

UNDERSTANDING PARENT MOTIVATION TO OPPOSE
DETRACKING MIDDLE SCHOOL MATHEMATICS:
MENTAL CONTRASTING TRIGGERS
WHITE EXEMPTIONISM

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MADELINE AHEARN

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Student: Madeline Ahearn

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This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Education Studies by:

Dr. Jenefer Husman	Chair
Dr. Joanna Goode	Core Member
Dr. Edward Olivos	Core Member
Dr. Jennifer Ruef	Core Member
Dr. Jessica Vasquez-Tokos	Institutional Representative

and

Krista Chronister	Vice Provost for Graduate Studies
-------------------	-----------------------------------

Original approval signatures are on file with the University of Oregon Division of Graduate Studies

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DISSERTATION ABSTRACT

Madeline Ahearn

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Title: Understanding Parent Motivation to Oppose Detracking Middle School Mathematics: Mental Contrasting triggers White Exemptionism

Tracking is the practice of sorting students into courses based on their perceived ability. Middle school mathematics programs commonly track students into leveled courses with differential access to curriculum, instructional practices and future courses. With 40 years of research to draw on, every professional organization of mathematics educators advocates ceasing the practice of tracking. This is in large part due to the racialized and classed outcomes tracking reproduces. Nevertheless, tracking persists in middle school mathematics courses. Research demonstrates that parent opposition to detracking partially explains the persistence of the practice, but this research has not been specific to tracking mathematics courses in particular, nor has it critically examined race within this context. Therefore, my research asked what motivates parents to oppose detracking mathematics courses and, how are elements of Whiteness expressed through their opposition. Via a nested case study, I investigated these questions through in-depth interviews with parents at one middle school and contextualized those with administrator interviews across four school districts. By extending Oettingen's (2000) concept of mental contrasting with Bronfenbrenner's (1977) Ecological Systems Theory I found that some of the parents in my study held multiple goals for their students' mathematical experience. Despite the expectation of administrators and the consensus from reviewed literature, the majority of parents

in my study did not hold the goal of a procedural mathematics experience for their child. However, I found three goals influenced by mesosystem and macrosystem factors that did contrast with detracking producing the motivation to oppose. Additionally, I found that some parents use Bonilla-Silva's (2003/2022) colorblind frames to rationalize racial disparities in access to high-tracked mathematics. Extending this theory, I develop the frame White exemptionism and define it as the colorblind move to acknowledge the benefit of equity-initiatives for oppressed and marginalized people only to claim exemption from participating, thereby perpetuating inequity. From my findings, I infer three productive moves for administrators aimed at helping them move their detracking projects forward in the face of parent opposition as well as recommendations for future research regarding my extensions of both mental contrasting and colorblind racism.

CURRICULUM VITAE

NAME OF AUTHOR: Madeline Ahearn

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
College of Notre Dame of Maryland, Baltimore
University of Maryland, College Park

DEGREES AWARDED:

Doctor of Philosophy, Critical and Sociocultural Studies in Education, 2023, University of Oregon
MA in Teacher Leadership, 2008, College of Notre Dame of Maryland
BS Degree in Mathematics, 2006, University of Maryland
BS Degree in Secondary Education, 2006, University of Maryland

AREAS OF SPECIAL INTEREST:

Mathematics Education
Detracking
Critical Race Theory

PROFESSIONAL EXPERIENCE:

Secondary Mathematics Methods Instructor, University of Oregon, Eugene, 2014-2023
Integrated Guidance Administrator, Lane Education Service District, Eugene, 2023
Mathematics Specialist, Lane Education Service District, Eugene, 2017-2023
Curriculum & Instruction Administrator, Eugene 4J School District, 2014-2017
Mathematics Instruction Coach & Teacher, North Eugene High School, 2013-2014
Mathematics Teacher, Roosevelt Middle School, 2010-2013
Mathematics Teacher, Baltimore Freedom Academy, Baltimore, 2006-2010

GRANTS, AWARDS, AND HONORS:

College of Education Travel Award, University of Oregon, 2021
College of Education Travel Award, University of Oregon, 2020

PUBLICATIONS

Ruef, J., Willingham, J. C., Ahearn, M. (2022). Math and equity in the time of COVID: Teaching challenges and successes. *International Electronic Journal of Mathematics Education*. <https://doi.org/10.29333/iejme/11818>
Sun, K. L., Ruef, J., Stoehr, K. J., Ahearn, M. (2022). Teaching preservice mathematics teachers in the time of COVID: What's worth keeping? *Journal of Humanistic Mathematics*. 12(1), 187-209. <https://scholarship.claremont.edu/jhm/vol12/iss1/14>

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CHAPTER 1: INTRODUCTION

Tracking students into leveled courses based on their perceived ability is a long-standing practice in school mathematics programs (NCTM, 2018). Professional organizations supporting mathematics educators have made recent calls for schools to cease the practice of tracking (Association of State Supervisors of Mathematics, 2021; National Council of Supervisors of Mathematics, 2020; National Council of Teachers of Mathematics [NCTM], 2018; TODOS, 2020). Detracking and removing these leveled courses to create heterogeneous classes across content areas has proven difficult in the past (Oakes, 1985/2005). One of the reasons for this difficulty is parent opposition to detracking (McGrath and Kuriloff, 1999; Oakes, 1992; Oakes and Rogers, 2006; Wells and Serna, 1996). Unlike research on this topic in the past, my study is specific to the context of tracking in mathematics and centers race in its analysis by investigating the motivations for parent opposition to detracking mathematics and how elements of Whiteness are expressed through their opposition. The implications of my research are written to the practitioners who are working in schools and districts today, trying to detrack their mathematics programs and facing parent opposition.

Statement of the Problem

With roots dating back to the early 1900s and reified through the years by social Darwinism, school segregation, and narrow conceptions of mathematics, tracking has resulted in over a century of the kind of racial and class-based segregated mathematics courses we see today (Oakes, 1985/2005; SDE, 2021b; Stiff & Johnson, 2011). Research demonstrates a link between this segregation and race/class inequities in mathematics outcomes (Apple, 2004; Ballón, 2008; Boaler, 2006; Domina, et al., 2016; Domina, et al., 2016; Louie, 2017; Oakes, 1985/2005). Every professional organization supporting mathematics educators advocates for schools to cease the

practice of tracking (Association of State Supervisors of Mathematics, 2021; National Council of Supervisors of Mathematics, 2020; NCTM, 2018; TODOS, 2020). And yet tracking persists.

Researchers, educators, activists – and those that intersect across these roles – have been studying and working to disrupt the practice of tracking across content areas for decades. Within the context of mathematics, detracking and placing students into heterogeneous courses is a well-studied process. Findings have demonstrated that moving to detracked mathematics courses allows for more cognitively demanding mathematical experiences, as opposed to the procedural learning experiences commonly associated with school mathematics (Boaler, 2006; Horn, 2006, 2008, 2012). In addition, these detracked programs produce better mathematics achievement outcomes for students (Boaler, 2002; Boaler and Staples, 2008; Burris, et al., 2009; Strutchens, et al., 2011) and increase the number of students who see themselves as mathematicians (Aguirre, et al., 2008; Ruef, 2021). Further, the positive results of detracking are found across student groups (Boaler, 2006). The research is “unequivocal,” tracking produces inequities and detracking decreasing these inequities (NCTM, 2018, p. 18). So, why haven’t we detracked mathematics yet?

Parent opposition is a well-documented reason for the persistence of tracking (McGrath and Kuriloff, 1999; Oakes, 1992; Oakes and Rogers, 2006; Wells and Serna, 1996). Oakes’ (1992) analysis of detracking names other reasons for tracking’s persistence including technical reforms with curriculum and teaching practices and normative conceptions of mathematics that make dismantling tracking difficult. However, even with all these other elements aligned, Oakes and Rogers (2006) document how parent opposition thwarted educators’ detracking efforts. Parents of privilege have been found to oppose change by wielding their social capital (Coleman, 1988) and their cultural capital (Bourdieu, 1987) and maintain status quo hierarchies in many

education settings (Bader, et al., 2019; Hagerman, 2018; Hill & Tyson, 2009; Horvat, et al., 2003; Lareau, 1989/2000, 2011, 2015; Useem, 1992; Yan and Lin, 2005). But few studies examine the intersection of parent opposition to detracking with the context of mathematics even though mathematics is the most tracked subject in schools (Oakes, 1985/2006). And none critically examine the role race plays in the opposition. Therefore, I researched what motivates parents to oppose detracking mathematics courses and, how are elements of Whiteness expressed in their opposition.

Setting

My research on these questions is set at a time of reform. The state in which my study was conducted has embraced the recent calls by professional organizations and has recommended detracking mathematics education. The state centers an equity lens in making this recommendation, naming inequities in access to advanced mathematics and an overrepresentation in lower tracked mathematics courses of students of color, students navigating poverty, multilingual students and students receiving special education supports as primary justification for dismantling tracked mathematics courses (State Department of Education, 2021). As a result, many school districts across this state are using their own equity lenses to assess access and course placement in their own schools and moving to detrack middle school mathematics as a result of the revealed inequities.

Those districts out in front of these changes are beginning to experience parent opposition. Valley and River School Districts in my study have been working to detrack their middle school math programs since 2020 and 2021, respectively, and the Curriculum Directors in each district are in charge of the project. Mountain School District is the furthest along in their

detracking work, having started in 2018, and the work was led by a Teacher on Special Assignment (TOSA).

At the center of my study is Forest School District. Four years before my study, this district detracked 6th grade. Parent opposition to this first step in detracking was intense and highly localized to the middle school serving the highest income and highest proportion of White students in Forest School District, Local Middle School (LMS). This opposition came through regular emails, phone calls and lobbying to supervisors and school board members and for the past four years detracking has been stalled at 6th grade. However, at the time of the study, teachers and administrators at LMS were committing to continuing the detracking of their middle school mathematics program by creating heterogeneous 7th and 8th grade mathematics courses. What bolstered these educators' desire to better serve students was the state's call for detracking and the knowledge that other districts around the state had moved in this direction too. What concerned them the most was parent opposition.

Chapter 3 will elaborate the many roles I hold within this research setting but in sum: I am entangled in the setting of the study. I have served on state advisory boards moving detracking recommendations forward and I represent the state in national coalitions aligning our efforts across multiple states. I served as curriculum administrator in one of the districts in this research study working to move detracking forward at that time, and have experienced parent opposition to my efforts. At the time of this study, I was a math specialist supporting two of the districts in this study and worked with them on parent engagement and curriculum redesign as a part of their detracking project. I am a parent of a child attending one of the districts in the study and I stand on soccer sidelines with some of the parents I interviewed. My methodological

choices allow me to embrace these roles and the rich context I have for my research topic because there is nothing neutral about my work.

Overview of the Study

My research asked two questions: what motivates parents to oppose detracking mathematics courses? And, how are elements of Whiteness expressed through their opposition? I conducted fourteen in depth interviews with parents at LMS and six interviews with administrators across four districts. Extended case methodology (Burawoy, 1998) allowed me to go to this data with theory. My theoretical framework includes Oettingen's (2000) concept of mental contrasting, extended with Bronfenbrenner's (1977) Ecological Systems Theory, to help me understand parent motivation. To help me understand the role race plays in parent opposition, I utilized Matias and Boucher's (2021) conceptualization of Whiteness, and most prominently colorblind racism (Bonilla-Silva, 2003/2022).

Mental contrasting is the juxtaposition of imagined futures (parents' goals for their child's mathematics experience) with present barriers to this vision (detracking) and engaging strategies to overcome the barrier (opposition to detracking). The concept of mental contrasting centers the individual as the unit of analysis and my study aims to contextual parent opposition in the socio-historical and cultural milieu that influence parents. Therefore, I extend mental contrasting with Bronfenbrenner's (1977) Ecological Systems Theory analyzing parent goals as influenced by macrosystem societal and cultural factors and mesosystem relationships in their communities.

My second framework draws on Matias and Boucher (2021) conceptualization of the elements of Whiteness which include many elements such as entitlement, Whiteness as property and, most salient for my study, color blindness. A colorblind ideology functions such that one

can acknowledge race but ignore any racial hierarchy (Bonilla-Silva, 2003/2022). In an extension of colorblind racism, I found a new frame functioning in my data that I call White exemptionism. I illustrate this move with examples of parents celebrating detracking as an equity-initiative that is good for other people's children but that they claim exemption from participating in the initiatives.

In the next chapter, I will review relevant literature on White parents, their engagement in school communities and their opposition in the past to mathematics reform and detracking efforts. In Chapter 3, I will discuss my methodology including who I interviewed and how, and how I applied my dual-conceptual framework to analyze the interviews. In Chapters 4 and 5, I analyze my data with each conceptual framework separately, and I extend each theory through my analysis. Then in Chapter 6, I bring the frameworks together looking at the findings from one framework through the lens of the other. This dual lens led to productive implications for administrators who are detracking their mathematics program and facing White parent opposition to their work.

Summary

Research is unequivocal; detracking mathematics programs is necessary but parents oppose this change (NCTM, 2018). Historically, opposition from parents has maintained the status quo hierarchies and meant tracking has persisted. At this time of statewide reform, my project seeks to better understand the motivations behind this opposition so that administrators can move their detracking projects forward despite the White parent opposition they are facing. With a dual-conceptual framework, I can do what research on this issue has yet to do, examine the motivation for parent opposition to detracking mathematics and analyze elements of Whiteness in that opposition. My hope is that this more holistic analysis, which yields concrete

recommendations for administrators, will bolster these arbiters of our education system so that they can change the tide of mathematics education reform and finally dismantle the long-standing, racist system of tracking.

CHAPTER 2: REVIEW OF LITERATURE

My research asks: What motivates parents to oppose detracking mathematics courses? And, how are elements of Whiteness expressed through their opposition? My review of the literature surrounding these questions will begin with the context of parent opposition in education broadly and then will narrow to the context of mathematics and then detracking. Then, I will review the literature on my two conceptual frameworks: mental contrasting that guided my analysis of parent motivation and a conceptualization of Whiteness that guided my analysis of race.

Context of Parent Opposition

I use the term opposition here to describe various forms of action to prevent or interrupt change (Roberts, 2015). Parent opposition can come as communication via an email, phone call, parking lot chat, etc. with a person holding decision-making power like a teacher, principal, or school board member. Also, opposition can take the form of a question asked publicly, aimed at disrupting a presentation or recentring the conversation on the needs of students placed into high-tracks. Opposition can also take the form of leaving or threatening to leave or unenrolling their student from a school. In my review, I found mathematics education researchers call these actions *obstructing* (Peressini, 1997) or describe them as *advocating* (Schoenfeld, 2004) but only when the advocacy is against changing the mathematics curriculum or pedagogy. In detracking literature, *objections* (Oakes, 1984/2005) and *demands* (Wells and Serna, 2010) are used to describe parent intervention in detracking projects with the intent of maintaining status quo tracking systems. My study is situated at the intersection of these two literature bases: mathematics education reform and detracking, and I intentionally use *opposition* to encapsulate behaviors documented across these contexts.

Resistance is often discussed in literature on parents and education within the context of social justice movements (Olivos, 2006; Ramirez, 2015). This is not how I am using opposition. Successful parent resistance movements in education have the outcome of promoting social justice through disrupting status quo social hierarchies and injustices (for relevant example: Oakes and Rogers, 2006). In contrast, opposition describes various actions taken by parents with intent on maintaining status quo hierarchies and/or privileges.

Parent Opposition that Maintains Educational Hierarchies

Coleman (1988) conceptualizes parent involvement in education as a form of social capital which he defines by its function as a resource for action. This is distinct from cultural capital which refers to the knowledges, manners of speaking and shared references; within privileged families the cultural capital held is explicitly valued in education settings (Bourdieu, 1987). When parents wield either form of capital to maintain social hierarchies it can be read as an enactment of power (Bourdieu, 1987). The following section will review literature on particular parent engagements in education that can be understood as enactments of power with the material effect of securing advantages for their child thereby maintaining hierarchies within the education system so their child can be on top.

Annette Lareau documents how parents from middle- and upper-classes wield social capital to secure an advantage for their children in schools (Lareau, 1989/2000, 2011, 2015). Through ethnographic research, Lareau (1989/2000) finds that knowledge of a child's schooling and parental contact with school provided by middle-class social networks gives these parents an advantage when advocating for their child. And, advocate they do. In this same study, she documents how middle- and upper-class parents play a more active role in managing their children's course placement onto higher tracks. The cultural knowledge afforded these parents

leads to them shaping their children's educational careers. Lareau (2015) writes of this cultural knowledge as knowing the “rules of the game” regarding how institutions worked. It is not that higher-class children automatically benefit from their parent’s cultural resources; in fact, Lareau (1989/200) found that there must be an investment of this resource such as advocacy, volunteering, or other such involvement in school functions. Lareau’s (2003) concept of concerted cultivation describes this parenting strategy of the economically advantaged parents to nurture their children by intensely structuring their time with enrichment activities for the purpose of giving their children a competitive edge. For the economically advantaged parents in Lareau’s studies, investing social capital was done to intentionally secure advantages for their child in what they viewed as a competitive education landscape.

Bennett and colleagues (2021) conducted a study of parents in the context of educational decision making. Similar to Lareau’s concept of concerted cultivation, these researchers found middle-class families to be engaging in what they called strategic parenting. They define this concept as parents constantly optimizing their children’s experience in the present to secure future advantage. Stahl’s (2015) concept of credentialing can be thought of as a form of strategic parenting. Credentialing is a commodity of neoliberalism, and by “dealing in the currency of academic credentials” schools reproduce social inequality (Stahl, 2015, p. 48). These academic credentials include the titles of courses their child is enrolled in (accelerated, advanced, etc.) and the labels schools have given their child (gifted). Parents cultivating their child’s education experience by strategically ensuring they are credentialed by the education system ensures they will have every competitive edge.

Hagerman’s (2018) book *White Kids* documents her two-year ethnographic study of White upper-class families. Race and class did not differentiate the families under study. They

were all White and upper-class, but she did document a difference in political affiliation that often produced a difference in racial awareness. For the more liberal families, she found them caught in a “conundrum of privilege.” Unlike the more conservative families she studied, liberal families had an awareness of the social capital as power they wielded and the choices that this capital afforded them. However, she described them struggling to reconcile this awareness with the belief that their individual actions were incapable of overcoming racialized structures. For example, one liberal White, wealthy family was disappointed by disproportionate discipline towards Black students at their school, so they pulled their child out and transferred schools – to a private school focused on social justice that is majority White. Instead of education choices that decrease racialized structures, these families focus on extracurricular activities, vacations, and other outside-of-school experiences to enrich their child. This finding is consistent with other studies where White parents’ commodification of diversity increased racialized hierarchies (Lewis-McCoy, 2014; Underhill, 2018). In these liberal White wealthy homes, parents acknowledge that race and racial inequity exists, that diversity and heterogeneous experiences are good. However, they engage their social or economic capital to avoid these experiences seeking to instead invest their capital solely to secure experiences for their individual child that are segregated and hierarchical.

Horvat and colleagues (2003) examined ethnographic data demonstrating how middle- and upper-class parents engage their capital to secure advantages for their children. Their findings show that when middle-class parents disagreed with decisions by the school, they were uniquely able to draw on contacts with professionals to mobilize the information, expertise, or authority needed to contest the judgments of school officials. “Parental interventions in schooling represent, in effect, an assertion of power in an institutional arena where parents are

formally endowed with only a restricted authority” (Horvat, et al., 2003, p. 346). Similarly, Bader and colleagues (2019) use qualitative interviews with parents to confirm many of these earlier findings, particularly when choosing a school for their child to attend. In their research of White, middle- and upper-class parents, they found that parents rely heavily on information that they received from their network of other neighborhood parents to whom they had social or casual ties. In fact, the researchers found parents relied on these networks more than any information provided by schools. These social ties seemingly held more value than school-provided information. White parents in this study used their social capital to overrule school-based decisions or information to secure advantages for their child. In sum, the studies reviewed here document parents engaging in strategic and cultivating moves to ensure hierarchies in school systems are maintained with their children at the top. I will continue to examine this phenomena in education, but will narrow the review to the context of mathematics education.

Parent Opposition in Mathematics Education

With a history of racialized and classed stratification, mathematics education invites privileged parent opposition to any change that would dismantle this system. This history is marked by reforms that resulted in the reification of a status quo racial hierarchy (Berry et al., 2014). The following review of literature on parents and mathematics education makes two important points. First, mirroring the previous reviews, White and economically advantaged parents stay engaged to secure advantages for their students in mathematics education. Second, the consensus of mathematics education research on parents is that parents expect their child’s mathematics education to prioritize a procedural understanding of mathematics with an emphasis on following rules and carrying out calculations. This reviewed research leads one to expect any effort to de-emphasize procedures in mathematics curriculum should trigger parent opposition.

During the 1950's, the Sputnik-affect sparked mathematics education to take on a patriotic air and intense political pressure was placed on schools to improve the preparation of students. "In James Conant's influential report of 1959, ability grouping of students, with special and rigorous attention accorded to the academically talented, was presented as the common sense means of shoring up American academic resources in the wake of Sputnik" (Oakes, 1984/2005, p. 39). A course of study was produced for mathematics education that recommended sending as many "deserving" students as possible to Calculus (Bressoud, 2020). For many parents, this era established Calculus, and the high-track of accelerated courses of study necessary to get to Calculus, as the goal of mathematics education for their child (Bressoud, 2020).

The Sputnik effect also created investment into mathematics education research resulting in a wave of curricular reforms to include a focus on mathematics beyond rote procedures (Fey & Graeber, 2003). This New Math, as it is often referred to, opened up *what* it meant to be good at mathematics but had no impact on the normative conception of *who* should receive quality mathematics education because mathematics courses remained a deeply segregated experience for most students at this time (Berry, et al., 2014, Phillips, 2014). Even for White parents whose students were accessing the reformed curriculum, Peressini (1998) found they too felt marginalized. "Parents did not have a place in the mathematics classroom with this new type of mathematics. In fact, because of the radical changes in the content, parents often could not help their children with their mathematics" (p. 565). The New Math era ultimately ended, according to Fey & Graeber (2003), from parent opposition instigated by the failure of reformers to educate parents on both the goals of the reform and the specific content of the reform. The residue of this failed reform from poor parent engagement is still felt today.

The backlash to the New Math was fierce. The 1980s brought Regan-era education reform, circulating a discourse of “failing schools” with the Nation at Risk Report (NCEE, 1983). With the increased pressure on schools, testing corporations pushed back-to-the-basics narratives resulting in a severely narrowed conception of what it meant to be good at mathematics. The National Council of Teachers of Mathematics (NCTM) (1980) produced a report opposing a back-to-the-basics narrative of mathematics. Berry and colleagues (2014) critique NCTM for its failure to use its platform to also address the racial inequities in access to mathematics. In 1989, NCTM published the Curriculum and Evaluation Standards for School Mathematics, and for the first time, they addressed racial inequities (Berry, et al. 2014). Shortly thereafter, NCTM addressed parent involvement, writing that “teachers and school administrators have responsibilities to work with the community and with parents, educating them about new goals and practices in mathematics teaching. Working with parents and in the community is crucial to making change possible” (NCTM, 1991, p. 19). Peressini (1998) argues that this involvement did not occur and what resulted is often referred to as the Math Wars.

The Math Wars took place between traditionalists, those with more procedural views of mathematics emphasizing basic skills, versus reformers, who held a broader conception of mathematics as understanding concepts along with skills and problem-solving (Schoenfeld, 2004). This later approach was well-founded as an effective curriculum by the mathematics education research community (NCTM, 1991). However, Klein (2003) recounts that “parents who worried that their children were getting unsound education from NCTM aligned mathematics programs did not give much credence to education research findings or the advice of education experts” (pp. 201-202). Seemingly mirroring the reform of the New Math era, parent opposition successfully halted the reform of state standards and school-based curricula

(Schoenfeld, 2004). This opposition was effective because parents were able to leverage their social capital – including networks with traditionalist mathematics professors, legislators, and other organizing tools – and advocate for the procedurally focused curriculum they desired (Schoenfeld, 2004).

Peressini (1996) took a closer look at parent involvement during the Math Wars. He researched three urban high schools all engaged in implementing the more conceptual, problem-solving mathematics programs recommended by research. The three schools were Jefferson, a majority White and high-income serving school; Lincoln, a majority White, mixed-income serving school, and Edwards, a majority Hispanic and low-income serving school. Using semi-structured interviews with parents, he analyzed the differing parental reactions to school mathematics. His findings suggest that parent involvement was mixed, some supportive and some oppositional. His analysis noted Jefferson parents, majority White and high-income, expressed the most concern about the changes and a desire to be kept more informed. Lincoln parents, majority White, mixed-income, expressed less concern and a greater degree of trust in the mathematics teachers. The concerns of Lincoln parents were largely centered around whether the reforms would prepare students for later life opportunities or not. Parents of students attending Edwards, majority Hispanic-student, low-income, were found to express the least opposition. Overwhelmingly, Peresinni (1996) found Edwards parents communicated that the responsibility for making programmatic decisions rests with the school. Across these sites, he found that when parents were oppositional, educators attempted to use research to assuage the parents that teaching more than just procedural mathematics was appropriate and effective. Educators found these parents would continue to oppose despite evidence. When advocacy for the changes to stop were unsuccessful, the largely White and wealthy parents at Jefferson would

remove their students and enroll them in a school with a procedurally focused mathematics program.

This notion that parents think mathematics class should be focused on procedural instruction of skills is consistent in the mathematics education literature. Boaler (2008) notes that many parents seek this procedural focus in mathematics education because it is consistent with their own educational experience. Jackson and Remillard (2005) researched how African-American mothers from a low-income neighborhood conceptualized their role in their child's mathematics education. These researchers found that the difference between parents' mathematics education, which emphasized rules and procedures, and the curriculum and instruction experienced by their children in classrooms, which was more conceptual and problem-solving focused, presented barriers to parental involvement. Civil and Bernier (2006) studied parent involvement in mathematics education in working-class Latino neighborhoods. They also found parents feeling marginalized from their children's mathematics education because of the mismatch between their expectations and their children's mathematics experience. Importantly, both sets of researchers centered the mathematical assets and knowledge of these parent communities, challenging conventional notions about parent involvement. The resultant models for parent engagement that they develop will be referenced again in Chapter 6 with implications for the administrators in my study (Civil and Bernier, 2006; Jackson and Remillard, 2005). Nevertheless, this research does reflect a widely held notion in the mathematics education community: parents expect their child's mathematics education to be focused on procedurally understanding skills.

Parents' Opposition to Detracking

Creating heterogeneous courses by detracking, regardless of content area, has consistently sparked parent opposition (McGrath and Kuriloff, 1999; Oakes, 1992; Oakes and Rogers, 2006; Wells and Serna, 1996). Creating heterogeneous courses specifically in mathematics has also been demonstrated to produce parent opposition (Domina, et al., 2016; Hansman, et al., 2022; Useem, 1992). Detracked, heterogeneous mathematics classes however, are heralded in research for their improved mathematical experiences for students (Boaler, 2006; Horn, 2006, 2008, 2012). In detracked classrooms, more students develop productive dispositions about themselves as mathematicians (Aguirre, et al, 2008; Ruef, 2021), and higher mathematics achievement is a result (Boaler, 2002; Boaler and Staples, 2008; Burris, et al., 2009; Strutchens, et al., 2011). The mathematics education research community has thoroughly documented the benefit of detracked mathematics classrooms and the occurrence of parent opposition to detracked mathematics courses, but research studying parent opposition to detracked mathematics courses remains thin (exception: Useem, 1992). Therefore, this review of literature will begin with a brief summary of the benefits of heterogeneous mathematics classes and then thoroughly trace instances of parent opposition to detracking to understand how it has functioned in the past, but the later section will not be limited to the context of mathematics courses.

How Detracked Mathematics Classes Work.

The benefits of detracked, heterogeneous classrooms are so well-documented that the National Council of Teachers of Mathematics have declared the findings “unequivocal” – tracking produces inequities in mathematics outcomes, and detracking decreases these inequities (NCTM, 2018, p. 18). The research documenting the success of heterogeneity finds these results

as the product of improved student experience across curricular, instructional and normative domains. In terms of curriculum, research demonstrates that moving to detracked mathematics courses allows for more cognitively demanding and rich mathematical experiences for all students (Boaler, 2006; Horn, 2006, 2008, 2012). This is because when students are grouped homogeneously in tracked courses, the distinguishing metric for sorting is often the singular dimension of procedural fluency. This problematic practice means those students sorted into the low-track have been determined to have low procedural fluency and those in the high-track do have procedural fluency and the resulting curricular experience for these students is inequitable. Low-track students experience an impoverished curriculum, limited to low cognitively demanding tasks and rote procedural practice, while those in high-tracks experience richer, cognitively challenging mathematics (Boaler, 2006). This inequity has been found to contribute to the decades-old “achievement-gap” – whose name has been largely rejected by the mathematics education community for the name “opportunity-gap” to point out this curricular disparity (Flores, 2007).

Instructionally, teachers of heterogeneous mathematics classes use pedagogies designed for such spaces including the well-researched structure complex instruction (Cohen & Lotan, 1995). This practice involves teachers establishing multiple mathematical competencies necessary to be successful in a rich task and using cooperative learning techniques, including status interventions and discourse moves to orchestrate productive collaborative student learning experiences. This pedagogical move is a direct affront to the fixed-mindset notion of ability, instead embracing the complex instruction mantra that “no one is an expert in everything but everyone is an expert of something” and that diversity makes mathematics learning experiences

richer (Cohen & Lotan, 2014). The results of these instructional moves are improved positive relationships between students and increased academic outcomes for students (Boaler, 2006).

Finally, in tracked mathematics courses, the normative message that students receive is explicit: you either are or are not good at math. This message is reflected in societal messages that math ability is fixed and innate – some people are good at math (Boaler, 2002). Research has demonstrated that all students can be "good at math" and the more we reinforce this message the more engaged students will be and the more competence students' will achieve (Boaler, 2006). In detracked, heterogeneous classrooms, research has shown that many more students see themselves as competent doers of mathematics (Aguirre, et al., 2008; Ruef, 2021) and Horn (2008) even found this impact to be a long-lasting effect on students' mathematical identity lasting into adulthood. It is clear from this research over the past thirty years that there is a preponderance of evidence in favor of detracking mathematics courses. But, the roots of the opposition to detracking run much deeper.

History of Parent Opposition to Detracking.

During the decades of Jim Crow and residential redlining, de jure tracking occurred via segregation (Tyack, 1974). While research did not explicitly document parent opposition during this time, understanding the racist roots of tracking is important for contextualizing those opposing detracking today. For example, many of the placement test practices we use today are based on tests developed by social Darwinists who held up IQ testing as demonstrative proof of White Supremacy and racist tracking practices (Au, 2016). “The conflation of this [proof] with societal beliefs about race and intelligence cannot be overlooked or overstated; the system was clearly designed to preserve privilege” (Berry, et al., 2014, p. 544). *Brown v. Board of Education* (1954) ended de jure school segregation but, as documented in their book *White Flight*, Dilworth

and Garden (2019) show how White parents responded to this court ruling moving their White families to the suburbs, creating resegregated schools. Upper-middle-class parents, especially White upper-middle-class parents, tend to have more success making their voices heard in schools because they have political power and because they carry an implicit threat of flight from public schools (McGrath and Kuriloff, 1999, p. 605). Racially mixed schools maintained segregation by creating within-school tracking (Lucas, 1999). These tracks mimicked the social stratification of society (Oakes et al., 1997). Berry and colleagues (2014) summarize this time-period citing Ellis (2005, 2008):

Taken together, a system was created that promoted the use of standardized tests premised on stratified outcomes (along a normal curve) to justify segregation between schools and tracking within schools and, as a result, limited access to meaningful mathematics learning for many students, especially and disproportionately so for Black students. (p. 544)

Through housing decisions and school choice, White parents supported the creation and maintenance of this system (Dilworth and Garden, 2019). This research makes clear that one form of parent opposition to detracking and the maintenance of educational hierarchies has taken the form of housing decisions.

Jeannie Oakes' (1985/2005) canonical text, *Keeping Track: How Schools Structure Inequality*, documents a study in which researchers spent about six weeks in twenty-five schools with various tracking systems. Through interviews, observations, and artifact collection, they comprehensively documented students' experience at these schools. While the study was not specific to mathematics, she notes that mathematics was the most tracked course across all of the schools (Oakes, 1985/2005, p. 49-56). Oakes' analysis demonstrates the inequities produced by tracking and the stratification of expectations – lower tracks receive procedural, back-to-the-basics, and higher tracks receive curricula that is rich, complex and centers on authentic problem

solving. She also documented the racial segregation of these tracks and the involvement of parents in maintaining these tracks. Oakes (1985/2005) elaborates that

parental opposition [to detracking] understandably led to a fear among educators that White, wealthy parents would abandon the schools, taking the schools political credibility with them. This fear compelled even reform minded individuals to proceed with caution and sometimes retain programs they found problematic. (p. 278)

Oakes' found that parent opposition, in the form of threatening to unenroll, had a significant impact on school administrators for maintaining the practice of tracking.

Similarly, Wells and Serna (1996) found parent opposition to detracking projects across ten diverse high schools. They describe these parents as elite, writing "the core of the power elite in all ten communities consisted of a group of parents who were White, wealthy, and well-educated" (p. 100). Their study focused on cultural capital and how elite parents employed this form of power to prevent structural change that would challenge their status and privilege. Through in-depth interviews with the parents, they found "the most interesting aspect of elites' opposition to detracking is that they based their opposition on the symbolic mixing of high 'deserving' and low 'undeserving' students, rather than on information about what actually happens in detracked classrooms" (p. 103). This distaste of heterogeneity led elites across all ten sites to oppose detracking efforts. Wells and Serna (1996) documented this opposition as four power moves: threatening to leave the school; co-opting the institutional elites with political pressure, so they abandon detracking efforts; soliciting buy-in from the "not-quite elite" via social pressure, and finally, accepting detracking bribes in the form of the "best" teachers or the least-heterogeneous courses (Wells and Serna, 1996, p. 107-8). These studies document other moves of opposition that parents have taken to ensure the social hierarchy in schools stays intact.

McGrath and Kuriloff (1999) documented parent-educator relationships at a suburban school district over the course of a year. Their research area of interest was explicitly White,

upper-middle-class parents' school involvement whom they also referred to as elite. Consistent with the findings of Wells and Serna (1996), these researchers noted,

Elite parents' advocacy for tracking is often driven by their desires to separate their children from those of lesser social status and to gain for their children access to the highest proportion of educational resources possible— often at the expense of other parents' children. (p. 606)

Again, elite parents justify their advocacy for tracking by a desire to separate the children of White and wealthy families from children deemed less worthy of the higher-tracked courses.

While this research study was not done in a district considering detracking, the researchers noted the administrators did desire to move away from the inequitable tracks. However, these school administrators felt the pressure from elite parents – so much so that they couldn't even consider detracking. Citing their field notes, McGrath and Kuriloff (1999) quote an administrator saying, “someone told me some schools are heterogeneously placed [detracked] in some districts. I say, okay. But wait till I'm retired. Because they're going to tear the doors off this place” (p. 620). The researchers noted the “they” the administrator was referring to here were the elite parents and the fear the administrator had of those parents who “are not reluctant to use their power to promote what they view as their children's welfare” (p. 626).

Brantlinger's (2003) study of affluent mothers, found similar patterns in her research despite her subjects self-describing as “liberals who believe in integrated and inclusive education” (p. 59). In interviews with these mothers, Brantlinger (2003) documents modes of ideological operation (Thompson, 1990) that function to advantage their child and simultaneously disadvantage other people's children. This includes a “need for class segregation” and that “their own identity formation was based on their children's school status” (Brantlinger, 2003, p. 59). Mirroring these results, Oakes and Rogers (2006) studied administrators who had to respond to parent opposition at Woodrow Wilson High School in the

early 2000's. This large, urban high school in a politically liberal university town was engaged in detracking efforts when they faced pressure from White middle-class parents. Oakes and Rogers (2006) make explicit "how the norms and politics of White and middle-class privilege undermine the efficacy of reforms intended to provide high-quality schooling equally to all students" (p. 21). Knowing how to detrack, and why it was essential to detrack, was well-established among the educators at Woodrow Wilson High School. However, the policymakers and education professionals in Oakes and Rogers (2006) study "limited their [detracking] reforms to redesigning structures, increasing professional knowledge, and improving practice. These technical reforms leave the prevailing norms and politics of social inequality untouched" (p. 158). Oakes and Rogers (2006) documented that,

wealthier White parents applied enormous pressure to keep the status quo; they worried that democratizing the high status curriculum would jeopardize their children's chances for admission to prestigious universities. Many middle-class White parents associated their daughters' and sons' increasingly scarce opportunities with the problems caused by minority students in their schools, most of whom were poor. (p. 28)

Seemingly, elite parents oppose detracking because ensuring their children have every possible advantage is their job as parents, and detracking takes that advantage away.

Finally, Useem's (1992) study marks the only study on parent opposition to detracked mathematics courses I reviewed. She conducted interviews with 86 mothers in two suburban communities investigating their involvement with the mathematics education of their students. In particular, she was interested in how they wielded their social capital when placing students into tracked mathematics courses. Outside of documenting that the schools these mothers sent their children served predominately White students, Useem's analysis does not examine race as a factor. Her findings revealed a high correlation between parents' education levels and their children's placement in the mathematics tracking system as they enter middle and junior high

school. Useem found four factors explained this correlation: these college-educated moms had a high awareness of the placement process, they had a high integration into school affairs and parental information networks, as well as a high likelihood to intervene in educational decisions that school personnel make for their children, and finally, they had willingness to exert this power over their children's preferences for course placement (p. 274). Useem's (1992) mathematics specific findings are consistent with research across content areas, noting that parental social class advantages produced educational advocacy that maintained social hierarchies.

Parents Advocate for Detracking

In Jeannie Oakes and John Rogers' (2006) book *Learning Power*, they document an alternative to the literature thus far reviewed – parents who support detracking. Their book articulates a framework for school reform, that emphasizes participatory social inquiry as a key building block for democratic sustainability. The authors describe examples of this framework in action, and particularly relevant for my study, include the work of a project called Parent-U-Turn and the Community Asset Development Re-defining Education (CADRE). These two examples describe Black and Latinx parents and community members who engage in social inquiry, organizing, advocacy and resistance. Parent-U-Turn “expresses its power through a range of collective actions,” including a sustained campaign to reduce class size and demand parent and community engagement in district decision making. When their school district proposed a schedule change that would track their students, Parent-U-Turn resistance prevented the implementation of this schedule. Oakes and Rogers (2006) also describe CADRE, a grassroots organization whose mission is about securing a quality education for children regardless of where they live, and the work of the Education Justice Collaborative, a network of organization,

to collaborative resist inequitable structures in education, including tracking, that limit students opportunities to learn. The efforts of the Black and Latinx parents who supported detracking documented here, marks acts of resistance to hierarchies that maintain status quo inequities in educational opportunities and outcomes.

Research documents that detracking does not disadvantage students; in fact, heterogeneous, detracked mathematics classrooms produce more equitable outcomes (Boaler, 2002; Boaler and Staples, 2014; Burris, et al., 2009; Strutchens, et al., 2011). But educators have not found that sharing that information with White and economically elite parents reduces opposition (Peresinni, 1996). Instead, research documents that these parents utilize their social capital to oppose changes (McGrath and Kuriloff, 1999; Oakes and Rogers, 2006; Wells and Serna, 1996). Others document Black and Latinx parents organize to advocate for detracked systems (Oakes and Rogers, 2006). This landscape led me to my research questions, what motivates parents to oppose detracking mathematics courses? And, how are elements of Whiteness expressed through their opposition? Therefore, I used two conceptual frameworks: one focused on motivation and the other on race. The following sections of this literature review will examine research on both frameworks.

Conceptual Framework 1: Understanding Motivation with Mental Contrasting

The literature reviewed in the prior section documenting parent opposition to detracking across content areas noted parents expressed goals of securing advantages for their children by maintaining tracking. Therefore, to understand the motivation for parents to oppose detracking in the specific context of mathematics, I sought a concept that centers future thinking and goal orientation in its conceptualization of motivation. Mental contrasting (Oettingen, 2000) is such a concept. However, since mental contrasting holds the individual as the unit of analysis and the

literature made clear that parents were enmeshed in community relationships, societal and cultural influences that affect their goal formation, I chose to attend to this context by extending mental contrasting with Bronfenbrenner's Ecological Systems Theory (1977). This section reviews literature on each theory.

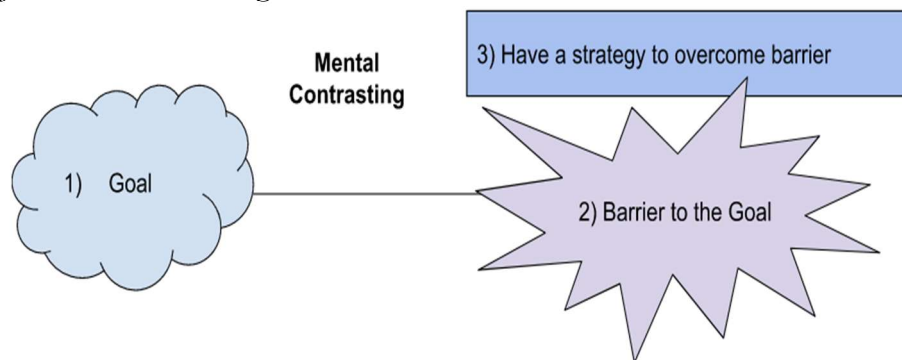
Mental Contrasting

Research demonstrates that thinking about the future can impact present-day behavior (Husman & Lens, 1999; Oyserman & Destin, 2010; Oyserman et al., 2002). Oettingen & Sevincer, (2018) elaborate that thinking about the future has three separate functions. First, it permits individuals to explore the future by mentally visualizing its endless possibilities. Second, it helps predict the future based on extrapolations from the past. Lastly, it helps to focus on specific objectives in the future, paving the way to reach our goals.

Oettingen and Mayer (2002) distinguish between two types of thinking about the future, beliefs and fantasies. The first type of future thinking, beliefs in the form of expectations, are grounded in past events that inform the belief that specific actions will cause particular results. In other words, I've done *this* before, and therefore, I expect *that* to happen in the future. Beliefs predict positive outcomes (Schunk & DiBenedetto, 2018), but they differ from fantasy in their connection to past events (Oettingen & Sevincer, 2018). Fantasies "are detached from an individual's past experience" and are thoughts or images describing personally relevant futures in positive idealized ways (Oettingen & Sevincer, 2018, p. 129). Fantasies are also distinct from goals in that the commitment to a goal is up front and the goal must be clearly attainable. Fantasies do not involve such commitment, nor must they be grounded as clearly attainable images of the future.

Oettingen's (1996, 2000, 2012) model of fantasy realization provides evidence that supports the influence of future thinking on one's present actions and goal commitments through engagement with mental contrasting, and others have reified this finding (Destin et al., 2018; Oettingen et al., 2001, 2009; Szpunar et al., 2018; Wright 2008). Mental contrasting "is the act of juxtaposing a positive future outcome with the present circumstances" (p. 53). Mental contrasting has three steps: first, defining an important wish or fantasy; second, identifying obstacles standing in the way of that outcome and third, selecting a strategy that one is capable of engaging to overcome the obstacle (Oettingen & Sevincer, 2018). These steps are illustrated in figure 1.

Figure 1
Illustration of Mental Contrasting



While a conscious imaginary strategy, mental contrasting functions through non-conscious cognitive processes and "by instigating these processes, mental contrasting fosters behavior change outside of conscious awareness, sidestepping the difficult task of conscious regulation" (Oettingen & Sevincer, 2018, p 137-8). The cognitive processes of conceiving an element of reality as an obstacle occur when the obstacle is perceived to be one that can be overcome. A non-conscious associative link between the goal and the barrier forms and is significantly stronger when, again, the obstacle is perceived to be within the control of the individual (Oettingen, et al., 2010). The key here is mental contrasting produces the necessary

energization to act and overcome the obstacle is the individual's view of the obstacle as one that can be overcome (Oettingen, et al., 2009).

As triggered through mental contrasting, these processes have been found to affect behavior change in various contexts. These contexts include experimentally by design (e.g., Oettingen, 2012) as well as spontaneously (e.g., Sevincer and Oettingen, 2013) and across various disciplines including academic (e.g., Destin, et al., 2018) and medical (e.g., Oettingen, 2000, study 2), as well as age groups including middle grades (e.g., Duckworth, et al., 2013) and with teachers (Ivey, 2021). Across these studies, the concept of mental contrasting was operationalized as an intervention or self-regulatory device to achieve desired futures via triggering action to overcome obstacles in the present reality.

These engagements of mental contrasting demonstrate that given a goal, an identified barrier and a strategy to overcome that barrier, one will be motivated to overcome the barrier in pursuit of the goal. The psychology of future thinking tells us that these goals are socially and culturally contingent (Markus and Nuriis, 1986). Therefore, to understand how mental contrasting functions for parents – their goals, their perception of barriers and their strategies to overcome the barriers – I also need to take into consideration the social and cultural influences on the parents. To achieve this, I used Bronfenbrenner's (1977) ecological systems theory.

Extending Mental Contrasting with Ecological Systems Theory

Bronfenbrenner's (1977) Ecological Systems Theory aims to provide a holistic theoretical approach to understanding human development. The theory states that an "individual's development occurs through complex interactions between an individual and the people, objects, and symbols in that person's surrounding environment" (Longe, 2016 as cited in Smith-Maddox, Sevillano, and Padilla, 2020). The four interrelated types of environmental

systems are: microsystem settings in which individuals directly interact; mesosystem, processes that occur between multiple microsystems; exosystem includes microsystems that involve but do not directly interact with an individual; and macrosystem of overarching beliefs, values, and norms of society (Smith-Maddox, Sevillano, and Padilla, 2020). This model is largely used to understand child development in a way that reflects the broader environment influencing the child. However, other students have used this theory to examine racial disparities in health outcomes, (Noursi, et al., 2021), understand community partnership in high schools (Leonard, 2011), integrating real world contexts into mathematics curriculum (Edelen, et al., 2020) and parent involvement in schools (Seginer, 2006). Each application allowed the researcher to provide a more holistic understanding of the factors influencing their studies' participants.

Extending mental contrasting with Ecological Systems Theory means recognizing that each step of mental contrasting – goals, barriers and strategies – is shaped and influenced across levels. For example, within the microsystem of one-on-one interactions, the White, college educated parents in Useem's (1992) study experienced success advocating for high-tracked mathematics courses for their child and would expect that strategy to be effective. At the mesosystem level, parents are influenced by their communities when comparing their child's status with others in the community (Bennett, et al., 2023) which may impact a parent's goal for their child. At the macrosystem level, parents are enmeshed in a culture of White supremacy that defines an ideology by which what can be or not be is narrowed to that which maintains Whiteness as dominant in all hierarchies (McLaren, 1998). This may impact what a parent perceives as a barrier. In sum, Ecological Systems Theory extends mental contrasting's three steps by allowing the researcher to acknowledge the context within which the subject is enmeshed.

Conceptual Framework 2: Elements of Whiteness

My second research question is also interested in contextualizing parent motivation. Bonilla-Silva (2003) writes, "Whiteness in all its manifestations, is embodied racial power" (p. 271). In the research reviewed above, parents engaged that power to secure advantage or justify privilege. But Leonardo (2003) calls on scholars of Whiteness to move past just a documentation of these privileges to an interrogation of the moves of power stemming from White supremacy. This interrogation can help us to understand how these moves "secure domination and the privileges associated with it" (p. 137). To understand these moves, I first need to define what I mean when I say "White parents."

Ian Haney-López' (2006) text *White by Law* grounds the definition of White and Whiteness from a legal perspective.

Whiteness is a social construct, a legal artifact, a function of what people believe, a mutable category tied to a particular historical moment. Other answers are also possible. 'White' is an idea, an evolving social group, an unstable identity subject to expansion and contraction, a trope for welcome immigrant groups, a mechanism for excluding those of unfamiliar origin, an artifice of social prejudice. Indeed, Whiteness can be one, all, or any combination of these, depending on the local setting in which it is deployed. On the other hand, in light of the prerequisite cases, some answers are no longer acceptable. "White" is not a biologically defined group, a static taxonomy, a neutral designation of difference, an objective description of immutable traits of humankind... In the end, the prerequisite cases leave us with this: "White" is common knowledge. "White" is what we believe it is. (p. 76)

I find this a productive place to start my definition of White parents because of the way Haney-López acknowledges the sociocultural and historical morphing of who is White. My use of White parents in the context of mathematics education needs to be inclusive of what Haney-López goes on to define as honorary Whites. "Unlike both those passing as White and those fully White, however, a new group is emerging, persons perhaps best described as 'honorary Whites'" (Haney-López, 2006, p. 151). Haney-López draws a distinction between the commonly used

notion of White-passing and honorary White. “Persons who pass as White hide racially relevant parts of their identity; honorary Whites are extended the status of Whiteness despite the public recognition that, from a bio-racial perspective, they are not fully White” (Haney-López, 2006, p. 151). To further clarify what is meant by honorary White, Haney-López (2006) uses the example of apartheid South Africa extending privileges reserved for Whites to Japanese individuals when the economic good of South Africa required it. Brantlinger (2003) cites Bourdieu (1984) in her assessment that “in all societies with hierarchical social divisions, the high continuously reinvent themselves as superior to retain power” (p. 38).

An honorary White phenomenon is functioning in tracked mathematics courses in which constrained privileges of Whiteness get extended to a few students who identify as Asian¹ and/or students in high-income households. This reflects White supremacy functioning as Haney-López (2006) describes such that “individuals and communities with the highest levels of acculturation, achievement, and wealth increasingly find themselves functioning as White...an identity that contemplates both White status and a biologically non-White identity” (p. 152). Parents of color and/or low-income parents with students in high track mathematics courses may oppose detracking to maintain privilege afforded them in these courses. Therefore, my usage of *White parents* should be read as *White and honorary White* parents: those that can function as White due to economic or *honorary* White privilege.

As a White researcher, I am not ascribing Whiteness to any individual. I am also not minimizing the racism that students and families who do not identify as White face daily in our community, nor the effort and advocacy these families exhausted in achieving a place in these

¹ I use the category as the Math Acceleration Group (2018) report does in alignment with the state’s Department of Education’s report guidelines. However, I agree with Chang & Au (2020) assessment that the use of the term masks diversity, class divide, ethnic inequality, economic circumstance, and racism.

high-track courses. Further, I cannot diminish the racism that students of color face in these high-track mathematics courses. Haney-López (2006) notes that xenophobia and other factors consistently positions Asian Americans as non-White. However, “the model minority myth and professional success have combined to free some Asian Americans from the most pernicious negative beliefs regarding their racial character” (p. 152). Therefore, to be very clear, my usage of *White* encompassing *honorary* White, is within the constrained contexts of access and advocacy for stratification via high-track mathematics courses.

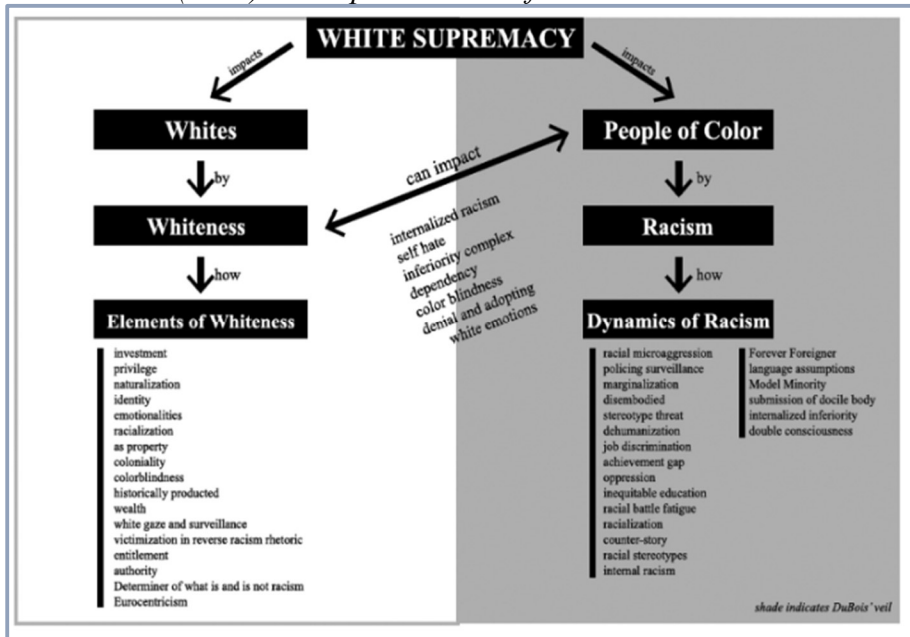
Elements of Whiteness

Critical Race Theory contends that racism is “the usual way society does business, the common, everyday experience of most people of color in this country” and that this functions to “advance the interests of both White elites (materially) and working-class Whites (psychically).” (Delgado and Stefancic, 2017, pp. 8-9). This theory helps to explain why the status quo racial hierarchies that mark all facets of our society are so persistent. Ladson-Billings & Tate (1995) took critical race theory from its largely legal applications to education research. In doing so, they theorized that the savage inequalities (Kozol, 2012) between White students and students of color could not be explained by any theory that did not acknowledge the centrality of race and racism (Bell, 1993). For the practice of tracking, critical race theory calls us to focus on how people of color are treated systematically differently, producing racially segregated classes, and associated racially stratified mathematics achievement outcomes.

The racial segregation that tracking produces has been known for nearly four decades (Oakes, 1985/2005). While this research helped bring an end to within-school tracking, it persists in subject-by-subject tracking, including in mathematics (Lucas, 1999). Peresinni (1996) found that educators grew frustrated by the lack of impact that sharing research on reformed teaching

practices has on parents' opposition. As established earlier in this chapter, Oakes and Rogers (2006) found consistent opposition to evidence in parents thwarting detracking efforts. According to Charles Mill (1997), this can be understood as an enactment of an epistemology of ignorance. A way of knowing that produces not knowing. "This ignorance, in essence, is a deliberate strategy to maintain hegemonic Whiteness ideology" (Matias and Boucher, 2021, p. 5). By reframing ignorance from a passive to an active state, Matias and Boucher develop a conceptualization of Whiteness, Figure 2, that includes multiple elements enacted to maintain social hierarchies. In this section, I will outline the elements of Whiteness from their conceptualization that I used to answer my second research question: how are elements of Whiteness expressed through parent opposition to tracking?

Figure 2
Matias and Boucher (2021) Conceptualization of Whiteness



Frames of Colorblind Racism

Colorblindness is a kind of selective ignorance in that it “acknowledges race while disregarding racial hierarchy” (Gallagher, 2003, p. 25). It is the avoidance of race, and the role race plays in our lives. Bonilla-Silva (2003/2022) explains colorblindness as an ideology.

The central component of any dominant racial ideology is its frames or set paths for interpreting information. These set paths operate as cul-de-sacs because after people filter issues through them, they explain racial phenomena following a predictable route. (p. 69)

Ideologies function in service to power; in school settings this is enacted through discourses that normalize hierarchies and hide or deny the human intentions to maintain hierarchies (Brantlinger, 2003). Bonilla-Silva (2003/2022) defines these discourses as frames and he outlines them as: abstract liberalism, minimization of racism, cultural racism, and naturalization.

Bonilla-Silva’s (2003/2022) defines the concept of *abstract liberalism* as a blend of political liberalism (equal opportunity) with economic liberalism (choice and individuality) to explain how White folks justify maintaining the status quo. This colorblind logic ascribes to the myth of meritocracy (Gotanda, 1991). In the context of tracking, this can sound like rationalizing those placed in lower tracks of mathematics as not having “worked hard enough” to have earned a place in the high track. This neoliberal bootstrap mentality is blind to the systemic inequities in our education system. One of many systemic inequities relevant here is the process by which students are placed onto tracks. Whether these placement procedures include the inherently biased teacher recommendation or not, they have been found to produce racist, classist, and gendered outcomes (Flores, 2007).

The claim that race has nothing to do with tracking can be understood with Bonilla-Silva’s (2003/2022) second frame: *minimization of race*. That is, in order for race to have nothing to do with tracking, placement on tracks must be equally available to each individual student and, while race was certainly a factor in education in the past, this logic contends that our

society is beyond its racist past and things are better now. This gaslighting frame (Sweet, 2019) functions to dismiss any suggestion that race is a factor in tracking. This frame can also be used to elevate other factors over race, like socioeconomic status, causing the user to be both color blind as well as ignorant to the impact of intersectionality (Crenshaw, 1991).

Naturalization is Bonilla-Silva's (2003/2022) third frame, and it is the myth that racial hierarchies are natural phenomena. Fischer and colleagues' (1996) text *Inequality by Design* was written in direct response to *The Bell Curve* where racial hierarchies in intelligence were argued as natural. Fischer and colleagues (1996) argue the view that intelligence is fixed – you either have it or you don't – means that “inequality is in these ways natural, inevitable, and probably desirable” (p. 6). The racial stratification of students in tracked mathematics courses then, following this logic, is natural as well. Fischer and colleagues (1996) fervently reject this notion and empirically debunk these naturalization claims.

Oakes and Rogers' (2006) study on detracking efforts found that when parents were pushed to rectify the obvious incongruence between the natural order conclusion and liberal notions of equality, their responses revealed that parents had

not escaped the insidious effects of pervasive cultural beliefs about low-income communities of color that they value education less, that they are less 'involved' with education, that their children are less able or less willing to achieve, and that their children's needs and futures are SO different from those of the community's White and wealthy children that they require different educational programs. (p. 21) [emphasis in original]

This frame is Bonilla-Silva's (2003/2022) fourth and final frame of colorblind racism, *cultural racism*. This is the most salient residue of Jim Crow era racism. While parents rationalizing tracking with blatant cultural racism is rare, a logic of deficits, as illustrated in Oakes and Rogers (2006) excerpt above, is pervasive. Miguel and Valencia (1998) found that this kind of deficit thinking is rampant in schools as a means of justifying racially disproportionate results.

Altogether, the four frames of colorblind racism function to rationalize racialized outcomes produced by tracking without having to acknowledge the impact of race on the persistence of tracking (Bonilla-Silva, 2003/2022). Tracking is clearly racism cloaked in meritocracy.

Scarcity Mentality

Another element of Whiteness relevant to parent opposition to detracking is the notion that detracking takes something away from their child to which they are entitled. Oakes and Rogers (2006) found that for parents in their study, “‘quality education’ (like ‘merit’) had meaning only as a relative concept. An education could be good only if it were better than what disadvantaged students were getting” (p. 32). The economic theories of neoliberalism tell us that capitalism projects a scarcity mentality that equips the privileged with an attitude of resource hoarding (Lipman, 2013). This kind of thinking can lead parents to enact practices that withhold access to rigorous and relevant curriculum for only a privileged few students. Thus, a scarcity mentality can rationalize opposing detracking because heterogeneous classes lack the hierarchical distinction of differential status.

Whiteness as Property

In her canonical piece, *Whiteness as Property*, Harris (1993) traces through legal scholarship and court proceedings how Whiteness functions as property to afford material advantage for those that can wield it. “Whiteness can move from being a passive characteristic as an aspect of identity to an active entity that – like other types of property – is used to fulfill the will and exercise power” (Harris, 1993, p 1734). In other words, when White parents oppose detracking – by emailing school board members, calling the school to advocate for a schedule change or demanding a principal overall a placement test and place their child in a higher course – these actions can all be read as using and enjoying the property that is Whiteness.

Whiteness also functions as property as it reaffirms social hierarchies. In making this argument, Harris (1993) cites many examples where courts have legally affirmed a person's reputation or status to have property value. Parents who oppose detracking efforts are opposing the removal of value. Having a child in a higher track class provides social cues to where the parent is in the social hierarchy. Heterogeneous, grade-level mathematics courses prevent parents from signaling their status. In this sense, opposing detracking can be read as motivated by a desire to maintain property value.

Interest Convergence

Bell's principle of interest convergence states that racial progress will not be made unless the progress will directly benefit White folks. An example Bell (1987) offers of interest convergence is the *Brown vs the Board of Education* case of 1954, writing this, "cannot be understood without considering the decision's value to Whites in policy-making positions who are able to recognize the economic and political benefits at home and abroad that would follow the abandonment of state-mandated racial segregation" (p. 62). Detracking as an equity initiative is justified as a practice that supports *all* students (NCTM, 2018). This justification can be seen as aligned to Bell's principle of interest convergence. That is, as Danny Martin argues (2003) engaging detracking cannot be taken up as a recommendation if it just benefited students of color – it must also benefit White students – hence the *all*. This distinction will become important when I both analyze administrator perspectives on engaging parents in conversation about detracking and articulate the implications of this research.

Summary

I began this literature review with three goals. First, to articulate the context in which parents' opposition is observed, including across education contexts, specific to the discipline of

mathematics and within the context of detracking. Then, I reviewed literature on my dual-conceptual framework: mental contrasting extended with Ecological Systems Theory and elements of Whiteness, in particular the frames of colorblind racism. Given this research landscape, the next chapter will explain how I went about conducting my research study.

CHAPTER 3: METHODOLOGY

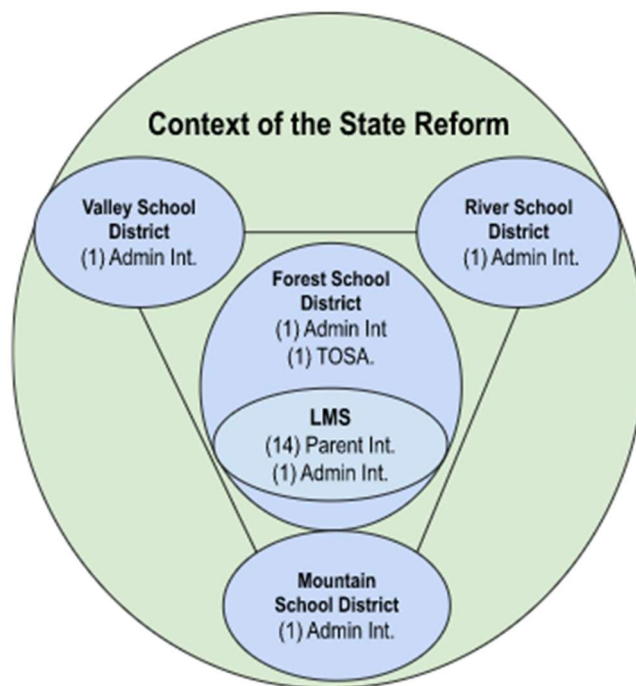
Multiple school districts across the state where my research took place are responding to the state's Department of Education's (SDE) recommendation to detrack their mathematics programs (SDE, 2021). Educators at Local Middle School (LMS) are taking up this call and have expressed White parent opposition as a cause for concern regarding the sustainability of their efforts. White parent opposition to detracking can be expected across all these sites (Wells and Serna, 1996; McGrath and Kuriloff, 1999; Oakes and Rogers, 2006). My research studied this opposition asking 1) what motivates parents to oppose detracking mathematics courses? And, how are elements of Whiteness revealed through their opposition? I studied these questions by collecting data via a nested-case study (Thomas, 2011) and then analyzed the data via extended case method (Burawoy, 1998). The results from my study formed recommendations for school administrators who are detracking their mathematics programs and responding to White parent opposition.

Study Design: Nested-Case Study

Case studies allow researchers to conduct “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project” (Simons, 2009, p. 21). By using nested-case studies, a researcher can nest a particular case within a “broader picture,” drawing comparisons between contexts and to the larger holistic (Thomas, 2011, p. 517). My study centered the case of parents at LMS but was designed with respect to the interdependency of schools within a school system. LMS is nested within the Forest School District. At the time of the study, Forest School District was planning a districtwide detracking project. Forest School District is nested in this state which has published recommendations to detrack mathematics programs. Further, other school districts are embarking on similar projects and staff at these

districts have been in conversation about their common projects. Of particular interest are districts similar in size and demographics to Forest School District and those that staff at Forest School District have reached out to for support or guidance in their detracking project. I refer to these districts as Districts 1, 2, and 3. These sites have all begun detracking projects, and findings regarding parent opposition at any one of these sites can be informative about patterns or anomalies when answering my research questions. Thus, my study “nests” the case of parents at LMS within the context of statewide mathematics reform as illustrated in Figure 3.

Figure 3
Illustration of Nest-Case Study Design



Case-study is a research design open to multiple methods, not a research method in-and-of-itself (Simons, 2009). My methodology was qualitatively involving in-depth interviews analyzed through the extended case method. A summary of the data collected via these methods is available in Table 1 and a discussion of the extended case method can be found under Data Analysis.

Table 1*Sources of data across the study.*

Forest School District					
	LMS	District Level	Valley	River	Mountain
Interviews and reflective memos	-Principal (1) -Parents (14)	-Curriculum Director (1) -Teacher on Special Assignment, TOSA (1)	-Curriculum Director (1)	-Curriculum Director (1)	-Teacher on Special Assignment, TOSA (1)

My interviews with 14 parents at LMS and six school staff (described in detail under Participants) was in-depth and qualitative following a semi-structured form (Taylor, et al., 2016). The interview protocols can be found in the appendices. Interviews used open-ended questions, allowing the participants to expand on their responses. The semi-structured nature of the interviews allowed me to follow-up on their responses with clarifying questions. Each interview was conducted via Zoom with the exception of two who requested in person interviews, LMS’s principal and the Curriculum Director from Forest School District. Each interview was recorded and transcribed using Zoom’s transcription feature or Otter.ai for in-person interviews. I wrote reflective memos following each interview to capture initial impressions and any relevant notes about demeanor or tone that were lost in a verbatim transcript (Taylor, et al., 2016). I used these memos to also note comparisons across interviews and any initial themes I noticed. Following the process of *progressive focusing* (Chambliss & Schutt, 2010) the interview protocol was honed throughout the sequential interviews by the insights provided during the prior interviews. Progressive focusing “improves the interview technique and [may] lead to conceptual categories used during the data analysis” (Vasquez, 2014, p. 391). All changes to the protocol were documented via memoing.

Research Context

In 2020, the state's Department of Education (SDE) embarked on a mathematics reform movement titled The state's Math Project (SDE, n.d.a). The project constructs its work upon four cornerstones: focus, engagement, pathways and belonging. Focus, refers to refining the Common Core State Math standards to improve clarity and increased emphasis on authentic problem solving. Engagement refers to recommendations for the inclusion of authentic mathematics experiences in the curriculum using real-world problems and technology. Pathways refers to the creation of new courses that increase relevance and choice during a students' junior and senior year of high school. And finally, most relevant for this study, the cornerstone of belonging describes the state Math Project's aim to remove mathematics as a gatekeeper and improve students' sense of belonging within the mathematics classroom (SDE, 2021b). As such, SDE recommends that school districts detrack their mathematics programs citing the recommendations of numerous professional organizations (Association for State School Supervisors, 2021; National Council of Supervisors of Mathematics, 2020; NCTM, 2018).

LMS, a middle school in Forest School District, serves a population of students that are 72% White (SDE, 2021a). LMS has some of the highest disparities on standardized mathematics achievement measures. Low-income students perform significantly lower than like peers at other middle schools and high-income students perform significantly higher than like peers (Math Acceleration Group, 2018). This correlates with LMS' entrenched system of tracking. Currently, there are three tracks of mathematics courses at LMS: at 6th grade students may skip and access the highest track, all other students take 6th grade math; at 7th grade, some students accelerate and access the second highest track; and all other students are placed on the third and lowest track resulting in three tracks of mathematics courses in 8th grade. This structure exists at all middle

schools in Forest School District, but LMS places more students than any other school on the higher two tracks – nearly two-thirds of their students are placed onto either of those tracks (Math Acceleration Group, 2018). These high tracks are highly racialized, with 82% of students in high tracks identifying as White or Asian, and classed, with 3 out of 4 high-income students being placed on one of the two higher tracks (Math Acceleration Group, 2018).

The principal of LMS has worked with this community of parents for over five years. During the school year prior to the study, she engaged parents in six community mathematics nights. These nights occur via the Zoom platform from 6:30-7:30 pm. They were recorded and sent out in the LMS school newsletter as well as posted to the LMS Facebook page. The content of the nights began with an overview of LMS' project to improve their mathematics program, followed by an overview of the statewide reform efforts and then a presentation from an expert on related research. Topics at these nights included: the state's Department of Education's justification for supporting detracked mathematics programs, modernized mathematics curriculum, mathematics anxiety, what it means to be college ready, and supporting all students. As the mathematics specialist for the county LMS is in, I supported the principal in developing the content for these nights. An average of 10 parents attended each night. Their questions and comments were been aimed at meeting the needs of advanced mathematics students, fears about detracking's impact on students' future opportunities and other notions that were consistent with the opposition found in previous research (Wells and Serna, 1996; McGrath and Kuriloff, 1999; and Oakes and Rogers, 2006).

Forest School District, the school district that LMS is in, has seven other middle schools. At the time of the study, no other middle school in this district had begun the work of transitioning to detracking nor had they begun to engage their parents in learning about

detracking. Teachers reported that this was due to a lack of bandwidth as they were transitioning back from distance learning as well as a lack of the administrative leadership. Three other school districts in the state are similar in size and demographics to Forest School District and have made significant progress in these detracking conversations: Valley, River, Mountain School Districts. Table 2 provides an overview of these school districts’ racial demographics as reported by the state’s Department of Education (SDE, 2021a)

Table 2
Demographics of Students (SY2020-2021) across Research Sites

	Forest School District					State
	LMS	District Level	Valley	River	Mountain	
# of students	<600 students	> 10,000 students	<7,000 students	<7,000 students	> 10,000 students	578,947 students
American Indian/ Alaska Native	1%	1%	1%	1%	<1%	1%
Asian	6%	3%	2%	5%	10%	4%
Black/ African American	1%	1%	2%	1%	2%	2%
Hispanic/Latino	8%	16%	25%	18%	20%	24%
Multiracial	12%	11%	9%	8%	9%	7%
Native Hawaiian/ Pacific Islander	0%	<1%	1%	<1%	1%	1%
White	72%	68%	61%	66%	58%	60%

Valley School District is geographically near Forest School District and serves a smaller percentage of White students than Forest School District. Valley School District has two middle schools serving sixth through eighth grade students and two schools that serve kindergarten through eighth grade students. The curriculum director in Valley School District utilized the uncertainty of the pandemic as justification to move to detracked middle school mathematics

courses two years prior to the study. Valley School District has not formally engaged parents in the process of detracking outside of responding to parent emails about their individual students. The Curriculum Director reports minimal opposition from parents to these changes but forecasts that the increase of detracking movements in neighboring districts will cause an uptick of opposition.

River School District is similar to Forest School District both demographically and in its location near a large public university, however it is a much smaller school district with only three middle schools serving sixth through eighth grade students. The Curriculum Director in River School District utilized teacher momentum following a summer professional development to detrack middle school mathematics courses one year prior to the study. River School District engaged parents after moving to detracking via an email communication from the district. However, after receiving public pressure via news media, the Curriculum Director was asked to create a school board presentation about the justification and process for detracking.

Mountain School District is the furthest from Forest School District both geographically and in their process of detracking. Mountain School District serves the least number of White students across all four sites in this study and has four middle schools serving sixth through eighth grade students. Teachers at one of these middle schools moved their school's mathematics program to detracked courses four years prior to the study. District administrators scaled their work to fully detrack all four middle schools two years prior to the study. Parent communication about detracking has been site-based in Mountain School District with school principals and/or teachers communicating directly with parents about process and timeline. Table 3 summarizes the relevant contexts across the various sites of research.

Table 3
Overview of detracking progress across sites of research

	Forest School District		Valley	River	Mountain
# of Middle schools	LMS	7 other	4	4	4
Detracked Year	Planned for one or two years post-study		One year prior	One year prior	Two years prior
Parent Engagement	6 virtual parent nights recorded	1 virtual parent night recorded	District email responses to individual parents	District presentation to School Board	School-based announcement via email

Participants

The interview participants in my central case included 14 parents at LMS. Given the research question about parents' motivation for opposing detracking, I used purposive sampling to recruit participants who were highly engaged in learning about detracking as they are more likely to hold strong feelings about the topic. Therefore, I began my recruiting efforts by sharing information about the research project and an invitation to participate in interviews to share their opinions about the changes to the mathematics program during the final community math night at LMS. The principal of LMS shared this same invitation via the school newsletter, see Appendix C.

Race being a central concept in my study, I sought to recruit a racially diverse sample. LMS' largely White and middle-high income student population meant my blanket recruitment efforts through the community math nights and school newsletter would be reaching a majority White audience. Therefore, I also sent the recruitment invitation via community networks that I have a personal or professional connection with and that directly serve or are directly connected

with Black and Latinx families attending LMS. I continued recruitment via these networks through June 2022, stopping when school had closed for the year and parents were no longer responsive to recruitment methods.

At that time I had 14 participants which was within my proposed 10-20 interview range which was set to collect a wide enough perspective but was limited by my own constraints of time and resources. The majority of interviewees self-identified as White (78%), approximating the student composition of LMS which is 72% White. Table 4 details the racial and economic demographics of participants. Appendix E contains a more detailed summary of the participants. Gender was not collected and they/them pronouns are used throughout the analysis to avoid misgendering participants and to maintain the focus on the salience of race to my analysis.

My attempts to oversample parents of color resulted in two parents that identified as biracial and one parent that identified as Asian. My identity as a White researcher, my lack of relationship directly with the parents of color, a historic lack of targeted engagement with families of color by the school and/or a general lack of trust of researchers all are possible explanations for this under-representation.

Table 4
Self identified demographics of LMS Parent interviewees

Self Identified Race			Self Identified Income Level			
White	Biracial	Asian	Lower Middle	Middle	Upper Middle	Upper
11	2	1	1	3	6	4

The case of LMS was nested first, in the context of Forest School District. This included interviews with the principal of LMS, the teacher on special assignment (TOSA) and the Curriculum Director for Forest School District. The principal of LMS identifies as a White woman who has worked with the community serving LMS nearly ten years. The TOSA serves as

curriculum and pedagogical support to all middle school and high school mathematics teachers in this district. She identifies as a White woman who has taught for over ten years – three of which at the high school that LMS feeds into. The Curriculum Director in Forest School District is a White man who lives in the LMS community, sent his children to LMS, and was principal of LMS for three years prior to any detracking projects. The decision to detrack is ultimately the responsibility of the Assistant Superintendent of Forest School District; however, the recommendation and communications to parents about detracking are the responsibility of the Curriculum Director supported by the TOSA.

I further nested the case of parents at LMS in the context of the statewide reform effort. This involves conducting interviews with the Curriculum Directors from Valley and River, a building principal in Mountain who formerly served as the TOSA responsible for moving the detracking project districtwide. These Curriculum Directors and the former TOSA were selected for interviews as they are ultimately responsible for decisions about detracking and communications to parents about detracking. The Curriculum Director in Valley School District identifies as a White man and the Curriculum Director in River School District and former TOSA in Mountain School District who identify as White women.

Data Analysis: Extended Case Method

I followed injunctions of extended case method (ECM) in my approach to data analysis (Burrawoy, et al., 1991; Burrawoy, 1998). ECM, while an interpretive approach, is not an inductive approach as in grounded theory. Rather, this approach to data analysis begins with theory and looks to data to find aspects of interest as means of examining existing theory (Burawoy et al., 1991; Emerson, 2001). Burrawoy (1991) explains the process here:

We begin by trying to layout as coherently as possible what we expect to find in our site before entry. When our expectations are violated – when we discover what we didn't

anticipate – we then turn to existing bodies of academic theory that might cast light on our anomaly... The shortcomings of the theory become grounds for reconstruction that locates a social situation in its historically specific context of determination. (p. 9)

ECM was an appropriate choice for my data analysis in that I made no claims that my findings are representative of White parents, or parents in this state, or any such extended population.

ECM does not produce generalizable claims – it extends theory. The method is such that researchers go to their data with theory as a means of “testing” the theory (Burawoy et al., 1991, p. 9). In going to my data with Oettingen’s (2000) concept of mental contrasting and Bonilla-Silva’s (2014) colorblind ideology, I asked, are these theories at work here? Do they explain my findings? “We need first the courage of our convictions, then the courage to challenge our convictions” (Burawoy, 1998, p. 20). If the extension of these theories to my data came at “too great a cost” I would have had to “abandon” them and return to the literature (Burawoy, 1998, p. 20). It did not, and Chapters 4 and 5 detail my findings from going to my interview data with these theories as well as my extensions of these theories.

ECM was also an appropriate choice as it complimented my study design of nested-case study. Samuels (2009) argues that ECM “engenders a multi-systemic episteme,” that recognizes both the micro-level world, a parent, in my case, and “the external structures that shape or constrain,” for my study, a school district, multiple school districts, the state (p. 1608). Therefore, ECM and nested-case study design are a good match as I studied the motivations of parents to oppose detracking in the broader context of statewide mathematics reform.

Given my multiple roles in the context of this study (mathematics specialist and researcher), ECM was also an appropriate choice for data analysis as it “makes no pretense to positive science” which assumes objectivity (Burawoy, 1998, p.10). In Burawoy’s (1998) explanatory piece on ECM, he describes the research contexts in which he developed ECM and he makes clear that he was “anything but a noninterfering observer” (p. 10). The reflective

perspective of ECM is such that the observer-as-participant actually improves the research. Burrawoy (1998) explains, “a social order reveals itself in the way it responds to pressure. Even the most passive observer produces ripples worthy of examination, while the activist who seeks to transform the world can learn much from its obduracy” (pp 16-17). In other words, my role as mathematics specialist supporting the detracking efforts in the state provided me an advantage in analysis.

I applied ECM through the following steps. First, I listened to the 14 recorded interviews with parents from LMS without coding to simply gather my initial impressions. Next, I reviewed the transcripts and listened again, while reviewing the transcripts for amendments. This second listening allowed for further reflections, nascent ideas for codes, and memo-writing. Next, I conducted initial coding (Saldaña, 2014) on each transcript given my initial reflections, my familiarity with the context and my familiarity with the literature. Using theory as a guide, these codes were developed consist with other scholars' use of ECM (Mueller, 2017; Samuels, 2009). In other words, I sought evidence related to Bonilla-Silva’s (2014/2021) colorblind frames and explanations possibly imbued with racial ideology and I coded such instances. I returned to the literature when finding anomalies to explain the findings in the specific context of LMS (Burrawoy, 1991). In considering the parent interview data with Oettingen’s (2000) concept of mental contrasting, I coded for expressions of goals, articulations of barriers and strategies for overcoming those barriers. Again, following the process of ECM, I returned to the literature when finding anomalies. See Appendix D for samples from the code book for each theory. These anomalies informed my process of “extending theory” through the process of ECM (Burrawoy, 1991). The codes were entered into Dedoose qualitative coding software to aid the process of

iterative coding and through iteration, I worked towards saturation and moved from codes to themes which are detailed in my findings in Chapters 4 and 5 (Saldaña, 2014).

Next, I situated these themes within the broader context of the state. I used a similar coding process as the first stage, but this time I began with themes from the analysis of the parent interviewees. The goal at this stage was twofold: first, “identifying common patterns and exceptional cases” (Vasquez, 2015, p. 406) between findings in LMS and multiple school districts and, then, to elicit any potentially productive points for administrators to intervene with parents. Then, I used these productive points to begin synthesizing for an administrative audience and forming the implications from my research which is detailed in Chapter 6.

Role(s) of this Researcher

I must make clear the multiple roles I hold in the context of this research study. First, at the time of the study I was the mathematics specialist for the county where two of the districts in this study are located. My daily work required collaboration with mathematics leaders in positions like mine across the state. In this role, I have influence and impact on statewide mathematics education policy development. For example, I was a member of the writing team for the new state mathematics standards and co-authored the statewide recommendation for detracking mathematics programs. I deliver the professional development sessions to district and school administrators on these policy changes as well as to the teachers implementing the curriculum and pedagogical shifts. Second, I support the development of community mathematics education nights throughout the county. In this role, I presented to and fielded questions from some of the parents I interviewed. As I described above, this involvement will benefit my research through the application of extended case method (Burawoy, 1998).

Ten years prior to this study, I taught at two schools in one of the districts I studied and as a teacher I worked to remove tracking with some success. When I began teaching at one of the schools ten years ago there were five tiers of tracks that students could be placed on. Additionally, I served as the administrator of one of the districts in this study for three years and worked to dismantle the system of tracking that remains entrenched due, in part, due to the opposition of parents. Importantly, I myself am a White parent. I live and raise my daughter in the community I am studying. I am on the soccer sidelines with many of the same parents that send their children to schools in the districts I am studying.

Instead of attempting to “erase the elements” in my project “which reveal their grounding in a particular time and place, their preferences in a controversy—the unavoidable obstacles of their passion,” (Foucault, 1984, p. 90) I bring to bear my multiple roles as mathematics specialist-researcher-teacher-administrator-mom throughout this research study. I leveraged my intimate knowledge of this context, my insider-outside knowledge (Dwyer and Buckle, 2009), to build rapport with parents and ask more relevant follow-up questions during interviews, to make reference to shared contexts with the administrators and to support participants recollections, and drawing connections between my central case and the context within which it is nested.

Clearly, there is no objectivity in my analysis that could ever consider a parent’s perspective that tracked classes are desirable to be a good thing. But as a mom, I can fully understand the motivation to seek out the best educational opportunities for my child and I found this tension present throughout my interviews. Nevertheless, my ethics as an educator do not allow me to engage in a research project that would not make explicit that our current mathematics education system of tracking is reproducing racist and classist harm and needs to be dismantled.

CHAPTER 4: FINDINGS ON MENTAL CONTRASTING

My first research question asked, what motivates parents to oppose detracking? Through the extended case method, I extended the concept of mental contrasting to my interview data finding that mental contrasting was, in fact, occurring for parents triggering the motivation to oppose detracking. Recall that mental contrasting (Oettingen, 2000) is the process of imagining a desired goal, identifying barriers standing in the way of the desired goal and then having strategies to overcome the barriers. This chapter will show how all three of these components: goals, barriers and strategies, are present in my data explaining the motivation for parent opposition, but that parent goals in this context are complicated.

Administrators in my interviews believed parents opposed detracking because they had a goal for their student that involved a sequence of classes that detracking would make inaccessible. They also told me that they believed parents' goals for their children were centered on procedurally understanding mathematics – as in calculating quickly, and following rules. As established in Chapter 2, detracking is a barrier for both of these goals as it de-emphasizes procedural fluency to make space for authentic problem solving. So I could have found mental contrasting functioning here and producing motivation for parents to oppose detracking. But, I didn't. When parents were asked about their hopes for their children's mathematical experience, only two of the parents held the goals administrators named. So, if these goals weren't contrasting with detracking and motivating parent opposition, what was?

In this chapter, I address this question by extending the concept of mental contrasting with Ecological Systems Theory. As described in Chapter 2, Ecological Systems Theory describes the influences of elements in the mesosystem, including relationships between parents and their peers and community, and the macrosystem, including societal and cultural influences.

I will illustrate that the parents in my study have goals at the microsystem level, which involve their children's individual interactions with mathematics, but these are not producing the motivation to oppose detracking. Their goals influenced by mesosystem and macrosystem factors, however, are mentally contrasting with detracking thus producing the motivation to oppose. I will conclude this chapter by examining the administrators' interviews to demonstrate how some administrators are misinterpreting parent goals and the implications of these misinterpretations will be discussed in Chapter 6.

Parents' Goals

Early in the interview, I asked what parents hoped for their children when they go to their mathematics class. Twelve of the fourteen parents I interviewed described a desire for their student to experience mathematics as a course that centers challenging, authentic problem-solving. For example, Skylar responded, "so I hope that they'll be challenged, and inspired, and excited about math. Um, and kind of realize the usefulness of math." Four participants explicitly named the hope that their children would learn to "solve authentic, real-world problems." Other participants described their hopes for their children's mathematical experiences that developed their confidence (3 participants), were engaging (3 participants), delved into complex problem-solving experiences (1 participant) and developed a conceptual understanding (2 participants). Although all of the administrators interviewed believed parents' goals in mathematics centered a procedural focus in mathematics, only Ryan and Cameron described their hopes in ways that focused on the development of skills. This finding not only conflicted with my interviews with administrators, it also conflicted with the reviewed literature (Civil and Bernier, 2006; Jackson and Remillard, 2005; Perisinni, 1999). These studies found that parents wanted their children to be good at math as defined as a focus on procedural skill and fast calculating. In contrast, the

clear majority of parents in my study expressed a hope for their child's mathematics experience that was focused on authentic problem-solving experiences in an engaging classroom environment.

Five of the participants shared hopes for their children that involved being "challenged" in mathematics class. When asked to describe what it looks like for a student to be challenged, Harper stated,

It's trying to solve problems in addition to just the worksheets so working on something that could be fun and interesting and, you know, related to the real world and something that, you know, she can see, they use it rather than just solving pages of math problems, which, you know, she can get into doing too, but obviously it's nice to, to be able to see the use in the real world.

This parent is hoping for intellectual engagement that would encourage a student to see mathematics as an interesting subject that is applied to the real world. Skylar defined "challenge" by bringing up the idea of boredom. They said, "So, it basically, in some ways, it's kind of like the opposite of boredom so where they're feeling like something is kind of at the right level where it's pushing them." Boredom came up in over half my parent interviews (9 of 14). This is expected as Macklem (2015) found that nearly half of high school students report being bored in school and that, across the grade levels, students report experiencing boredom in mathematics more than any other subject. For four participants, boredom was what they addressed in the very first question in the interview – stating their hope for their child's mathematical experience is that they are not bored. For these parents, boredom was defined as experiences focused on procedural mathematics, like completing worksheets, and this was clearly the counterexample to what they hoped for in their child's mathematical experience.

Consistent with administrators' reports, four participants did state their goals were related to future course taking. Bailey did so with a vague sense of the distant future and not with respect to a particular sequence of courses, "I know that a good mathematics education is, sort

of, you know, key to a better future.” When asked what that meant, Bailey stated that “fields, like, that use a lot of mathematics typically have better pay and more security, job security.” This participant’s goals for their children in mathematics is tied directly to career opportunities and economic advantage. Whereas other participants were connecting mathematics to college-readiness. Ryan named “get ready for college” as their hope for what their child would be doing in middle school mathematics and the three others that discussed middle school mathematics as a stepping-stone in a sequence of courses necessary to access college. These participants responded to the question of, “what do you hope for your middle school student when they go to math class?” by looking to the future and hoping that their child’s mathematical experiences are aligned to what is needed in the future.

All these responses occurred early in the interview with the majority of parents' goals for their children's mathematical experience expressed as one that is engaging in real-world and authentic problem-solving; inconsistent with the procedural focus on skills and quick calculations that administrators reported. However, as the interview progressed into the topic of tracking, and parents began to express concerns about detracking, other goals for their children's mathematical experience were revealed.

Parents’ Concerns about Detracking

In discussing the detracking project that is occurring at LMS, parents expressed two main points of concern. Consistent with administrators' reporting, a few parents were concerned that their student wouldn't be progressing through a necessary sequence of courses to access college-level mathematics while still in high school. For more parents though, detracking was concerning because it meant that their student would be in a heterogeneous class. Participant responses are summarized in Table 5 below.

Table 5.
Summary of participant positions on detracking

		Concerns about Detracking		
	Race	Position on Detracking	My student won't be progressing through a necessary sequence of courses	My student's individual student needs won't be met in a heterogeneous class
Deven	Biracial	Supportive of detracking	Not concerned	Not concerned
Alex	White			
Ryan	White	Opposed to detracking	Concerned	Concerned
Rowan	White			
Kory	White	Advocated for a different form of tracking	Not concerned	Concerned
Min	Asian	Concerned about detracking	Not concerned	Concerned
Riley	Biracial			
Avery	White			
Cameron	White			
Skylar	White			
Bailey	White			
Kelly	White			
Jaime	White			
Harper	White			

Rowan and Riley, who openly opposed detracking from the outset of the interview expressed both of these reasons, fervently. Here's Ryan, "Now I'm just kind of just despairing because they've gotten rid of all math differentiation until, I don't know until like 11th grade. So, um, so there's no light at the end of the tunnel." For Kory, who advocated for separate math classes for highly-gifted students like their child, only heterogeneity was opposed. Here's Kory, "in my opinion, um, it's not ideal, to take these highly gifted math students and just push them forward. I don't think accelerating them to higher levels of math is what they need. I think what they need is separate, harder math."

The remaining nine participants expressed concerns about detracking predominantly because they believed that their children's needs would not be met in a heterogeneous class, for example, here's Kelly, "the truth is, if you have 35 students in there, are you really able to see where your students are and provide enrichment where needed?" However, Participants 2 and 5 advocated for detracking were not concerned with either of these issues. Here's Deven, "I'm really glad that they're going to be together, and then the kids who are struggling can benefit from learning from, you know, they could do more strategic pairing up and kids can learn from kids who are getting it." Each of these perspectives will be discussed in depth in the following sections.

Access to Calculus

Accessing Calculus classes while still in high school was a main point in administrator interviews. In fact, every administrator engaging in detracking projects reported that parents who oppose detracking do so primarily because they want their child to take Calculus while in high school. However, in my interviews, Calculus was only raised by Riley and Rowan. Here is Rowan explaining this perspective,

My perspective is that to be competitive, for university, you have to have algebra one in eighth grade, which is what my daughter did. Not because she's going to use math and science in any way, shape or form. But so she can take the calculus exam and not possibly have to take it in college.

For Rowan, education is a competition and securing every edge for their child is the role of the parent. They went on to share that their experience attending a “very elite private school” gave them the perspective that anyone can learn Calculus, “It’s not hard math.” They stated that the only reason more students are not enrolled in Calculus is that the class sizes in public school “are massive.” Here, we can see how Rowan is influenced by mesosystem relationships to their own private school experience to establish detracking as a problematic practice and macrosystem neoliberal cultural messaging that positions education as a competition. Riley similarly raised the issue of Algebra 1 enrollment 8th grade as a prerequisite for Calculus. However, they communicated uncertainty about this benchmark saying they had “friends” that told them this was true. These mesosystem relationships influencing this perception didn’t appear as convincing for Riley as the mesosystem and macrosystem influences apparent in Rowan’s response.

Even still, only two of the fourteen participants raising Calculus was surprising given the prominence this had in the administrator interviews. One possible explanation that this perspective was so rare was the community math nights LMS held where information was shared about the changes to college and university admission policies de-emphasizing the importance of Calculus (Just Equations, 2021) and the new pathways model at high school (SDE, 2020) which condenses Algebra 2 and Precalculus into a year allowing all students access to Calculus without the need to take Algebra 1 in 8th grade. Another possible explanation for why Calculus might be less of a concern is the age of the participant’s children. Only half of the participants had children in high school as well as middle school, like Rowan,

and expressed a higher degree of certainty that a particular sequence of courses was necessary demonstrating they are drawing on past experience to form their current goals. Rowan was the only one of these that insisted on Calculus being the culmination of that experience. The rest, like Riley, either had only children in middle school or children in middle school and elementary school. These parents were less certain about what sequence was necessary in their child's future at high school and therefore less certain that detracking at middle school was something they needed to oppose in the present. Either way, the administrator notion that Calculus is the crux for parent opposition to detracking was not apparent in my sample of LMS parents.

Opposing Heterogeneity

Although participants were not unified in detracking's implications for accessing a particular sequence of courses, the concerns about their student being a part of a heterogeneous math class were overt and unified with every participant expressing this concern except the two that supported detracking. Participants expressed strong opinions about their student learning mathematics in a heterogeneous class with Rowan and Ryan expressing the strongest. Here's Ryan,

I mean, I feel like the kids are treated as an end to a means rather than as ends, you know?

(Interviewer) What do you mean by that?

I mean, like this idea 'Well, we have to keep, like, we have to keep the advanced kids in with the less advanced kids in order to help the less advanced kids' rather than find what's best for every kid,

Ryan, here, was expressing frustration with the perceived use of advanced students as tutors in heterogeneous classes for the less advanced students. Eight parents believed that heterogeneous classes worked by teachers using the "smart math kids" to tutor the "not smart math kids" but

only half saw this as a negative interaction. Here, Kelly shares their thoughts about the benefits of this design.

In theory, I was in major support like I believe that math is a perfect opportunity to have some sort of, I don't say mixed age, but mixed abilities, that kids can support one another and help bring each other up and the kids who are more fast would be able to fast track, have the opportunity to teach others and I also believe there's lots of opportunities for enrichment within the same class. My concern, of course, is that the classes are so big, like in theory, it sounds awesome. But the truth is, if you have 35 students in there, are you really able to track where your students are and provide enrichment where needed?

Kelly, like three other participants, sees value in heterogeneous classes for all students but remains concerned about meeting the individual student needs. The lack of understanding among parents about how detracked, heterogeneous mathematics classrooms function was apparent and reflected a scarcity mentality that there is only so much good teaching that can go around and a fixed mindset about math ability being something one has or doesn't have. This line of reasoning was used by four participants and produced the argument that large class sizes prevent heterogeneous classes from working.

Another common response to heterogeneity was the fear of instruction falling to the lowest common denominator. Here is Avery's take on heterogeneous classes, "Really sounds like Russia versus the US. Where we're sure we're all going to get through it together, but at a lower level where no one feels inspired and excited because we're all made the same." Four other participants brought up similar fears that their children will not receive the challenge they hoped for and instead experience a lower level of instruction due to the heterogeneity of student need. Others were concerned but expressed it through a feasibility argument. Here is Harper,

Every student has strengths and weaknesses so it's trying to keep them all occupied and I know that's really challenging and I know COVID hasn't helped anything. And I know teachers are overloaded and, and all of that, but I just hope there are options if there aren't advanced classes, I hope, there are options for, to keep kids engaged if they're, you know, done early or feel like they need to do something more awesome.

The concern about detracking here is that it becomes a teacher workload issue and that the presence of different ability students in one class is adding to an “overloaded” teacher who would be unable to support students who are “done early” with something “more awesome”. Three other participants used teacher workload as their way of expressing concerns about heterogeneous classes.

Support Detracking

Participants 2 and 5 opened their interviews expressing support for detracking. Notably, they were both the only participants to support detracking and the only participant with children placed into low track mathematics. Here’s Alex describing how they feel about LMS’s plan to detrack mathematics,

you know, I would say relief because I guess what I've experienced... I didn't pay attention to it in elementary school like it was never mentioned and then all of the sudden kids were testing to take a higher math class and getting tutors and all this stuff to get into a higher math class and um you know my son always, he, always felt like he was good at math and then that kind of started to diminish.

In a reflection of the literature on math identity and tracking (Boaler, 2006), Alex is describing the impact of tracked mathematics classes on her child who was placed in low track mathematics. Initially their child had a positive disposition towards mathematics, but Alex recognized that the leveling of mathematics courses marked a turning point in their child’s relationship with mathematics.

Also consistent with research on detracked mathematics classes (Horn, 2006), Alex and Deven named curricular benefits of detracking. First, Deven made frequent reference to the lack of development of conceptual understanding their child was experiencing in the low-track class. This also came up in Alex’s interview and they hypothesized why,

I don't know if this is true, I have a sense that um the kids that don't get put in the advanced classes have a worse quality of instruction as well. So the easiest to teach, the

ones that learn the quickest, get the best instructors, the most interesting content and stuff. So, I don't know if that's true but that is my perception.

This perception has been well-documented in research as the reality for students in low-tracked mathematics classes (NCTM, 2018). Deven named detrimental experiences they've heard about in the alternative situation, students in the high track.

I have a couple of friends who fast track their kids and now their kids are in a world of hurt because it's too hard too fast. And they didn't learn some of those core skills of how to be able to get frustrated and continue learning because they'd always been quote – good at math – and then suddenly it got hard you know.

This anecdote reflects a researched phenomena and found to be a common experience for students (Boaler, 2006). In fact, Forest School District's own report from four years prior to my study found students who were placed in high track mathematics courses had a higher failure rate in advanced mathematics courses than those who were not (Mathematics Acceleration Group, 2018).

Both Alex and Deven described benefits of heterogeneous courses. But interestingly, no parent – including Alex and Deven – framed heterogeneity as beneficial for the student perceived as more advanced. Heterogeneity was seen by parents as solely beneficial for students perceived as less advanced. This is inconsistent with research where all students benefit by the diversity of mathematical thinking that heterogeneous classes provide (NCTM, 2018).

Consistent with other parents, Participants 2 and 5 recognized the difficulty of meeting diverse student needs in a diverse mathematics class. However, they were open to the possibility, “it's effective in other subject areas so it can be effective in mathematics” (Alex).

This was an intriguing argument that was not offered by other participants. Why was mathematics perceived differently for parents? LMS does not track in science class, or social studies or even physical education even though there is an abundance of diversity in these

subject areas. I began to pose this question to the other participants, “Why is math different?” and through their responses other goals for their children's mathematical experience emerged.

Goals at Mesosystem & Macrosystem Levels cause Mental Contrasting

For mental contrasting to explain the motivation for parents to oppose detracking, parents must, first, must have a goal for their children's mathematical experience, second, detracking must be perceived as a barrier for this goal and, third, they must feel like they have effective strategies to oppose detracking. Early in the interviews it appeared that parents did not have a goal that contrasted with detracking, their goals were largely about engaging mathematical learning experience centering real life problem solving – nothing for which detracking would be a barrier. Nevertheless, detracking was described as a barrier. When I asked parents to speak to the fact that tracking is a practice that only persists in mathematics, goals that were influenced by mesosystem and macrosystem factors emerged.

For seven participants, the question “why is math different?” caused them to pause. They acknowledged they had never considered this fact before. Here is how Avery put it,

That's a really good question, but no, not in any other subject now that you say that. And I think it's just because math is so progressive, right, every class builds on the last. Um, I haven't seen anybody try to advance in Spanish, or Language Arts.

Here, they acknowledge that this push for advancement is unique to mathematics. When they consider why this might be, a more linear understanding of mathematics is revealed, “it's just because math is so progressive.” Avery continues reflecting on what makes mathematics different here,

So, I think math is seen as a, a really strong benchmark of intelligence and achievement. I think it's very, it's very easy to, to grade, right? Its objective, the answer's right or it's wrong. So, if, for people, like, it's kinda like the spelling bee, you know? I think probably people who love spelling, probably also excel in math. Like, you just can, you can tear through lists, you can tear through rules, you can memorize, you can move on, you can get faster and faster.

This excerpt makes two compelling points that came up across every interview. These two points reveal distinct goals from the early one described at the beginning of the interviews and demonstrate the mesosystem and macrosystem influences on parents' envisioned futures of their child's mathematics experience. First, just like Avery explained above, four other participants expressed this understanding that success in mathematics was a signifier of intelligence. Where does this association come from? Chestnut and colleagues (2018) found this association to be pervasive and uniquely problematic in mathematics. They write that the myth that only "brilliant" people are good at math,

may stem in part from common intuitions about what "doing math" entails. Some parents and teachers, for instance, might believe that math involves complex mental operations that only some students can accomplish. They might view math as so difficult, abstract and specialized that those who succeed in school must have the "right brain" for it. This idea is unfounded (p. 2).

Avery, Riley and Rowan all referred to this signifier as desirable explicitly for their child (Rowan) or implicitly as why "a" parent would want their child in high-tracked mathematics courses (Avery and Riley).

This signifier of intelligence is inextricably intertwined with race, class and other marginalizing factors. Leslie, and colleagues (2015) found that the more that academics in a particular field considered brilliance important for success, the less likely their field was to have a strong representation of female and African-American PhD graduates. Associating achievement in mathematics with intelligence is a reflection of a history of maintaining structural inequities (Berry, 2014; Boaler, 2006; Bullock, 2019). As Berry and his colleagues (2014) state the conflation of this notion of achievement in mathematics with "societal beliefs about race and intelligence cannot be overlooked or overstated; the system was clearly designed to preserve privilege" (Berry, et al., 2014, p. 544). A parent's goal for their student to have a mathematical

experience that signifies intelligence is a goal that is steeped in these macrosystem influences of racism and classism. Detracking removes stratification. Without sorting students into tracks, the signifier of intelligence is lost and we can see how this goal would contrast with detracking.

Second, similar to the description Avery provided – “You can tear through rules, you can memorize, you can move on, you can get faster and faster” – five other participants used this question of “why we track in mathematics?” to explain that mathematics is an “objective” subject that is easy to grade. This is the clearest demonstration that, although initially declaring a hope for their student to experience challenging, real-world problem solving in mathematics, parents also hold an understanding that to be deemed good at math, one is measured by their procedural fluency with mathematical calculations. This is exactly what administrators reported as the goal parents hold for their child. So why did I initially find parents hold goals about rich, problem-solving for their child in mathematics only for them later to report a notion of good-at-math as constrained to procedures and quick calculations?

Extending mental contrasting with Bronfenbrenner’s Social Ecological Theory, this finding can be understood as parents holding different goals influenced by factors at different system levels. At the microsystem level, I asked parents to talk about their hopes for their child and these were rich with examples of real-life problem solving and challenging mathematics. When I asked parents to justify why we only track in mathematics, they drew on influences at the mesosystem level and macrosystem level. Parents referenced their own past mathematical experiences, what they’ve heard their friends with kids say, what their older children’s experience with mathematics was and even cultural tropes that ‘doing the math’ is equated with performing a quick calculation. These factors are all influencing parent perceptions of what it means to be good at mathematics. Detracking, however, creates heterogeneous mathematics

classes valuing multiple ways of being good-at-math equally; it does not status procedural fluency above other mathematical proficiencies. It does not align with the view that good-at-math is equal to “tear[ing] through rules, you can memorize, you can move on, you can get faster and faster.” Therefore, a parent’s goal of having their children be good-at-math that actually is aligned with this procedural perspective is another goal that contrasts with detracking.

For the third and final goal that contrasts with detracking, we return to Avery continuing to reflect on the question “why math is different?”

So, I think it's a really easy place to obviously excel and then that, you know, feeds both the ego and the recognition of ‘hey, this is a really smart kid’ and the parents are recognized that ‘I have a really smart kid.’

In this excerpt, Avery brings up the notion of credentialing. Credentialing, as described in Chapter 2, is a commodity of neoliberalism that is sought after as a form of social capital (Stahl, 2015). The goal of having a child in a particular mathematics course as a credential for the parent, as Avery named here, came up with two other participants as well. Noticeably, all these parents were bringing up the notion of credentialing as something ‘other’ parents do. As in, “I heard a few parents say” (Riley) or “We’ve decided as a society that...” (Rowan) and this distancing themselves from these behaviors is an example of socially desirability bias and is evidence of the mesosystem relationships and macrosystem societal norms impacting how parents envision goals for their children's mathematical experiences. Brantlinger (2003) found when parents advocated for maintaining hierarchies between class tracks, they “indicated that their own identity formation was based on their children’s school status” (p. 59). The creation of heterogeneous classes through the process of detracking, which removed the signifier of intelligence for the student, also removes the opportunity for the parent to be credentialed with

having “a really smart kid.” Therefore, a goal of gaining a credential via their children's mathematical experience stands in contrast with the project of detracking.

These three goals that contrast with detracking are not enough to trigger motivation via mental contrasting. The key to mental contrasting producing the necessary energization to act and overcome the barrier is the individual's view of the barrier as one that can be overcome (Oettingen, et al., 2009). In other words, they have strategies to overcome the barriers. Rowan demonstrates how they see themselves equipped with the power to overcome detracking here,

I have the means to make what we need to make happen for our kids and working where I work and having worked in public education for a really long time I'm very, very aware of the fact that a lot of people do not have either the means or the advocacy or even the idea that they can question the status quo and, and fight for themselves to open those doors.

Rowan here is framing the opposition to detracking as fighting the status quo – when the reality is that tracking is the status quo. They also assert they “have the means” to succeed in their opposition for their child. Most parents were not as forthright with expressing that opposing detracking is something they feel they can be successful at, and again, only two parents were openly opposed to detracking with the rest just expressing concerns.

Towards the end of the interview each participant responded to a hypothetical question about what they would do if they were the administrator in charge. In answering this question, four of the parents that, initially were just concerned with detracking, expressed that they would ensure there was a pathway for parents who wanted to be exempt from detracking. Chapter 5 will delve deeper into this notion of “exemption,” here we will explore this idea as the last element needed for mental contrasting to produce the motivation to oppose. Here is Jaime,

I think, I just think the parents will be less resistant if you provide an avenue. I just, I just don't think when you get to the secondary education the parents are really going to be satisfied with what you can realistically provide with your differentiation... I think you just have to provide, you know, a path for them and they'll do it, you know?

First, this participant recognizes that parents are “resistant” and then, they assert that in order to be successful with detracking administrators will “just have to provide” concessions for parents to get out of detracking. Consistent with the literature reviewed in Chapter 2, Jaime is communicating the entitlement of parents to overcome this perceived obstacle. Rowan’s earlier assertion that “I have the means to make what we need to make happen for our kids” also reveals mesosystem influences in that their interactions have afforded them greater attention, recognition and concessions from public schools assuring them their opposition to detracking would be successful. At the macrosystem level, we can understand this to be a function of both racial and economic privilege producing a confidence that detracking will not be a barrier for their children.

In sum, when we examine the reasons parents in my study are opposed to or concerned about detracking with an understanding that mesosystem and macrosystem factors are influencing parent’s envisioned futures and their strategies to overcome barriers, we can see three goals that, juxtaposed with detracking, can trigger the motivation to oppose detracking. These were: 1) a mathematical experience that signifies intelligence for their child, 2) a mathematical experience that allows their student to be ‘good at math’ as measured by procedural fluency, and 3) a mathematical experience that credentials the parent as having a “really smart kid.”

Explaining the Extension

Mental contrasting has been well established in the literature through experimental study designs centering the individual as the unit of analysis and engaging the individual in a process of mental contrasting producing motivation to achieve future goals (Destin et al., 2018; Oettingen et al., 2001, 2009; Szpunar et al., 2018; Wright 2008). My application of mental contrasting extends this theory beyond the individual level to recognize the mesosystem

connections between parents and their social groups, and the macrosystem social and cultural milieu that all influence parents' goals, perceptions of barriers and their confidence that they have the means to overcome the barrier. This extension beyond the unit of analysis of the individual is essentially an argument that says: context matters. In fact, it not only matters, but is essential to fully understanding the motivations of an individual.

Bronfenbrenner's (1977) Ecological Systems Theory states that humans are enmeshed in various ecosystems, so to study an individual, one must study across these contexts. Researchers' use of mental contrasting at the microsystem level demonstrated that mental contrasting can produce motivation. I am extending the concept with analysis at the mesosystem level in taking into consideration influences between parents' social groups and the macrosystem level by considering societal influences. From these levels, parents' goals, perceptions of barriers and power to overcome the barriers with the social and historical context that influence the resultant motivation can be more completely understood.

Markus and Nuris (1986) make clear that any future goal is socially and culturally contingent. Applications of mental contrasting that were reviewed in the previous chapter (Oettingen, 2000; Gollwitzer, et al., 2011; Oettingen, 2012; Duckworth, et al., 2013; Sevincer and Oettingen, 2013; Destin, et al., 2018; Ivey, 2021) found that the social and cultural influences on goal-setting were acknowledged but not to the extent that one may perceive something as a barrier as a result of social and cultural influences as in my study. For example, Gollwitzer and colleagues (2011) acknowledged the sociocultural influences on low income students' goal-setting to learn a foreign language, albeit in deficit-framing them and their families, when they state "preparing children for a successful school career appears especially challenging for children from low income backgrounds, who as a group receive less support

from parents and other educators” (p. 405). An application of my extension of mental contrasting in this particular study would ask questions like: was there evidence that mesosystem community influences impacted students’ goal formation? And, what macrosystem societal norms were influencing the barriers that low-income students faced during the study? And, what macrosystem economic forces influenced student confidence that they could overcome these barriers? Through my extension, applying a meso-macrosystem lens across the stages of mental contrasting can reveal a more holistic analysis.

Administrators Missing Goals

Administrators across all four districts reported many experiences with parents consistent to the findings described above. As previously established, an interesting discrepancy between my findings and the administrators’ reports is in the perception that parents only think of success in mathematics in terms of procedural fluency. While this goal came out through mesosystem and macrosystem analysis, at the microsystem level it is clear that parents hold goals for their children's mathematical experience that includes rich and engaging problem-solving as well. This section will share findings on both the consistencies and discrepancies between what administrators shared and what I found through my parent interviews. The implications of which will be discussed in Chapter 6.

Each administrator was asked to speak to their experience engaging parents as they worked to detrack their district’s middle school mathematics programs. Mountain School District’s administrator shared a theme from these engagements.

They all wanted to make sure their kid could take college level math in high school, because that's what they did or that's what so-and-so did, or their neighbor, or their older kid. So as soon as they really understood that there was still a pathway to advance level math, whether that was calculus or statistics, or what, that the changes we were making made sure everyone had access to that, not just their student, most parents, then, we're okay with it.

Her assessment is consistent with my findings where 12 of the 14 parents recognized detracking did not remove future course-taking options from their children, but rather increased access for more students. Additionally, this administrator recognizes that this is a goal situated at the mesosystem level when she names the clear influences on the parent by “what so-and-so did.” Notably, when parents recognize that the credential of college-level math in high school is still accessible, the opposition diminishes.

The administrator from Valley School District also named future course-taking as a common reason parents shared for their opposition to detracking. But the administrator quickly went on to list many other reasons parents have communicated about why they might oppose detracking.

[It prevents] access to calculus, dumbing down the curriculum for the benefit of the few and, in sort of the name of wokeness. Yeah, not meeting the needs, or really only focusing on the needs of the quote unquote low learners, and not focusing on the needs of these other kids who quote unquote work so hard to be where they are and they deserve it and they're ready and blah blah blah. And underlying this was a belief that acceleration is this, this belief that acceleration is a no brainer in math, that it's, it has to be that way you have to accelerate students if they're ready for algebra you must accelerate them to algebra.

Many parallels can be drawn between Valley School District’s summation of opposition and the findings from the parents in LMS: the perception that detracking removes access to a particular and necessary course of study, that homogeneous classes only serve the students perceived as low in mathematics, this assumption that acceleration in mathematics is appropriate and this perception of entitlement, “they deserve it,” is also consistent between districts. This entitlement will be analyzed in greater depth in the next chapter as one of the moves of colorblind racism. Focusing on the concept of mental contrasting here, what is important to note is how the administrators interpret the implicit goals of the parents. In this excerpt the conclusion that Valley School District’s administrator draws is that all the opposition stems from “this belief that

acceleration is a no brainer in math.” Although this was consistent with my findings that the majority of parents had taken for granted that mathematics is the only subject where tracking occurs, this isn’t the only motivating factor for parent opposition and neglecting these other factors will have implications that will be discussed in Chapter 6.

Other discrepancies in goals were found between administrators’ experiences and my findings. Here is the TOSA from Forest School District reporting why parents oppose detracking, “We’re taking away opportunities for kids who work hard. We’re taking away opportunities for kids who have been bored for too long and moving fast through the curriculum is the only way that they’re not bored.” Although parents at LMS certainly reported that their children were bored, these reports were shared predominately at the microsystem level, in the way parents describe their individual student’s experience in mathematics. At this level, the vast majority of parents named real life, authentic problem solving as the opposite of boredom, not “moving fast.” The administrator in Forest School District also reported hearing similar desire for advancement,

And so there's a false sense of advancement that parents see so they want to continue to have their child pushed, or may feel their child is bored in class, because they may know the procedural piece or they can do it in their head, but they're not working on the larger picture.”

Here, the administrator makes a number of important observations at multiple levels. First, “there is this false sense of advancement that parents see” (macrosystem influenced goal for signifier of intelligence) and “they want to continue to have their child pushed” (mesosystem influenced goal for credentialing). Then, the administrator turns to the microsystem level describing the students’ experience with mathematics as either the “procedural piece” or “working on the larger picture.” The throughline between these levels that the administrator is making to explain parents’ motivations for opposing detracking is not consistent with my findings.

What is consistent with my findings from the parent interviews are the observations that LMS's principal shared about conversations with parents on the experiences of their child in the mathematics classroom. LMS's principal recalls when they "answer those questions from parents as to how is my kid getting support? What extension opportunities will be available?" and they respond by sharing the details about these experiences in the classroom, parents' opposition to detracking diminishes. River School District's administrator also recalled getting specific about "what's happening in the classroom" and noticed that this helped alleviate some parent pushback. These observations make sense because my findings suggest that parents have goals at the microsystem level that align with detracking and the implications of these findings will be discussed in Chapter 6. If administrators understand that parents hold multiple goals, and only some contrast with detracking to produce the motivation to oppose, this will have implications for how they go about their detracking projects.

Summary

In this chapter, I demonstrated how mental contrasting can explain parent opposition to detracking but we must extend the concept to analyze parent goals considering mesosystem and macrosystem influences. At the microsystem level, parents hold goals for their children that are supported by detracking, that is for their child to be challenged and to engage with authentic mathematics in real world contexts. However, parents hold other goals that are influenced by mesosystem and macrosystem factors of conceptions of intelligence, procedural notions of mathematics and credentialing. These goals conflict with detracking, positioning detracking as a barrier for parents. Some administrators are misinterpreting the goals parents hold and the implications of this will be discussed in the final chapter. However, since parents feel empowered with strategies to overcome detracking, all three elements of mental contrasting are

present: goals, barriers, strategies, explaining the motivation for parent opposition. In the next chapter, I will examine this same interview data for elements of Whiteness through an extension of the frames of colorblind racism.

CHAPTER 5: ELEMENTS OF WHITENESS

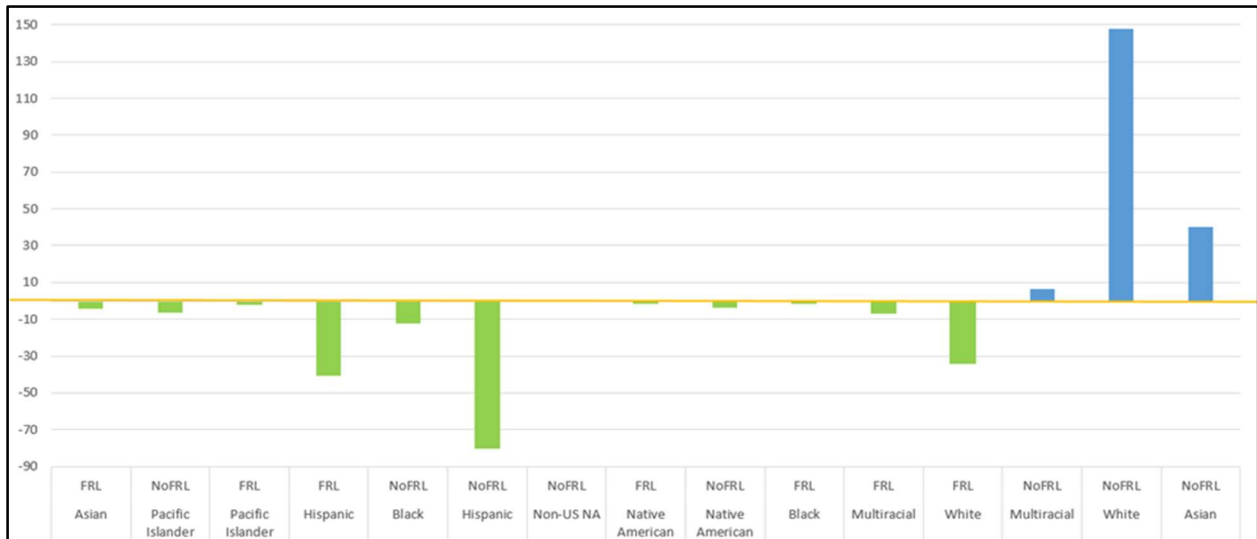
Across the interviews, parents expressed concerns about detracking that reflected the frames of colorblind racism: abstract liberalism, cultural racism, naturalization and the minimization of racism (Bonilla-Silva, 2021). This chapter will explore each of the frames demonstrating how they were used to rationalize parent opposition to or concerns with detracking while ignoring or avoiding a conversation about race. Additionally, I will extend Bonilla-Silva's four frames by adding White exemptionalism. I define this new frame as the act of parents claiming exemption from equity-minded reforms while paradoxically applauding those forms as beneficial for advancing equity goals. In sum, these five frames function within an epistemology of ignorance (Mills, 1997) to rationalize parent advocacy for individual advantages while maintaining ignorance about the racial segregation this advocacy produces. Similar to the previous chapter, I will end here with findings from the administrator interviews. As the arbiters in tracking decisions, it is important to examine how colorblind frames surfaced in administrators' assessment of their interactions with parents and which frames administrators confront versus fuel when they encounter parent opposition to tracking.

Cultural Racism

Cultural racism is a frame of colorblind racism that "relies on culturally based arguments" (Bonilla-Silva, 2021, p. 81). This frame most often appeared in response to the interview question about representation in high-tracked math courses. Figure 4 below is the image used during the interview to show the racial and economic disparities in representation on the high-track math class in Forest School District.

Figure 4

Forest School District's Display of the Over/Under Representation in High-Track Mathematics by Race/SES² Longitudinal Data from 2015-2022



In response to this image, some participants used cultural racism to explain the lower representation of Hispanic students in accelerated math courses. For example, here is Rowan,

This isn't because of the acceleration. I mean the Hispanic um stuff, I mean I've worked in [state] for a long time, I mean part of that is, unless they have been here for quite some time, I mean the, the culture is not to question the teachers, right? Where you have very, um, you know, uppity, uppity White folks who are like 'hey my kid needs this' that would never happen in Spanish culture, right? If the school tell them, this is the class your kid is going to be in' the parents, like 'okay'. Okay? The, not only, they may not know how to question but they wouldn't push back.

Here Avery is using a racist trope about Hispanic culture to explain the racial segregation in tracks of mathematics courses. Although research confirms the observation that Hispanic parents appear less involved in education (Ramirez, 2008; Salinas, 2013) the claim that this is the cause of Hispanic students' underrepresentation in high-track mathematics courses is unfounded. Some research demonstrates that Hispanic parents hold an assumption of care, in that they believe educators have the best interest of their children in mind and they do not need to advocate for

² Socioeconomic Status (SES) is indicated by Forest School District by the families eligibility for Free or Reduced Lunch (FRL). NoFRL indicates the family is not eligible whereas FRL indicates the family is eligible.

individual advantage (Garcia, et al., 2009). Other research finds that the subtractive nature of schooling demonstrated in poor school-based relationships and organizational structures, like tracking, are designed to erase students' culture and devalue the engagement of Hispanic families (Valenzuela, 2010). Avery's explanation that blames Hispanic parent involvement for racial disproportionality in participation in the high-track mathematics course is unfounded cultural racism.

Other instances of cultural racism in the interviews were more coded behind "behavior" as the main concern. Three parents raised the desire to have their children accelerated to avoid the "behavior issues" that they believe come with a heterogeneous class. Bailey, for example, is describing the regret of not choosing to advance their sixth grader here,

And then, you know, they're going through sixth grade math and they're reporting that they're not appropriately challenged, or that they're in a class where there's a culture that students aren't as interested in learning and there's a lot of behavioral management that needs to be done, and so they were hoping for this 7A class to come about and they can advance those students that are interested in math and interested in learning.

As the racial breakdown in Figure 4 makes clear, the demographics of "those" students Bailey is describing as "interested in math and interested in learning" are majority White. Although Bailey did not bring up race, their association of classrooms with more Brown and Black students as having more behavioral management issues with students not interested in mathematics or learning is a common culturally racist trope that functions to justify the opposition to detracking and creating more diverse and heterogeneous classrooms (Ladson-Billings, 2006).

Cultural racism was also shared through an anecdote from Min. As an Asian-identifying parent, Min named that they experienced "reluctance" in signing up for the interview fearing the perception that they were a "tiger" in their advocacy for their child. When asked what they would do about tracking in mathematics if they were the principal of LMS, Min shared a recent

experience. They were approached by a Korean family whose child attends another middle school that has a higher percentage of Hispanic students than LMS. Min recalls them saying that,

we heard LMS is much more academically rigorous. It, it has a reputation for providing good high level classes and the students, they are smarter, the students, and that area is safer, in that area, the school.

This experience left Min reflecting on their own biases. They shared that they “don’t even know what part of town [this other middle school] is in.” Ultimately, they were left considering the underlying assumptions behind this family’s desire to send their child to LMS and that this desire reflects cultural racism. When they turned to answer my hypothetical question about being principal, Min said that they would have to take these assumptions into account because “it’s not just this Korean family that have this kind of stereotypes and assumptions, right?” They concluded that, as principal they would have to directly confront this notion.

One of the best ways to do that will be to say, well, here all students in the school district are receiving sixth grade math, seventh grade math, eighth grade math. No one is falling behind or no, it is not receiving a high-quality education.

Interestingly, Min started the interview expressing similar concerns about detracking as the other parents. This hypothetical question led Min to confront cultural racism and support detracking. Later in this chapter this will be contrasted with how the White parents in this study handled the hypothetical question.

The last common usage of the cultural racism frame was in parents' deficit-framing of Black and Hispanic students. Eleven of the parents framed the lack of representation of Hispanic and Black students in accelerated math courses as a reflection of those students’ disadvantages. These were all participants who identified as White. Here’s Kory,

With all other things being equal, you know, if they were White middle-class students, then they would be in the, the upper track, but because they are working with other disadvantages and, for some reason they're not chosen for, for the more advanced track.

Interestingly, Kory begins by acknowledging the role of race in the process of selecting students for high-track courses by stating they would be on that track “if they were White middle-class students.” Then, they turn to a culturally racist frame that not being White and middle class implies that “they are working with other disadvantages.” For four of the participants, these disadvantages stayed vague as in this example. Five other participants framed the disadvantages as having a lack of resources and two participants framed the disadvantages as specific to a lack of parental involvement. Altogether, this usage of the culturally racist frame that being Black or Hispanic is a disadvantage functions to rationalize the overrepresentation of Asian and White students in high-track math courses for parents.

Minimization of Racism

When faced with the data in Figure 1 that demonstrated representation in accelerated classes was disproportionate by race, not economic class, four parents turned to the colorblind frame of minimization of race. Here, Cameron has just been given an opportunity to respond to the data about racial disparities.

I, uh, I agree completely that if, you know, like the representation we're basically all straight across you know proportional to everything that'd be, that'd be, uh, the best case, no question. My biggest concern is, uh, not allowing a student to be challenged for their ability, that is my single biggest concern. Uh. It does unfortunately correspond with the, the High SES kids, they are more likely to be bored and tune out in class because they have had other opportunities and perhaps gone to better schools. I mean I know all that stuff, but if they're there and they're ready to be challenged for more, uh, I have this big concern that they could be held back.

Three interesting things are happening here that reflect patterns in the way parents responded to the racial disproportionality in accessing high-track math courses. First, is the acknowledgment that proportional representation would be the “best case.” Four participants began their response in similar ways. This recognition of equitable representation as the goal can be read as social desirability bias wherein parents understand that to say anything else would be read as overtly

racist (Grimm, 2010). However, they make a hard turn to re-center high-achieving students with “my biggest concern is...” This move can be read as minimizing (or all out avoiding) race as a possible factor in student enrollment in advanced math courses. This reflects the pattern that also showed up in Participants 3, 4 and 14 where racial disparities weren’t recognized or addressed in their response to the data at all.

Finally, Cameron links high-achieving students with high SES students without naming that it is White high SES students that they are talking about. Four participants, three that identify as White and one that identifies as Asian, talked about the data in this way. Each avoided race and conflated middle and high income with high achieving. This conflation may be explained by Owens’ (2022) concept of “racialized organizational climate.” Owens discusses this concept to explain the way race/ethnicity and school racial/ethnic composition interact to exacerbate biases in teachers’ perceptions of student blameworthiness in schools serving predominantly Black and Brown students. The inverse may be functioning at LMS, where the White organizational climate functions to presume high rates of students in high-track mathematics. By avoiding race and centering income, parents used this colorblind frame to continue to advocate for advantage without having to acknowledge how this system produces highly racialized results.

Naturalization

For some parents the naturalization frame of “this is just that way it is,” was a productive frame to use to justify their position and communicate the rationale behind their opposition to detracking. This frame was found in the parents' assumption that there are just naturally, highly gifted students in mathematics. Here’s Kory explaining their response to this situation,

In my opinion, um, it's not ideal to take these highly gifted math students and just push them forward. I don't think accelerating them to higher levels of math is what they need. I

think what they need is harder math. I wish that there was a class that covered the same material just harder for students who are highly gifted in math.

Kory is arguing here for separate math classes, not tracking in the sense of advancement, but tracking in the sense that highly gifted students would have a separate math class. First, separate educational experiences have been litigated in education to be inherently unequal (*Brown v. Board*, 1954). Second, education research has long demonstrated the problematic measures and methods of identifying naturally gifted students resulting in extreme over-identification of high-income White students. “Under the mask of seemingly empirical and color-blind measurements of ability (i.e. IQ tests), ‘the construction of the category of the gifted student could serve to reposition and safeguard Whiteness’ while enabling the use of ability grouping to resist desegregation” (Martschenko, 2021 citing Porter, 2017, p. 5). Therefore, to create separate classrooms in response to the presumed natural presence of highly gifted students is a colorblind request for racial segregation.

Jaime makes a similar naturalization argument when explaining their own experience being educated in a highly segregated city.

I went to a magnet school in [city], which is a largely Black city, and there they did a reasonably decent job of identifying gifted – this was elementary school – gifted Black students as well. And I think that's one thing, uh, we haven't necessarily done a good job of, you know, why are we having, you know, more White kids and Asian kids identified as TAG? Well, they're the parents that are insisting on it, right? And you know the measures they use are not completely independent of performance, right? So, you know, one of things that I wish they would push for, you know, is more TAG and enrichment in low-income, higher minority schools.

First, there is a claim about the natural presence of gifted students and that these naturally gifted students need different treatment. This is followed by a concession of problems with identification of these naturally gifted students over-identifying White and high-income privileges. Then, they conclude that the solution lies in fixing the problem by providing more enrichment to poor Brown and Black students “enrichment in low-income, higher minority

schools.” These paradoxical naturalization arguments function within an epistemology of ignorance to reaffirm to White parents that they should continue to advocate for special treatment for their highly gifted students because any resultant racial discrepancies are actually problems with not enough identification of gifted students of color – not a problem with their advocacy.

Abstract Liberalism

Abstract liberalism is a colorblind frame used to appeal to liberal notions of individualism and equal opportunity when rationalizing racist outcomes. Throughout the interviews, participants framed detracking as problematic in that it limited the meritocratic function of public schools and halted individual achievement. Parents’ appeal to the logic of meritocracy most often took this form: hardworking students deserve to advance on a high track. This abstractly liberal frame occurred across all of the participants that were opposed or concerned about detracking, including one of the parents who identify as Biracial and the parent who identified as Asian. Rowan, who identifies as White, described their concept of meritocracy when explaining that to gain access to the high-track of math, often referred to as the accelerated track, their daughter needed to receive 6 months of tutoring and then later shared that their daughter continued to receive tutoring in mathematics to be successful on this high track.

I hate the word acceleration because it means you are moving the kid faster than they should, I mean if the kid is ready, that’s not acceleration, that’s just their level. And to do anything else is just holding them back.

(Interviewer) What does it mean to be ready, though? Because, I mean, if she needed a tutor to do it, is she ready? I don’t understand, can you say more about that?

But I don't see a tutor as an extra thing necessarily that's just a smaller class size.

Lareau’s (2003) concept of concerted cultivation describes a parenting strategy of economically advantaged parents nurturing their children by intensely structuring their time with enrichment activities for the purpose of giving their children a competitive edge. In the excerpt above, we

can see Rowan describing, not only their use of concerted cultivation, but an ignorance about their own parenting strategy. Through a lens of abstract liberalism, there is no paradox of needing tutoring to be on high-track math courses – their daughter was “ready” to be on the high track because they paid for them to be on the high track. “Equal” opportunity and meritocracy operate differently for the privileged and involve all the resources and advantages they can afford.

Another usage of the abstract liberalism frame is appealing to the logic that detracking and creating heterogeneous classes means the course will fall to the lowest level. Four White-identifying participants used this frame by claiming detracking would result in a lowest-common-denominator kind of instruction. Here’s an excerpt from Avery that was previously analyzed in Chapter 4 through the lens of mental contrasting,

I just think it’s really hard. I, I understand the idea of ‘let’s all get behind all of these kids and let’s move everybody through together and create opportunities for them.’ And I love that idea. I, also, as a parent with children, think ‘oh, it sounds like they’re just being herded through as cattle and there’s no chance to be inspired or to shine.’ Really sounds like Russia versus the US. Where we’re sure we’re all going to get through it together, but at a lower level where no one feels inspired and excited because we’re all made the same.

An interesting turn in Avery’s argument occurs when they assert the role of the parent. Prior to this, they express that there is value in a collective approach to schooling and “getting behind all these kids.” However, once the role of parent is taken, schooling appears to become a zero-sum game. In other words, the implication of this argument is that in order for a child to “be inspired or to shine,” they must shine because they contrast against others who are not shining. They conclude that if we detrack and create heterogeneous classes, it must be “at a lower level.” There is no alternative where all children shine. Ryan agrees with this notion, but is more blunt in their ascertain,

You can't, what's it say in the Bible? You can't serve 2 masters. You can't serve, you can't be about excellence and also about equity. And everything seems to be about equity and equity is important, you have to balance things, but excellence matters too.

Ryan is also viewing education as a zero-sum game. Education is either “about excellence,” understood by Ryan as ensuring a few students are served very well – or it is “about equity” serving everyone but at a lower level. When viewed through this lens, parents motivated to secure individual advantage for their child need to find a way around a system that is “about equity.” The patterned way parents in my study “went around” the system is how I extended Bonilla-Silva’s frames of colorblind racism and developed White exemptionism.

Extending Theory: White Exemptionism

Bonilla-Silva’s frames explained much of the colorblind racism present in the interviews. However, I needed to extend his concept to explain a patterned move across all White parents who were opposed/concerned about detracking. In this move parents first recognized detracking as a good “equity initiative,” but they claimed they were exempt from participating. I call this White exemptionism. This extension of Bonilla-Silva’s framework allows the user to distance themselves from the racist outcomes perpetuated by their lack of engagement in an initiative while still feeling good about their awareness and support of that initiative.

Avery, with experience in health care, shared a powerful health-related corollary to the issue of detracking and in so doing, demonstrates White exemptionism.

People will ask me if I think fluoride should be in the water or if vaccines should be mandatory, and I say, well, absolutely because I come to the perspective from the perspective of population health. So, I'm trying to protect the community, right? And the community will be better, be better protected if we have fluoride in the water and vaccines are mandatory. Do I judge parents who are really worried, and you know, have had so many sleepless nights that they're just so worried about the safety of vaccines, even though I'm not worried about safety vaccines at all? Do I? No, because they are looking at this brand-new baby, right? Of theirs, and saying, ‘what do I do to protect this baby?’ and they're not worried about the people out there who can't get vaccinated or of herd immunity like I am.

So, I think of it similarly. Like, I want all of our kids and our community to be, to have equal opportunities in terms of education. At the same time, my first priority will always be to give MY kids the opportunities that, that I can. I don't want my kiddo sitting in the class, the math class that's going to under-challenge him just to create a system that is equitable for all. So, I think that's where, in theory, I'm supportive of things happening, but I'm also going to watch out for my own and go around that system.

Here, Avery exemplifies the frame of White exemptionism in their acknowledgement of the “social good” of the initiative (fluoride, vaccines, detracking) and then exempting themselves from participating in the initiative as they “go around that system.” White exemptionism works together with abstract liberalism in its individualistic motivation. Avery describes this above when they ascribe the value of individualism to the anti-vaccine parent saying that they are looking at their child thinking ““what do I do to protect this baby?” and they're not worried about the people out there.” The dominant culture mentality that parents must elevate the good of their own child over the good of the group is a key component to how White exemptionism functions.

White *exemptionism* is the enactment of White *exceptionalism*. White exceptionalism (Alcoff, 2015) is when Whiteness is viewed as set apart and above, “intrinsic [in its] incapacity to accept equality” (p.68). This belief is required for White exemptionism to occur. White exemptionism begins with acknowledging, or even celebrating an initiative’s focus on equity and social good. As Avery stated above, “I’m supportive of things happening.” This is followed by claiming exemption that they are just not going to participate as Avery did when they stated, “but I’m also going to... go around that system.” The implicit paradox of White exemptionism (detracking is great!) is rationalized by White exceptionalism (just not for my kid).

White exemptionism occurred in every interview with parents who opposed or were concerned about detracking and identified as White (10 participants) and one of the parents who identified as Biracial. It most often occurred late in the interview when I asked them what they would do if they were principal of LMS. Three participants, who all identified as White, used

this frame to double-down on demands for individual consideration, engaging the frame of abstract liberalism and White exemptionism simultaneously. For example, Rowan states that they would make clear that the curriculum and sequence are changing for all students, but “for people like me, the best thing I can hear is, ‘I hear you, we got you, you actually don't need to worry, the message is really not for those one-off situations’.” Rowan, as the hypothetical principal, would ensure that the detracking project moved forward but that for “one-off” parents like them – they were exempt. Kory used White exemptionism similarly. Early in the interview they made clear that “the main advantage of detracking is removing the systematic advantage and bias from the system” that produced the racial disparities in representation on high-track courses. Then, they responded to the hypothetical prompt about what they would do if they were the principal as follows,

Well, [as the principal] I would say yes to what I'm going to propose to the middle school, which is that I and some of my friends are interested in having their kids participate in a, well, we want to pull, we're thinking about this, we're thinking about pulling our kids out of math and putting them in a small class outside of the middle school.

Although they've earlier stated an understanding of the social good of detracking, given the opportunity, they've also made clear that they (and their friends) are exempt from the implications of the detracking project.

Ten participants, all White identifying and one of the parents who identified as Biracial, felt that as principal they needed to balance perspectives and they had advice on moving forward with detracking while ameliorating ‘those’ parents by engaging the White exemptionism frame.

Jaime exemplifies this later approach here,

I think, I just think the parents will be less resistant if you provide an avenue. I just, I just don't think when you get to the secondary education the parents are really going to be satisfied with what you can realistically provide with your differentiation. I think at the elementary level, sure, you can probably do that. But I think you just have to provide, you know, a path for them and they'll do it, you know.

Dismissing the ability of secondary teachers to differentiate their instruction for heterogeneous classes, Jaime moves to exempt “the” parents from participating in a detracked system and instead wants to be sure that a separate path is provided for “them.” This was the most common engagement of White exemptionism: as principal, I recognize detracking is good for students, but I would make sure there is a way around it for some students. Riley, one of the two parents who identified as Biracial, used the hypothetical question to describe ways they would “rebrand” detracking to prevent parents from perceiving it as an equity initiative that they would want to be exempt from and in so doing, demonstrating the understanding that if detracking was perceived as an equity initiative it would trigger White exemptionism. In contrast, Min used this hypothetical question to confront cultural racism as described earlier in the chapter. In fact, they were the only participant to alter their position over the arc of the interview.

White exemptionism was confronted by participants themselves. Deven, the other parent who identifies as Biracial, teaches in a school predominantly serving Hispanic students and advocated for detracking throughout the interview. They used the hypothetical question to confront White exemptionism, stating “I would educate parents, not to be such entitled pricks. I’m sorry. I think there needs to be a lot more parent education on, like, it is not all about your child being special and unique.” Alex, who identifies as White, has a child in the low track of mathematics and they also advocated throughout the interview for detracking. They summarized White exemptionism as we were wrapping up the interview stating “a lot of parents might want racial justice and socio-economic justice. But when it comes down to your child, you think you are fighting for what’s right for your child and sometimes the rest of society gets put aside.” Both these participants recognized the difficult place that administrators are in, but that administrators were the key to making detracking successful and in providing a more equitable mathematics

education for their child, and for other people's children.

Administrators and Elements of Whiteness

Administrators who are engaging in detracking in their districts understand tracking to be a racial project in that it reproduces structures of domination based on racial identities (Omi and Winant, 2015). Every administrator I interviewed also named the parents who opposed detracking as predominantly White and economically privileged parents. They all surmised this opposition to be a function of the entitlement to special considerations that some parents feel they have. As such, administrators have largely found solace in their district's equity lens or other equivalent tools to support them in moving detracking work forward. However, reflecting the Critical Race Theory principle of interest convergence as discussed in Chapter 2, some administrators feel pressure to ensure detracking is perceived as also good for White kids and in doing so, they center Whiteness in their efforts to detrack. In this final section of the chapter, I will demonstrate how administrators are race-aware, as opposed to colorblind, in their discussion of detracking but that some of their concessions play into parents' usage of White exemptionism and may function to reify racial stratification in new forms.

Valley School District's administrator explains their awareness of tracking as racial project here, "persistence and success in math are completely predictable, both in terms of free and reduced lunch and also race, and so it was apparent to me that we were holding a racist system in place through tracking." For all of these districts, educational equity is a priority of district leadership, and perpetuating a system of tracking when it is known to produce racialized outcomes was unacceptable. Here's River School District's administrator reflecting on this,

We have a district equity leadership team that has been meeting for several years, and one of the questions I think we kept coming back to is like "where are the receipts that you're really invested in, in the equity work?" And it's like, if you're still tracking, are you, are you invested in equity?

The desire to “produce receipts,” in other words, demonstrate evidence that a district is engaged in equity-work, was similar across the cases in this study with administrators using student achievement data, course taking patterns, student interviews and other data sources to justify to leadership teams that detracking was an equity imperative.

Unlike the parents in this study, the administrators I interviewed were comfortable with the heterogeneity that detracking would create. In fact, four of them named the homogeneity of classes that tracking creates as deeply problematic. Here’s Valley School District as an example,

There’s this great debate about whether, like, homogeneous grouping allows you to reach hard to reach kids. And it never felt right in my heart and now there's a body of research emerging that indeed, it is not correct. That if you do that, you're ghettoizing kids and for us, it shows in their, in their outcomes.

Like Valley School District, all of the school districts in this study had longitudinal datasets demonstrating how tracking into homogeneous groups only widened gaps between White/Asian students and students of color. These “ghettos” served as compelling justification for detracking mathematics courses.

For administrators, the persistence of tracking in mathematics, when no other courses maintain a system of tracking, was as puzzling as it was to the parents. Unlike the parents though, many of the administrators named race and class as part of the reason mathematics has held on to the practice of tracking. Here’s the TOSA from Forest School District reflecting on this, “being a math person or not being a math person has allowed us to segregate our society without saying it's about class and race and I can't really name another subject in which our society has latched onto it in that way.” They go on to elaborate the uniqueness of this phenomena in mathematics here,

For so long, the emphasis on procedural fluency is different than other, than other subjects. Like can you, can you imagine if in English language arts, you could just skip a

class if you could read real fast? Right? ... for the most part in these other classes, we focus on all of the strands and yet in mathematics, we really internalize this like capitalist way of doing things where it has to be, like quick and efficient. And if you're not going to kind of conform to this box, you're, what you're bringing to the table is, is devalued. Um, and so I think we've just created a really efficient pipeline for dominant culture to succeed in ways that the other subjects haven't.

The awareness of tracking as a racial project, and that mathematics has long held responsibility for maintaining racial stratification, justified for these administrators, the labor of moving detracking projects forward in their districts.

Every administrator I interviewed recognized that engaging detracking projects would elicit opposition from parents. Forest School District's TOSA recalled their presentation about detracking to district leaders which was met with overwhelming support, "no one said this isn't right for all kids they just said, this is going to make some people upset." Administrators received emails and phone calls with opposition to detracking and appeals for exemption from the detracking initiative. When asked to reflect on who these parents were, administrators were quick to name parents of economic privilege that were largely White and Asian. Here's Forest School District's reflection on engaging these parents,

We've spent so much time and attention, 90% of our time and attention in math, on the accelerated students and the needs of those parents and not on the needs of the students and parents who are not finding success. Time and energy goes to appealing to and supporting and holding the hand of parents of complete privilege, versus doing the work that we really need to do which is to bring up our students who traditionally have not been successful and underrepresented. So, it's a little shameful that we've spent so much time and energy on the wrong population of students.

LMS's principal reflected on the parent nights that were designed to communicate the research and reasons behind LMS's move to detrack mathematics. They noted how disappointed they were that the turnout was so low, particularly amongst their parents of color but quickly followed up by naming the trope that parents of color didn't attend because they weren't interested.

Like, don't just assume that your parents aren't interested? Because they're not. They may

not know that those nights are for them. Right, because they've been so segregated from schools in the long time.

(Interviewer) Would you say that those nights were for them?

... we were anticipating all of the White liberal pushback... you're absolutely right. You're absolutely right... What could it have looked like?

Here, LMS's principal is recognizing the disconnect between the intention of the math nights to be "for them," as in parents of color, while the design of those nights was, in fact, to respond to "White liberal pushback." Their explicit desire to center parents of color in parent engagement opportunities to learn about detracking stands in contrast with the way in which they were designed – which was to convince White, liberal parents detracking is good for their kids too. In sum, administrators were not employing the colorblind moves to minimize race nor were their claims of naturalization justifying racial disparities in student outcomes. Nevertheless, Whiteness was centered in administrators' efforts to detrack and sell White parents that detracking was good for their kids too.

When detracking is justified as a practice that supports all students, it can be seen as aligned to Bell's principle of interest convergence which states that racial progress will not be made unless it also benefits White people (Bell, 1987). In other words, detracking will not be taken up as a practice if it just benefits students of color – it must also benefit White students – hence the use of "all" students in equity rhetoric. Mountain School District's administrator demonstrates the principle of interest convergence here, "what we've tried really hard to do is, is, frame it all as – we're not taking opportunities away from some kids, we're giving opportunities to every kid – and that's a lot harder to argue with." Every administrator made clear that their district would not make meaningful progress detracking their mathematics programs unless there was an explicit benefit for all, exemplifying the principle of interest convergence.

Administrators also played into White exemptionism in their implementation of their detracking projects. Here is Mountain School District’s administrator describing a request from parents and their response,

[The parent states] “Why can't you make sure that all pathways are good and still accelerate my kid?” Like this argument that you can, you can increase access and still sort [students] has been something that's come up. Not with many but like with a couple of parents. And I think, I think, saying, “Yeah, there are going to be exceptions.” Every single student doesn't have to take grade-level, math, and like if we're accelerating them, we need a really strong data set before we do that.

The hypothetical parent here is demonstrating White exemptionism in their request to still move the equity initiative forward, “make all the pathways good,” but then claims exemption for their child. In response, this administrator concedes that “yeah, there are going to be exceptions,” reinforcing the parents’ notion that stratification will occur and their advocacy will be successful. This illustrates how, while race-aware in their implementation of detracking, this administrator is reinforcing White exemptionism in their desire to convince all parents that detracking is good for all kids. The implications of this move will be discussed in Chapter 6.

Summary

The patterned responses that many parents used to communicate their opposition or concerns about detracking mathematics demonstrate the existing frames of colorblind racism. What emerged from my study was a new frame of colorblind racism: White exemptionism. This frame occurred when White parents acknowledged that detracking is an initiative that can promote more equitable outcomes for marginalized and oppressed students – but, because they believe their child is exceptional, they are exempt from detracking. Administrators avoided the colorblind frames of cultural racism, naturalization, and minimization of racism in my interviews, but were found to center Whiteness in their desire to convince White parents that detracking is good for their kids too. I found this move to reflect the principle of interest

convergence and to play into parents' usage of White exemptionism. In the next chapter, I will discuss the implications of these findings by bringing together White exemptionism with the previous chapters findings on mental contrasting.

CHAPTER 6: DISCUSSIONS & IMPLICATIONS

My research study asked two questions: what motivates parents to oppose detracking and how elements of Whiteness show up in those motivations. Thus far, I have separately used the concepts of mental contrasting and colorblind racism to answer these questions and in so doing, I extended each of these frameworks. In this chapter, I'll discuss these concepts together by analyzing the findings from one framework through the lens of the other framework. I will use my analysis to describe implications for administrators in their ongoing work to detrack mathematics.

Mental Contrasting while White

Mental contrasting is the process of imagining a desired outcome, identifying obstacles standing in the way of the desired outcome and then having strategies to overcome those obstacles (Oettingen, 2000). In my interviews with parents at LMS, they described two main reasons that they opposed or were concerned about detracking: their student wouldn't be on a desired sequence of courses, and/or their children's needs wouldn't be met in the heterogeneous classroom created by detracking. But when I pressed parents to explain why these reasons exist for mathematics and not for any other subjects their justification revealed three desired goals that they held for their child's mathematical experience. These were: 1) a mathematical experience that signifies intelligence for their child, 2) a mathematical experience that allows their student to be 'good at math' as measured by procedural fluency, and 3) a mathematical experience that credentials the parent as having a "really smart kid." These desired goals were all described in ways that were influenced by mesosystem relationships to their community and macrosystem elements of neoliberalism, classism and racism (Bronfenbrenner, 1977). And these goals all mentally contrast with detracking which produces the motivation to oppose detracking.

In this section, I will discuss these findings through the lens of Whiteness. I will establish that the pervasiveness of the mesosystem and macrosystem factors influencing parents' goals are such that administrators cannot "sell" detracking as a project that aligns with parent goals influenced at those levels. Instead, I will argue that administrators must focus on the other goals parents hold at the microsystem level. My findings show that parent goals at this level were about their children experiencing mathematics as a subject that is rich with challenging real-world problem solving. These goals align with detracking, and administrators should focus their efforts here thereby interrupting mental contrasting from producing the motivation to oppose detracking.

In Chapter 2, I established through the literature that White parents wield their social capital (Coleman, 1988) and their cultural capital (Bourdieu, 1987) to maintain social hierarchies in education settings (Bader and colleagues, 2019; Hagerman, 2018; Hill & Tyson, 2009; Horvat, et al., 2003; Lareau, 1989/2000, 2011, 2015; Useem, 1992; Yan and Lin, 2005). In fact, for the economically advantaged parents in Lareau's studies (1989/2000, 2011, 2015), the normative conception of being a parent means they must invest their social capital to secure advantages for their child. Bader and colleagues (2019) found these privileged parents secure advantages for their child by overruling school-based decisions like course placement on particular tracks. My findings are consistent with these studies in that parents were motivated to oppose detracking because it contrasts with the goals for their child's mathematical experience that would secure advantages such as the goal of a mathematical experience that signifies intelligence and the goal that the mathematics class will credential the parent. Parents in my interviews demonstrated that advocating for individual advantage was a largely unquestioned assumption of what any parent would do, as Alex summarized, "when it comes down to your child, you think you are fighting

for what's right for your child then sometimes the rest of society gets put aside.” By relating my findings back to the literature on White parents we can see the consistency of White parents using their social and cultural capital to maintain advantage.

Also consistent with reviewed literature is my finding that the heterogeneity created by detracking was a key concern of parents. Wells and Serna (1996) found “the most interesting aspect of elites’ opposition to detracking is that they based their opposition on the symbolic mixing of high ‘deserving’ and low ‘undeserving’ students, rather than on information about what actually happens in detracked classrooms” (p. 103). Brantlinger’s (2003) study of affluent mothers who were self-described “liberals that believe in integrated and inclusive education” (p. 59) were fervent advocates of class segregation to advantage their child. While consistent with these studies, my findings extend this literature in that I also considered race as an influential aspect of parents’ opposition.

Dr. Bettina Love (2019) tells us that “Whiteness is at the center of the reproduction of structural inequality” (p. 143). Parents' macrosystems are steeped in Whiteness, influencing their goals to reify the structural inequality that tracking produces. This can be demonstrated by using Harris’ (1993) concept of Whiteness as Property to analyze the goals parents hold that are mentally contrasting with detracking. Harris (1993) demonstrates Whiteness has value in that it has been reified by court rulings that legally affirmed a person’s reputation or status to have property value. Heterogeneous, mixed race mathematics courses represent a loss in value because they remove the signifier of intelligence for their student and the ability to be credentialed as a parent that homogeneous high-track math classes provide. Therefore, my finding that the parents desire for homogeneity in mathematics class can be read as a desire to maintain the value that Whiteness provides. Understanding that parents’ goals produce

motivation to oppose detracking as connected to these pervasive factors in our racist and classist society demonstrates the mesosystem and macrosystem factors influencing parents' goals. So, what is an administrator to do when faced with White parent opposition for detracking mathematics influenced by seemingly immutable forces in our society?

Implications for Administrators

A common move by administrators in responding to opposition is to share the research with parents (Peressini, 1996). Research documents that detracking and creating heterogeneous classes does not disadvantage students; in fact, the mathematical experience in heterogeneous classrooms produces more equitable outcomes (Boaler, 2002; Boaler and Staples, 2014; Burris, et al., 2009; Strutchens, et al., 2011). Past efforts to detrack mathematics, however, found that sharing that information with parents did not reduce opposition (Peressini, 1996). My findings from extending the concept of mental contrasting to the mesosystem and macrosystem read through a lens of Whiteness may offer an explanation for why these efforts have failed. The experiences of students in the mathematics classrooms that are described in this research – the curriculum, the teaching methods, the problem-solving practices – this is not what produces opposition. In fact, I found that these are exactly the kinds of experiences the majority of parents in my study hope their children get.

My study also found that administrators think parents want a mathematics experience that is narrowly constrained to success at procedural fluency tasks. This is a misinterpretation of parents' goals. Yes, I found that parents do define success at mathematics as being fluent with procedures; but this is a mesosystem and macrosystem goal that has less to do with their individual child and more to do with the parent's past mathematics experiences, cultural tropes about "doing the math," and with an education system that reifies this narrow definition through

standardized testing and maintaining systems of tracking. When administrators approach parents who oppose detracking by trying to convince them that these authentic mathematical experiences in detracked classrooms are good for their kid, administrators are making a micro-level case for a mesosystem and macrosystem issue. Parents already believe these kinds of experiences are good for their kid. They don't need convincing.

Unfortunately, addressing the goals influenced at the mesosystem and macrosystem, the ones that are producing the motivation to oppose detracking, will likely not be effective either. Again, these goals include a mathematical experience that signifies intelligence for their child, a mathematical experience that allows their child to be "good at math" as measured by procedural fluency, and a mathematical experience that credentials the parent as having a "really smart kid." As described above, these goals are steeped in the mesosystem and macrosystem influences established in the reviewed literature, such as the desire for White parents to use their social and cultural capital to maintain advantage in social hierarchies and the desire to preserve the property value of their Whiteness. It is unlikely administrators' individual conversations with parents will assuage them of these influences. Instead, my findings suggest sticking to the microsystem level will be the most effective course of action for administrators. This means, instead of convincing parents that authentic, problem-solving mathematics is best for their child, administrators should celebrate that this is already likely their goal.

While parents may still oppose detracking due to goals influenced by mesosystem and macrosystem factors, administrators can choose to not engage the racism and classism implicit in those goals by consistently bringing the conversation back to common ground and centering their child and the positive learning experience everyone wants that child to have with mathematics. This move interrupts mental contrasting by refocusing parents on the goals they hold that do not

contrast with detracking. LMS's principal shared that centering the individual child and their experience in math class has been effective in their engagements with parents. This does not explicitly confront the racism and classism that are implicit in the goals that mentally contrast with detracking. The next section will offer implications that are more direct. These come from flipping the lens and analyzing my findings from colorblind racism through the concept of mental contrasting.

White Exemptionism produced from Mental Contrasting

In analyzing the parents' interviews through the conceptual framework of colorblind racism (Bonilla-Silva, 2021) I found evidence of all four frames functioning – cultural racism, minimization of race, naturalization, and abstract liberalism. These frames allowed parents to continue to oppose or express concerns about detracking while not sounding like a racist. I also found an extension to Bonilla-Silva's framework that I call White exemptionism. This frame describes the act of a White person acknowledging that a particular norm or activity holds a benefit for marginalized groups, but because of White exceptionalism, they are exempt from participating in the activity or norm. In this section, I will analyze White exemptionism through Oettigen's (2000) concept of mental contrasting to understand it as the strategy that White parents use to overcome the perceived barrier of detracking. In doing so, I will demonstrate that mental contrasting functioned for parents in my study when parents were confronted with an equity initiative aimed at disrupting social hierarchies, and in turn, they were motivated to overcome this obstacle with the strategy of White exemptionism. The implications for administrators are two-fold: one, administrators cannot reify White exemptionism by providing exemptions for White parents and two, to reduce the prominence of claims for exemption, administrators need to decenter White parents in parent engagement efforts.

My study found that parents perceive a high-track mathematics class for their child as valuable because of the outcomes: signified intelligence for their child, access to a presumed necessary sequence of courses for college readiness, and credentials for the parent. These outcomes are not unique to the social stratification of schooling. Signifiers, access and credentials can be found to benefit the dominant class among any system of stratification. Equity initiatives that aim to remove stratifications are a direct threat to the dominant class. In my study, this was demonstrated by the fear of homogeneity in parents' unfounded claims that mathematics teachers cannot teach heterogeneous classes while conceding that all other subject area teachers can. In making this claim, parents are revealing their desired goal is to maintain homogeneity and the obstacle is detracking because it creates heterogeneity. Equity initiatives remove stratifications that are an obstacle to the dominant class's goal to maintain dominance, thus they may trigger mental contrasting if they have a strategy to overcome the barrier. In my study, White parents utilized exemptionism as the strategy by acknowledging they understood and supported the equity-focus of detracking, so as not to sound like a racist, but they are exempt from participating in detracking, so as to maintain racist structures of dominance.

Implications for Administrators

First, administrators must be aware that tracking is maintaining a racist and classist social hierarchy and that parents are seeking exemption to maintain a privileged position in that hierarchy. I found that every administrator in my study was aware of this fact. However, the desire to appease parents and avoid confrontation caused some of the administrators to make exemptions. This functions to maintain systems of dominance and will only produce more claims for exemption. Instead, administrators must maintain that heterogeneous mathematics courses can meet the needs of individual students, as has been documented in the reviewed literature on

heterogeneous classes (Boaler, 2002; Boaler and Staples, 2014; Burris, et al., 2009; Struchens, et al., 2011). Administrators should focus on the mission of the equity-initiative and hold the line to disrupt the social hierarchy by not allowing parents the exemptions to which they believe they are entitled. In doing so, administrators will interrupt the process of mental contrasting because parents will recognize that their strategy of White exemptionism will not be effective in overcoming the barrier of detracking.

Second, administrators must recognize that using White exemptionism as a strategy to overcome detracking is made more powerful among communities of White parents. This was evident in my study through the prominence of mesosystem relationships parents drew on when describing the hypothetical exemptions they would give as principal, as in Kelly naming their “friends and acquaintances who are passionately fighting on either end of it” as who they would center in their parent communications as hypothetical principal. Communities of Whiteness mirror back a privileged experience as the norm and exemptions for one member become expectations for exemption for all. Horvat and colleagues (2003) found this in their study of White parents overruling school-based decisions, Bader and colleagues (2019) found this in White parents' engagement in school choice processes and I found this in my study as parents frequently referenced mesosystem relationships as justifications for their positions on detracking. To decrease this effect, administrators must decenter Whiteness in their parent engagement. Administrators recognize the disproportionality of their engagement efforts – as in Forest School District’s administrators' confession that “90% of our time and attention in math is on the accelerated students and the needs of those parents and not on the needs of the students and parents who are not finding success.” Detracking is an equity initiative aimed at better serving

students of color and all marginalized students. Whiteness functions to distract leaders from focusing their efforts on the communities their equity initiatives are designed to serve.

Therefore, administrators should diminish the power of the White exemptionism strategy by centering parents of color. Aligning with research on parent engagement, administrators can rethink their approach to parents in ways that center the communities detracking is aimed to serve (e.g., Anderson and Minke, 2007; Bolivar and Chirspeels, 2011; Civil, et al., 2005; Jackson and Remillard, 2005; Harper, et al., 2021; Olivos, et al., 2011). In Jeannie Oakes and John Rogers' (2006) book *Learning Power*, they document how authentic parent engagement in communities of color can shift power dynamics in school communities such that detracking efforts can be sustained. My study adds fuel to their findings by demonstrating administrators' efforts trying to "sell" detracking to White parents will not be effective as equity-initiatives dismantling hierarchies that privilege White parents which will inevitably produce motivation to oppose. Instead, administrators can spend their time engaging the parents of color they aim to serve and assess if the equity initiative is genuinely aligned to their goals and their children's needs.

Limitations

While my study was designed to offer the most thorough analysis of my research questions that I could, it remains limited in several ways. First, the selected cases for analysis were chosen because of their engagement with detracking. This tells a particular and incomplete story. This state is a majority rural and White state; the county I work in, for example, has more than 15 school districts, and all but three are rural and majority White. While the three non-rural school districts have, or likely will, experience White parent opposition to detracking, the other rural school districts may not. These rural school districts are resourced such that course

offerings are frequently limited and the entitlement to course access assumed by White parents in non-rural contexts is often not a reality for White parents in rural communities. Therefore, while this nested-case study aimed to tell a contextualized story of parent opposition to detracking in the context of the state, it remains a partial story.

My study is further limited by the state's history of racist exclusionary laws and actions. This history ensured that Indigenous people were forcibly removed from their homeland, and Black and Latinx people were excluded from securing homes and employment in the state for generations. This racist past results in present day disproportionately White enrollment in the state's schools. This is a limitation for my study because when recruiting parents I am drawing from a largely White population and the resultant lack of racial diversity in my sample means I'm telling a partial story.

My study is limited by a lack of attention to gender. Mathematics education has a well-documented history of gender discrepancies in outcomes and access (Leyva, 2017) and parent engagement is also gendered (Goodall, 2018). Both these literature bases lead me to assume that gender will be raised explicitly or implicitly in data collection. My analysis did not pursue this avenue as my research questions in this study are concerned with race. However, I recognize that this lack of an intersectional analysis is a limitation that future studies could pursue.

Finally, the centering of Whiteness as an analytic was a choice in this study. In making this choice, I learned from Matias and Boucher (2021) as they caution researchers engaging Whiteness in their research to “(1) [a]void drawing from a White epistemological standpoint. (2) Give scholars of Colour their due. (3) Go beyond White racial epiphanies” (p. 3). I made an intentional effort to heed this advice through my choices of study design, data analysis and

resultant implications. Nevertheless, centering Whiteness in research remains a limited strategy in an attempt to dismantle White supremacy.

Implications for Future Research

I describe three implications for administrators who are engaging detracking projects: shift parent conversations about opposing detracking to the microsystem level and center their child's rich mathematical experiences, do not fuel White exemptionism by granting exemptions to detracking efforts, and decenter White parents in parent engagement efforts by centering parents of color through early and authentic engagement. Although these implications logically flow from my findings, they are ripe for future research. Does continuously centering the microsystem experiences of their student in mathematics have any impact on parent goals influenced by mesosystem and macrosystem factors? What are the implications for administrators who do not grant exemptionism? How might centering parents of color in parent engagements support administrators to authentically engage detracking as an equity initiative? These questions and more can be asked because of my study.

One of the most surprising results from study came early in my process when I found the vast majority of parents described their hopes for their children's mathematical experience as real-world, authentic problem-solving. I entered my study with a research base that gave me the impression that parents would be emphasizing traditional conceptions of mathematics education that promote procedural fluency (Boaler, 2006; Civil and Bernier, 2006; Remillard and Jackson, 2006). Although these ideas certainly surfaced in the interviews, they did later when parents justified why we track in mathematics and don't in other subject areas. This finding is ripe for further research. Are my findings simply social desirability bias in that parents are parroting to me, a mathematics education researcher, a hope for a mathematics experience that they think I

want to hear? Or, did my interview protocol lead to this surprising finding? When I asked parents for their “hopes,” this question conjured responses about rich problem-solving. Whereas, when I asked parents about “why we track,” this conjured the expected responses about procedural fluency. Future studies could investigate if the temporal nature of these questions impacted their responses. In other words, is the question of “hope” conjuring future fantasies about mathematics, while the question about “why we track” conjuring past, traditional notions of mathematics? Either way, my findings suggest that what parents want for their child in mathematics class is more complicated than past research has suggested it to be.

Additionally, my application of both mental contrasting and colorblind racism extended these frameworks in productive directions and research applying my extensions to various contexts is warranted. For example, how is my application of mental contrasting at the mesosystem and macrosystem level relevant beyond the context of White privilege? Does White exemptionism function in other contexts where equity initiatives are implemented as it did in the context of mathematics education here? Finally, research is also welcomed on my claim that mental contrasting and White exemptionism will function for White people whenever we are confronted with an equity initiative that aims to dismantle social hierarchies. Contexts like healthcare, housing, college-admissions and environmental justice movements all appear to be areas where this phenomenon may be functioning as they all aim to disrupt hierarchies where Whites have maintained dominance. Similar to the implications for administrators leading the detracking efforts, an application of this research may yield productive recommendations that could interrupt the power of Whiteness to impede equity initiatives.

Conclusion

My research study asked two questions: what motivates parents to oppose detracking and how do elements of Whiteness show up in those motivations. By engaging two conceptual frameworks I found that some parents are motivated to oppose detracking because they see it as an obstacle to maintaining privilege and they use colorblind racist frames to rationalize the racist system they uphold with their opposition. We can infer three productive moves for administrators from these findings.

First, they must understand that parents hold multiple goals about their children's mathematical experience. Some of these goals are influenced by mesosystem relationships and macrosystem factors and these goals contrast with detracking producing the motivation to oppose. Therefore, administrators should bring parent conversations about opposing detracking down to the microsystem experiences and center their child and the rich mathematical experiences in the classroom. Second, administrators must recognize that some parents will likely use the colorblind move of White exemptionism to acknowledge or even celebrate the equity goals of detracking, but then they will seek exemption. Granting these exemptionism will fuel this colorblind move and reify the hierarchy that detracking is aimed at dismantling. Finally, administrators engaging detracking projects reported doing so for equity goals, but some also reported their implementation has centered engaging White parents. By intentionally and authentically engaging parents of color early in their detracking efforts, administrators can simultaneously decenter Whiteness and ensure their equity efforts are aligned with the goals of the communities these efforts are aimed to serve. Future research can assess the effectiveness of these recommended moves, however my findings suggest these moves will avoid, respond to or diminish the impact of parent opposition potentially making detracking efforts successful.

APPENDIX A

Parent Interview Protocol

PURPOSE OF THE STUDY: You are invited to take part in a research project studying changes to the state's mathematics education system. The purpose of this study is to examine parent perspectives of moving from a system that tracks students on particular sequences of mathematics courses to one that offers everyone grade-level mathematics through 10th grade. My study will produce recommendations for school administrators across the state to use when engaging parents about these ongoing changes.

RESEARCHER: As you may be aware, I am the math specialist supporting LMS in implementing these changes. My role today is as a PhD student and principal investigator researching parent perspectives. Your responses will be anonymous no one who works at LMS or Forest School District will have access to the recording or transcript.

RISKS/DISCOMFORTS: This study had minimal risks for you as a participant beyond the burden of your time. This interview is recorded for accuracy in transcription purposes and will live on a secure drive where only myself and my advisor will have access. Again, no one who works at LMS or Forest School District will have access to the recording or transcript.

BENEFITS: While there is no direct benefit to you from participating in this study, there is the potential benefit as a result of the information gathered in this study to improve the quality and support given to parents regarding their students' experience studying mathematics in the state.

PROCEDURES: This interview will take place on Zoom and will last between 30 minutes to an hour. Over the course of this interview, you may refuse to answer any question or ask that a response remain anonymous or even off the record.

VOLUNTARY PARTICIPATION: You do not have to agree to be in this study, and you may change your mind at any time. You may call me, the principal investigator, at 541-514-5591 if you have question or complaints about being in this study. If you have any questions about your rights as research participant, or if you think you have not been treated fairly, you may call the University of the state Research Compliance at (541) 346-2510 or email researchcompliance@

PERMISSION TO PROCEED: Is it okay to proceed with this interview?

<Thank you so much for taking part in this interview. I'm going to start with some broader questions to start to understand your perspective and then we'll dig into the specific issue at hand. >

<I'd like to get a general sense of your perspectives on math and math education>

1. What do you see as the goal of a middle school math course?

- From your perspective as a parent, is this what you perceive as happening at LMS? Why or why not?
- Can you give me some examples?
- Say more about being *good* in math
- Say more about who

<I'd like to get a sense from you now about the role of parents in making changes to things like mathematics courses or broader program changes>

2. What do you think the role of parents should be in making program changes in schools?

- Can you tell me about a time when this did or didn't happen?
- Can you tell me about a time when you disagreed with a change and what did you do?

<Ok – now let's dig into the topic of at hand. [Principal's name] has been hosting math nights, to inform parents the coming changes to the math education system. (show flyer) >

3. Have you attended any math nights?

- If yes, which ones?
- If no, have you been to or watched the recordings of any of the math nights?

-----If the participant has not been to nor watched any math nights, skip to question 6 -----

4. What were you hoping to learn or gain from attending these math nights?

- Can you share with me what has stuck with you from these math nights? What do you most remember?
- Say more about why you think that stuck with you
- Say more about why that resonates with you
- Say more about how that challenges you

5. What is your understanding of the changes that are coming?

- What is your understanding of what is motivating the changes?

<I'd like to talk specifically about one of the changes – moving from the tracking system that LMS uses to place students in math class – to offering everyone grade level math and then pathways at the 11th and 12th grade level. This is called detracking. LMS will maintain the use of placement tests to allow students to skip grade levels of math they already understand. >

6. When you first found out about this move towards detracking math, how would you describe your reaction?

- Why do you think you reacted the way your did?
- As you've learned more about why this change is being made, has your response changed and if so, in what way?

7. From your perspective as a parent, what do you see as the benefits of detracking?

- Say more about what you think might be gained
- Say more about who you think might benefit
- Say more about what it means to be successful or “good” in math
- Say more about what you see as the purpose of learning math

8. From your perspective as a parent, what do you see as the challenges of detracking?

- Say more about who you are concerned about and what those concerns are
- Say more about what you think is lost
- Say more about what it means to be successful or “good” in math
- Say more about what you see as the purpose of learning math

<Race and class inequities are a motivator for detracking. Show graphs. Math education researchers and professionals recommend detracking and modernizing mathematics as a means of addressing these inequities.>

10. What is your reaction to this data and research?

- Say more about who you are concerned about and what those concerns are
- Say more about what it means to be successful or “good” in math

11. If you were the administrator of a middle school making these changes, what would you say to parents who shared your concerns?

- <If relevant> Is there anything administrators or teachers or the programming itself could do to assuage your concerns?”
- If yes, what might that be?
- If no, what recommendations could you offer the administrator given your concerns.

Is there anything else you would like me to know?

- How do you identify racial? How does your child?
- How do you identify economically?
- What math class is your child in?
- Would you like to choose your pseudonym?

APPENDIX B

Administrator Interview Protocol

PURPOSE OF THE STUDY: You are invited to take part in a research project studying changes to the state's mathematics education system. The purpose of this study is to examine parent perspectives of moving from a system that tracks students on particular sequences of mathematics courses to one that offers everyone grade-level mathematics through 10th grade.

RESEARCHER: As you may know, I am the math specialist supporting xx County in implementing these changes. My role today is as a PhD student and principal investigator researching parent perspectives. Your responses will be anonymous and help inform training material for school administrators across the state to use when engaging parents about these ongoing changes.

RISKS/DISCOMFORTS: This study had minimal risks for you as a participant beyond the burden of your time. This interview is recorded for accuracy in transcription purposes and will live on a secure drive where only myself and my advisor will have access. No one who works for a K-12 public school will have access to the recordings or transcripts.

BENEFITS: While there is no direct benefit to you from participating in this study, there is the potential benefit as a result of the information gathered in this study to improve the quality and support given to parents regarding their students' experience studying mathematics in the state.

PROCEDURES: This interview will take place on Zoom and will last between 30 minutes to an hour. Over the course of this interview, you may refuse to answer any question or ask that a response remain anonymous or even off the record.

VOLUNTARY PARTICIPATION: You do not have to agree to be in this study, and you may change your mind at any time. You may call me, the principal investigator, at 541-514-5591 if you have question or complaints about being in this study. If you have any questions about your rights as research participant, or if you think you have not been treated fairly, you may call the University of the state Research Compliance at (541) 346-2510 or email researchcompliance@

PERMISSION TO PROCEED: Is it okay to proceed with this interview?

<Thank you so much for taking part in this interview. I'd first like to start off by asking you where your district is in implementing detracking>

1. Can you describe which grade-levels are detracked and when that occurred?
2. What was the motivating factor for your district to move to detracking?
3. What would you say has gone well so far? Why do you think that is?
4. What have been the challenges? Why do you think that is?

<I'd like to talk specifically now about engaging parents in this process. >

5. Can you share what your district has done so far to engage parents on the topic of detracking?

- <if artifacts are referenced> Would it be ok to follow up after this so I could include the [artifact] in my study?
- What has been the response to this/these parent engagements?

6. <Edit based on previous response> Have you experienced parent opposition to your efforts?

- What does that opposition look like? Sound like?
- Have you observed patterns in *which* parents are opposing? <*schools, demographics, regions*>
- Have you observed patterns in *how* the parents are opposing? <*emails, phone calls, letters to editor, etc.*>
- How have you or other staff members responded to this opposition? How has that gone over?

7. <Edit based on previous response> Have you experienced any parents overtly supportive?

- Have you observed patterns in *which* parents are supportive? <*schools, demographics, regions*>
- Have you observed patterns in *how* the parents express their support? <*emails, phone calls, letters to editor, etc.*>

8. <Edit based on previous response> Have you experienced parent supporting to your efforts?

- What does that support look like? Sound like?
- Have you observed patterns in *which* parents are supporting? <*schools, demographics, regions*>
- Have you observed patterns in *how* the parents are supporting? <*emails, phone calls, letters to editor, etc.*>
- How have you or other staff members to this support?

9. If you were meeting with an administrator of a district who has not begun the process of detracking, what advice would you have with respect to engaging parents, particularly those who may oppose detracking?

10. Is there anything else you would like me to know?

APPENDIX C

Recruitment Language

You are invited to take part in a research project studying changes to [state's] mathematics education system. The purpose of this study is to examine parent perspectives about moving from a system that tracks students on particular sequences of mathematics courses to one that offers everyone grade-level mathematics through 10th grade.

As you may know, I am the math specialist supporting [named] County in implementing these changes. My role in the study is as a PhD student and principal investigator researching parent perspective. Your responses will be anonymous and help inform training material for school administrators across the state to use when educating parents about these ongoing changes.

While there is no direct benefit to you from participating in this study, there is the potential benefit as a result of the information gathered in this study to improve the quality and support given to parents regarding their students' experience studying mathematics in [state].

The interview will take place on Zoom and will last between 30 minutes to an hour. Over the course of this interview, you may refuse to answer any question or ask that a response remain anonymous or even off the record.

You do not have to agree to be in this study, and you may change your mind at any time.

Would you like to participate? [Click here to sign up for a time slot and sign the informed consent form.](#) Thank you for your consideration!

Maddy Ahearn

APPENDIX D

Samples from Codebook

Mental Contrasting			
Goals			
Code	Definition	Sample	Notes
Rich Math	Describing a goal for math that is beyond procedural and multidimensional: conceptual, application, high-cognitive (challenge), reasoning	so I hope that they'll be challenged, and inspired, and excited about math. Um, and kind of realize the usefulness of math.	Look to response following protocol question #1, 7 & 8
Obstacles			
Detracking as barrier	Describing detracking as preventing or getting in the way of a future outcome	My main concern, as I mentioned, is grouping everyone together, I feel like that's going to be a problem and there is a loss there.	Look to response following protocol question #6 & 8
Elements of Whiteness			
Colorblind Frames			
Code	Definition	Sample	Notes
Cultural Racism	Using culturally-based arguments to explain racist outcomes	I mean the Hispanic stuff ...unless they have been here for quite some time, I mean the culture is not to question the teachers right ?	Look to response following protocol question #10
Entitlement			
Scarcity Mentality	Articulating a belief that there are limited resources – ie. teacher attention,	But the truth is, if you have 35 students in there, are you really able to track where your students are and provide enrichment were needed?	Look for notions of detracking takes something away from their child to which they are entitled.

APPENDIX E

Parent Participants

	Race	Class	Position on Detracking	Kid Span
Deven	Biracial	Middle	Supportive of detracking	Elementary & Middle
Alex	White	Middle	Supportive of detracking	Middle
Ryan	White	Upper	Opposed to detracking	Elementary & Middle
Rowan	White	Upper Middle	Opposed to detracking	Elementary & Middle
Kory	White	Lower Middle	Advocated for a different form of tracking	Middle & High
Min	Asian	Upper Middle	Concerned about detracking	Middle
Riley	Biracial	Upper Middle	Concerned about detracking	Middle & High
Avery	White	Upper	Concerned about detracking	Middle & High
Cameron	White	Upper	Concerned about detracking	Middle & High
Skylar	White	Upper Middle	Concerned about detracking	Elementary & Middle
Bailey	White	Upper Middle	Concerned about detracking	Elementary & Middle
Kelly	White	Upper Middle	Concerned about detracking	Elementary, Middle & High
Jaime	White	Upper	Concerned about detracking	Middle & High
Harper	White	Middle	Concerned about detracking	Middle

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