From the Peripheral to the Transboundary: Documenting the Lived Experiences of Students and Parents with Online Math Tutoring Services

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Abstract

Despite the growing prevalence of tutoring services in Canada, and a corpus of studies focusing on its overall implementation, research on the tutoring experience of Canadian students is lacking. This article reports findings from a study that responds to this gap through interviews with three high school students receiving online tutoring services in math, and two parents of children receiving online tutoring services. Specifically, the study responds to three questions: (1) What are the lived experiences of high school students receiving math tutoring from a private tutoring service in Ontario Canada?; (2) What are parents' motives for seeking private tutoring services?; and (3) How do participants perceive the learning taking place in different environments (e.g., tutoring vs. school)? In response to these questions, this article outlines the extent to which student participation in online tutoring demonstrates "transboundary learning", responding to earlier claims arguing that tutoring services are considered to be more like "peripheral" learning environments as opposed to an important context for student learning. Findings show a distinct shift in the relationship between tutoring and schooling, where learning is more transboundary in nature and boundaries between schooling and tutoring are blurred. Discussion of findings elaborates on evidence of this transformation as aligning with central characteristics of transboundary learning. The increasing role of tutoring in families' learning and schooling experiences could signal the potential for more inequalities in education, which are discussed in detail.

Keywords: tutoring, math, transboundary learning, perhipheral learning, parentocracy

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Introduction

Tutoring services have experienced exponential increases in enrollment in Canada, with Ontario alone witnessing a 60% increase from 1996 to 2000 (see Aurini & Davies, 2004). Although Canadian research has documented institutional patterns (Davies & Aurini, 2004, 2006) and parent motives (Lim, 2010; Wu, 2003), inquiries into students' lived experiences are lacking, specifically with regards to recent debates on the relationship between tutoring and schooling (Bray, 2017; Chan & Bray, 2014; Davies & Aurini, 2013; Hajar, 2020; Kim & Jung, 2019a, 2019b; Zhang & Bray, 2020). In societies with high-intensity tutoring (e.g., Korea and Japan), the boundaries between schooling and tutoring are blurring, creating what has been termed *Transboundary Learning* (TL) (Kim & Jung, 2019a, 2019b). Recent publications have argued that tutoring in Canada plays a "peripheral" role in students' education (Davies & Aurini, 2013), however, Canadian research has not yet incorporated the voices of students in this line of argumentation. As Hajar (2020, 2018) suggested, building a more holistic understanding of tutoring services in Canada demands the inclusion of students' lived experiences to the existing knowledge, claims, and characterizations of the relationship between tutoring and schooling. This study seeks to fill this gap in empirical research by documenting the lived experiences of three high school students and their parents with online tutoring services for math in Ontario Canada.

Conceptualizations of Tutoring

Supplemental education is referred to in a variety of ways in the literature, such as shadow education (Bray, 2017; Chan & Bray, 2014; Javadi & Kazemirad, 2020; Malik, 2017; Stevenson & Baker 1992), private tutoring (Hajar, 2018, 2020), learning centres (Aurini & Davies, 2004), and after-school programs (Lim, 2010). Studies in Asia, where tutoring is quite popular, refer to it as "shadow education" (Bray, 2017; Chan & Bray, 2014; Javadi & Kazemirad, 2020), a term given because this form of tutoring shadows the schooling system in structure and objectives (Stevenson & Baker, 1992). With this diversity of names and the relative novelty of the phenomenon, comes a common issue in the field concerning the conceptualization of the term 'tutoring' (Bray, 2014; Zhang & Bray, 2020). Authors either use the term to mean different things or fail to clarify the concept they are using (Bray, 2014; Malik, 2017). This is problematic as "clarifying supplementary education-related terms and their meanings is crucial to the research endeavor because how the phenomenon is discussed and debated relies upon what each of these concepts encompasses and where these concepts may be limited" (Wiseman, 2013, p. xi). In this article, the term 'tutoring services' is used to encompass three tutoring-related characteristics previously established in the literature (Bray, 2014; Malik, 2017; Zhang & Bray, 2020). First, the service must be private, meaning that a fee is required to obtain the service. Second, the service is supplementary to mainstream schools and is not offered during school hours or as a part of school activity. Third, tutoring offers various services in Canada, but the focus of this article will be on their academic services, specifically supporting students in mathematics.

Student Lived Experiences and Theoretical Considerations

This research is situated within a poststructuralist framework, specifically the work of Micheal Foucault. Foucault argued that truths around a topic or issue are what create discourses which in turn create what he called "regimes of truth" (MacNaughton, 2004, p. 28). These regimes exist in any given field of study, and they guide how we think, understand, and discuss concepts and issues. The interaction of truths is also veiled in power relations, in that "as one truth accumulates official sanction, others become marginalized and/or silenced" (p. 28). Informed by a Foucauldian lens, this article aims to disrupt and question several regimes of truth on tutoring, learning spaces, and students' voices.

Students' lived experiences have not been a primary focus in the Canadian literature on tutoring services. Lim (2010) and Wu (2003) offered the only exceptions where student and parent perspectives were simultaneously documented. The current research adds to this small body of emergent literature. Math is one of the top subjects sought for tutoring in many countries including Hong Kong (Bray & Kwok, 2003), and Israel (Addi-Raccah, 2019). To date, tutoring in mathematics has been documented in both international (Atalmis et al., 2016; Choi et al., 2012; Kim et al., 2016; Ünal et al., 2010), and Canadian (Gale, 2016; Would, 2010) tutoring literature, however, studies on tutoring for mathematics are largely quantitative (Would, 2010). Findings from this study offer qualitative data on the utilization of tutoring for math support specifically, which has yet to be explored in the Canadian context.

Learning Spaces

Aurini and Davies (2013) argue that supplementary education is at the periphery of educational institutions. Through an organizational lens, the authors offered compelling evidence demonstrating the uniqueness of the Canadian educational structure, which limits the intensity of tutoring's impact on schooling. For example, Canadian universities do not require an entrance exam, in addition to having a "flat stratification system" (Aurini et al., 2020, p. 173), contrary to educational systems with entrance exams as is the case of the Scholastic Assessment Test (SAT) in the United States (USA) (Aurini, 2008; Buchmann et al., 2010). In contrast, the Canadian educational system is less intense with each province offering its own educational structure (Bray, 2017; Davies & Aurini, 2013), creating opportunities for diverse and province-specific tutoring. Aurini and Davies (2013) argued that tutoring in Canada is therefore not particularly intense (despite its constant growth and popularity), making its relation to schooling peripheral in nature. In high-intensity societies (e.g., Korea and Japan) tutoring shadows the schooling systems to the point of blurring the boundaries between tutoring and schooling spaces, creating a new space termed Transboundary Learning (TL) (Kim & Jung, 2019a; 2019b). In this space, students' learning occurs in multiple contexts as they merge and combine resources in their journey to access the university of their choice.

In this article, the Peripheral Learning (PL) and Transboundary Learning (TL) arguments are viewed as two ends of a continuum on learning. Transboundary Learning characteristics are

contrary to the Peripheral Learning characteristics, particularly in their position on the role of schooling and tutoring on learning - PL views tutoring as a supplement that is yet to penetrate the border of schools, while TL maintains that the border is almost disappearing with the two contexts having equal roles on students' learning. Students input is key to these debates as they are the key players in both institutions. However, unlike Kim and Jung's research, Davies and Aurini did not source data from students to inform their arguments. In this study, motives for pursuing math tutoring are reported based on both student and parent perspectives. Table 1 outlines the main areas of difference between TL and PL characteristics (Findings in the table are based on Aurini and Davies, 2013; and Kim and Jung, 2019b).

Table 1: Comparison of Peripheral Learning and
Transboundary Learning Characteristics

Peripheral Learning (PL)	Transboundary Learning (TL)
Satisfaction with public schooling	Dissatisfaction with public schooling
Centering of school authority	Decentering of school authority
Stable models of academic success	Changing models of academic success

Parentocracy

Parents' perspectives and motives are often discussed in the tutoring literature (Bray & Kwok, 2003; Davies & Aurini, 2008). In recent decades, a parent's role in their child's education has evolved with them actively demanding educational advantages for their children. Brown (1990) described these changes to be a result of free-market education and choice advocacy creating a socio-political ideology termed "parentocracy." Barret DeWielet and Edgerton (2016) expanded this conceptualization by adding Annette Lareau's (2003) "concerted cultivation" as another layer of parentocracy referring to the distinctive child-rearing practices of North American middle-class parents (i.e., parents' view of their active role in all aspects of their child's life and maximized engagement in a variety of activities to support their child's cognitive development and educational trajectory). Regarding tutoring, findings from Tan (2017) out of Singapore confirmed that such extended conceptualizations of parentocracy materialize in tutoring choices. Concerted cultivation as parenting logic has also been documented in Canada (Davies & Aurini, 2008; Davies, 2004). With this in mind, Barrett DeWielet and Edgerton's conceptualization of parentocracy discourse is the lens through which parent data are understood and discussed in this article.

To address these arguments and gaps in the empirical and theoretical literature, this study aimed to respond to three research questions linked to student and parental lived experiences in math tutoring, namely:

1. What are the lived experiences of high school students receiving math tutoring from a private tutoring service in Ontario, Canada?
2. What are parents' motives for seeking private tutoring services?
3. How do participants perceive the learning taking place in different environments (e.g., tutoring vs. school)?

Method

To create a space for student perspectives in research, researchers need to disrupt discourses of "power imbalances" between students and researchers (Cook-Sather, 2006, p. 366). In this study, this was achieved by creating space for students and parents to share their perspectives via interviews that recognize their agency and active role in informing research. Like other related studies (e.g., Chan & Bray, 2014; Hajar, 2018), semi-structured interviews with students revealed detailed accounts of students' experiences in these learning contexts. Student and parent interview protocols were directly informed by previous Canadian inquiries documenting students' and parents' lived experience in tutoring contexts (i.e., Lim, 2010; Wu, 2003).

Procedure

After receiving ethics clearance, social media posts and parent invitation letters were used to advertise the study. Interested participants were asked to contact the researcher. Snowball sampling was also used to recruit additional participants, whereby consenting participants were asked to share the recruitment materials with anyone who might be interested and who fulfilled the recruitment criteria. This sampling method proved successful as it allowed for the recruitment of one additional student participant through their parents.

A total of five participants (three students and two parents) each took part in one 30-60 minute semi-structured interview. Due to COVID-related restrictions, all interviews were conducted virtually using the Zoom platform. The interviews took place in December 2020 and January 2021. Students were all attending different public high schools in Ontario (Canada) during the time of data collection. Pseudonyms are used in this article to protect participant identities.

Kevin and Jessica were grade 12 students and Hannah was a grade 11 student. The participants were respectively receiving tutoring in math from two online tutoring services and an independent tutor. In addition to math tutoring, Jessica and Kevin were receiving tutoring in physics. In terms of parent participants, Jennifer (Hannah's mother) and Andrew (Kevin's father)

also took part in one interview. The sample size and narrow scope represent limitations to the study. First, even though the smaller sample of participants provided rich data, arguments and conclusions should continue to be tested with different samples of varying sizes in different contexts. Second, because only parents and students were interviewed, other dimensions of TL were not investigated (e.g., teacher perspectives on tutoring). Future studies could increase the sample size and interview other stakeholders, such as teachers, to add to the reported findings.

Analysis

The data were analyzed using Thematic Analysis (TA) (Braun et al., 2014; Braun & Clarke, 2012). In their recent publication, Braun and Clarke (2020) expanded on their earlier work on TA (see Braun & Clarke, 2006) by introducing three types of TA; (a) codebook; (b) coding reliability; and (c) reflexive TA - i.e., the approach followed for this study.. Reflexive TA positions the researcher as actively involved in the data analysis and interpretation, and can be used both inductively (where authors lay down the theoretical assumptions outlining the analysis) and deductively (where literature review and theoretical framework are used to code, analyze, and interpret the data). In the current study, reflexive TA was used deductively, hence, the TL conceptual framework formed the lens through which data was coded and analyzed.

Findings and Analysis

Findings revealed a shift in the relationship between tutoring and schooling from Peripheral Learning (PL) to Transboundary Learning (TL). This shift was evident in the data related to three of Kim and Jung's characteristics of TL (2019b, p.164-173), namely: (a) conversion of decision-making agents; (b) decentered authority of education; and (c) various models of academic success. These characteristics emerged from the data with nuanced features related to participants' unique lived experiences.

Parents and Students as Main Decision-Makers

The first theme identified in the data is "parents and students as main decision-makers." This theme expands on the TL characteristic "conversion of decision-making agents" (Kim & Jung, 2019b, p. 166). As the boundaries between tutoring and schooling blur, Kim and Jung argued that parents and students start to display increasing autonomy over learning. Findings from this study showed purposeful agency on the part of both parents and students in regard to their expressed motives for pursuing math tutoring and discussion of its benefits. Findings under the theme "parents and students as main decision-makers" were organized into two sub-themes: (a) students' customization of learning through tutoring; and (b) parents displaying parentocracy.

Student Customization of Learning Through Tutoring

In this study, participating students reported using tutoring to both customize and take responsibility for their learning. They viewed tutoring as a form of flexible and individualized support that they purposefully aligned with their general learning needs and math-specific goals. For example, many strategically scheduled tutoring to align with their learning in school, like Jessica who used tutoring to help organize ideas following a class: "I usually have tutoring after a class and it definitely helps to kind of string together everything we did in the day." Students also strategically scheduled tutoring sessions before tests:

> The way I would have worked out my tutor sessions is I'll have tutor emergency sessions…. But generally, we'll be, like, planning the week and say, 'Well, I know I've got a test on let's say Friday. Why don't we have a tutor session on Thursday the day before?' And one on this day, for example, whether I know I'll need the help then or not. And even if I don't need the help during these tutor sessions, I'll just make sure I get through as much homework as I can much faster. (Kevin)

Besides having control over scheduling, students also chose their tutors and were able to change the tutor if they did not connect with them:

> I guess that's the benefit of tutoring. I…in a way. I could go through one online tutoring specifically, if I don't like my math tutor, I could simply go out of my way to go find another one. If you're doing online tutoring across the world, there's a massive amount of people that want to tutor math. So, if I'm not understanding the way the tutor is talking to me or don't understand what they're trying to show me, we just don't. It doesn't click right away. I could just go and get another math tutor. (Kevin)

Unlike in their relationship with the classroom teacher, students can choose to work with the same tutor for years. Andrew (Kevin's parent) discussed this drawing from his experience in the tutoring industry:

> What I'm able to see from my data, is the students, you know a lot of them want, they get a tutor and they want to keep that tutor [...] Some show up to get a help, one or two sessions for an exam, an assignment, a problem they are having, and then they

start, make more sessions with the same tutor they develop a relationship [...] so I've seen [how] tutoring becomes very 'relationship style' if it progresses and they develop that bond. That's not like getting help from dad.

This tendency to want to build long-term relationships with one's tutor was also evident in the student data. Both Kevin and Jessica reported working with the same tutor for years. For Hannah (who is still in grade 11), her mother explained that they plan to work with the same tutor next year "we've already talked about you know next year when you take grade 12 math we'll see if we can arrange for the same tutor just for that support." In Jessica's case, working with the same tutor for years made for more familiarity with her learning preferences which she explained as being important for her learning:

I like that it's consistent. She knows how I learn, I know how she teaches. So we've gotten, like, used to each other's style of learning [...] My tutor definitely gets to know how I like to learn and she can design lessons or notes that fit me best, whereas [in] a class, we basically just work on problems at whiteboards with people.

Similarly, Kevin discussed the advantage of working with the same tutor in terms of building a relationship over the long-term (versus short-term relationship building with school-based teachers):

If you have a tutor that, let's say, you've been working with through a couple years, who knows [you] personally, it's much easier for them to explain a topic than someone who's only met you for a few months now, comparatively. So, I just find that having that one-on-one experience is really beneficial in terms of learning whether I need the help or not.

Kim and Jung (2019b) argued that such displays of student agency over learning in the form of autonomy over their educational choices were evidence of TL, because if their needs were not being met, tutoring allowed them to access this freedom and the power to "leave and find another provider" (p. 167). Participating students identified the fast-paced schooling environment as a challenge to their math learning needs. Hence, tutoring was utilized purposefully to address this issue and slow the pace of learning to a speed that worked for them:

It's more move at your own pace where a teacher has to move at the pace of the class, not the pace of the student, which is big, especially for people who are struggling. I don't necessarily struggle but it's still useful. To be able to learn things at your own pace rather than the agenda of the class. (Jessica)

This purposeful use of tutoring services to fulfill learning needs that are not being met in the classroom is a clear indicator students are exercising agency over their learning through tutoring. Students took control over aspects of their learning that are normally uncontrollable, namely, choosing their educator, and adjusting the learning pace to their individualistic needs. In other words, "passive learning in schools through standardized curriculum and structured lectures is being augmented (or replaced) by shadow education" (Kim & Jung, 2019b, p. 166 - 167). As a result, it could be deduced that for these participants, boundaries between schooling and tutoring are starting to blur as parents and students increasingly mobilize tutoring services to customize their learning experience.

Parents Displaying of Parentocracy

In the TL context, agency is not only displayed by students but is also evident in parents' actions regarding student learning and their tutoring motives (Kim & Jung, 2019b). As described in the sections that follow, findings showed evidence of parents displaying Barrett DeWielet and Edgerton's (2016) extended conceptualization of parentocracy (i.e., parents having choice over their children's education and displaying concerted cultivation).

Choice

The discourse of parentocracy encompasses the idea of parents using their socioeconomic status to organize educational options for their children. Parents following this logic emphasize the need to have educational choices for their children, such as tutoring (Tan, 2017). Tutoring fulfilled different kinds of educational preferences that parents wanted for their children, which they felt were not possible through traditional schooling, such as additional support. For example, on the one hand, research has shown that tutoring can be used to challenge high-achieving students (Davies & Aurini, 2013). This was evident with Andrew, for example, who felt that Kevin was not challenged enough in school and was often bored in math class. Therefore, math tutoring was sought to challenge and further enhance Kevin's math performance, as Andrew stated: "he excels quite highly in mathematics, so we got him a tutor not because he had problems - because he's good - [but] to challenge him to do even better because he found class to be boring." On the other hand, tutoring can also be used by parents to help their children who are struggling (Davies & Aurini, 2013). As an example, Jennifer felt that her daughter (Hannah) needed to enhance her confidence in math, which would lead to better grades. Hence, tutoring was sought to enhance both her confidence and grades because such support was not necessarily possible or being provided in the classroom context:

> It was almost immediate. The way her confidence improved (...) so for example, you know asking a question in class, before having tutoring you know she wouldn't want to ask, she wouldn't want, she was afraid she would look stupid in front of the class

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and the teacher and that sort of thing. But I think with the tutoring, she had the
opportunity to have that one-on-one tutoring where you could ask the question…and
a safer…what she felt was a safer environment and a more comfortable environment.
And then because she could get a handle of the material, then when she was in the
school classroom scenario (...) she could ask questions that she felt were not stupid
questions.

Such an agentic narrative suggests a shift to Transboundary Learning (TL), namely increased
parental involvement in their child's education and an overall blurring of boundaries that "[expose]
parents to numerous possibilities outside of public schooling… some parents are desperate to find
the very best curricula and teachers for their children" (Kim & Jung, 2019b, p. 167). Here, parental
agency over learning is being accommodated by tutoring services, suggesting a clear shift to TL.

Concerted Cultivation

Barrett DeWielet and Edgerton's (2016) extended conceptualization of parentocracy
includes the notion of concerted cultivation, which was also evident in participants' accounts of
their child-rearing practices and corresponding views about individualized support and the use of
tutoring for math. At the centre of this logic is the idea that "a concerted cultivator believes that
'good parents' not only provide food and shelter but also nurture a stimulating environment in the
name of child development" (Davies & Aurini, 2008, p. 57). Here, parents demonstrated concerted
cultivation in their purposeful mobilization of academic and extracurricular opportunities outside
of school, including tutoring. Participating parents viewed themselves as responsible for guiding
their child's educational trajectory and mobilizing opportunities when possible, as Andrew
explained: "as a parent you've got to open your kid's eyes, it's one of your key roles, [to] open their
eyes…you can't tell them what to look at but you've got to be able to open their eyes and show
them." To bolster their concerted cultivation logics, Andrew and Jennifer sought out
extracurricular activities outside of school. Involvement in sports was argued by the parents as a
necessity for teaching time management and organizational skills. Parent discussion of the benefits
of sports is evidence of concerted cultivation, as "concerted development of children, particularly
through organized leisure activities [is viewed as] an essential aspect of good parenting" (Lareau,
2003, p. 2). Participating parents also reported having high expectations for their children's
academic performance in preparation for university and the workplace - expectations that were
being met via tutoring. Jennifer reported that tutoring enabled her to monitor her child's
performance and check on their progress. For Andrew, tutoring helped to reinforce his belief in
cultivating academic discipline at an early age, starting as early as middle school:

Since grade 7 I told him, his number one goal, every year is to be on the honor roll
(…) So our philosophy, mine was, to get my son into training a study habit, and a
training habit for his school work, so that when he hits grades 11 and 12 it would not
be such a shock, so all I did as a dad was try to preempt him getting a shock.

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Andrew went on to justify his parenting methods as representing 'what good parents do', even though these practices went against other parents' approaches:

> Others who say "yeah it's only grade 11 and 12 that count." They may get good marks also but they would not have had the mindset, the study skills lined up that practice (…) to manage their time well. And there will be a shock for a lot of them.

Such "deliberate cultivation of children and their leisure activities" (Lareau, 2003, p. 5) is another sign of concerted cultivation. Tutoring allows involved parents the space to extend their involvement in their child's activities and ultimately development because unlike schooling, tutoring allows for "more opportunities for them [parents] to make decisions" (Kim & Jung, 2019b, p. 167). Their extended agency in the tutoring context was particularly evident in their choice of math tutoring as it was sought to offer an advantage or to keep options open. For example, Andrew chose tutoring in math to challenge Kevin who is a high achiever, and to enhance his math abilities which were argued as essential to improving performance in other academic subjects:

> What I find is personal experience. If you're good at math, you could be very good at most of the science fields generally. If you have a mathematical mind. It lends so much to the other things, like physics. So because he has advanced his math even more with tutoring, he's now really good [laughing] at everything science.

Further, Jennifer talked about the importance of improving math abilities in particular to allow more options for Hannah later on "you want to keep her options open, she may discover something in Grade 12 or you know, maybe she goes to university you know she might discover there's a path she wants which we want to keep her options open."

In their role as educational choice seekers and in line with a concerted cultivation approach, parents "are rarely content to merely complement existing school arrangements and strive to instead manage their child's education" (Davies & Aurini, 2008, p. 58). Participating parents understood that their high expectations for their children's education were challenging to meet in a traditional classroom context where teachers cannot offer individualized support. Nevertheless, parents' increased involvement did not stem from their dissatisfaction with schools and teachers. Rather, they believed that their preferences related to their child's education were better accommodated in tutoring contexts, and they expressed empathy and understanding related to the limitations of school-based educators to meet their needs. In this way, tutoring was therefore allowing participating parents to customize their child's learning.

Therefore, they opted for tutoring to help fill perceived gaps in their children's school-based education. When asked what distinguishes schooling from tutoring, Andrew discussed the school restraints preventing the possibilities of individualized support: "in school, there's not enough time in the day, for teachers to help everybody. There's just not enough time. So, I think

you'll have to look for that outside help." Jennifer echoed Andrew's perspective, saying that "definitely that one-on-one personalized teaching. I mean the teacher cannot…be individual with fifteen different students in the class. Especially kids with different learning styles you know."

These perspectives on schooling and underlying motives for seeking tutoring align with the extended conceptualization of parentocracy. Although Kim and Jung do not refer to Barrett DeWielet and Edgerton's (2016) extended conceptualization of parentocracy when discussing the "conversion of decision-making agents" characteristic (p. 166), the authors do refer to the notion of a guiding discourse on parenting that "is visible and explicit," specifically, in parents' "decisions about their child's career path, school, curriculum, materials, teachers, and tutors" (p. 167). Correspondingly, the visibility of parentocracy discourse in parents' accounts supports the existence of this key Transboundary Learning (TL) characteristic.

Tutors as Mentors and Friends

The second theme identified in the data is "tutors as mentors and friends" This theme links to the TL characteristic "decentered authority of education" (Kim & Jung, 2019b, p. 164). In this section, I outline evidence from the data on how views on formal education are changing. Specifically, I discuss participants' description of tutors as friends and mentors.

Findings showed that tutors and tutees have a unique relationship beyond the focus on teaching and learning the school-based curriculum. Here, tutors were described as friends, mentors, and role models, in addition to being "that second wave of help you can get" (Kevin). Kevin described what this friendship looks like between him and his tutor:

> You get to meet someone and talk to them, like, almost like a friend in math and be like, "Oh, yeah, so I had this problem that was bugging me a bit. I really want to solve it" [...] It almost gets to the point that they want to solve it too with you. I'm like, "well, what's the problem? I'm curious." Especially when you start running into people that really are passionate about what they're teaching and learning. Oftentimes, a lot of the tutors are doing it not as a job but more as a passion, which is really like really, really, really nice to know. Because it's much easier to get taught by people who really, really have a passion in the things that are getting taught.

Kevin also talked about how tutors are mentors. For instance, not only did his math tutor help him with math, but he also helped by "show[ing] me what I could learn in university at the same time to be able to be at the same level as them per se." Jessica also talked about the different skills she learned from her tutor that went beyond the math subject:

> I think the main thing about tutoring is that I've learned that I can know how to ask questions to teachers because I think before that, I really wouldn't like because I was

fairly good at math, I would just go on my own way. But now I feel like if I have a question, I'll really try to bring it up to them so I can understand something more fully.

Hannah reiterated this idea of tutors teaching important skills that went beyond the math subject: "you, like, go over stuff. But then you can also, you also, like, learn new ways to do things and like other things that you might need."

A noteworthy element to the tutor-student relationship transforming to more of a mentorship or friendship could be the narrow age gap between the student and tutor, as Andrew pointed out by saying "these are smart people and they are only 3, 5 years older than [Kevin], so he relates better, than to a 55, 60-year-old person right?"

This characterization of tutors as mentors was mirrored in the parent data. Andrew (i.e., Kevin's father) also referred to tutors as mentors "the tutor uhmm, I..I would hesitate to call them tutors actually anymore, I would actually call them a tutor/mentor." He explained that this was specifically the case with his son Kevin. As discussed earlier, Kevin did not necessarily need a lot of help with math, so Andrew viewed the tutoring as a way to communicate and learn from a mentor:

What I found was [that] by having a tutor, [they] became more like a mentor/friend. Someone to help guide him because he didn't need help in math. But when he had a mentor, who he could look up to, who's more advanced than him, he could then talk with him and, and do even better from what he was doing. (Andrew)

Andrew further explained why the relationship between tutors and students could be seen as more of a mentor-mentee relationship:

Because when a younger student is looking up to someone in university or above, they, they, they open their mind up to what is the next step that could be for them [...] So these people become more than just the tutor, they do become a mentor, mentors more than just the math part, they talk right? They are not robots, they talk. They have an hour, an hour and a half session, [and] they talk.

Another factor that strengthens and ultimately transforms the relationship between tutors and tutees into mentors-mentees is the efforts made to match tutors and tutees. Jennifer explained how the tutoring centre took the time to interview both her and Hannah, which led to them matching her with the right tutor:

> She connected with him right away, and I mean I think part of it is that the tutor like [name of the tutoring service], they took the time to do an interview with us before we started the tutoring, so they could match her with an appropriate tutor and I'm sure part of that is personality and sort of knowing what her needs were so I felt that was a valuable [pause] exercise they know ahead of time what her needs were sort of what her situation was and they matched her with who they felt would be an appropriate tutor.

The informal setting of a tutoring environment allows time for students and tutors to talk and develop a relationship that might not always be possible in a classroom setting. In this vein, Kevin shared how he was able to ask questions on the curriculum with his tutor that went beyond the textbook to expand his learning:

> And sometimes, like the theoretical part of physics sometimes or other ways is like I don't understand, completely unrelated to what we're doing in school. I'm like, I'll ask my physics tutor saying "Hey, I don't really understand the physics behind how this works." Next thing you know, I know how they make like electricity in those turbines at some dams and stuff. And being able to talk with people about that. That's really helped me understand a bit more what diving into university [is like], knowing my goals, what that could teach me.

Hannah echoed Kevin's comments, explaining the sense of confidence she feels in her tutoring session which allowed her to ask questions without hesitation:

> The tutor. He was really nice. And he made me like, feel, like, more confident. And I don't know, I felt like... really easy just to ask questions [...] made me feel really really comfortable too, like, in the environment.

Kevin explicitly referred to teachers negatively as "bosses" while tutors were described positively as friends, mentors and role models. He explained his preference for working with tutors, saying "with the tutor, you don't have to hand them in anything. They're purely there to help you. It's good

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to know that there's very little stress while you're doing the work with them." This framing of tutors in a more favorable light compared to teachers is not uncommon; as Addi-Raccah (2019) explains: "unlike school teachers, private tutors who interact with pupils on a more individual and personal basis seem to provide the care and support that pupils need while being exposed to pressure for high academic achievements" (p. 954). This kind of favoring of tutors over teachers is a sign of the changing authority of education, whereby tutors hold more than a simple second teacher position in parents' and students' eyes (Kim & Jung, 2019b).

Positioning tutors as mentors and friends suggests a clear trust in tutors, which leads to them being heard (by parents and students) and ultimately having influence and authority over students' learning. These findings suggest that expanding the definition of educator and mentor to include tutors is evidence of a shift in the holders of educational authority over learning, whereby students and parents rely on both tutors and teachers. The line separating educators in school versus educators in tutoring contexts was also being blurred by participants; although teachers often have the added responsibility for assessment and accountability towards students and parents, tutors were not characterized in the findings as being fully on the periphery. Instead, tutors were seen by participants as playing equal roles (and in some cases even more prominent roles) in students' learning journey. In addition to reshaping the definition of an educator, views on academic success were also being reshaped by participants, as will be discussed in the following section.

Math Success as a Combination of Tutoring and Schooling

The final theme in the study is "math success as a combination of tutoring and schooling." I will discuss how this theme connects to the Transboundary Learning (TL) characteristic "various models of academic success"(Kim & Jung, 2019b, p. 173). Findings showed that participants viewed academic success generally, and in math specifically, as being a result of both school and tutoring learning contexts.

As the boundaries between school and tutoring blur, Kim and Jung (2019b) explained how "simply put, academic success can no longer be attributed solely to the role of public education - it now extends to shadow curriculum" (p. 173). In this study, participating students did not attribute their success solely to school and instead discussed how tutoring had a specific role to play in their overall academic achievement. Kevin discussed this by contemplating "is tutoring gonna get you better marks? I think it should. I mean, for me, it definitely helped me do better in math and English and everything." Kevin's father (i.e., Andrew) reiterated how tutoring helps with achieving academic success:

> The tutoring definitely helps, tutoring helps anyone, get better than what they currently are because unless you're scoring 100%, you can always improve, and if you can't do it on your own, that outside source, a tutor, a mentor, will help you to get to that next piece, that next…help you put that jigsaw puzzle together where you're missing that last piece. Tutoring definitely helps, whether you're not too smart, or you're very smart.

Students in the study were all motivated to achieve their best and tutoring was utilized as a tool to maintain or enhance marks. In line with the blurring boundaries of Transboundary Learning (TL), they considered their academic success to be contingent on both schooling and tutoring. For many, academic success was particularly important in order to go to university:

> I guess just to do well, and like be proud of where I'm at. But I say like for especially now we're in grade 12. I'm pushing myself to get grades that I can apply with. (Jessica)

> I wanna do well, so that I can like go to university. (Hannah)

Student participants' desire for high achievement was further supported by tutors who helped them improve their math grades and enhance their confidence in the subject. Even though Jessica and Kevin regarded themselves as math people and were high achievers, tutoring allowed them to do even better. When asked whether she experienced improvement with tutoring, Jessica stated:

> Definitely, from when I didn't have my tutor to when I got my tutor, I saw a difference in grades. So it's pretty nice. I think I got a 90 grade 10 I think I got a 96 [...]And I think that stems from just like, being more competent with the subject knowing that I have someone there to support me if I do need support.

Students explained how tutoring helped them significantly with challenging subjects. Specific to math, Jennifer noticed a "dramatic improvement" in both Hannah's grades and confidence with math. When Hannah was asked whether the improvements she experienced in math were because she better understood the subject with the help of tutoring she responded by saying; "yeah, because I'm able to go over it later with someone that can give me extra support and knows how to teach it."

Participating students acknowledged the role tutoring played in their academic success particularly in math. In their discussion of the different models of academic success, Kim and Jung (2019b) argued that "students of today... do not believe that working hard at school is the only way to ensure academic success" (p. 173). Hence what emerges in the TL context is different models of academic success that are not limited to "the traditional model of sitting in a school classroom and diligently following school teachers" (Kim & Jung, 2019b, p. 175). Instead, and as was evident in the findings of this study, students are achieving their academic goals through merging resources from both tutoring and schooling contexts. In this vein, their learning experiences are changing due to tutoring.

Discussion

The aim of this study was to document students' and parents' lived experiences with tutoring services for math and their views on the relationship between tutoring and schooling. Specifically, the research questions posed in this study were: (a) What are the lived experiences of high school students receiving math tutoring from a private tutoring service in Ontario, Canada?; (b) What are parents' motives for seeking private tutoring services?; and (c) How do participants perceive the learning taking place in different environments (e.g., tutoring vs. school)?

Findings revealed a shift in the relationship between tutoring and schooling from Peripheral Learning (PL) to Transboundary Learning (TL). The following sections will outline this key finding and associated sub-themes in terms of how they respond to the research questions, correspond to findings from the existing literature, and suggest implications for practice and research.

Learning Experiences in Tutoring Contexts

As of today, very few Canadian studies have reported on students' lived experiences with tutoring (Wu, 2003; Lim, 2010). The current study responds to this gap in the scholarly literature by centring the voices of students on tutoring services for math. Participating students' narratives revealed the important role tutoring plays in their educational journey. Students shared many advantages and benefits of tutoring that align with earlier work in the field, such as; tutor availability (Chan & Bray, 2014); fulfilling shortcomings from the classroom like lack of individualized attention (Addi-Raccah, 2019; Chan & Bray, 2014); dissonance between learning style and teaching style (Kwo & Bray, 2014); and informal learning setting (Hajar, 2018, 2020). Participants reported benefitting from the informal context of learning that tutoring provided, where they could receive tailored support and have enough time (and confidence) to ask questions and expand their knowledge beyond the ascribed curriculum. These needs were fulfilled in the tutoring context; and, as a result, students reported enhanced math achievement in school and an overall increase in their perceived confidence and competence in the subject.

Students took ownership of their learning by recognizing these needs and fulfilling them through seeking tutoring services. It was evident that the participating students' experiences in tutoring contexts were more agentic, as opposed to the kind of dependent experience reported in schooling contexts (Kim & Jung, 2019b). Here, participants' socioeconomic status allowed them to access tutoring, and as a result, experience agency over their learning and ultimately succeed in math. However, more common to the broader context is the reality that tutoring is not affordable for everyone, and therefore many students are unable to experience these kinds of positive and agentic experiences made possible through tutoring, which leads to widening achievement gaps. Therefore, as these findings show, in order to mitigate tutoring's impact on educational inequality, more attention should be given to tutoring and its role in student learning.

Discourse of Parentocracy and Associated Inequalities

In addition to highlighting student perspectives, parental motives were also investigated. On the surface, participating parents wanted to support children with their math development; however, examining parent data through a parentocracy lens also revealed the clear presence of the extended conceptualization of parentocracy (Barrett DeWielet & Edgerton, 2016). Similar to Tan (2017), findings show that the newly conceptualized parentocracy discourse (Barrett DeWielet & Edgerton, 2016) is present as a parental logic informing educational decision-making particularly related to tutoring. For instance, participating parents viewed tutoring as an aspect of educational choices that "good parents" should seek to give an advantage to their children. Findings from the parent data pointed to their desired involvement in areas beyond academics to other after-school activities (including tutoring), which aligns with a concerted cultivation perspective on parentocracy (Barrett & Edgerton, 2016; Lareau, 2003).

Evidence of parentocracy as a guiding parental motive for seeking out tutoring raises concerns over inequality (Barrett DeWielet & Edgerton, 2016, Brown, 1990). Here, parental involvement and educational orientation enabled participants to mobilize resources (including math tutoring) in order to provide a competitive advantage for their children. As a result, their children would have more opportunities and a higher chance of moving up the social ladder. The additional push for concerted activities (such as extracurricular activities) is also concerning, as it can often lead to "the transmission of differential advantages to children" (Lareau, 2003, p. 5). Lareau elaborates on this concern by saying that "children raised according to the logic of concerted cultivation can gain advantages, in the form of an emergent sense of entitlement, while children raised according to the logic of natural growth tend to develop an emerging sense of constraint" (p. 7). In this vein, recommendations for tutoring expansion come with an important caveat that such expansion risks an increase in parentocratic discourse and associated inequalities. Policymakers need to recognize the increasing influence of tutoring on learning and its role in creating and maintaining inequalities.

Changing Narratives and their Implications

The third and final research question inquired about both parent and student insights on learning in schooling and tutoring contexts. Participants perceived student learning in both contexts as distinct by arguing that tutoring offered many advantages that were absent from the schooling context. A reading of these positive accounts through the TL conceptual lens suggests a change in the narrative around education that makes space for tutoring when discussing the influence of educators and schools on academic success generally, and the merits of tutoring specifically. Students and parents reported that success in math was not due solely to students' efforts and teachers' support; instead, high achievement in math was due to the additional support they received from tutors. This was the case for participants who were struggling (Hannah) and those who were not (Kevin and Jessica) and was echoed by the parents.

Participants' descriptions of tutors as friends and as mentors, and their positioning of that as an advantage of tutoring showed that participants wanted an informal context of learning where they could receive tailored support and be provided time and space to build confidence to ask questions and expand their knowledge beyond the ascribed curriculum. In many cases, tutors were viewed positively as educators, mentors, and friends (when compared with school-based teachers), mainly because (unlike teachers in schools) their role in student learning does not involve the added responsibility of assessment and they are able to offer more individualized support.

Conclusion

Following Kim and Jung's analysis Transboundary Learning (TL) in the tutoring context, Zhang and Bray (2020) suggested that future research is "likely to show increasingly blurred boundaries between public and private [learning contexts]" (p. 331). Such is the case in the present study, which provided evidence of a shift to TL in the context of math tutoring in Canada. Findings revealed that the boundaries between tutoring and schooling are blurring, as tutoring increasingly impacts students' learning and academic success. Findings from this study suggest that future conversations about math tutoring in Canada and other countries should examine its influence in schooling contexts as opposed to examining it in isolation of learning in schools.

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