Advancing the Promise of Educational Equity in Belize: A Case Study

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Abstract

Despite technological advancements and educational reform across the globe, pockets of the world still struggle to provide students with even basic programs to meet their educational needs. A country that has struggled to deliver quality education is Belize. High school education in Belize, historically, has been accessible to only the top performing students and families that could afford to pay. In 2008, however, High Seas Academy high school was established on a small, remote island in Belize. Before the school was established, only primary school was available, and students were either relegated to a life of poverty while tourist and other international "transplants" prospered through the flourishing tourism industry, or families were broken apart as students left the island to attend high school, often in dangerous, crime-ridden areas of Belize. Despite this new educational opportunity, educational leaders struggle to promote academic success for students. High school completion rates are low, and student progress through school is limited. The purpose of this qualitative case study is to understand existing challenges that students at High Seas Academy experience that hinder them from achieving their academic potential. Utilizing the theoretical framework of Patterson's (2001) culture of poverty, findings indicate the existence of strong cultural and structural barriers that interfere with students' educational progress. Cultural barriers include family norms of reliance on students to contribute to family finances, high incidence of early pregnancy and marriage, low expectations for advancement, and little parent oversight to disrupt the influence of substance abuse and gang activity. Structural barriers include limited communication among adults causing the adult native population to live in isolated pockets of close friends and family, the presence of many single parent families, limited resources for the sustainability of the school, and the remote location of the school. This study offers important implications for actions and activities that could, potentially, reduce the influence of these barriers. This study adds to the existing body of literature by offering a narrative portrait of a school in a remote, isolated context, minimally influenced by extraneous factors such as the media or competing interests/goals. The use of Patterson's theoretical model is expanded to explore Caribbean cultural context. Findings from this study may further understandings about the influence of transmitted and modified cultural barriers and structural barriers to promote enhanced student success.

Keywords

International Education, Belize, School Reform, Poverty, Educational Access, Equity

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1. Introduction

Technological advancements and educational reform across the globe have expanded educational opportunities for students worldwide [1]. These advancements, including use of the Internet, online classrooms, digitizing textbooks, and the transition of technical journals to an electronic format, support the ability of students to pursue education "from any where at any time" [1]. However, despite technology that makes education increasingly available, pockets of the world still struggle to provide students with even the most basic programs to meet their educational needs. For students in these countries, basic impediments mean that attaining a high school or college education is no closer now than it has been throughout history.

One country that has suffered in its ability to deliver quality high school education to students is Belize. Historically, high school education in Belize has been accessible to only the top performing students and those families that could afford to pay for it. However, in recent years, Belizean educational leaders have devoted significant effort into improving their educational system and enhancing accessibility across the country. In 2011, Belize's Ministry of Education, Youth, Sports and Culture advanced their National Education Strategy for 2011-2016 [7]. The goals of the Ministry at that time included: 1) reducing funding/outcome inequalities among rural and urban districts, 2) increasing enrollment of students in primary and secondary schools, 3) increasing the proportion of students who earn a satisfactory score on national examinations, 4) improving completion rates at the secondary level, and 5) reducing gender gaps in enrollment [6]. However, despite the investment of considerable effort and resources, the country continues to face considerable challenges concerning access to education and student success as compared to other Latin American and Caribbean countries [7].

1.1. Problem

Educational access and equity in the country of Belize remain as primary concerns of educational leaders despite recent efforts to enhance the educational system and promote secondary school attendance. Specifically, a system that has, historically, limited access to secondary education based on student performance on entrance exams and family ability to pay continues to experience limitations to pathways of access for Belizean secondary students. A recent development on one of the islands off the mainland in Belize, however, is offering promise to advance the goals of this educational system. In 2008, High Seas Academy high school was established on a small, remote island that, previously, only offered students access to primary education. Before the high

school was developed, students either stopped their education after primary school and stayed on the island to work in low-income service areas, or, for those parents who could afford secondary education for their children, they often chose to send their children to the mainland to begin secondary education. Consequently, students were either relegated to a life of poverty while tourist and other international "transplants" prospered through the flourishing tourism industry on the island, or families were broken apart as students left home at the age of 12 to attend high school, often in dangerous, crime-ridden areas of Belize.

The establishment of High Seas Academy has changed educational opportunities for students on the island. This school, founded by two women (an American and a Canadian), provides access to secondary education on this small, one mile wide by five miles long, island. The school accepts students regardless of academic or financial ability, and all students on the island are encouraged to attend. Because of its innovative approach to education and inclusion policies, the school has gained the attention of educational leaders across the country and is increasingly recognized by the Belizean Ministry of Education, Youth, Sports and Culture (hereafter referred to as the "Ministry of Education" or MOE) as a model school in the country (MOE Interview, 2016). However, while some students succeed and take advantage of this opportunity to progress in their education, others struggle to succeed, leaving teachers and administrators exhausted from their efforts to "bring out the best" in students (Interview, 2016). For example, the student population in Forms One through Four, U.S. equivalency of grades nine through twelve, was 78 in the Fall of 2017. However, only ten students progressed to graduate in Spring 2018, representing an attrition rate of approximately 50%. One potential explanation for the lack of student success could be the result of factors outside of the school that hinder student progress. Specifically, prevailing cultural and structural factors could influence and/or impede student aspirations and academic success for students at High Seas Academy.

1.2. Purpose

The purpose of this qualitative case study is to understand, from the perspectives of teachers, students, administrators, and community members, the existing challenges that keep students from achieving their academic potential despite new opportunities available to them. This study utilized the theoretical framework of Patterson's (2001) Culture of Poverty [8] to answer the research questions. Orlando Patterson's (2001) theoretical model built upon the work of Lewis [4] by integrating both cultural/behavioral arguments and structural/economic arguments into one integrative framework to explain the perpetuation of poverty.

2. Theoretical Framework and Research Questions

Lewis wrote in 1961 that poverty was "adaptation to a set of objective conditions of the larger society, [but] once it comes into existence, it tends to perpetuate itself from generation to generation because of its effect on children" [8], (p. 119). Lewis argued that poverty was culturally self-reinforcing, and its incidence was directly connected to "structural conditions in society" [4]. Patterson (2001) built upon that work to provide an explanation for behavioral outcomes based on interaction of cultural models, both transmitted and modified, and the structural environment [8] (See Appendix). Patterson [8, 9] defines culture as "a repertoire of socially transmitted and intra-generationally generated ideas about how to live and make judgments, both in general terms and in regard to specific domains of life" (p. 208). To Patterson, culture is inherited through socialization from the preceding generation, and it is learned intra-generationally directly from peers and significant others and indirectly through media or popular figures. Patterson [8] argued that cultural and/or behavioral variables are only relevant to the extent that structural factors condition the environment in which groups of varying economic and social advantage operate and react. More specifically, behavioral variables (e.g., teen pregnancy, divorce, crime) should be viewed as proxies for cultural mechanisms that are always at play in all social groups and in all contexts rather than static behavioral dysfunctions exclusive to certain groups. These perspectives should not be viewed as dichotomous, but interrelated and valid depending on context, explaining how cultural patterns interact with structural ones to produce outcomes (p. 215).

Therefore, the research questions guiding this study are:

1. What are teacher, administrator, parent, student and community perceptions about educational opportunities offered by High Seas Academy?

2. What are teacher, administrator, parent, student, and community perceptions about cultural barriers to educational advancement for these students?

3. What are teacher, administrator, parent, student, and community perceptions about structural barriers to educational advancement for these students?

4. How do these cultural and structural barriers work together to influence student outcomes at High Seas Academy?

3. Education in Belize

Belize, formerly British Honduras and the only English-speaking country in Central America, recorded a total population of 382,444 at the beginning of 2018 [10]. The population has increased steadily since 2005 when the population was recorded as 283,277, an increase of almost 100,000 or approximately 35%. The United Nations Children's Fund [11] records that in 2015, of the total population, approximately 133,000 were children under the age of 18, and 38,000 were children under the age of five. The median age in Belize is 23.8 [14].

In Belize, primary school consists of grade levels that are called Standards One through Six, and secondary education consists of Forms One through Four. Students enter school around the age of five or six, and they are expected to complete Standard Six at approximately 12 years of age. The net attendance ratio for children enrolled in primary education in Belize was 94 percent in 2015, and the net attendance ratio for students enrolled in secondary education was 55 percent [11]. The Ministry of Education in Belize reveals that only two of five high school age children are actually attending school in Belize [6], and less than a third (only 27%) of enrolled 13 to 16 year olds complete secondary school on time. Another third drop out of secondary school before completing 9th grade [7].

A closer look at these statistics reveals even more alarming trends. For example, Naslund-Hadley, Alonzo, and Martin [7] report that the average 12-year-old student in Belize will have attended school for six years but will have only completed four grades successfully. Additionally, at the age of 17, while comparable students in the United States would have completed 12 years of school and fulfilled requirements at the secondary level, the average 17-year-old in Belize has been enrolled in school for 10 years and completed only eight grades [7]. Especially startling is the fact that the average 20-year-old in Belize has attended school for 11 years but completed only primary school requirements [7].

Failure to complete a secondary education has devastating consequences for children of Belize leaving many out of the labor market and increasing the risk of involvement in criminal and gang activities [3]. The high drop out rate could help to explain the current high crime rate in Belize, as the country consistently ranks among the top ten in the world for homicides, and increasing levels of gang related activity were recorded in 2014 and 2015 [13]. Ironically, individuals without a secondary degree are not qualified to participate in the largest industry in Belize, tourism. While crime rates, including drug related offenses and gang activity, has increased considerably the last few years [3], the educational system is having limited influence on reducing factors that lead to criminal activity because so many students leave school at such an alarmingly early age.

4. Methods

The purpose of this qualitative case study is to understand existing challenges that students at High Seas Academy experience that hinder them from achieving their academic potential despite new opportunities available to them. Data for this qualitative case study were gathered in the summer of 2015, spring of 2016, and fall of 2017 on a small, remote, limestone coral island that measures less than five miles long and a mile wide off the coast of mainland Belize. Original industry on this island included fishing, shipbuilding, and agriculture. Despite the fact that tourism has grown in the past 50 years, the community of approximately 1,300 maintains a distinct cultural flavor, strongly influenced by Mestizo, Garifuna, and Creole influences. Almost all businesses are locally owned, golf carts are the most common vehicles on the sand packed, unpaved streets, and lodging is typically small and relatively inexpensive compared to many other tourist destinations.

A case study design was used to gain an understanding of stakeholder perceptions of cultural and structural barriers that impede student success at this high school. Data was derived through interviews with six teachers, 15 students, three administrators (two Directors and one principal), six community members, and five members of the MOE, for a total of 35 interviews. Prolonged time spent at the school allowed the researchers to become immersed in the culture of the school. Data also was collected from field notes, documents and observations. Document analysis included the school website, student progress reports, student journals and class assignments, applications to the MOE and international organizations for student awards, and documents related to the social enterprise aspect of the school (described more fully in the findings). Observations were made at all times during the school day: before school, during classes, during lunch break and after school. Observations were also made of student activities after school hours. Some of these activities were school related, such as an athletic competition, while others were observations of social interactions between students away from school. Observations were also conducted at parent meetings and at school events that involved parents, such as graduation and a holiday fundraising event in Fall 2017.

Data analysis was an inductive, ongoing process as data were collected over a two-year period of time. The researchers (a) condensed raw textual data into a brief, summary format; (b) established links between the research objectives and the summary findings; (c) utilized trustworthiness techniques (e.g., peer debriefing, member checks, triangulation, etc.) to ensure rigor and reliability; and (d) developed a narrative that portrayed participants' perspectives of challenges that keep students from achieving their academic potential. Subsequent to the above process, the researchers incorporated the language and structure of Patterson's (2001) theoretical model. The frame was used *a posteriori* to "guide and inform rather than determine and force the research design and process" [2] (p. 145).

5. Findings

High Seas Academy was established in 2008 by two women, an American and a Canadian, who had relocated with their families to the island. At the time of the inception of the school, both of these women were recognized by residents on the island as being well-educated (Personal Interview, 2015), and residents began questioning them about their willingness to offer high school education to students on this remote island. One of the women described the feeling of "being on the front of a wave that I could not get off of" concerning the amount of parent interest in the school. She explained that parent interest was so strong that parents would often show up at her home, at all times during the day and evening hours, to speak with her about the possibility of offering a high school education.

Up to that point in time, no high school education was offered on the island. Before the start of High Seas Academy, children either stopped school after Standard Six, or parents enrolled their children in schools on the mainland of Belize. Most commonly, students who made the choice to continue their education enrolled in private schools in Belize City. This choice either required them, as 12-year old students, to travel to Belize City via water taxi (an hour boat ride away) or to relocate to the mainland. Participant interviews revealed that only the most economically advantaged individuals on the island could afford tuition and transportation costs due to the fact that water taxi transportation averaged approximately $50 BZE (U.S. equivalent of $25) per round trip ticket. Additionally, children who chose to commute to the mainland often left home before 6:00 in the morning and returned home approximately 12 hours later. This schedule was described as "unbearable," "exhausting," and "almost impossible" by parents in the study. Parents also described their fear for the safety of their children due to high crime rates in the city.

At the time of the study, High Seas Academy had grown to an enrollment of 78 students across four grade levels, Forms One through Four. The school employed five full-time teachers, one half-time teacher, and one administrator (principal). The teachers at High Seas Academy taught courses in math, English, Spanish, science, technology, history, and physical education. The two founding members of the school served as Directors, but they did not receive

payment, preferring to volunteer their time to make education more affordable to residents on the island. The Directors volunteered their time for grant writing, fundraising, communicating with the MOE, and developing curriculum for the students. The Ministry of Education in Belize does not fund secondary education; however, the Directors of the school believed firmly that "all children should have the opportunity for a high school education whether they can afford it or not or whether or not they are academically qualified." Therefore, they charged minimal annual tuition to parents (approximately $1,000 BZE or $500 U.S. equivalent) to help subsidize costs of the school and to encourage parent and student commitment to the educational process. In exchange for low tuition rates, parents were expected and encouraged to help with school activities and volunteer their time to support school efforts. Additionally, in contrast to existing Belizean culture where only high performing students who could afford education were allowed to enroll in high school, High Seas Academy accepted all applicants regardless of ability to pay or previous academic achievement.

Parent demand for the school has remained strong. One of the Directors of the school explained that many of the parents on the island "would do whatever it takes" to send their children to the school. For example, she explained, "one of the parents searched through trash dumpsters around the island looking for discarded school uniforms for her daughter to wear so that she could attend High Seas Academy." Parent support was also evidenced in parent presence during the school day. It was not unusual for parents to stop by the school to speak with a teacher, principal or one of the Directors. Although parent interest in the school was strong, teachers, the principal and the directors indicated that challenges exist that inhibit student completion of graduation requirements at High Seas Academy. These challenges often interrupted student progress or required students to drop out of the Academy. The following section first outlines opportunities provided through High Seas Academy, and then it outlines and explains the challenges that were identified.

5.1. High Seas Academy

High Seas Academy is located in a modest three-story building located on the south end of the island. Classes at High Seas Academy typically meet on the first and second floors of the building due to slowly progressing construction on the third floor. Construction on the third floor does not resemble typical U.S. construction. Instead, dozens of trees have been stripped of their limbs, and they serve as supports for the ceiling that is slowly being built by volunteers and visitors to the school. Additionally, the stair case to the third floor exits to a landing that has, just recently, been secured by

a sturdy railing. Before volunteers to the school built the railing, anyone entering the third floor was just steps away from a three-story plunge to the hard-packed, sandy ground below. Another item that captured attention was the presence of fans, located in each classroom, that were operated without a shield or guard attached to the front of the fan. Students moved freely in front of and behind fans, and no one seemed to notice the potential for injury that was present. Light fixtures in each classroom are simple light bulbs dangling from a wire connected to the ceiling. Windows are covered by boards, and the boards are pushed out each day to allow ocean breezes to flow through the hot, humid building.

Students, dressed in bright, ocean-blue tops and khaki pants or skirts, sit at wooden desks with wooden chairs. In some classrooms, desks are aligned in neatly formed rows. In other classrooms, desks are strewn haphazardly around the classroom, and students are allowed to sit either in the chairs or on the desks. It was interesting for us to note that teachers, administrators, and Directors wear uniforms that resemble student uniforms. Each adult wore a bright blue shirt with either a khaki skirt or pants. In each classroom, a white board with dry erase markers hangs on the wall. Classrooms are painted a variety of bright colors (lavender, yellow and mostly bright blue), and concrete serves as the floor for the second and third stories. Hard packed sand serves as the flooring for the bottom floor. The only air-conditioned room in the building is the computer lab, located on the ground floor. Approximately 20 computers sit on tables that line the walls of this dimly lit room. One small office, where the principal sits behind a desk that almost spans the limited width of the room, is located at the corner of the first floor, and a teacher workroom separates the office from the computer lab. Also located on the ground floor is a small hallway that serves as a library. Wooden bookshelves line the wall, and a dirt floor serves as the foundation. Modest restrooms for boys and girls are available on the first floor as well.

5.2. Opportunities Offered at High Seas Academy

High Seas Academy offers a foundation of classes in English, science, math, history, Spanish, and computer science for students in Forms One through Four (the U.S. equivalent of grades nine through twelve). Recent educational reforms in Belize have required that all teachers hold a bachelor's degree in "an academic or education-based subject" [6]; therefore, High Seas Academy has required each of its teachers to complete a bachelor's degree and to apply for a teaching license. Teachers earn just enough money to pay for housing and food (Personal Interview, 2016).

Additional opportunities available to students include a

"social enterprise" (Personal Interview, 2016) approach to education. The Directors of the school have worked diligently to integrate coursework with an entrepreneurial perspective. Students are responsible for programs that help sustain the school while also encouraging innovation, fiscal responsibility, and an entrepreneurial spirit. The primary enterprises that have evolved include "Bike with Purpose" and "Kayaking Adventures." Specifically, each of these programs is a student-led program where students volunteer to take visitors on biking or kayaking tours of the island. Visitors/tourists pay for these tours, and the money is split between the school and the student. In this way, students become responsible for helping to fund their education, and they are provided with an opportunity for leadership and money management. In addition to these student operated businesses, students also create jewelry, photographs, and artwork that they can sell to visitors on the island. These entrepreneurial activities are encouraged for all students, and students are allowed autonomy in deciding which activity they will be involved in.

Service is a requirement for students. Students regularly participate in activities on the island such as clean-up of plastic bottles on the waterfront, beach clean-up, or activities that protect the ecosystem of the island, such as protection of mangroves. Visitors to the island often provide additional instructional activities for students. For example, visitors that have become acquainted with the school from previous vacation experiences, often volunteer to share their expertise with the students. The Directors work diligently to encourage visitors to share their expertise with students to expand student understandings beyond their island experiences. For example, visitors with an expertise in banking, aviation, medicine, engineering or other professions often talk about their business experiences, or they may lead a special class for students with the goal of expanding student understandings of potential professional opportunities. Another opportunity that was introduced is a partnership between students at High Seas Academy and a small high school in Israel. The purpose of the partnership was to encourage students to develop a more global perspective and to create mutually beneficial learning opportunities between High Seas Academy and this school. The partnership, however, was stopped is in its infancy stage because of connectivity problems on the island. Although there is interest among the Directors and the leaders of the school in Israel to continue the partnership, there are no immediate plans to address problems with technology/connectivity.

5.3. Factors that Influence Student Success at High Seas Academy

Even though this opportunity exists for students on the island, findings indicate the existence of strong cultural and structural barriers that significantly interfere with students' educational progress.

5.3.1. Cultural Barriers

Adhering to Patterson's [8] definition of culture as "a repertoire of socially transmitted and intra-generationally generated ideas about how to live and make judgments, both in general terms and in regard to specific domains of life" (p. 208), several cultural barriers emerged as themes from data analysis. Cultural barriers included family norms of reliance on these students at very early ages to contribute to family finances, high incidence of early pregnancy and marriage, low expectations for advancement from peers, family, and the community, and little parent oversight to disrupt the influence of substance abuse that has risen due to the high number of tourists/visitors on the island. Limited parent oversight also threatens these students as they experience the emerging influence of gang activity due to an increase of gang activity on the mainland.

For all students, expectations from their families to contribute to the financial stability of the family often interfered with their ability to attend school. For girls, this expectation is evidenced in the expectation for many high school girls to provide care for younger siblings while parents were at work. Most families were headed by single mothers, and girls at the school described responsibilities that they had at home to "help take care of" either their younger siblings or the children of their older siblings. One female student who described aspirations to become a medical doctor explained, "I can't come to school when I need to watch my niece and nephew. My sister has to work, and I have to stay home with them." She explained that keeping up with schoolwork has been difficult for her and that she "does (her) best" to do homework late in the evening. This socially accepted norm, of younger girls taking care of their own younger siblings or of their older sisters' children, had a profound impact on the ability of some female students to attend school regularly. Similarly, boys often were expected to participate in family businesses during lunch and after school. One young man, a Form Two student (U.S. 9th grade equivalent), left school during his lunch break to help his family with a modest restaurant that his family owned. He returned to the restaurant when school was dismissed and worked until the restaurant closed in the evening (approximately 8:00 p.m.). One difference noted between expectations for boys and girls on the island was that family expectations for boys were primarily during lunch and after school hours. For girls, expectations often precluded them from attending school.

Girls also experienced a cultural barrier in high rates of teen

pregnancy. While approval seeking between young men and women is certainly noticeable in countries around the globe, the acceptance of teen pregnancy as a norm was evident. This tendency is evidenced by a historically high rate of teen pregnancy across Belize and the number of students at High Seas Academy that indicated that their older sisters had become pregnant at an early age. Further evidence was discovered in conversations with students concerning pregnancy and sexual activity among their peers and sexually suggestive photographs taken and placed on social media. These factors indicate a socially transmitted pattern. Adult participants supported this conclusion as they explained that, even when girls held high educational aspirations, social norms of teenage pregnancy in the community often deterred educational pursuits. For example, during the previous year, 6 girls, ranging from Form One through Form Four, quit school at High Seas Academy because of pregnancy. This number is especially concerning given the enrollment at High Seas Academy was 78 students, and less than half of the students were girls. Even more concerning is that students described examples of teenage girls on the island becoming involved with older men, primarily tourists who had settled on the island for an extended period of time. One relationship, in particular, seemed to be motivated by the young girl's desire to meet her basic needs of food, shelter, and acceptance. She was not allowed by her parents to live at home (the reason was not explained), and this man was providing for her needs at the time of the study. Further evidence suggests that these situations are especially difficult for school officials to address given the transient nature of the adult male involved.

Although parents expressed high aspirations for their children (including graduating from high school and attending college), parent actions and family situations often communicated low expectations for secondary school completion. As explained, expectations placed upon several students to care for their younger siblings often precluded completion of homework assignments. Additionally, low expectations for educational advancement from peers, families, and the immediate community seemed to inhibit their educational aspirations or persistence to achieve educational goals. Parents expressed appreciation for the school, but they did not always express confidence in their child's ability to complete high school. For example, one parent explained, "If the school believes my daughter can do it, I guess I do too." Another stated, "I didn't really know if my daughter could do the work. Ms. (name of school Director) has really worked with her." Additional family challenges included illness due to limited healthcare, deaths of siblings or parents due to illness such as HIV, and drug involvement and imprisonment of some family members (primarily brothers and fathers). Life on this beautiful, tropical island for these students seemed to be undergirded with a harsh realization of reality and tragedy. Several students explained recent painful experience of loss and tragedy. Directors and teachers explained that these incidents often interfered with student progress in school.

Low expectations were also expressed in the community. For example, there appeared to be a lack of communication between local businesses and the school concerning ways to provide mutually beneficial opportunities for students. Although business owners were aware of the school, many were unfamiliar with the goals of the school. Additionally, several business owners expressed concerns with the fact that the school was depending upon the community to offer internship opportunities. One business leader stated, "we don't know if we are here for the school or if the school is here for us." In contrast, other business leaders were highly supportive and provided tremendous support in the form of resources (financial contributions for scholarships) and intern opportunities.

Parents expressed strong desires for their children to attend the school; however, for both boys and girls, parent expectations seemed to be influenced by limited familiarity with educational opportunities beyond the borders of Belize and assumptions that their children will "follow in their parent's footsteps" concerning future occupational pursuits. Demanding parent work schedules and single parent families (structural barriers) often result in limited supervision of high school age children (a cultural barrier), further perpetuating some of the cultural barriers for both boys and girls. As a result, the school often assumes a "parenting" role as parents depend on the school for supervision, advice, and support.

Finally, the influence of a drug culture, as promoted by a high tourism industry on the island, was evident in the data. This culture primarily influenced young males on the island as they came into contact with tourists and visitors. Teachers and administrators at the school explained the challenge of combating the influences of a transient population as illegal substances were often brought into the country with little ability to hold those that brought them accountable. Additionally, with the high rate of poverty experienced by many of the High Seas Academy students, drugs offered an opportunity for income, although criminally generated, that was unavailable to them otherwise. Increased gang activity on the mainland and limited opportunities for structured activities outside of school hours also influenced the infiltration of a culture of drug use on the island. Even though several students had been brought to the island to "get away from the drug" culture in Belize City, the influence of drugs and gang activity seemed to be making inroads into this small island community.

5.3.2. Structural Barriers

According to Patterson (2001), cultural and/or behavioral variables are only relevant to the extent that structural factors condition the environment in which groups of varying economic and social advantage operate and react. Several structural barriers were identified in this study including limited communication among adults causing the adult native population to live in isolated pockets of close friends and family, the presence of many single parent families, limited resources available for the sustainability of the school, and the location of the school on this remote island.

The first structural barrier identified was a dichotomous "neighborhood" structure with native Belizeans living in the center of the island and visitors and tourists occupying the beach fronts and outer edges of the island. Parents native to the island operated in their own "spaces," on the interior of the island, and even though the island is very small, little communication between parents or between parents and the school was evident. There is a stark contrast between the more affluent beach front properties and the modest, poverty ridden communities in the center of the island. One Director explained, "visitors come to the island with financial resources and education, and they decide to stay. They dominate the tourism industry, and the (native) people are left to work for them."

Interactions between adults reflected this hierarchy. While several parents visited the school, when interacting with school personnel, it was clear that the school representative directed the conversation, and parents listened as passive recipients. Interestingly, most interviews with parents were conducted at the parents' homes, at the parent's request, rather than being located at the school. During interviews, the majority of parents expressed that they did not know parents of other students in the school. Additionally, students indicated that their parents did not know each other. It was noted, during the graduation ceremony, that parents interacted with teachers in a formal manner, but they did not interact with each other in a way that indicated friendship relationships. Relationships existed mostly along family lines, and parents rarely interacted with each other in the community or at school. Additionally, although community members are aware of the existence of a high school, many are not familiar enough with the school to actively assist with educational efforts. For some community members, tension exists between whether the school should "serve the community or the community should serve the school" (Interview, 2016). These tensions were most apparent when the school sought field/internship experiences for students or when the school approached business owners for financial support.

A lack of financial resources also serves as a structural barrier for these students. Secondary education is not funded through the Belizean government, and families must pay for the education that students receive. With many families headed by single mothers, and with those mothers working in service positions, families struggle to pay the modest tuition that is requested. It was noted that even when parents could not pay their tuition expenses, children were allowed to attend classes. High Seas Academy operates as a non-profit 501(c)3 entity with a foundation board overseeing fundraising for the school. The nine Foundation Board members are primarily American and Canadian, and all funds raised through the foundation, with the exception of a small administrative fee, are donated directly to the school. The school currently depends upon fundraising for sustainability, and one of the Directors of the school currently contributes a large portion of her family income (earned through owing a hotel on the island) to subsidize teacher salaries. She indicated that, currently, the school is operating with an operating deficit of approximately $7,000 per month. Additionally, data suggests that the educational foundation provided in primary school did not always prepare students for the challenges of high school. Summer school is offered to students who are struggling academically, and it was noted that almost half of the students were required to attend at least one course in summer school, with the majority of students needing support in reading, writing and math. One teacher explained, "(elementary) teachers use a lot of memorization and drill with these students. When they come to us, they do not know how to solve problems, and many of them are passed along without knowing how to read." Because of limited funding, High Seas Academy could not pay teachers a salary in the summer for student remediation. Therefore, they were reliant on visitors and volunteers to offer support during the summer months. Additionally, teachers were not present during summer school to provide feedback to volunteers that could help in understanding student needs.

Despite these financial challenges, the Directors of the school share a strong vision for enhancing outcomes and developing the social enterprise aspect of the school. Their dream is to develop the school into an opportunity to host tourists and visitors to the island. The Director who owns a hotel on the island is very interested in developing a hotel management training program that could provide financial support to sustain the school's operations. In her vision, the school would expand to build a hotel/restaurant on site, and students would be trained in hotel and restaurant management. Their skills would directly benefit them, through skill development, and the school, through financial support. The Ministry of Education in Belize is

aware of this dream, and they have agreed to donate land on the island for the building of the school/resort. However, the land that has been donated contains many highly-protected mangrove trees, and no funds have been allocated for construction of a building. Directors of the school are currently working with an American architect through the Foundation Board to develop building plans for the school that could preserve the mangroves on the land and support the buildings that could fulfill their dream.

The location of the school on a small, remote island served as one of the most obvious structural barriers. Technology, while available, is intermittent, and extremely high temperatures and humidity decrease the lifespan of technological devices. It was noted that even electricity was intermittent, and electrical tools used for construction in the building were quickly eroded by salt and humidity. These limitations influenced students directly by limiting educational opportunities. The partnership with the school in Israel is a strong example. Also, because Belize is a developing country with limited access to secondary education, most school supplies were shipped from the United States. Even supplies such as paper and books were limited. High tariffs and the expense of shipping limited the availability of resources on the island, and Directors often depended upon tourists and visitors traveling back and forth from the United States to the island to transport needed supplies. If items were shipped, they often did not arrive at the school. For example, the school had received a donation of kettle drums for the students, but these drums were badly in need of repair. As a result, school Directors ordered a shipment of goat skins so that the drums could be repaired. However, even though the goat skins reached the country of Belize, they were not allowed to pass through customs, and the school did not receive the materials that they had, in fact, paid for. Even if the supplies do arrive safely in the country of Belize and pass through customs, they still would be transported by water taxi or sea plane to the island. While water taxi is certainly the most economical choice, transporting supplies by water taxi includes the challenges of weather, extremely crowded spaces, and sea water.

5.3.3. Cultural and Structural Barriers Influence Student Outcomes

It was evident that, despite the enormous effort put into educating these students, cultural and structural barriers inhibit student progress in this high school. Family expectations of childcare and supporting family income, social norms of sexual activity of teenagers, and limited perceptions of parents regarding aspirations for their children, and conflicting community expectations regarding student outcomes were cultural barriers that worked together to diminish educational progress. Additionally, a transient population of more affluent visitors on the island seemed to further isolate these native families, and this transient population brought an illegal drug influence that was difficult to combat. The structural barriers of single parent families, poverty, lack of school resources, remote location, and social hierarchy between natives and "transplants" were structural factors that conditioned the environment for natives on this island. Taken together, these cultural barriers are reinforced by structural barriers [8], and the influence that enhanced educational opportunities is intended to have on these students is diminished. These challenges indicate that the culture of poverty that exists among natives on the island will be difficult to combat.

5.3.4. Evidence of Overcoming Cultural and Structural Barriers

Despite these findings, evidence suggests that High Seas Academy is beginning to evolve as a community as evidenced by one parent's comment that "being a parent of a High Seas Academy student makes me a part of High Seas also." Parents indicated feeling more efficacious in their parenting abilities because of the support of High Seas faculty and administration. This sense of efficacy may potentially lead to more support from the home and higher expectations and aspirations for both boys and girls. For example, one parent stated, "(Name of school) saw potential in my daughter. If they see her that way, I should see her the same way." Another stated, "The school sees the best in (name of child.) It changed my attitude. It encouraged me to expect more from her."

Additionally, changes in membership of the Foundation Board offers promise for the future of the school. The Foundation Board has recently increased its membership from four board members to nine. These members have experienced a renewed commitment to securing the future of High Seas Academy. For example, one new board member recently hosted a fundraising birthday party for her 30th birthday where all funds, approximately $5,000 U.S., were donated directly to High Seas Academy. Additionally, the Missions Committee from the church of three of the board members has contributed $10,000 annually to sending volunteers to help with construction of the school, remediation for struggling students, and summer school teaching. Another board member, motivated to enhance educational opportunities in Belize, has committed to help the school secure the funds for construction of a new building on the land that has been secured by the MOE. A nationally recognized Canadian song artist has begun a fundraising campaign for the school, and increased attention to the school through social media garnered approximately $10,000 U.S. equivalent in contributions toward the school at the end of 2017.

6. Discussion/Significance of Study

Findings from this study indicate that strong cultural and structural barriers exist that negatively influence student progress in this school despite the new opportunities available to them. For example, cultural norms of early involvement in sexual relationships and high rates of teen pregnancy often interfere with educational progress, especially for teenage girls. This tendency is precipitated by a historically high rate of teen pregnancy among young girls in Belize. In fact, a recent report published by the United Nations indicates that Belize has the highest rate of teen pregnancy in the Caribbean [12]. This statistic is troubling due to the fact that, in Belize, educational policies prohibit pregnant girls to continue in the formal education system [12]. These policies disproportionly limit educational opportunities for young women as supported in the statement, "Too often, society blames only the girl for getting pregnant. The reality is that adolescent pregnancy is most often not the result of deliberate choice, but rather the absence of choice, and of circumstances beyond a girl's control" [13] (para 3).

Failure to complete a secondary education has devastating consequences for children of Belize leaving many out of the labor market and increasing the risk of involvement in criminal and gang activities [3]. Ironically, individuals without a secondary education are not qualified to participate in Belize's largest industry, tourism. Crime rates, including drug related offenses, and gang activity have increased considerably the last few years [3], and the educational system is having limited influence on reducing factors that lead to criminal activity because so many students leave school at an alarmingly early age. For example, the average 12-year-old student in Belize will have attended school for six years but will have only completed four grades successfully and, by the age of 17, while comparable students in the United States would have completed 12 years of school and fulfilled requirements at the secondary level, the average 17-year-old in Belize has been enrolled for 10 years and completed only eight grades [3]. Findings suggest that these same trends are apparent on this small island. Therefore, the addition of this model high school is extremely important, not only for students on the island but for the country of Belize. However, despite their efforts, if educational leaders are not able to address the significant cultural and structural barriers that remain, access to education may continue to be restrained.

7. Conclusion

The purpose of this study was to understand, through the lens of Patterson's culture of poverty [8], the cultural and structural barriers that influence student progress at High Seas Academy, a newly established high school on a remote island in Belize. A qualitative case study design was utilized to answer the research questions. Findings from this study identify key cultural and structural barriers that negatively influence student success at High Seas Academy. Cultural barriers include family norms of reliance on students to contribute to family finances, high incidence of early pregnancy and marriage, low expectations for advancement, and little parent oversight to disrupt the influence of substance abuse and gang activity. Structural barriers include limited communication among adults causing the adult native population to live in isolated pockets of close friends and family, the presence of many single parent families, limited resources for the sustainability of the school, and the remote location of the school.
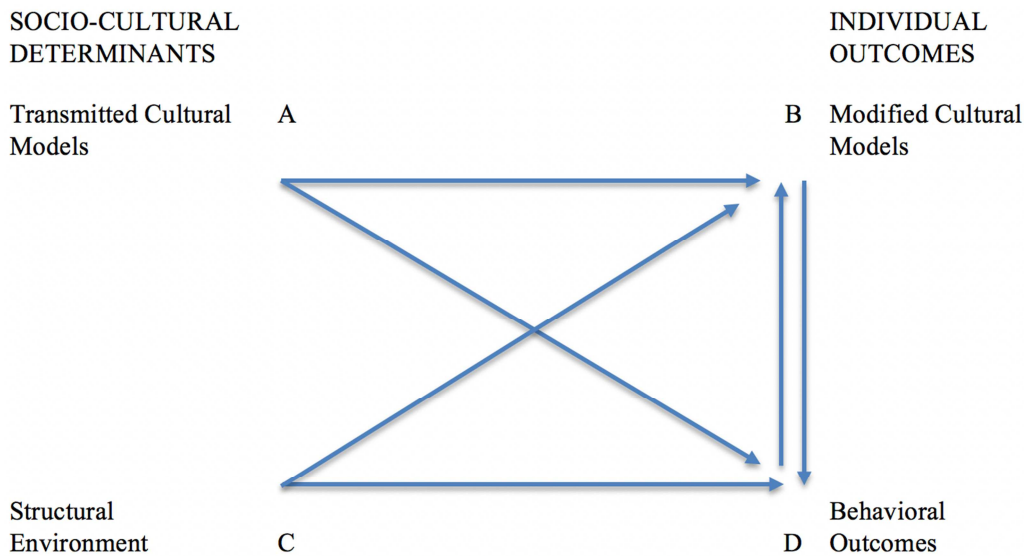
These findings are important due to the fact that failure to complete a high school education in Belize has devastating consequences including a perpetuation of a culture of poverty among native Belizeans. This study informs practice in that it identifies several key cultural and structural barriers and offers important implications for actions and activities that could, potentially, reduce the influence of these barriers. While results from this study cannot be generalized beyond the context of this school, explanations for reducing cultural and structural barriers for students on this island may help to inform other schools in the country that are experiencing similar barriers, providing enhanced opportunity for academic growth for native students. This study also adds to the existing body of literature by offering a narrative portrait of a school in a remote, isolated context, minimally influenced by extraneous factors such as the media or competing interests/goals. Regarding significance to theory, the use of Patterson's theoretical model is expanded to explore Caribbean cultural context. Findings from this study may help further understandings about the significant influence of both transmitted and modified cultural barriers and structural barriers in an international context where contextual factors greatly inhibit opportunities to break a cycle of generational poverty.

Declarations of Interest

All authors declare that they have no competing interests.

Appendix

Patterson's Cultural Model

| SOCIO-CULTURAL DETERMINANTS | | INDIVIDUAL OUTCOMES |

Transmitted Cultural Models   A

B   Modified Cultural Models

Structural Environment   C

D   Behavioral Outcomes

Patterson's Interactions Among Cultural Models, the Structural Environment, and Behavioral Outcomes (2001, p. 210).

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