar to my participants. A summary of the participants can be found in Table 4.1. Participants selected a pseudonym of their choice or indicated that they would like for one to be assigned to them.

Table 4.1

Summary of Participants and Their Daughters.

Mother	Occupation	Daughter (Age in years; Year in school)
Melissa	School counselor	Hannah Jane (12; 6th Grade)
Karen	Child and adolescent psychologist	Erica (16; 10th Grade)
Audrey	School psychologist	Ivey (20; Undergraduate)

Note. All names are pseudonyms.

Procedures

      I first met with participants either online (Melissa) or face to face at a location of their choice (Karen and Audrey), and our initial conversations were approximately 60-90 minutes. After reviewing the purpose of the study and consent procedures, as approved by my institutional review board, I audio recorded each conversation using a handheld audio recorder. I used an interview guide (Appendix) to guide our conversation, and I took occasional notes as I listened to each mother share stories of her daughter. I also requested each mother share photos of her daughter during our conversation, and I did this for two reasons. First, the photos were used as elicitation devices to help guide our conversations. Second, I kept an electronic copy of the photos for reference throughout the data analysis stages of the study. Since I was speaking only with their mothers, referencing the pictures of their daughters when I composed their narratives reminded me that I was, indeed, inquiring into the lives of real gifted girls.

      After collecting and analyzing the data, I presented a draft of each narrative to each mother. Each narrative, or what narrative inquiry calls an interim research text (Clandinin, 2013), was then reviewed and negotiated through a series of emails, phone calls, and online video calls. As a part of this process, participants offered additional suggestions and clarifications, and in turn, became co-creators of the narratives. One mother (Melissa) was unable to participate in the negotiation phase of the study as she had a death in the family and did not feel as though she could participate in the designated time frame. However, she did inform me that the draft narrative of her daughter did not need any revision. Final narratives, or research texts, were agreed upon, and these are the narratives included in this article.

Data Collection and Analysis

      Data included interview conversations, negotiation and reflection emails with participants, and researcher memos. The photos of the girls were kept only for reference and

were not analyzed in any way. Each conversation was audio recorded, transcribed verbatim, and sent to each participant for review. None of the participants requested any content changes to their transcript, and one participant added additional reflections after talking with her daughter about what giftedness and belonging meant to her.

My first phase of analysis took place during data collection. After interviewing participants, I created researcher memos that served as my initial reflections and analyses of the mothers' reports. These memos included initial insights and puzzling questions, and overall helped me explore the meaning of my data and supported researcher reflexivity (Birks, Chapman, & Francis, 2008). For example, the following statements could be found as evidence of early stages of analysis: "more comfortable with people who are different" (Memo, Hannah Jane) and "overlapping belonging" (Memo, Erica).

My second phase of analysis prioritized writing initial narratives of each mother-daughter dyad. I created analytic memos (i.e. chronicled records) throughout this process in order to document my decision making (Birks et al., 2008). To do this, I read and re-read each transcript multiple times in order to orient myself to my data. On the fourth read through of each transcript, I used the paraphrase feature of MAXQDA 2018 (VERBI Software, 2017), a qualitative data analysis software, to summarize and capture portions of a mother's stories. I then created a narrative reflecting each mother's perspective of her daughter's sense of belonging that highlighted the unique ways in which each daughter experienced belonging. Since each daughter was different, I chose not to adopt a rigid method to creating each narrative. Instead, I revisited my methodological resources and wrote each narrative by first creating web diagrams of each girl. Branches of the web diagrams included, what I refer to as, *takeaways* from our conversation. My takeaways were short phrases that represented stories, repetitive themes, or common threads of belonging throughout the individual transcript.

Due to the uniqueness of each gifted girl, these analysis procedures did not create narratives that precisely mirrored each other. Instead, by taking a narrative inquiry approach, I aimed to maintain focus on their girls' lives as lived, as told through the perspectives of their mothers, and placed emphasis on *wondering* over generalizing (Clandinin, 2013). Lastly, in writing the initial narratives, I purposefully situated myself throughout the narrative to remind the reader that the researcher plays a vital role in qualitative inquiry (Wolcott, 2009).

My third phase of analysis invited each mother to be active in the creation of the final narratives (Clandinin, 2013). With the help of the mothers, the narratives were refined in our follow-up conversations. This negotiation acted as "member checking" and helped to ensure the narratives portrayed an accurate representation of their daughters (Thomas & Magilvy, 2011). The participants offered additional comments or clarifications to the text, in addition to sharing their own reflections of their experience in participating in the study.

Findings

Next, I present three negotiated narratives from my inquiry with each of the girls' mothers. Within each narrative, I highlight how stories of belonging are interwoven with stories of relationships, stories of school, and stories of their sense of self. Through these scattered stories, as told by their mothers, we (e.g. researchers, educators, counselors, and parents) can gain a better understanding of how stories of belonging have shaped the stories gifted girls live by. Although the narratives present only a glimpse of the experiences of how giftedness influenced the ways in which three girls experienced belonging, the complexity of their stories sheds light on the inner experiences of being a gifted adolescent girl. In efforts of supporting a Deweyan approach to experience (1938), there are moments in which I speak of each gifted girl in the present tense, as they continue to lead storied lives beyond the boundaries of this study's inquiry.

Hannah Jane: Authentic and "Our Little Grown Up"

My first meeting with Melissa (May 9, 2018) to talk about her daughter, Hannah Jane, took place online via a video call. I sat at my dining room table, double checked all of my audio recording equipment, and eagerly awaited Melissa to respond to my online call request. I first met Melissa a few months prior to our conversation, in the midst of my work in providing professional development for teachers, counselors, and administrators regarding assessment and talent development of highly creative children and adolescents. Aside from engaging with Melissa in a few discussions on our professional development material over the course of a few days, I knew nothing about her life or her gifted daughter. After sharing some of my current research projects with the group, Melissa approached me later in the day and volunteered to participate in the study. Back at my computer, an alert notified me of our online call connection, and I smiled as I welcomed Melissa to our conversation. I was a little nervous, as sometimes there is no telling whether or not technology will work when we want it to, and I crossed my fingers that both of our internet connections would behave during our conversation.

Melissa, a practicing school counselor, was also a little nervous. She had called me from her home and offered apologies in the case that her dog might be distracting to us in the background. I assured her that it would not bother me, and I thus proceeded to review the purpose of our conversation, verify her consent to participate in the study, and let her know that I might look off the screen to take a few notes while we talked.

Her daughter, Hannah Jane, was 12 years old, the youngest of four children, and in the 6th grade at the time of our conversation. Hannah Jane had been identified as a gifted student in Kindergarten, typically considered an 'early' time to identify giftedness. Melissa described her daughter as being highly gifted with an advanced level of intellect that far surpassed her same-aged peers. She told stories of how her daughter saw the world in patterns, and how she would

often find her toys, shoes, or other household items strategically arranged in rows according to some pattern Hannah Jane had configured. Starting at a young age, she was constantly absorbed in whatever was around her, with Melissa claiming that even as a young baby, Hannah Jane never napped. Now an adolescent, she still dives into intense topics of interest where she "finds out *everything she can* about it *herself*."[11] Melissa continued, sharing interesting aspects of Hannah Jane's personality:

> She's just like all our other kids. She's more *uniquely* (chuckles)–I don't know how to describe this. She's more *like us* in a way. It's hard to explain. Like, I don't treat her like a grown up. Don't worry about that! But she's always been like a little grown-up, for as long as I can remember. (emphasis original)

Her advanced intellect and interests mimicked that of someone much older than her biological age, and although not uncommon among gifted children, this can sometimes surprise parents and teachers.

Hannah Jane excelled in school. So much so that she was often bored, complaining of the slow pace or how her classmates were constant obstacles in letting the teacher progress deeper into the content. As we transitioned to talking about stories of her giftedness and stories of school, I began to see how Hannah Jane's giftedness influenced her social interactions with peers. This in turn, impacted her ability to feel as if she belonged amongst her peers, particularly at school.

Hannah Jane first began to experience what Melissa described as a sense of social isolation in the 4th grade. This was a time that other girls started to form cliques, and not knowing exactly how or why certain alliances were forming, Hannah Jane began to realize that she was different than other girls her age. From then on, connecting with peers was difficult for

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[11] All quotes appearing in italics were words or phrases verbally emphasized by participants.

her. I listened as Melissa described most of the friction in connecting with peers as having to do with Hannah Jane's giftedness:

> The *way* that she thinks is *so different* than her peers in a lot of ways. Like, her thought processes *as well as* the things that she *thinks about,* because she's thinking about and discussing things that are like–We are very up on current events, politics, for better or for worse…She can hold forth on a very intelligent conversation about *all* sorts of different topics, and I think she has a little bit of trouble when it comes to relating with her peers. (emphasis original)

Hannah Jane often seeks advice from her mother for how to talk and socialize with kids her age. She has trouble understanding why some things are important to other middle school girls (e.g. interest in boys, clothes, etc.), and therefore she has a hard time pretending that they are important to her. I got the sense that in trying to fake interest in the same things as her peers, Hannah Jane feels as though she is an imposter for not being true to herself. Hannah Jane values authenticity, having more of a ''what you see is what you get'' type of attitude when it comes to navigating the "social waters" of middle school. But, her mother commented, "It makes her sad sometimes when she's just not able to *connect* in way[s] *other* girls connect" (emphasis original).

Hannah Jane's high academic achievement also puts her at odds with her classmates. At the time of our conversation, she was part of a gifted and high achieving cohort of approximately 25 other "quirky" students. They traveled in a cohort to every single class, except for specials (e.g. orchestra, art, etc.). Knowing that she excels at school easily, her peers are quick to ask her what grade she made on a given test or project, even though "everybody knows she made an A." When this happens, she feels stuck. She does not want to share her high grade, for fear of making her classmates feel *worse* for their lower score, but she also does not want to dumb herself down to make it seem like she did not do well. She often chooses to be honest about her grade, but the

struggle to answer with honesty in these types of situations is obvious to her mother. Melissa hoped Hannah Jane would continue to choose being honest over dumbing herself down, but I could sense apprehension for fear of her daughter losing this aspect of her character in order to fit in more with her peers.

Of the few friends Hannah Jane did have, her mother described her has having a more mature definition of friendship. Hannah Jane was sensitive when it came to following rules and had a strong sense of right and wrong. Her high expectations for finding a friend with similar interests and who aligned themselves with similar moral values as she was difficult. Melissa shared:

> The only thing I wonder about that is that, she is not interested in having anybody come to the house and really doing anything outside of school with her school friends. It's more like they are in their little compartment at school, and then this is her home, and it's like she doesn't want it to infringe on her time to come and recoup her energies and get ready to go back and face the next day…She just she will be the *first* to tell you, that "Sometimes I just don't want to be around people my own age."

Along the same lines, and throughout our conversation, Melissa commented how Hannah Jane felt more comfortable having conversations with adults compared to other kids, even other gifted kids she had classes with. She once told her mother, "Kids make me nervous!" –which made both of us chuckle–and Melissa recalled responding, "But you're a kid!"

Even though she was a "kid" who had just entered middle school, Hannah Jane was already ready for high school and beyond. She claimed to be bored with the slow pace of the middle school curriculum and looked forward to the possibility of starting college early by taking college-level classes in high school, a program option for gifted students in her state. Her ideas of what she wants to be when she grows up fluctuate, but they mostly revolve around something

in the hard sciences. At the time of our conversation, Hannah Jane was interested in working in a lab, claiming she would only have to "deal with the data"–and by default *not* with people. As I continued to talk with Melissa about how her daughter navigated social interactions with peers, I got the sense that Hannah Jane did not feel as though she belonged amongst her gifted and high achieving classmates. Navigating social relationships at school was consistently difficult for Hannah Jane, and without understanding how her giftedness impacted these relationships, it is difficult to understand her stories of belonging.

However, Melissa shared other stories of instances in which Hannah Jane did seem to experience a sense of belonging. She described Hannah Jane as having deep connections with animals and with students at her school who are different in other ways. To elaborate, Melissa shared how Hannah Jane was consistently excited and felt satisfaction from interacting with a group of students who had severe and profound disabilities that made learning in schools challenging. The students in this special program were non-verbal, and Hannah Jane "*loved*" going into their classroom and interacting with them. Melissa elaborated on how Hannah jane is "extremely kind" and "tender hearted," and "she *notices* those kids who nobody else talks to or who generally get left out and she makes a point and tries to engage with them."

Understanding where Hannah Jane *does* feel a sense of belonging demonstrates the complexity of how a highly gifted girl may experience certain challenges at school. I know from experience that educators often think that gifted students navigate the landscape of school easily (see Moon, 2009; Peterson, 2009), especially because the emphasis on achievement comes relatively easily to those who have demonstrated advanced intelligence and academic performance. But this has not been the case for Hannah Jane.

As I started to bring our conversation to a close, I asked Melissa if there was anything that stood out to her in the midst of our conversation about Hannah Jane's stories of belonging as a gifted girl. She shared,

> I think mainly just that *it's tough,* you know? Like it's *really toug*h watching her try to navigate her way through it. As her mom, it's very difficult to watch her feel spurned by her peers for not (short pause) fitting in the way that *they* fit in, because in *their* minds, they *also* have their own prescribed set of "This is what you have to do to fit in." Whereas Hannah Jane is completely different…With *her*, what it takes to be her friend and what attributes *she* would look for in a friend, it is completely different than a lot of cases.

Melissa clearly saw how Hannah Jane's giftedness impacted her ability to make friends and find a sense of belonging. She continued,

> It's is difficult for *her*, too…She *feels* things *very deeply,* even though she may not want to talk about them as much, she feels things very deeply sometimes. Where she used to kind of not notice as much, but the older she gets, and the more people are kind of socially breaking off into the little groups, she notices more that she *does not have a group.* And like a place where she *fits,* and while she doesn't worry *logically* that she doesn't have a place to fit, worrying logically about that is *way* different than the way that it makes you *feel inside* when you have that *feeling* like you don't fit in.

She hoped that high school would be easier for Hannah Jane, primarily because of the state's option to enter and earn college credits or enter college early. Our conversation ended with this sense of knowing that her experiences of belonging in elementary and middle school would be layered with her future experiences of belonging in high school and beyond.

Erica: Confident and "Well-Connected"

I first met Karen when I pulled up to Karen's office (May 16, 2018), the location she preferred to meet to discuss her gifted daughter's sense of belonging. My anticipation heightened as I noticed her place of work was her own psychology practice. Karen was a child and adolescent psychologist, and since our topic of discussion was going to be 'belonging,' I made the assumption that Karen would understand the construct and thus might provide some interesting insights into her daughter's experiences. I had met Karen's daughter, Erica, the year before as part of a separate research study with gifted adolescent girls, but I was eager to learn more about Erica through her mother's perspectives and stories of living alongside her.

My excitement quickly turned into curiosity as I was guided by Karen from the waiting room to her office. I sat on the couch across from her chair, and I wondered what this conversation may feel like for Karen. It seemed to me that I was sitting in the space that her clients typically sit, but I was the one who would be initiating the questions to guide our conversation, complete with audio recorder, my interview guide, and a pen in my lap so that I could take notes. After reviewing the study's consent procedures and logistics of our future negotiation of my interpretations, we entered into our conversation about Erica's characteristics and personality as a gifted adolescent girl.

At time of our conversation, Erica was a 10th grade student at her public high school. She had been a part of the district's gifted education program since she was a young child in elementary school and was currently pursuing rigorous curricular options provided by her high school. Karen described Erica as being smart, mature, and a deep thinker, which her mother noted as characteristics that enhance her relationships with adults. She is also headstrong, outspoken, and has a thirst for knowledge. The youngest of two children, Karen claimed, "She was the child who questioned everything, needed an answer, needed a reason. She always knew

where the line was and how to toe *just* to the other side of it." Erica had grown to be an adolescent girl who was empathetic, self-confident, and a "take them all by the horns and wrestle it down kind of girl." Outside of being talented in academics and a hard-working student, Erica is a talented dancer and performer, not afraid to be the center of attention on stage. She had followed in her mother's footsteps and travels across the United States each summer to attend the same summer camp. Karen referenced Erica's relationship to her fellow campers and the summer camp organization often throughout our conversation, and thus I got the sense that camp is a big part of Erica's life. Through these stories, I learned how Erica's sense of belonging has been influenced by a variety of sources.

Erica had grown up with a sense that the world was bigger than the town she lived in. She travels across states to the same month-long camp every summer, makes yearly visits to family that live across the country, and takes vacations with her family within and beyond the borders of the United States. Karen believed that all of her travels instilled in Erica a sense of "I can go away from here and be okay." This in turn fostered a self-confidence that Karen found to be rare among teenage girls. She shared,

> She's able to go, "You know what? I just am who I am, and I am what I am, and I am okay." And I know a lot of girls who can't say that at her age. And so, there's just the self-confidence that she has that *she's good enough*. Well, you know, she has her moments, but we all do. But for the most part, she's very self-confident. She has a broad worldview which I just think–It just makes her *different* than her friends [at school]. She's told me her friends have said, "Erica, you are just different! You know, you don't get caught up in the drama like everybody else" or "You don't get mired in this or that."

As I listened, it seemed as though both Erica and her peers recognized how her strong sense of self was atypical for adolescent girls her age.

Furthermore, Erica's strong sense of self is bolstered by her involvement with her school's program for gifted and high achieving students. Her high school takes pride having a positive school culture around the gifted program. It is cool to be smart. Being identified as *gifted* is not necessarily socially stigmatizing. As for Erica's relationship with her closest peers, Karen mentioned that for how tight knit the group of gifted girls in Erica's classes are, she was surprised how little "drama" there is amongst them.

Yet, even though Erica finds a sense of belonging amongst her peers at school, demonstrated by quality of care and acceptance they all have with one another, she still feels a sense that she is different from the other gifted girls in her group. For example, the fact that Erica was not born in the same, current town as her classmates creates a sense of pride–a sense of "I'm not from here"–that translates to how she sees herself belonging amongst her peers.

> She can look at her group of friends, she can probably say, "These are the people that are going to *maybe* go away to [college] and they're *absolutely* definitely coming back. They will die in this town." And she *is not* one of them. And I think that impacts her belongingness, her sense of belonging with her peer group.

Where some adolescent girls may find the idea of 'not being one of them' difficult, on the surface, this does not seem to bother Erica. She finds belonging in her peer group, but she also sees herself as "living beyond the group." In other words, she does not feel bound to only finding belonging in the midst of her current peers. Her mother added, "I think it makes her feel good. She takes pride in that, 'I'm not *just like them*.'" Erica knows she will move beyond her current group of friends in the future, and I gathered she looks forward to this.

Erica's strong sense of self and confidence also translates into exhibiting strong leadership skills amongst her peers. Karen shared, "Even as a little kid, she was the ringleader. Even when she was *three* in the Montessori classroom, five-year-old children were following

Erica. Three-year-old Erica was, 'You do this! You do that!'" Karen told additional stories of

how Erica was not afraid to schedule a conference with her school's administrator when she

experienced conflict with a teacher, bring up deep questions in her church's youth group that

challenged the typical way of thinking and exploring spirituality, and even be the girl in the 'in

group' of peers to reach out to a new student or youth group member and help them feel a sense

of belonging to the group. In general, Erica finds a sense of belonging from multiple sources

(e.g., her peer group, her church group, her spirituality, her family), and her awareness of her

place in the world gives her a sense of permission to go against the current of expected social

behaviors as deemed by traditional adolescent culture.

However, there have been times when Erica seemed to experience a sense of friction

when it came to how intensely she went against the social current. Karen shared a story in which

she witnessed Erica reaching out to a new girl who had just joined their church. Erica saw how

the girl felt uncomfortable with being in a new group, and at the same time, displayed

characteristics and personality traits that Erica knew would not be widely accepted by her

immediate peers. Erica wanted to make the girl feel as though she belonged. However, even

though Erica had a high sense of confidence, Karen was quick to point out how she was still a

typical adolescent girl:

> But she won't help her to the point that she's going to be made fun of by her friends. And
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> I've seen it, standing back and watching. I'm there on Sunday evenings. I volunteer
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> sometimes, and I can step back and watch a little bit, and I see that she holds back–where
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> she might get slack from her friends, and she knows it… She doesn't hold back in the
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> way that she turns around and she's rude to the girl, but I can see her–I can see her
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> holding back from when she knows no one else is looking. The kindness, the level of
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> kindness that she shows varies a little bit based on whether or not her friends are

watching… She's not going to be kind to the extent that she gets ostracized [by her friends].

Similarly, I too have witnessed such behaviors from adolescents in my own work as a high school teacher. In general, adolescent behaviors and identity development are often shaped by their relationships with peers. Hearing these stories of Erica left me wondering how she felt the pull to belong and help others belong, without sacrificing her own belongingness in her desired group.

Throughout my conversation with Karen, I learned how the ways in which Erica understood and related to her sense of belonging were complex, and I wondered how much of this had to do with her advanced ability to think abstractly and her enhanced awareness of the world around her. She has a way of finding a sense of belonging, no matter where she is or who she is around. When she feels a sense of exclusion from her peer group at school, Erica draws on her strong sense of belonging from her immediate and long-distance family, her summer camp friends, her friends at her church, and even a more abstract sense of existential belonging that she finds in her practice of faith and spirituality. In Karen's words:

> She's got a lot of overlapping but separate networks that I think forms a net that keeps her from feeling on the fringe… And if she feels like she's on the fringe over *here*, then she knows that she is not on the fringe over *here*. If all else fails here in [this town], she's totally not on the fringe at camp. She's got that fall back. She's got those people that she's texting and in contact with on a weekly basis, sometimes daily. So, she's really a well-connected kid in terms of safety nets of people. "If *these* people aren't working for me, I got *these* people. If *these* people aren't working for me, I got these *other* people!"

This is also compounded by Erica's longing to go to a college far from her current hometown, to an institution that her current school friends will not be attending. Her parents had raised her to

explore the world and seek out *experiences*. Karen felt that Erica's strong sense of self and confidence will take her to great places, despite the fact that it might be far from home. From her mother's perspective,

> There's a sense that she belongs somewhere else. And not here. That's that 'foot out the door' [mentality that she has]. This is not her permanent place, and she knows that too, and we know that. But she knows that we know that, and we're okay with it.

Erica knows that there is more to life that her hometown and high school. She eagerly awaits the chance to explore the world fully and independently.

In bringing our conversation to a close, I asked Karen if there was anything that stood out to her in the midst of our conversation about Erica's sense of belonging as a gifted girl. She shared,

> I think because of her self-confidence and her sense of self, that she can belong anywhere she wants to. She can make herself belong. She will find a way to belong, (short pause) because she's never *not* belonged (short pause) in some form or fashion. Even if she was not in the core [of the group], she's *in the group*…She's just that kind of person, and I guess if she finds her place–a place where she doesn't belong, she just *leaves* and finds a place she *does*. That's a bit of the way she is, too. If this doesn't work, well, "To heck with them. I'll try something else!" And I think that comes from her self-confidence. She's got enough confidence in *who she is* that she'll find where she belongs wherever she goes. And she won't become somebody she's not in order to belong. She has the sense of "Well, if you don't like me, then poop on you. You don't have to."

Karen wanted to be clear in that she does not feel Erica, in general, compromises who she was in order to belong. Instead, Erica simply has a way of finding her place, even if it is not among the most popular kids at her current school. She always finds a way to fit in and feel comfortable.

Karen had watched her daughter navigate interpersonal relationships from Montessori school through the first few years of high school and described Erica's self-confidence as being a common thread throughout those experiences. I left our first conversation feeling refreshed and hopeful, as I do not often encounter stories of gifted adolescent girls in high school with such self-confidence.

Ivey: Brilliant and "Misunderstood"

I arrived early at a popular chain-based coffee shop for my conversation with Audrey. Upon walking in, I turned my attention to trying to find the quietest place to sit, as I knew transcribing our conversation alongside the hissing espresso machines and the busy morning rush would be a challenge. Audrey arrived minutes later, and after a brief conversation regarding the level of the noise in the shop, we both decided to proceed with staying where we were as the noise was manageable, and we were both eager to get started.

Audrey had four daughters, all very close in age and all of whom had been identified as gifted by their local public-school district. Upon reviewing the purpose of my study, Audrey offered to talk primarily about her oldest daughter, Ivey, who at the time, was 20 years old and in college. Audrey described Ivey as being a highly gifted child who was one of her "purely gifted" daughters, implying that Ivey's gifts and talents indeed came naturally to her, and her gifted identification was not necessarily based on high achievement. Ivey loved learning, but she cared very little about grades. Her interests gravitated towards music, theater, and science. In middle and high school, she earned numerous lead roles in school plays, and now that she was in college, she found her place as a Marine Biology major. She had always been highly intelligent, independent, and more mature that her same-aged peers.

However, Ivey's giftedness also presented challenges to both of her parents and her siblings. For example, Audrey told me,

My husband described her early on–and it sounds bad–as a *gifted criminal.* It's like she has that mind that can think of things that would never even cross my mind. And she is incredibly good at finding alternative ways to do things.

She was always plotting against her younger sisters, and her behavior at home and at school was oftentimes difficult to deal with. Audrey, a school psychologist, was often contacted by teachers regarding Ivey's disruptive and inappropriate behavior in class. Ivey had been diagnosed with Attention Deficit/Hyperactivity Disorder when she was in first grade, and it seemed as though some of her behavior issues in the classroom stemmed from this. Audrey now questioned the diagnosis: "Knowing what I know now and looking back and seeing her progress since that age, it was likely *anxiety* and her not knowing what to do with it." She continued by sharing how she felt it was primarily Ivey's giftedness and advanced intelligence that influenced her social anxiety. And, the interaction between giftedness and anxious feelings was not only reserved for the classroom. It also translated to the home and her relationships with her sisters.

With her tablet, Audrey pulled up a photo of Ivey and her three sisters. Ivey was the oldest, the tallest, and in this photo, she was standing in the midst of her sisters, striking a dramatic pose. Audrey estimated that Ivey was probably in the 8th or 9th grade at the time the photo was taken. She commented,

I love this picture… You can see her, "I'm front. I'm center." But if you look at her face, she is looking off. She's unsure. Like even though she wanted to be that front and center, there is always this, "I'm not that comfortable here."

She also pulled up another photo of Ivey when she was much younger. Again, it was a photo of Ivey with her three sisters, all lined up in what appeared to be ballet costumes. Audrey drew our attention to Ivey's facial expression, and claimed, "That was her face *all of the time.*" I probed

further, by asking, "How would you describe that face? When you see that face, what do you think of?" Audrey hesitated for a moment,

> (Takes a deep inhale) Um, when I see that face, I think "confused." I think she constantly wrestled with naturally wanting to be one way, but "I keep getting in trouble for it, but I don't know what to do." She was–She was unhappy and angry a lot… When I look at that picture, I see–Yeah. Frustration. A tinge of sadness. Like she always felt she didn't *belong* with her sisters. She knew that *I* did not talk to *them* the way I talked to *her*. And it was because in differences of personality.

Like many gifted children, Ivey had a heightened sense of awareness. Recognizing the ways in which she was different from her sisters–and to also feel like she could not control her differences–was perplexing not only to her mother but also to her.

Audrey continued, sharing more details about how Ivey was always oppositional as a child. Of her four daughters, Ivey was described as being demanding and always requiring attention. Ivey continued to be challenging to her parents as she grew into an adolescent girl. As Audrey and I continued talking, I was encouraged by what I felt to be her candidness and honesty about what it was like to parent Ivey. In high school, their relationship was "incredibly strained." She reflected,

> I *love* my daughter, but I didn't *like* her. I didn't love her personality. I didn't want to be around her. The other three were just so much *easier* and she knew that. And that kind of perpetuated it even more. It was just kind of a vicious cycle.

But now that Ivey was in college, their relationship was becoming less strained as Ivey began to turn to Audrey for advice on how to recognize and regulate her emotional reactions and social anxiety. Audrey commented on how it was much easier to be present for her daughter, given that there she was no longer living at home.

As our conversation steered back to Ivey's earlier experiences of friendship, Audrey told stories of how Ivey had trouble relating to her peers at school. Audrey shared how she believed that most of her interpersonal difficulties stemmed from having drastically higher intelligence than her same-aged peers and "not knowing what to do with it." I asked Audrey whether or not she thought Ivey was aware of how her giftedness set her apart from her peers when she was in elementary, middle, and high school. She shared,

> I think she was, but she didn't know why. She knew she had to try harder [to fit in] than everybody else. She knew that she got in trouble a lot. She knew that, between me and her teachers. She knew that she was *excluded* and sometimes, sometimes she would think that she was *included*, and she wasn't.

All of this was confusing for Ivey. She questioned her belongingness amongst her peers, and for most of her K-12 experience, she had very few peers to whom she could easily relate. She was often rejected by her classmates, and as she grew older, she became more aware of how she had very few close friends.

To demonstrate, Audrey elaborated with one story of when Ivey was in high school. Ivey and some other girls had made plans to attend the school's homecoming festivities together, and during the event, the girls left Ivey without telling her. Ivey was purposely deserted, and from that point on, the same girls started bullying her at school. Towards the end of the school year, her class was assigned a project related to Dante's *Inferno* in which they had to present their own versions of hell. Ivey got up in front of the class–a class in which these girls were in–and retold the story of when they had left her, boldly claiming, "This is my version of hell." Audrey referred to this event a few other times throughout our conversation, and I got the sense that to Ivey, peer rejection was "hell." Audrey added to this,

> She's always had a fear of rejection, because she has been rejected… There is that wall in every situation. She's very cautious. She enters into situations preparing to be rejected. And then she's kind of pleasantly surprised when she's not [rejected].

Audrey had a comprehensive understanding of Ivey's sense of belonging. Living alongside Ivey's experiences as a child, adolescent, and now young adult gave Audrey a unique perspective to how her daughter's giftedness influenced her belonging with her peers and siblings. Ivey's high intelligence left her feeling misunderstood and believing that fitting in was simply not "natural" for her.

> However, Audrey shared of a small period of time in which Ivey's stories of *not* belonging were interrupted. For Ivey's 6th-8th grade school years, she was selected to attend a local gifted middle school academy instead of the traditional middle school she was zoned for. Audrey described those three years for Ivey as being "*life changing.*" She continued,

> She flourished in middle school. As for middle school, it's usually a hard time for girls, but it was a great environment for her because at the gifted middle school academy, as you may know, there are high level thinkers there. They're *all* al little *quirky*, and she fit right in. And, you know, she had a few issues, but nothing too extreme. [It] was great for her.

Audrey also shared a time that a psychologist, who had seen Ivey, expressed some concern regarding Ivey's ability to make friends:

> I remember her coming to me and being like, "Audrey, I'm worried about Ivey's vocabulary because she speaks so much more intelligently than someone her age should. And that can make her be an outcast." And at that time, she was at the [gifted middle school academy], and I was like, "Everybody talks like that. So no, she fits right in!"

These stories shared insight into how Ivey gets along well with peers that are at her "same intelligence level" or with those who are "smarter than her". It was also during her time at the middle school academy when Ivey's interest and talents in theater grew. Audrey noted that the school's theater teacher had a daughter that was very similar to Ivey: "She just *loved* [Ivey] and *embraced* her… she *got* her." As Audrey reflected back on Ivey's time at the gifted middle school academy, she realized, "That's the happiest I remember her being."

The transition to high school was beyond difficult for Ivey. Audrey described it as "incredibly different" and "horrible". Even though Ivey was placed in advanced classes, she was unable to relate to her classmates in the same ways she had with her classmates at the gifted middle school academy. They were not on 'her level.'

> She was bullied quite a bit. She was known for being incredibly annoying. She didn't
> have that filter [of] "This might not be appropriate to say."…At the gifted middle school
> academy, they kind of had an environment where the kids were talking and socializing,
> but when the teacher got up and said, "Let's get started," all the kids got quiet and settled
> down. But [at the traditional high school], they just kept talking, and there was a level of
> disrespect there. And so, she would turn around and say, "Guys! She said stop talking!"
> And then, she was targeted. She got on everybody's nerves.

Even her experiences in the high school theater program were different. At the high school, Audrey described the program as highly competitive and "backstabbing."

> *Socially*, she didn't know how to navigate all of that and came home every day crying.
> Freshman year was just *incredibly hard* for her…Later, she told me she had considered
> suicide. She was very depressed. She didn't find anybody she really connected with.

For Ivey, connecting with others who were not on her same intellectual level was very difficult, and I sensed the jump from being surrounded by "quirky" kids who were just like her at the

gifted middle school back to being in a more traditional heterogeneous ability environment at the high school was extreme.

It was not until her junior and senior years of high school that Ivey started to find a little bit of relief from the heaviness of not belonging. Audrey had essentially forced Ivey to join the swim team, as a novice, in order to try to get her around different peers in a new environment. She excelled immediately, as the "black and white world" of swimming was a place Ivey could 'function' – because it was her swimming times that determined whether or not she progressed to the final competitions. This was in stark contrast to the more subjective judgements Ivey experienced in the theater program.

Also, for Ivey's last year of high school, she was involved in her district's dual enrollment program. This meant that she, as a gifted and high achieving high school student, could take courses at the local college for college credit. In turn, Ivey was hardly ever on her high school campus her final year of school. "She was totally at the college and loved that environment. It was wonderful for her. So dual enrollment was a godsend..." In talking with Audrey, I gathered that Ivey had had a roller coaster of an experience with belonging in her school environments.

As our conversation continued, it was clear to Audrey, and also to me as I came to learn more about Ivey's stories of belonging, that Ivey's advanced intellect and difficulty with interpersonal relationships had impacted her sense of self. Audrey shared how once Ivey transitioned back to the traditional high school, she started to notice Ivey "dumbing herself down sometimes to fit in a little more." When I asked her to tell me more about this, she shared how Ivey started noticing how her peers would talk about her when she voiced her opinions or raised her hand to share answers in class. So, she stopped raising her hand and offering answers. "She

stopped answering because she was ridiculed for it." Ivey, who had once always sought to the "center of attention," no longer felt comfortable doing so. Audrey reflected,

> I did notice her kind of draw into herself more so as not to make waves. To make it - To kind of disappear. And she wasn't used to disappearing. She wanted to be the center of attention. So, that was a change in personality for her.

Hearing this, I wondered what it must have felt like for Ivey to begin to make those choices. Her divergent personality traits, particularly as it related to her giftedness, created a sense of opposition with her peers. Her precocious intellect, intense interests, and "quirky" personality were seen as *too much.* She felt misunderstood all of the time. But, in the attempt to appease her classmates, she eventually grew tired of trying to mask some of her more intense personality traits. She became frustrated and angry.

Her mother shared one final story to demonstrate how Ivey had developed an antagonistic personality. During her final year of high school, Ivey participated in a school tradition of decorating paper crowns for homecoming. Instead of the typical glitter and glam, which is how most high school girls decorated their crown, Ivey boldly expressed her "creatively dark" side. Her crown was "rebellious in nature" and was decorated with dark colors. Audrey showed me a picture of the crown, and I saw a collage of images that included fractious statements such as "Boss" and "Bitch." Audrey reflected,

> I think she was embracing the role that everyone had set for her. I don't think that that's the core of who she is. But to her, she was. It was, in a way, a self-fulfilling prophecy. So, in a way, she was like, "Okay. I'll be that."

I wondered if in making such a bold statement, Ivey had chosen a *new* path in search of belonging – a path that was antithetical to that of the girls she longed to be friends with.

My conversation with Audrey ended with her sharing some final reflections of Ivey's giftedness and how her giftedness influenced her personality. With respect to Ivey's behavior, Audrey claimed to have experienced a "shift" in her own assessment of her actions and expressions. She had eventually started to embrace Ivey's independence and personality, and she concluded with a short story of talking to some of Ivey's teachers early on regarding her "inappropriate" and "in-your-face'" behaviors in the classroom. She remembered asking them, "If she were a boy, would we be having this conversation?" to which, Audrey claimed, the teachers did not have a response. I started to wonder how the cultural environment of being raised as a girl in the southeastern United States influenced the ways in which others saw Ivey's unique gifted characteristics. Audrey and I briefly discussed the dominant "boys will be boys" attitude that is commonly adopted, and in referring back to her earlier talks with teachers, she shared, "I know for a fact that this [other] kid acts in the same way, but with boys, it's being *strong*. And with girls, it's being *bitchy*." I was then not surprised that Audrey ended our conversation sharing that Ivey "can't wait to get out of the South." Ivey was scheduled to study abroad within the next few months, to which Audrey chimed, "I wouldn't be surprised if she came back and said, 'Okay. I'm moving there after I graduate.' I wouldn't be surprised at all."

Discussion

My inquiry into the lives of these three gifted girls reflect only pieces of the girls' experiences of belonging. By attending to several stories of belonging, as told by their mothers, my goal in taking a narrative inquiry approach was *not* to write one final narrative or locate finite themes amongst the data. Instead, my goal was to open up the possibility for different and varied stories (Clandinin, 2013) of belonging among gifted girls. At the time of my conversation with their mothers, each of the three girls were at different developmental stages, which contributed to a rich tapestry of how gifted girls may experience belonging throughout their lives. Their stories

of belonging were most evident in their relationships to their peers, but their belonging was also influenced by institutional stories of school, familial stories of relationships to their parents and siblings, and cultural stories of gender norms.

Remember, a Deweyan (1938) perspective of experience acknowledges that we can never fully describe a person's experience independent of time (Connelly & Clandinin, 2006). As you read this article, the storied lives of these three gifted girls continue to unfold, and their lives continue to be influenced by the stories they experienced and interpreted during their childhood and adolescent years. However, before attending to my concluding reflections and on-going wonderings, I present some connections of the girls' stories of belonging to the literature, situating their experiences in the midst of others.

Hannah Jane, Erica, and Ivey all exhibited characteristics common to gifted adolescents, particularly as they relate to social and emotional development. Gifted adolescents are inherently different from other adolescents due to their advanced intellectual and academic abilities, which often complicate their attempts to integrate their intellectual integrity with the dominant teenage culture (Assouline & Colangelo, 2006). In turn, they may have difficulty gaining and maintaining relationships with peers (Callahan et al., 2004; Coleman & Cross, 1988). When grouped with like-minded peers, as evidenced primarily by Ivey's time at the gifted middle school academy, friendships may come more easily (see Assouline & Colangelo, 2006; Rollins & Cross, 2014), and they may have more positive perceptions of school (Eddles-Hirsch et al., 2012), as we found evident in Ivey's narrative when she attended the gifted middle school academy. And yet, as in the case of Hannah Jane, there is some evidence that gifted students report homogenous grouping as having fewer social/emotional advantages (e.g., Adams-Byers, Whitsell, & Moon, 2004).

Even though gifted adolescents are, by default, different from the typical teenager, they often still long to belong to the dominant teenage culture. Coleman and Cross (2014) interviewed ninety-nine gifted high schoolers regarding aspects of giftedness being a "social handicap." The researchers found that eighty-seven percent of participants believed others saw them as different, with most claiming they felt "estranged and distant" from the other students in their classes (p. 12). Additionally, gifted girls may dumb down or hide their giftedness in order to be more accepted by their peers. The behaviors indicating "blending in" or "pretending to be normal" have been described by Coleman (1985) as not admitting a test was easy, asking questions one already knows the answers to, not raising hand or volunteering answers, and purposefully trying to be vague about accomplishments or grades, just to name a few. Gifted girls have been known to take on these behaviors in order to avoid being seen as unattractive (Reis & Hébert, 2008) or feeling alienated (Fahlman, 2004).

Conclusion

Towards the completion of the final research texts, my wonderings of the girls' storied lives of belonging continued. The mothers I spoke with had tremendous insight into the lives of their daughters. Their relational living alongside their daughters offered perspectives that I might not have been able to gather if I had interviewed the girls themselves. I wonder what additional stories of belonging the girls experienced, and would continue to experience, inside the institutional walls of schools.

I also wonder, for Hannah Jane, what was it like to feel nervous being around other kids? What is it exactly that creates a sense of belonging amidst working with non-verbal students? Would she feel a sense of belonging in high school? For Erica, how does her seemingly ever-present belief that "she belongs somewhere else" influence her in the day-to-day moments when she encounters the feeling that she is different from her friends? Does her ability to feel

belonging in multiple groups lead to a sense of feeling pulled in different directions? Which group does she feel most 'at home' in? How will these stories of belonging influence her when she is in college, likely far away from home? For Ivey, how did it feel to grow up without feeling a genuine sense of belonging, both at school and amongst her sisters? How would she reflect on her years at the gifted middle school academy? Did they provide a sense of social rest and respite, compared to her experiences in traditional classrooms in elementary and high school? In what ways did her stories of belonging in high school influence the ways in which she interacted with peers in college? For all of the girls, I wonder what they would say about their own stories of giftedness and belonging? How would these early stories of belonging influence them as they continued through school, perhaps through college, and into their adult lives?

Lastly, my intention in this study was not to generalize the experiences of belonging for *all* gifted adolescent girls. I found myself wondering how the experiences of these three girls may differ from stories of belonging from gifted adolescent girls from underrepresented and culturally diverse populations. Compared to their White peers, culturally diverse gifted adolescents have different experiences of belonging, identity development, peer relationships, social and emotional needs, and more (see Ford, 2002; Ford & Moore, 2006; Sayman, 2015; Scott, 2014). Similarly, gifted adolescent girls who are twice exceptional, having both precocious ability in addition to a learning disability, likely have different stories of belonging.

In conclusion, the stories presented here are not intended to reduce adolescent belonging into simple understandings, nor are they intended to demonstrate adolescent experiences that are so different from others that they present new theories of belonging. Instead, according to Clandinin and Murphy (2007), the knowledge developed by my narrative inquiry is textured by particularity and incompleteness instead of generalizations and certainties. Hannah Jane's, Erica's, and Ivey's stories of belonging do not end with my research. They continue evolving.

"These stories live in us, in our bodies, as we move and live in the world" (Clandinin, 2013, p. 22). For those of us who live and work with gifted girls–be us parents, teachers, counselors, researchers, friends, etc.–may the stories presented here continue to live in us in ways that encourage us to place our own stories of belonging alongside theirs and shape the way we promote talent development among our gifted girls in schools.

References

Adams-Byers, J., Whitsell, S. S., & Moon, S. M. (2004). Gifted students' perceptions of the academic and social/emotional effects of homogeneous and heterogeneous grouping. *Gifted Child Quarterly, 28,* 7–20. https://doi.org/10.1177/001698620404800102

Assouline, S. G., & Colangelo, N. (2006). Social-emotional development of gifted adolescents. In S. M. Moon & F. A. Dixon (Eds.), *The handbook of secondary gifted education* (pp. 65–85). Waco, TX: Prufrock Press Inc.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental health motivation. *Psychological Bulletin, 117*, 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and processes. *Journal of Research in Nursing, 13*(1), 68–75. https://doi.org/10.1177/1744987107081254

Boston, J. S., & Cimpian, A. (2018). How do we encourage gifted girls to pursue and succeed in science and engineering? *Gifted Child Today, 41*, 196–207. https://doi.org/10.1177/1076217518786955

Callahan, C. M., Sowa, C. J., May, K. M., Tomchin, E. M., Plucker, J. A., Cunningham, C. M., & Taylor, W. (2004). The social and emotional development of gifted students. *National Research Center on the Gifted and Talented.*

Clandinin, D. J. (2006). Narrative inquiry: A methodology for studying lived experience. *Research Studies in Music Education, 27*(1), 44–54. https://doi.org/10.1177/1321103X060270010301

Clandinin, D. J. (2013). *Engaging in narrative inquiry.* London: Routledge.

Clandinin, D. J., & Murphy, M. S. (2007). Looking ahead: Conversations with Elliot Mishler, Don Polkinghorne, and Amia Lieblich. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 632–650). Thousand Oaks, CA: SAGE Publications Inc.

Clandinin, D. J., & Rosiek, J. (2007). Mapping a landscape of narrative inquiry: Borderland spaces and tensions. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 35–75). Thousand Oaks, CA: Sage.

Coleman, L. J. (1985). *Schooling the gifted.* Menlo Park, CA: Addison-Wesley Publishing Company.

Coleman, L. J., & Cross, T. L. (2014). Is being gifted a social handicap? *Journal for the Education of the Gifted, 37*, 5–17. https://doi.org/10.1177/0162353214521486

Coleman, L. J., Micko, K. J., & Cross, T. L. (2015). Twenty-five years of researched on the lived experience of being gifted in school: Capturing the students' voices. *Journal for the Education of the Gifted, 38*, 358–376. https://doi.org/10.1177/0162353215607322

Connelly, F. M., & Clandinin, D. J. (2006). Narrative inquiry. In J. Green, G. Camilli, P. Elmore et al. (Eds.), *Handbook of complementary methods in education research* (2nd ed., pp. 477–487). Mahwah, NJ: Lawrence Erlbaum Associates.

Cross, T. L., Coleman, L. J., & Terhaar-Yonkers, M. (2014). The social cognition of gifted adolescents in schools: Managing the stigma of giftedness. *Journal for Education of the Gifted, 37*, 30–39. https://doi.org/10.1177/0162353214521492

Csikszentmihalyi, M. (1996). *Creativity: The psychology of discovery and invention.* New York, NY: HarperCollins Publishers.

Davis, G. A., & Rimm, S. B. (2004). *Education of the gifted and talented* (5th ed.)*.* Boston, MA: Pearson Education, Inc.

Davis, G. A., Rimm, S. B., & Siegle, D. (2011). *Education of the gifted and talented* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Delisle, J. & Galbraith, J. (2002). *When gifted kids don't have all the answers: How to meet their social and emotional needs* (2nd ed.). Minneapolis, MN: Free Spirit Publishing, Inc.

Dewey, J. (1938). *Experience and education.* New York, NY: Macmillan Publishing Company.

Eddles-Hirsch, K., Vialle, W., McCormick, J., & Rogers, K. (2012). Insiders or outsiders: The role of social context in the peer relations of gifted students. *Roeper Review, 34*(1), 53–62. https://doi.org/10.1080/02783193.2012.627554

Fahlman, S. A. (2004). Perceptions of giftedness among gifted females in emerging adulthood. *Qualitative Research in Psychology, 1*, 285–306. https://doi.org/10.1191/1478088704qp019oa

Ferguson, S. K. (2015). Affective education: Addressing the social and emotional needs of gifted students in the classroom. In F. Karnes & S. Bean, *Methods and materials for teaching the gifted* (4th ed., pp. 479–512). Waco, TX: Prufrock Press Inc.

Ford, D. Y. (2002). Racial identity among gifted African American students. In M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. 155–164). Waco, TX: Prufrock Press, Inc.

Ford, D. Y., & Moore, J. L., III. (2006). Being gifted and adolescent: Issues and needs of students of color. In S. M. Moon & F. A. Dixon (Eds.), *The handbook of secondary gifted education* (pp. 113–136). Waco, TX: Prufrock Press Inc.

Good, C., Rattan, A., & Dweck, C. S. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology, 102*, 700–717. https://doi.org/10.1037/a0026659

Gross, M. U. M. (1989). The pursuit of excellence or the search for intimacy? The forced-choice dilemma of gifted youth. *Roeper Review, 11*, 189–194.

Guthrie, K. H. (2018). The weight of expectations: A thematic narrative of gifted adolescent girls' reflections of being gifted. Manuscript submitted for publication.

Heilbronner, N. (2013). The STEM pathway for women. *Gifted Child Quarterly, 57*, 39–55. https://doi.org/10.1177/0016986212460085

Institute for the Study of Advanced Development. (n.d.). *The Columbus Group.* Retrieved 4/30/2017 from http://www.gifteddevelopment.com/isad/columbus-group.

Kerr, B. A., & McKay, R. (2014). *Smart girls in the 21st century: Understanding talented girls and women.* Tucson, AZ: Great Potential Press, Inc.

Kerr, B. A., Vuyk, M. A., & Rea, C. (2012). Gendered practices in the education of gifted girls and boys. *Psychology in the Schools, 49*, 647–655. https://doi.org/10.1002/pits

Kramp, M. K. (2004). Exploring life and experience through narrative inquiry. In K. deMarrais & S. D. Lapan (Eds.), *Foundations for research: Methods of inquiry in education and the social sciences* (pp. 103–122). Mahwah, NJ: Lawrence Erlbaum Associates.

Lovecky, D. V. (1995). Creative connections: Perspectives on female giftedness. *Advanced Development, 5,* 95–106.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50,* 370–396. https://doi.org/10.1037/h0054346

Maslow, A. H. (1962). Some basic propositions of a growth and self-actualization psychology. *Perceiving, behaving, belonging: A new focus on education* (pp. 34–49). Washington, D.C.: Association for Supervision and Curriculum Development.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: John Wiley & Sons, Inc.

Moon, S. M. (2009). Myth 15: High-ability students don't face problems and challenges. *Gifted Child Quarterly, 53,* 274–276. https://doi.org/10.1177/0016986209346943

Moon, S. M., & Dixon, F. A. (2006). Conceptions of giftedness in adolescence. In S. M. Moon & F. A. Dixon (Eds.), *The handbook of secondary gifted education* (1st ed., pp. 7–33). Waco, TX: Prufrock Press Inc.

Paek, S. H., Sumners, S. E., & Sharpe, D. I. (2019). Teachers' beliefs of creative children. *Journal of Creative Behavior, 0*(0). 1–16. https://doi.org/10.1002/jocb.400

Patton, M. Q. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Peterson, J. S. (2009). Myth 17: Gifted and talented individuals do not have unique social and emotional needs. *Gifted Child Quarterly, 53*, 280–282. https://doi.org/ 10.1177/0016986209346946

Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences.* Albany, NY: State University of New York Press.

Reis, S. M., & Hébert, T. P. (2008). Gender and giftedness. In S. Pfeiffer (Ed.), *Handbook of giftedness in children: Psychoeducational theory, research, and best practices* (pp. 271–291). New York, NY: Springer Science and Business Media, LLC.

Rollins, M. R., & Cross, T. L. (2014). A deeper investigation into the psychological changes of intellectually gifted students attending a residential academy. *Roeper Review, 36,* 18–29. Https://doi.org/10.1080/02783193.2014.856372

Ryan, J. J. (1999). Behind the mask: Exploring the need for specialized counseling for gifted girls. *Gifted Child Today, 22*(5), 14–17.

Sayman (2015) "I Was Scared to Be the Stupid": Latinas in Residential Academies of Science and Math. *Multiple Voices for Ethnically Diverse Exceptional Learners, 15*(2), 22–35.

Scott, M. T. (2014). Resisting dark chocolate: A journey through racial identity and deficit thinking: A case study and solutions. *Interdisciplinary Journal of Teaching and Learning, 4,* 43–55.

Silverman, L. K. (1997). The construct of asynchronous development. *Peabody Journal of Education, 72*(3/4)*,* 36–58.

Tardif, T. Z., & Sternberg, R. J. (1988). What do we know about creativity? In R. J. Sternberg (Ed.), *The nature of creativity: Contemporary psychological perspectives* (pp. 429–440). New York, NY: Cambridge University Press.

Thomas, E., & Maglivy, J. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing, 16*(2), 151–155. https://doi.org/ 10.1111/j.1744-6155.2011.00283.x

Torrance, E. P. (1962). *Guiding creative talent.* Englewood Cliffs, NJ: Prentice-Hall, Inc.

Torrance, E. P. (1963). The creative personality and the ideal pupil. *Teachers College Record, 65,* 220–226.

Torrance, E. P. (1979). *The search for satori and creativity.* Buffalo, NY: Creative Education Foundation, Inc.

VERBI Software (2017). MAXQDA Plus 12 [computer software]. Berlin, Germany: VERBI Software. Available from https://www.maxqda.com

Westby, E. L., & Dawson, V. L. (1995). Creativity: Asset or burden in the classroom? *Creativity Research Journal, 8*(1), 1–10.

Wolcott, H. F. (2009). *Writing up qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Appendix

Interview questions and probes.

Question 1
    A. Tell me a little bit about your daughter. What are some of your favorite stories about her?
      • What are her interests?
      • Her strengths?
      • *Ask to see photos
    B. How do you see your daughter as being 'gifted.'
      • You mentioned ____. Can you share an example of that?
    C. How do you think your daughter sees herself as being gifted?
      • You mentioned ____. Can you share an example of that?

Question 2
    A. Tell me about your daughter and her relationships with your family.
      • With you?
      • Siblings?
    B. Tell me a little bit about your daughter and her relationships with friends.
      • At school? Outside of school?
    C. How do you think her giftedness impacts her relationships with her friends?
      • Your family
      • At school
      • You mentioned ____. Can you tell me more about that? Can you give an example?

Question 3
    A. In what ways do you think your daughter feels like she "fits in" or "doesn't fit in" because of her giftedness?
      • Anti-intellectual attitudes?
      • Do you have another story to share?
    B. In what ways do you see your daughter's relationships and 'fitting in' impacting her own 'sense of self'?
      • You mentioned ___. Can you tell me a little more about that?
    C. How do you see her 'fitting in' or 'not fitting in' as impacting her sense of self as a *gifted* girl?
      • You mentioned ___. Can you tell me a little more about that?

Question 4
    From our conversation here today about your daughter's sense of 'belonging' or 'fitting in', what stands out for you?
      • What is your main takeaway from this experience?
      • You mentioned __. Can you tell me a little more about that?

Questions 5
    Is there anything else that came up for you during this discussion? Is there anything you would like to add?

CHAPTER 5

CONCLUSION

How do you conclude a qualitative study? Wolcott (2009) boldly claimed, "You don't. Give serious thought to dropping the idea that your final chapter must lead to a conclusion or that the account must build toward a dramatic climax" (p. 113). This may sound unconventional to some readers, but in essence, Wolcott encouraged qualitative researchers to avoid the temptation of "dichotomous" thinking – research does not have to be either decision-oriented or conclusion-oriented. Instead, if the purpose of the research is to attend to issues of exploring and wondering about phenomena, then encouraging readers to continue to explore and wonder about the phenomena or issues addressed may be more appropriate. He wrote, "Rather than striving for closure, see if you can leave both yourself and your readers pondering the essential issues that perplex you" (p. 115).

Wolcott's perspective reminds me of Dr. E. Paul Torrance's pedagogical approach to fostering creative thinking by keeping a degree of openness and resisting the urge to jump to conclusions and 'close' the learning process. In the Incubation Model of Teaching (Torrance & Safter, 1990), there are three phases for lesson development that set the stage for incubation to occur beyond the classroom. They are Stage 1: Heightening anticipation, Stage 2: Encountering the expected, the unexpected, and deepening expectations, and Stage 3: Going beyond and "keeping it going" (Torrance & Safter, 1990). Although this dissertation is certainly not a classroom lesson, perhaps the reader can see corollary aspects of this framework situated amongst its five chapters. Chapter 1, the Introduction, aimed to heighten your anticipation of qualitative inquiry among gifted adolescent girls. Chapters 2-4 deepened your understanding of

the methodologies, procedures, findings, and interpretations of the experiences of gifted adolescent girls. Here in Chapter 5, the Conclusion, I pose reflections and questions that challenge myself and readers to go beyond and "zoom out" to bigger contexts and fields of meaning (Galman, 2013), remaining open about what we have learned from this research.

Instead of a formal conclusion, Wolcott (2009) recommended summaries and statements of personal reflections as appropriate alternatives to concluding a study. Thus, the purpose of this Conclusion Chapter is three-fold. First, I provide a summary of criteria related to qualitative quality and how this dissertation met several characteristics of high-quality qualitative research. Second, I offer reflections of the personal, practical, and social justifications (Clandinin, 2013) woven throughout the three articles (Chapters 2-4). Lastly, I subscribe to advice from Wolcott (2009) and Torrance and Safter (1990) and reflect on the issues that continue to perplex me, inviting readers to come alongside me in my ponderings.

Attention to Qualitative Quality

Quality research is marked by reliability and validity. These are, in the words of Galman (2013), "key parts of the recipe for making good science" (p. 88). In the broad spectrum of qualitative research, reliability and validity can be difficult to define and can take on different terminology (e.g. quality, rigor, credibility, etc.). Many have addressed how these constructs apply to qualitative study designs, data collection, analysis, and interpretation (see Creswell & Miller, 2000; Galman, 2013; Lincoln & Guba, 1985; Polkinghorne, 2007; Thomas & Maglivy, 2011; Tracy, 2010). Some (Barbour, 2001; Lincoln & Guba, 1985; Tracy, 2010) have cautioned against having strict definitions or universal guidelines for establishing rigor in qualitative research. For example, Barbour (2001) claimed, "If we succumb to the lure of 'one size fits all' solutions we risk being in a situation where the tail (the checklist) is wagging the dog (the qualitative research)" (p. 1115).

Instead of a 'one size fits all' approach, Tracy (2010) proposed eight general "big-tent" criteria for excellent qualitative research intended to serve as a guide for enhancing the *quality* of a study. These eight criteria are: worthy topic, rich rigor, credibility, resonance, significant contribution, ethical procedures, and meaningful coherence. Next, I describe these criteria in more detail and summarize their contributions to this dissertation.

Worthy topic refers to research that is relevant, timely, significant, and interesting (Tracy, 2010). According to Tracy (2010), worthy studies are conceptually or theoretically compelling and "point out surprises—issues that shake readers from their common-sense assumptions and practices" (p. 841). Chapter 1 situates this dissertation research in the greater context of recent qualitative inquiry with or about gifted adolescent girls from 2008-2018. Chapter 2 offers new perspectives on approaching qualitative inquiry with groups of adolescents, and Chapters 3-4 contribute significant and timely perspectives and insights to the experiences of the current generation of gifted adolescent girls.

Studies marked with *rich rigor* have sufficient, abundant, appropriate, and complex aspects relating to theoretical constructs, sample(s), context(s), data collection, and data analysis procedures. Rich rigor is also supported by the amount of time spent in the field, although there is no "magic amount of time in the field" (Tracy, 2010, p. 841). In essence, rich rigor provides face validity. In Chapter 1, I was transparent about the steps I took when locating qualitative inquiry studies with or about American gifted adolescent girls. The study presented in Chapter 3 was designed with multiple methods of data collection (four group interviews, written reflections) and adopted an alternative, poetical approach to analysis alongside the primary thematical analyses. Capturing the perspectives of the teacher in two one-on-one interviews also contributed alternative perspectives of the girls' experiences. Chapter 4 closely aligned with a

narrative inquiry approach in the tradition of Clandinin (2013). Rich theoretical perspectives and time spent verifying the narratives with each mother increased the study's rigor.

Sincerity is characterized by self-reflexivity and honesty about subjective values, biases, and inclinations of the researcher(s) (Tracy, 2010). Freeman, deMarrais, Preissle, Roulston, and St. Pierre (2007) wrote, "There are no 'pure,' 'raw' data, uncontaminated by human thought and action, and the significance of data depends on how material fits into the architecture of corroborating data" (p. 27). Stating one's subjectivities early on in the research process allows readers to understand a researcher's position, thus bracketing those subjectivities throughout the research process and interpretation (Creswell & Miller, 2000). Sincerity also includes transparency about the study's methods and challenges or mistakes (Tracy, 2010). A full account of my subjectivity statement was included in Chapter 1, and more concise researcher statements are included in Chapters 2-4.

Credibility refers to trustworthiness and plausibility of research findings (Tracy, 2010). Research deemed credible is marked by thick description, concrete detail, explication of tacit (contextual) knowledge, and the idea of showing rather than telling (Tracy, 2010). In qualitative inquiry, personal accounts of experiences and perspectives are trustworthy sources of evidence of the human realm (Polkinghorne, 2007), and when personal accounts have a way of producing feelings in the reader that they have experienced, or could experience, these are thick, rich accounts (Creswell & Miller, 2000). Credibility also refers to studies that include triangulation or crystallization, multivocality, and member reflections as part of the study procedures (Tracy, 2010). Although different approaches in data collection or interpretation lenses may result in different interpretations, gathering and validating data through multiple procedures is considered valuable across qualitative paradigms (Tracy, 2010). Chapter 3 invited member checking with the teacher and follow-up discussions with the girls in order to discuss and reflect on my

interpretations from our earlier conversations. Chapter 4 invited parents to be shared narrative inquirers, and negotiation of the final research texts (e.g., narratives) were part of the study's design.

Resonance reflects the study's ability to influence, affect, or move particular readers or a variety of audiences through aesthetic, evocative representation (Tracy, 2010). A study with "empathetic validity" (Dadds, 2008) has the potential to "transform the emotional dispositions of people and promote greater mutual regard" (Tracy, 2010, p. 844). It also refers to a study's ability to provide naturalistic generalizations and transferrable findings. In other words, this criterion describes research that "reverberates and affect[s] an audience" (p. 844) or shares findings that are valuable across a variety of contexts and have resonance (Tracy, 2010). Chapter 3 opened with a poetic transcription representing the girls' collective voice. This chapter was also written in such a way that readers potentially felt a sense of heightened anticipation followed by disappointment. This mirrored my own reactions to learning that the girls had essentially lost their sense of confidence when they returned to the co-ed classroom. Depending on the reader, Chapter 4 may reverberate among readers who are parents of gifted children, who were themselves gifted students, or who have taught gifted adolescent girls in schools.

Research that makes a *significant contribution* does so conceptually, theoretically, practically, morally, methodologically, or heuristically (Tracy, 2010). Studies that extend knowledge, improve practice, generate ongoing research, or empower people are considered significant (Tracy, 2010). Providing sufficient responses to the questions 'So what?' or 'So what now?' can help researchers attend to the significance of their research contributions (Galman, 2013). Chapter 1 verified the potential significant contribution of Chapters 3-4, the qualitative inquiry studies with or about gifted adolescent girls. Chapter 2 combined literature from qualitative methodology with literature from the field of group work/counseling, highlighting

group cohesion as the foundation to rich meaning making in group interviews with adolescents. Chapters 2-4 all conclude with implications for the fields of research and education.

Ethical research considers a variety of contexts including procedural ethics (such as guidelines for human subject research promoted by an Institutional Review Board), situational and culturally specific ethics, relational ethics, and exiting ethics (e.g. leaving the scene and sharing the research; Tracy, 2010). Every circumstance and interaction are different, and qualitative researchers must "repeatedly reflect on, critique, and question their ethical decisions" (Tracy, 2010, p. 847). This may also include the ways in which researchers relate to participants in the midst of inquiry and how researchers terminate the research study and disseminate findings. Chapters 3-4 were approved by my university's Institutional Review Board, participation was voluntary, and participants were given the opportunity to choose their own pseudonyms. Chapter 3 implemented strategies mentioned in Chapter 2 in order to promote a sense of group cohesion and trust in the group interviews. I also treated my participants with respect, maintained confidentiality in all aspects of the research, and privileged participants' voices over my own.

Lastly, a study with *meaningful coherence* achieves what it purports to be about and uses methods and procedures that fit its stated goals (Tracy, 2010). These studies also meaningfully interconnect literature, research questions, findings, and interpretations with each other. Tracy (2010) cautioned that meaningful coherence does *not* refer to research that is messy, unexpected, or jarring, as these characteristics may be intentionally written to show fragmented aspects of phenomena and experiences. Instead, a study achieves meaningful coherence if its representation style matches the goals of the research. Chapter 2, even though it did not involve inquiry with human participants, interwove literature from two different disciplines. Understanding how adolescents may interact and respond in group environments from two different perspectives

helps us better understand how to approach group interviews. Even though Chapters 3-4 each contained 'unexpected' turns or fragments of stories, both studies achieved my intended goals.

Even though researchers will "fall short, deviate, and improvise" (Tracy, 2010, p. 849), these eight criteria represent best practices and serve as goals to strive for, regardless of the specific paradigm or methodology. Although this dissertation did not saturate each component, aspects of each "big-tent" criterion were demonstrated. Table 5.1 summarizes the demonstration of each criterion by the main chapters (articles) in this dissertation.

Table 5.1

Qualitative Quality Criteria and an Account of Each Criterion by Chapter.

Tracy's (2010) eight "big-tent" criteria for high quality qualitative methodological research	Ch. 2	Ch. 3	Ch. 4
Worthy Topic	●	●	●
Rich Rigor		●	●
Sincerity	●	●	●
Credibility		●	●
Resonance		●	●
Significant contribution	●	●	●
Ethical		●	●
Meaningful coherence	●	●	●

Justifications for Dissertation Research

Clandinin (2013) encouraged researchers to attend to the questions of "So what?" and "Who cares?" Answering these two questions will help to justify the importance of one's inquiry (Clandinin, Pushor, & Orr, 2007). Although Clandinin and colleagues presented these questions in the context of narrative inquiry research, I believe attending to these questions can be applied to other methodologies and qualitative inquiry as a whole (see Galman, 2013). Keeping with Clandinin's (2013) approach, attending to the personal, practical, and social justifications of the research will help to dismiss simplistic views of qualitative inquiry.

Personal justifications attend to the relation of the inquiry in context of one's own life experiences, tensions, and personal inquiry puzzles (Clandinin, 2013). My search for understanding the lives and experiences of gifted adolescent girls was inspired by my own experiences of teaching and mentoring gifted adolescent girls in my classroom. And, it is my own experiences as a gifted girl that fueled my personal inquiry puzzle. As my inquiry into the lives of gifted adolescent girls continues, I naturally begin to set my stories alongside those of my participants. Understanding their stories helps me make sense of my own. Through my interactions with study participants, I see my own personal stories through the eyes and stories of others. I begin to make meaning of my own understandings of what it means to be gifted.

Practical justifications support the narrative inquiry's ability to shift or change a practice, or practical justifications may be grounded in the need to more deeply understand the experiences of a certain population (Clandinin, 2013). Practical justifications for Chapter 2 focused primarily on shifting the practice of qualitative inquiry with groups of adolescents. By placing qualitative methodological considerations alongside those from the field of group work and group counseling, qualitative researchers were invited to consider new ways of designing and implementing research so participants have an opportunity to share in rich meaning making. Practical justifications for Chapters 3-4 were rooted in the need to understand the experiences of gifted adolescent girls. Coleman, Guo, and Dabbs (2007) challenged the field of gifted education to champion the voices of gifted adolescents, without adult interpretation, in order to better understand their experiences. The voices you heard in Chapter 3 were those of gifted adolescent girls. The voices you heard in Chapter 4 belonged to mothers, and their perspectives offered insight into the lives of gifted adolescent girls. The three mothers had lived alongside their daughter's stories of belonging, and their ability to reflect on their daughter's past, present, and future experiences helped us see how giftedness can influence the stories gifted girls live by.

Social justifications serve as theoretical justifications or as social action or policy justifications (Clandinin, 2013). The three articles in this dissertation are elaborations of the ways in which meanings guide our understanding of the world. Created out of social interaction with others (see Blumer, 1969; Mead, 1934; Morgan, 2012), the ways in which gifted adolescent girls prescribe meanings to being *gifted* influences their sense of self. During adolescence, their experiences of the world are strongly influenced through the contexts of school and peer relationships. In the words of Dewey (1938), "every experience lives on in future experiences" (p. 27). The meanings girls attribute to *gifted* are woven into their storied lives.

Reflections and Ongoing Questions

Throughout my program of research, including studies conducted outside of this dissertation, I have found that gifted adolescent girls are often surprised that I am interested in talking to them about how they see and relate to their giftedness. I have sensed that my conversations with them very well may be the first time they have reflected on their giftedness and how it influences their sense of self and relationships with others. And, I can say the same for my conversations with parents! Many of the parent participants in my research have expressed gratitude for the chance to reflect and discuss how their children experience and relate to their giftedness.

The guiding questions for this dissertation, originally stated in Chapter 1, the Introduction, were:

- What does being gifted mean to gifted adolescent girls? How do their interpretations influence their sense of self? In what ways does their giftedness influence the ways in which they experience and make meaning of their world?

- What influences the ways in which adolescent participants engage in and respond to group interviews? How does group interaction shape their meaning-making? How can we

encourage rich meaning-making among adolescents in group interviews? In what ways might group interviews benefit gifted adolescent girls in their search for meaning and understanding?

This dissertation research contributed multiple perspectives and insights into these questions. Yet, like any good researcher, I continue to reflect on the complex nature of giftedness and how qualitative inquiry contributes to our understanding of giftedness. Resisting the temptation to simply answer these questions in light of my own judgement and offering critical reflections of this dissertation's shortcomings (Wolcott, 2009), I continue to wonder about the lives and experiences of my participants and those of other gifted adolescent girls. Perhaps this is what Torrance meant by *singing in one's own key*, his phrase for inviting personal meaning, making associations, and seeing future implications (Torrance & Safter, 1990).

How are the girls from Chapter 3 experiencing their junior year of high school? Do they reflect back on their time in Laura's classroom? Do they carry with them stories from their reflections and interactions from participating in my study with their classmates? Of the three girls from Chapter 4 (Hannah Jane, Erica, and Ivey), how do they continue to experience their giftedness and belonging? Do the mothers reflect on their participation and, at times, see their daughters through the perspective of narrative inquiry? How will the stories and meanings of giftedness continue to influence the lives of gifted girls as they grow into emerging adults and adulthood? How will it impact their experiences in post-secondary environments?

Since most of my participants were American, White, and living in the southeastern U.S., how might the meaning of giftedness be different for gifted adolescent girls from underrepresented culturally diverse groups? Who are twice-exceptional? Who identify as LGBTQ+? What if I spent more time in the field? Would I have gained deeper, richer insight?

How would longitudinal inquiry impact my findings and interpretations? What might different approaches to analysis offer?

How will this research influence the ways I teach, observe, mentor, or relate to gifted girls? How do the stories of the gifted girls in this dissertation come alongside my own? Or perhaps most importantly, what questions am I still missing? All of these questions, those that served this dissertation and the new questions that arose from my inquiry, will guide me as I continue my program of research exploring the experiences of gifted adolescent girls.

References

Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *British Medical Journal, 322*, 1115–1117. https://doi.org/10.1136/bmj.323.7311.514b

Blumer, H. (1969). *Symbolic interactionism: Perspective and method.* Englewood Cliffs, NJ: Prentice Hall.

Clandinin, D. J. (2013). *Engaging in narrative inquiry.* London: Routledge.

Clandinin, D. J., Pushor, E., & Orr, A. M. (2007). Navigating sites for narrative inquiry. *Journal of Teacher Education, 58*(1), 21–35. https://doi.org/10.1177/0022487106296218

Coleman, L. J., Guo, A., & Dabbs, C. S. (2007). The state of qualitative research in gifted education as published in American journals: An analysis and critique. *Gifted Child Quarterly, 51*, 51–63. https://doi.org/10.1177/0016986206296656

Creswell, J. W., & Miller, C. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), 124–130.

Dadds, M. (2008). Empathetic validity in practitioner research. *Educational Action Research, 16,* 279–290. https://doi.org/10.1080/09650790802011973

Dewey, J. (1938). *Experience and education.* New York, NY: Macmillan Publishing Company.

Freeman, M., deMarrais, K., Preissle, J., Roulston, K., & St. Pierre, E. (2007). Standards of evidence in qualitative research: An incitement to discourse. *Educational Researcher, 36*(1), 25–32. https://doi.org/10.3102/0013189X06298009

Galman, S. C. (2013). *The good, the bad, and the data: Shane the long ethnographer's basic guide to qualitative data analysis.* New York, NY: Routledge.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry.* Beverly Hills, CA: SAGE Publications, Inc.

Mead, G. H. (1934). *Mind, self & society.* London: The University of Chicago Press, Ltd.

Morgan, D. L. (2012). Focus groups and social interaction. In J. Gubrium, J. Holstein, A. Marvasti, & K. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (2nd ed., pp. 161–176). Thousand Oaks, CA: SAGE Publications, Inc.

Polkinghorne, D. E. (2007). Validity issues in narrative research. *Qualitative Inquiry, 13*, 471–486. https://doi.org/10.1177/1077800406297670

Thomas, E., & Maglivy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing, 16*, 151–155. https://doi.org/10.1111/j.1744-6155.2011.00283.x

Torrance, E. P., & Safter, H. T. (1990). *The incubation model of teaching: Getting beyond the aha!* Buffalo, NW: Creative Education Foundation Press.

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*, 837–851. https://doi.org/10.1177/1077800410383121

Wolcott, H. F. (2009). *Writing up qualitative research,* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.