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STUDY OF BARRIERS TO ACCESS AND COMPLETION OF TERTIARY TECHNICAL EDUCATION IN JAMAICA



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TABLE OF CONTENTS

LIST OF CHARTS.....	4
LIST OF TABLES.....	5
ACKNOWLEDGEMENTS.....	6
GLOSSARY.....	7
EXECUTIVE SUMMARY.....	8
SECTION ONE: INTRODUCTION.....	11
Advance Program.....	11
Study Overview.....	12
Technical Education in Jamaica.....	12
Disadvantaged Youth in Jamaica.....	13
Research Questions.....	14
Mixed-methods approach.....	14
Target Population.....	15
Sample Sociodemographic Characteristics.....	16
SECTION 2: KEY FINDINGS INDIVIDUAL BARRIERS.....	22
Education and Career Aspirations.....	22
Attitudes towards Technical Education.....	23
Awareness of Technical Education Opportunities.....	25
Awareness of Technical Careers.....	27
Perceived Preparedness After High School.....	27
Self-Confidence.....	28
Family Responsibilities.....	29
Access to Financial Aid.....	29
Access to Transportation.....	31
Disability.....	32
COMMUNITY BARRIERS.....	34
Home Environment.....	34
High School Experience.....	35
Exposure to Violence at School and in the Community.....	37
Perceptions of Insecurity at School and in the Community.....	39
Exposure to Academic Achievement.....	41
Exposure to Professional Achievement.....	42
Institutional Challenges.....	43
GENDER-RELATED BARRIERS.....	45
Stereotypes and Traditional Gender Roles.....	45
Early Pregnancy.....	46
Sexual Harassment.....	47
SECTION THREE: BARRIERS HIGH SCHOOL STUDENTS FACE.....	48
Individual Barriers.....	48
Community Barriers.....	50
SECTION FOUR: DISCUSSION.....	54
APPENDIX.....	58
WORKS CONSULTED.....	60

LIST OF CHARTS

Figure 1. Advance Program Framework	11
Figure 2. Target communities and distribution of youth participants across target communities	16
Figure 3. Gender, age and geographic distribution of sample	17
Figure 4. Number of persons living in the household, by cohort	17
Figure 5. Primary sources of household income, by cohort	18
Figure 6. Youth employment status, by cohort	19
Figure 7. Top subject areas technical tertiary and low-level technical students are currently studying	21
Figure 8. Top responses: primary motivation for studying	21
Figure 9. Youth career goals, by cohort	22
Figure 10. Highest level of technical certification to which students aspire	23
Figure 11. Percentage of respondents that believe a technical certification makes them more likely to succeed	24
Figure 12. Likelihood of pursuing a technical education certificate in the next 6 months or 3 years	25
Figure 13. Proportion of students who are aware that Jamaican tertiary technical institutions offer highest level certification	26
Figure 14. Perceived readiness for education and work after high school, by cohort	28
Figure 15. Measures of self-confidence, by proxy and cohort	28
Figure 16. Proportion of students that are responsible for a child or other family member	29
Figure 17. Percent of youth who have experienced difficulties paying for school costs	29
Figure 18. Ease of obtaining financial support from one’s family or spouse	30
Figure 19. Percentage of students who have applied for financial aid	30
Figure 20. Distance between home and school	31
Figure 21. Mode of transportation used to travel to school	32
Figure 23. Proportion of students who experienced student support services many times during high school	36
Figure 24. Number of extracurricular activities students participated in during high school	37
Figure 25. Frequency at which youth witness violence in their communities	37
Figure 26. Frequency at which youths witness violence in their schools	38
Figure 27. Proportion of youth who have witnessed violence being committed against someone they know	38
Figure 28. Percentage of students who disagree with the statement: “I feel safe going to and from school”	39
Figure 29. Percentage of youth who feel safe while they are at school	40
Figure 30. Proportion of youth who stopped attending school because of violence in community or school	40
Figure 31. Proportion of youth who have missed classes because of violence in community or school	41
Figure 32. Number of Family members who have completed tertiary level education	41
Figure 33. Proportion of youth who have friends with ost-secondary education or training	42
Figure 34. Number of persons in youth’s family that have successful careers	42
Figure 35. Perception of Employment Status in the Community	43
Figure 36. Student support services available at tertiary technical institutions	44
Figure 37. Most difficult application requirement for entering tertiary technical education	44
Figure 38. Proportion of tertiary technical students who believe their programme is equally accessible to both genders	45
Figure 39. Education aspirations among cohort of students currently in high school	48
Figure 41. Perceived ease of receiving financial assistance from family or spouse to further education	49
Figure 42. Frequency of violent acts in the community	50
Figure 43. Frequency of violent acts at school	51
Figure 44. Extent to which students agree that a lot of violence occurs at their school	51
Figure 45. Proportion of high school students who have missed class due to violence in school	52
Figure 46. Proportion of high school students who feel safe while they are at school	52
Figure 47. Proportion of high school students whose families have attained tertiary technical education	53
Figure 48. Number of persons in the family who have completed secondary school	53

LIST OF TABLES

Table 1. Quantitative Study Participants by Cohort and Gender	15
Table 2. Percentage of students living in households with one or more incomes	18
Table 3. Average Weekly Income in Jamaican Dollars (n=824)	18
Table 4. Primary reasons for unemployment, by strata	19
Table 5. Average number of hours worked per day, by strata	20
Table 6. Education aspirations, by cohort	22
Table 7. Youth’s life goals in the next 10 years	23
Table 8. Youth’s attitudes towards technical education as opposed to traditional university	24
Table 9. Percentage of youth who are aware of tertiary certificate university equivalents	26
Table 10. Proportion of youth who correctly identified the competencies attained at each level of technical education	27
Table 11. Challenges youth face applying for financial aid	31
Table 12. Home support scale	34
Table 13. Proportion of students living with one or both parents	35
Table 14. Proportion of students who experienced disciplinary actions many times in high school	36
Table 15. Types of violence most commonly witnessed in youth’s communities	39
Table 16. Family members who most influenced youth’s desired career path	43
Table 17. Proportion of high school students who correctly identified the competencies attained at each level of education ...	49

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GLOSSARY

DISADVANTAGED YOUTH

The Advance Program defines disadvantaged youth as those who have completed secondary school and have limited access to tertiary technical education. This includes rural and urban poor, youth living in communities with high crime or violence, indigenous peoples, and those marginalized due to ethnicity, gender, religion, disability, or sexual orientation or identity.

TECHNICAL EDUCATION

Technical education is defined as aspects of the educational process involving the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various economic sectors.¹

TERTIARY TECHNICAL EDUCATION

For the purposes of this study, tertiary technical education is defined as 2-year technical courses or associate degree qualification.

¹ Shakes, 2011.

EXECUTIVE SUMMARY

The Study of Barriers to Access and Completion (SBAC) in Jamaica employed three interconnected perspectives—student, community, and gender—to investigate the barriers that prevent disadvantaged Jamaican youth from accessing and completing tertiary technical education.

The study identified barriers by studying youth at four discrete stages throughout their education and work lives: (1) students that are currently studying at the secondary level, (2) students that ended their education after completing secondary education, (3) students that are studying or have completed non-university-level technical education programs, and (5) students that are studying or have completed university-level technical education programs.

This report is structured as follows. Section one provides an introduction of the Advance Program, the study at hand, and the context within which disadvantaged Jamaican youth live and attend school. This section also offers an overview of the methodology, target population, and target geography that were identified for this study.

Section two provides a detailed explanation of this study's key findings—barriers from the individual, community and gender perspectives—and a discussion on significant barriers that impede students from accessing and completing tertiary technical education in Jamaica. This analysis is conducted by comparing differences in key variables of interest between the cohort of students who pursued tertiary technical education, and the two cohorts of students who have completed secondary school, but either subsequently ended their education or pursued non-university-level technical education.

To complement this analysis, Section three provides an examination of the situation facing current high school students in Jamaica to shine light on key barriers that may impact their ability or willingness to pursue tertiary technical education. Finally, Section four closes the report with a discussion on the key conclusions and recommendations that can be drawn from the findings of this study.

This report presents a picture of the environments, opportunities, challenges, and complex incentives structures that Jamaican youth face each day. The barriers highlighted in this study shape the lives of disadvantaged youth and impact their willingness and ability to access and complete tertiary technical education. The following provides an overview of key barriers investigated by this study.

Individual Perspective

Attitudes Toward Education and Aspirations: More than 90 percent of students interviewed for this study viewed education as very important to achieving their life and career goals. More than three-quarters agreed that they could not achieve their life goals without furthering their education. This view was consistent across all levels of education attainment. However, students who pursued tertiary technical education reported higher-level career aspirations than other groups, including professional careers such as a lawyer, doctor, executive, or manager.

Perceived Readiness for Work or Post-Secondary Education: Interestingly, a perception of preparedness for the working world after high school may limit the desire to access tertiary technical education. Students who terminated their education after completing high school were significantly more likely to believe they were ready for work when compared to students who pursued tertiary technical education. Forty percent of students who stopped their education after high school agreed that they were ready for work as compared to only 22 percent of those who pursued tertiary technical education.

Self-Confidence: Self-confidence appears to also be inversely related to educational attainment. Students in this study who pursued tertiary technical education were significantly more likely to report lower self-confidence than those who had only completed high school.

Family Responsibilities: Having a child is also inversely related to educational attainment for students in this study. Youth who terminated their studies after high school were more than twice as likely to report having a child as those who pursued tertiary technical education. Just 12 percent of youth who pursued technical education reported having a child compared to 31 percent of youth who ended their studies after high school.

Financial Challenges: Not surprisingly, students who pursued tertiary technical education were least likely to report financial challenges such as paying for tuition or course fees, and non-academic expenses such as food and transportation. High school students also reported difficulty paying tuition and purchasing course materials or food.

Awareness of Technical Education: Students who terminated their education after high school exhibited a general lack of awareness of technical courses and programs offered at a tertiary level. Students currently in high school also showed a low awareness of tertiary technical education opportunities. Just 36 percent of male high school students and 32 percent of female high school students reported an awareness of tertiary technical education.

Awareness of Technical Careers: Students who pursued tertiary technical education were generally more aware of technical or vocational career paths and job opportunities available to them than other cohorts. This has implications for the implied value of tertiary technical education, and youth's willingness to invest in tertiary technical education to improve their employment potential.

Community Perspective

Home Environment: Students across all cohorts reported that their home environment was generally supportive and emphasized the importance of education. However, the relative emphasis placed on the importance education in the household varied across cohorts. Students who pursued tertiary technical education were significantly more likely to come from families that placed a high level of emphasis on the importance of education.

High School Experience: Despite differing educational trajectories, youth reported similar levels of satisfaction with their high school experience. At least 80 percent of students at each educational level agreed that their high school experience encouraged them to further their education. However, students reported a significant variance in their exposure to career counselling, and a lack of career counselling emerged as a potential barrier to accessing tertiary technical education. Students who pursued tertiary technical education were significantly more likely to report having been offered career counselling than those who did not.

Differences also emerged in the incidence of disciplinary actions experienced during secondary school. Students who ended their education after high school were more likely than those pursuing tertiary technical to report having experienced disciplinary actions or punishment in high school. Tertiary technical students report fewer disciplinary experiences and were also significantly more likely to be involved in more extracurricular activities during high school.

Exposure to Violence: Exposure to violence and perceived safety in the community emerged as potential determinants of educational trajectory. Students pursuing tertiary technical education were significantly less likely to report exposure to violence than the other students in this study.

Examples of Academic and Professional Achievement: Compared to youth who ended their education after high school, students who pursued tertiary technical education were significantly more likely to have several family

members with successful careers, full-time employment, post-secondary training, or a tertiary education degree. Thirteen percent of participants who stopped their education after high school reported that all or many members of their family pursued tertiary education, as compared to 28 percent of youth who pursued tertiary technical education.

Disability: Just ten respondents across all groups reported having a disability. Visual impairment and learning disabilities were the two most commonly reported types of disabilities. As noted by disability professionals interviewed for this study, students with disabilities face many obstacles to academic achievement. Particularly among lower socioeconomic groups, students with disabilities experience financial burdens which may prevent them from completing their studies.

Gender Perspective

Sexual Harassment: Seventy percent of students interviewed for this study believed that sexual harassment is a problem for women in the workplace. More than 50 percent believe that it is a problem in the classroom. However, 90 percent of respondents still report a belief that educational institutions provide the same access to males and females, and that males and females have equal access to opportunities in the labour market.

Pregnancy: More than half of students believe that pregnant women are given the same access to educational institutions as non-pregnant women. The juxtaposition of high levels of sexual harassment combined with a perception of equal access paints a complicated picture of women's access to tertiary educational education in Jamaica.

SECTION ONE: INTRODUCTION

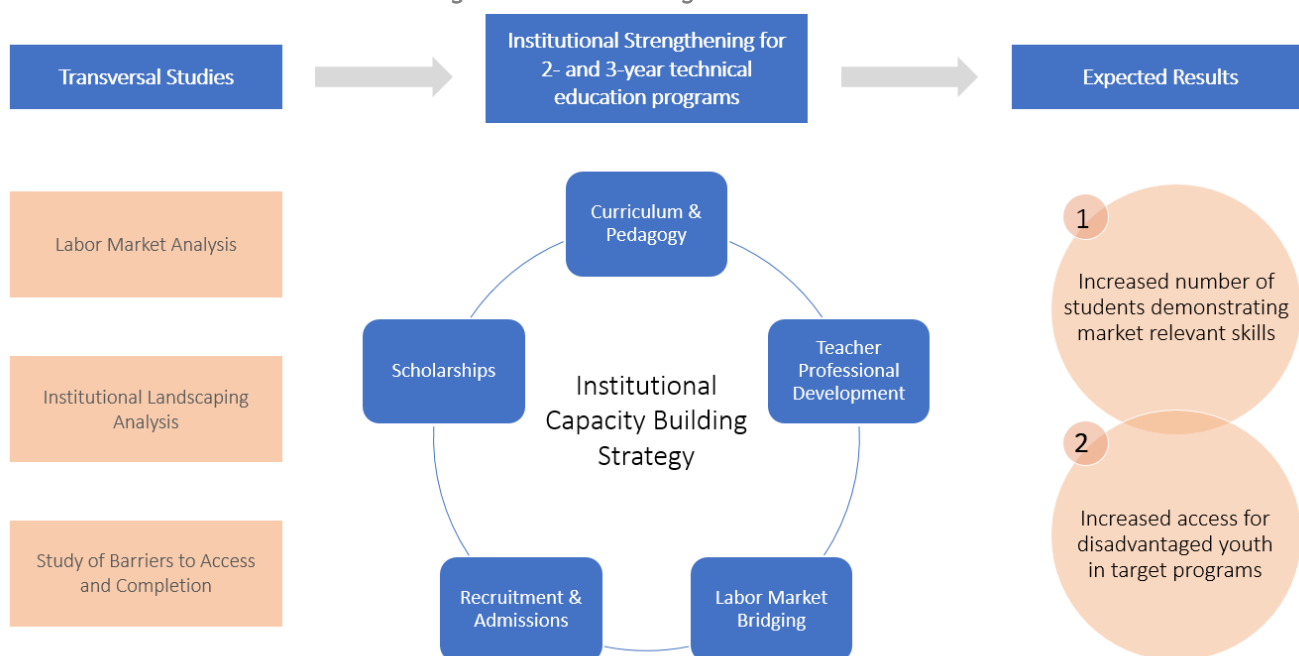
Advance Program

The Advance Program works to improve employability for disadvantaged youth in the Latin America and Caribbean (LAC) region by strengthening the capacity of 2- and 3-year tertiary technical education programs at select institutions in Jamaica, Honduras, and Guatemala. The Program has completed three transversal studies in all three countries: a Labour Market Assessment (LMA) to identify economic sectors with high employment growth potential, an Institutional Landscaping Analysis to investigate the capacity and breadth of tertiary technical institutions in each country, and a Study of Barriers to Access and Completion (SBAC) to identify major barriers to accessing and completing tertiary technical education for disadvantaged youth.

These three complementary studies were designed to collect and analyse the information necessary to maximize the Advance Program's impact for disadvantaged youth studying at partner institutions. The studies informed the Program's decision-making when selecting partner institutions and degree programs to focus on and helped familiarize the Program with the target populations in each country. The studies were also utilized to develop tailored institutional capacity building strategies for all nine Advance Partner institutions, which work to achieve the Program's two target results:

- **Result 1: Increased number of students in target academic programs demonstrate market relevant skills**
 - Intermediate Result 1.1. Curriculum and pedagogy improved
 - Teacher, faculty, and staff development refined
 - Labour market bridging enhanced
- **Result 2: Increased access for disadvantaged youth in target academic programs**
 - Expanded access through improved recruitment and admissions practices
 - Scholarships for disadvantaged youth

Figure 1. Advance Program Framework



Study Overview

The Study of Barriers to Access and Completion (SBAC) employed three interconnected perspectives—student, community, and gender—to investigate the barriers that prevent disadvantaged Jamaican youth from accessing and completing tertiary technical education. The study investigated these barriers by studying youth at four discrete stages throughout their education and work lives: (1) students that are currently studying at the secondary level, (2) students that ended their education after completing secondary education, (3) students that are studying or have completed non-university-level technical education programs, and (5) students that are studying or have completed university-level technical education programs.

Factors from all three perspectives—individual, community, and gender—had a strong relationship on students’ educational trajectories. From the *individual perspective*, barriers to accessing and completing tertiary technical education included financial challenges relating to tuition payments and miscellaneous fees and a general lack of awareness of tertiary technical education. From the *community perspective*, family examples of educational attainment (or lack thereof) and violence in the school environment were important determinants of educational trajectory. From the *gender perspective*, pervasive sexual harassment and early pregnancy were strong barriers to access and completion of tertiary technical education.

This report presents a picture of the environments, opportunities, challenges, and complex incentives structures that Jamaican youth face each day. The barriers highlighted in this study shape the lives of disadvantaged youth and impact their willingness and ability to access and complete tertiary technical education.

Technical Education in Jamaica

The Jamaican government has long looked to technical and vocational education and training (TVET)—defined as training in the practical skills, attitudes and knowledge relating to technical professions in various economic sectors—as an option to stimulate productivity, engage a largely untrained workforce, and combat workforce migration.^{2,3} Though technical education has traditionally been stigmatized in Jamaica—having been viewed as a remedial trajectory for those who would not be successful in the traditional higher education system—the negative perception is slowly changing, as more students enter the technical education stream, and technical certifications gain recognition as an important mechanism for students from diverse backgrounds to gain credentials across a range of economic sectors.^{4,5}

The Human Employment and Resource Training Trust (HEART) was established by then Prime Minister in 1982 Edward Seaga as a national coordinating body, mandated to oversee TVET training institutions across the island.⁶ Today, HEART oversees 94 on-the-job Community Training Interventions, a program called Workforce Solutions which is a public-private partnership engaging more than 1,000 private sector partners, and 30 TVET institutions and workforce colleges that offer a variety of post-secondary and tertiary level certifications in several sectors that are crucial to the Jamaican economy.⁷

² Watson-Williams, 2017.

³ UNESCO. World TVET Database: Jamaica. 2012.

⁴ Watson-Williams, 2017.

⁵ *ibid*

⁶ UNESCO. Education for All 2015 National Review. 2015.

⁷ *ibid*

In the 2013-2014 academic year, 22,747 students graduated from a HEART TVET programme, split roughly evenly between female and male students. Notably, just 40 percent of HEART students who graduated in 2014 were young people between the ages of 15 and 24. The majority of HEART students (60%) were adults over the age of 24.⁸

HEART's TVET institutions offer training programs that culminate in a Jamaican National Vocational Qualification (NVQ-J), which signals that the holder has a certain set of skilled competencies and is recognized across Jamaica and in the Caribbean Community and Common Market (CARICOM) region. The NVQ-J levels stratify technical programming into five successive levels of certification. Students are admitted to different levels of programming based on their academic and professional histories going into the program.

The certification levels, and the competencies they are associated with, are as follows:

- Level 1: Directly Supervised Worker
- Level 2: Supervised Skilled Worker
- Level 3: Independent/Autonomous, Skilled Worker
- Level 4: Supervisory, Specialist Worker
- Level 5: Managerial Professional Worker⁹

For the purposes of this study, NVQ-J Levels 1 and 2 are classified as non-university-level technical training, also referred to throughout the report as “low-level technical.” This study defines tertiary technical education as 2-year technical courses that result in a NVQ-J Levels 3 through 5 and are roughly equivalent to an associate degree.

Disadvantaged Youth in Jamaica

In Jamaica, expected years of schooling has been on the rise for many years. On average, students now complete 9.6 years of schooling, as compared to just 6.5 years in 1990.¹⁰ The country has achieved universal primary education, and most youth successfully complete the transition from primary to lower secondary school (grades 7-9), though quality and equity remain a challenge.¹¹ At the upper secondary level, however, the survival rate begins to decline, and gross enrolment at the tertiary level plummets to just 27 percent.¹²

In the quickly evolving global economy, tertiary education credentials have become even more critical for securing quality employment, providing for one's family, and productively contributing to society and the economy. However, as is the pattern across the world, disadvantaged Jamaican youth* are frequently excluded from higher education, both as a consequence of circumstance and due to deliberately opting out of higher education opportunities based on the opportunity structure they see in their local communities.¹³

Youth who live in communities with low levels of educational attainment and limited access to high-quality employment tend to view higher education as irrelevant to their future and unlikely to be beneficial or worth the investment. As such, low-income youth are at risk for labour exclusion, as they often lack the skills, knowledge, and attitudes obtained at the tertiary level, that are necessary to succeed in the formal employment sector.¹⁴

⁸ UNESCO, 2015.

⁹ HEART Trust/NTA, 2018.

¹⁰ UNDP. Briefing note for countries on the 2016 Human Development Report. 2016.

¹¹ UNESCO, 2015.

¹² World Bank. Raw data, 2017.

¹³ Willis and MacLeod, 1987.

¹⁴ Editorial Teseo, 2010.

The correlation between low levels of tertiary education and high levels of unemployment in Jamaica is very vivid. Youth unemployment in Jamaica is 28.3 percent.¹⁵ With 48 percent of the population below 24 years of age, the youth unemployment crisis has important implications for Jamaica's employment and productivity potential in general.¹⁶

Globally, the international community is increasingly interested in identifying the factors that lead to early drop out of students pursuing tertiary education. The recent literature illuminates several contributing factors including sociodemographic and socioeconomic background, family composition, and support at home.¹⁷ Lack of access to financing and inadequate non-financial student support systems at tertiary institutions can also contribute to disadvantaged students failing to successfully complete their course of study.¹⁸

Students who are disengaged from their studies or are unable to cope with academic and external pressures also tend to drop out.¹⁹ A recent study conducted by HEART (n=2,165) identified an inability to meet academic requirements (27%), financial challenges (17%), competing job demands and other commitments (8%), securing employment mid-programme (7%), lack of interest in programme (5%), and pregnancy (3%) as top reasons students fail to complete a HEART programme.

This study supports the findings in the recent literature and contributes new insights to the discussion surrounding significant factors associated with disadvantaged students in Jamaica failing to either access or complete tertiary technical education.

Research Questions

The objective of this study was to analyse barriers to access and completion of tertiary technical education for disadvantaged youth in Jamaica from the individual, community, and gender perspectives. The study analysed key differences between students who pursued tertiary technical education, and those who either ended their education after high school or pursued non-university-level tertiary technical education, to identify the factors that have the greatest impact on differentiating educational trajectories. The research questions driving this study were:

- What are the barriers to accessing tertiary technical education that disadvantaged youth face?
- What are the barriers to successfully completing tertiary technical education that disadvantaged youth face?

This study used a mixed methods approach and utilized both secondary and primary research. During the secondary research phase, the authors conducted an extensive review of the relevant literature to provide background information on the context of disadvantaged youth and tertiary technical education in Jamaica and inform the design of the primary research phase. The primary research consisted of both quantitative and qualitative methods, described below.

Mixed-methods approach

Qualitative Research

During the qualitative phase, the researchers conducted 16 focus groups with disadvantaged youth who are at various stages on their education journeys, and in-depth interviews with leaders of tertiary technical institutions and local communities. Focus groups were comprised of youth ages 17-25 years old and divided into relatively

¹⁵ World Bank. Raw data, 2017.

¹⁶ CIA World Factbook, 2018.

¹⁷ Lindo et al., 2016

¹⁸ Evans et al., 2017.

¹⁹ Shalienks & Gluszynski, 2007

homogenous groups according to educational attainment, gender, and urban-rural location. During the focus groups, the researchers employed projective techniques such as vignettes, which allowed for the exploration of sensitive topics, such as the causes of school dropout, while avoiding embarrassment for participants.

The researchers also conducted 20 in-depth interviews with community stakeholders to better understand locally relevant barriers to access and completion of tertiary technical education from the institutional and community perspectives. Specifically, interviews were held with directors of tertiary technical institutions, guidance counsellors, select community leaders, representatives from the disabled community, and experts in technical education.

The findings of the qualitative phase were used to provide a greater understanding of the Jamaican tertiary technical education context for the quantitative research phase, and to increase precision of the quantitative research tools.

Quantitative Research

During the quantitative phase, the researchers interviewed 824 youth between 15 and 25 years of age, from January to March 2018. Trained interviewers conducted face-to-face intercept and household-based interviews, which included both closed- and open-ended questions; the survey was designed to last approximately one hour.

Interviewers located youth at their households, which were randomly selected through walking pattern from a random start point. Because youth—particularly males and the most marginalized—tend to spend a significant amount of time in community spaces as compared to at home, intercept interviews were conducted in community spaces to ensure this population was included in the sample.

The sample of 824 participants yielded data projectable at a 90 percent confidence level. The researchers analysed the data using binary logistic regression to identify the most important barriers to access and completion of tertiary technical education in Jamaica. The model was statistically significant (*Chi square = 111.637.138, p<.000 with df=9*), and explained 36.6 percent of the variance in tertiary technical attainment and correctly identified 71.9 percent of cases.

Limitations

Surveyors experienced difficulties locating people who had completed or were currently studying university-level technical education. Thus, the initial definition of university-level technical education was expanded from levels four and five only to include levels three through five. Interviewers visited vocational institutions in target parishes to meet the quota for university-level technical education students.

Target Population

Students interviewed for this study were grouped into one of six categories based on their education and employment trajectories.

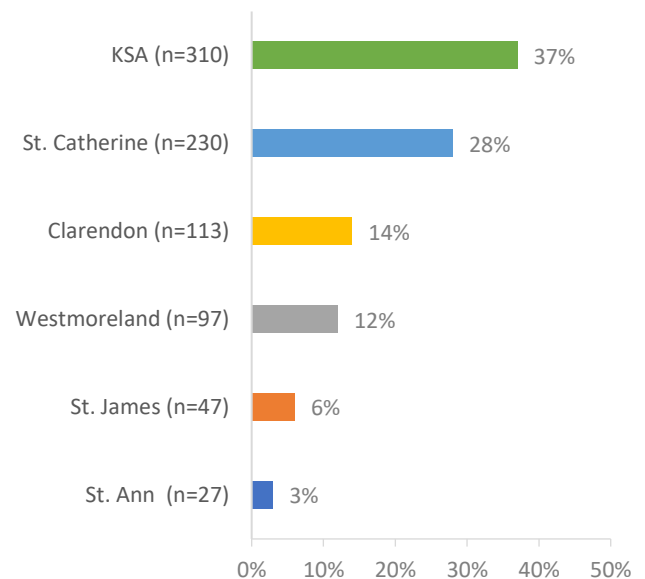
Table 1. Quantitative Study Participants by Cohort and Gender

Cohort		Male	Female	Total	% of sample
Current high school students		68	68	136	17%
Students who ended their education after graduating from high school	Currently employed	68	68	136	17%
	Currently unemployed	68	81	149	18%
Individuals who are studying or have completed non-university-level technical education programmes (Levels 1 & 2)		74	73	147	18%
Youth who are studying or have completed university-level tertiary technical education (Levels 3–5)	Currently employed	62	31	93	11%
	Currently unemployed	70	93	163	20%
Total:		410	414	824	100%

Sampling was conducted in 24 communities randomly selected from six parishes across Jamaica. The communities included are characterized by high levels of unemployment, crime, or youth at high risk of illicit activities. They are considered priority communities by the Community Renewal Programme and Social Development Commission.

Figure 2. Target communities and distribution of youth participants across target communities

Parish	Community
Kingston & St. Andrew (KSA)	Seaview Gardens, Papine, Lawrence Tavern, Trench Town, Rockfort, Maxfield
St. Catherine	Waterford, Gregory Park, Newland, Innswood, Naggo Head, Homestead
Clarendon	Canaan Heights, Thompson Town, Ebony Park
Westmoreland	Russia, Grange Hill, Frome, New Market
St. James	Flankers, Catherine Hall, Tucker
St. Ann	Steer Town, Runaway Bay, Bamboo

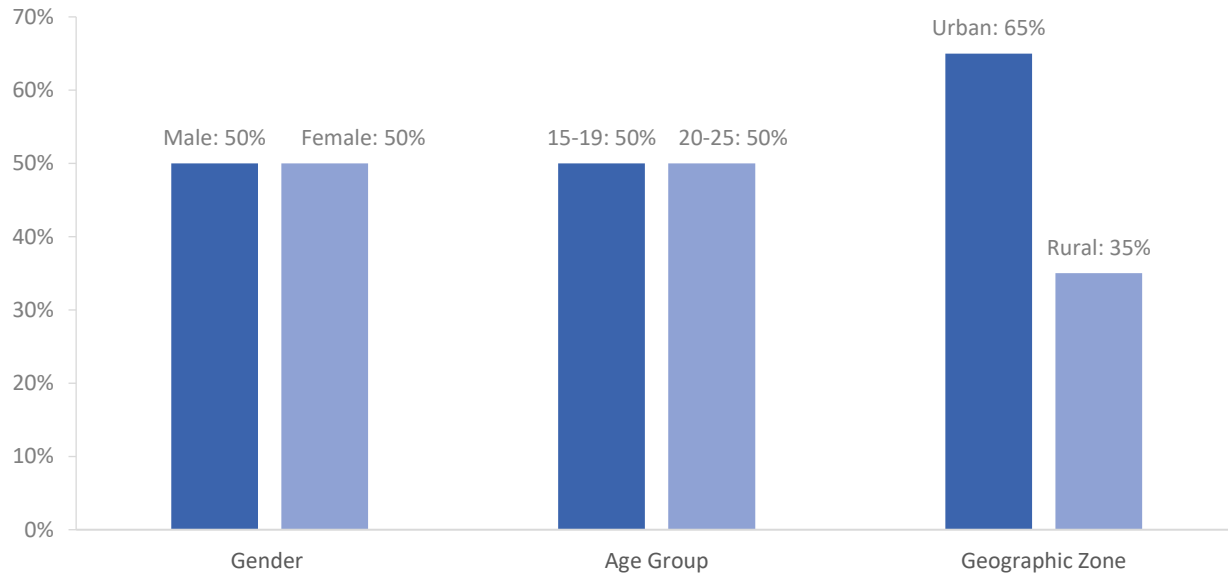


Sample Sociodemographic Characteristics

Household Composition

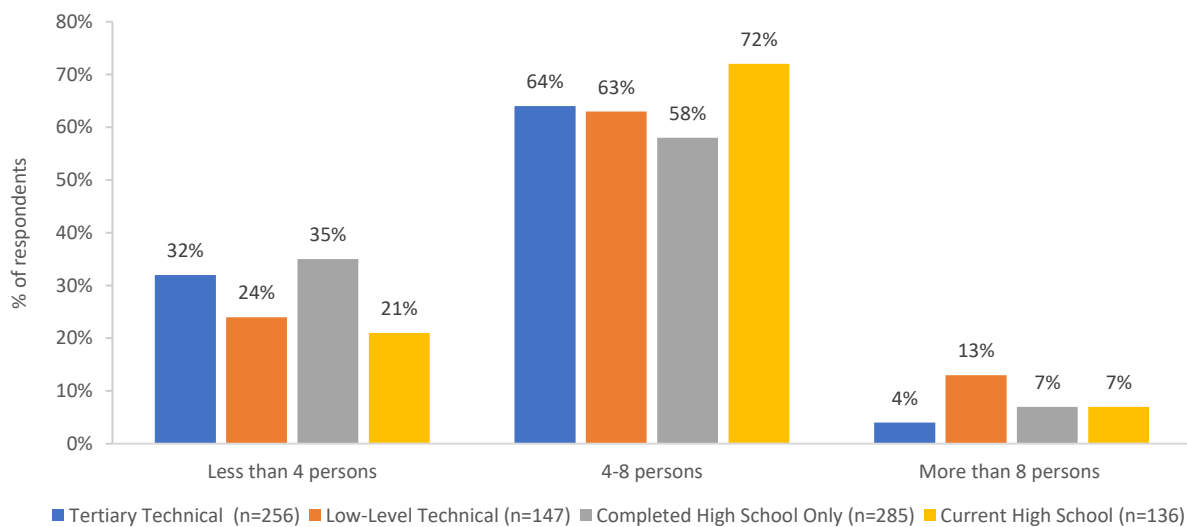
The sample for this study was split evenly by gender across all strata and consisted of an equal percentage of youth ages 15–19 years old and youth 20–25 years old. Sixty-five percent of respondents were from urban areas. The majority of respondents were single (84%), while 13 percent are involved in a common law relationship and 1 percent were married.

Figure 3. Gender, age and geographic distribution of sample



More than half of participants’ households, regardless of strata, had between four and eight persons. Participants’ households primarily were comprised of a single parent or guardian and siblings. Very few students lived alone or with friends.

Figure 4. Number of persons living in the household, by cohort

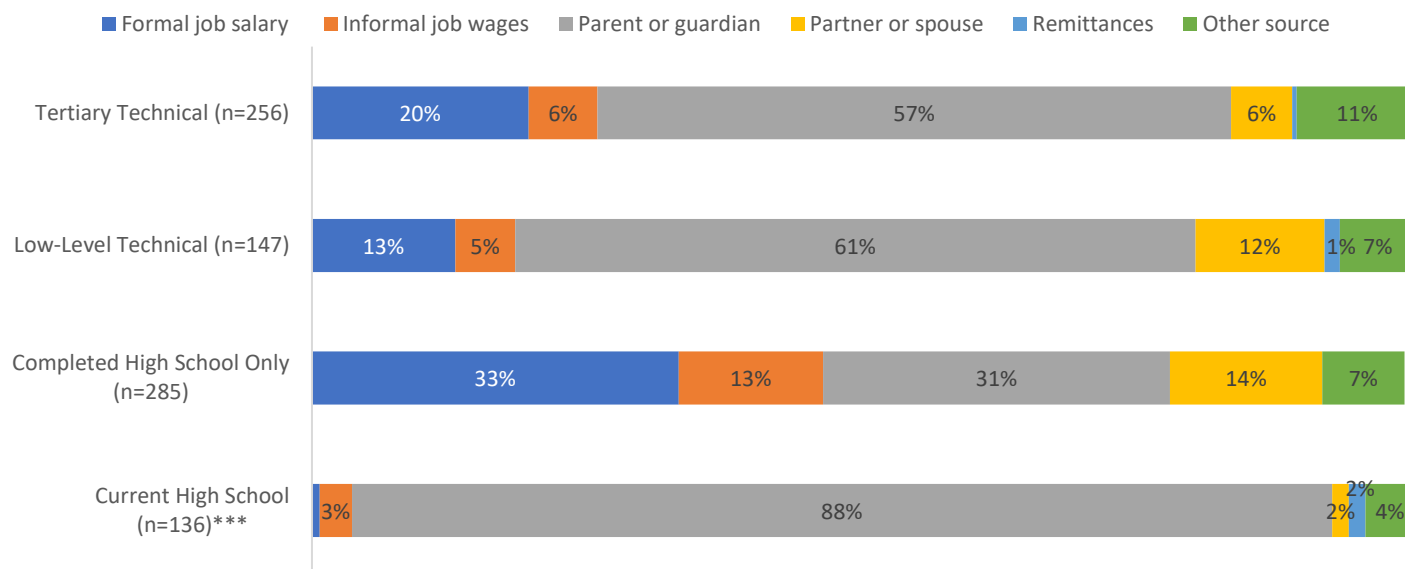


Household Income

Tertiary technical students and current high school students reported that parents were their main source of income. Logically, those currently in high school were significantly more likely to list their parents as their main

source of income than any other group. The two most commonly cited sources of income for the cohort of youth that ended their education after high school were a formal job salary (33%) and parents or guardians (31%).

Figure 5. Primary sources of household income, by cohort



When asked about other sources of income, more than half of tertiary technical (54%), low-level technical (55%) and current high school (58%) respondents indicated they had no other source of income. Less than one-quarter listed parents or guardians, another person or source, or partner or spouse as their other source of income. More than nine of every 10 respondents across all groups received income on a regular basis, between daily to monthly.

More than half of tertiary technical (54%), low-level technical (56%) and current high school (58%) respondents reported having only one primary source of income. However, more than one-third of each group indicated that they have at least two income sources, and those who ended their education after high school (55%) were slightly more likely to have at least two income sources than other groups.

Table 2. Percentage of students living in households with one or more incomes

	Tertiary Technical (n=256)	Low-level Technical (n=147)	High School Only (n=285)	Current High School (n=136)
One income	54%	56%	45%	58%
Two incomes	42%	42%	51%	39%
Three or more incomes	4%	2%	4%	3%

The average weekly income from all sources was highest for a job salary, whether formal or informal.

Table 3. Average Weekly Income in Jamaican Dollars (n=824)

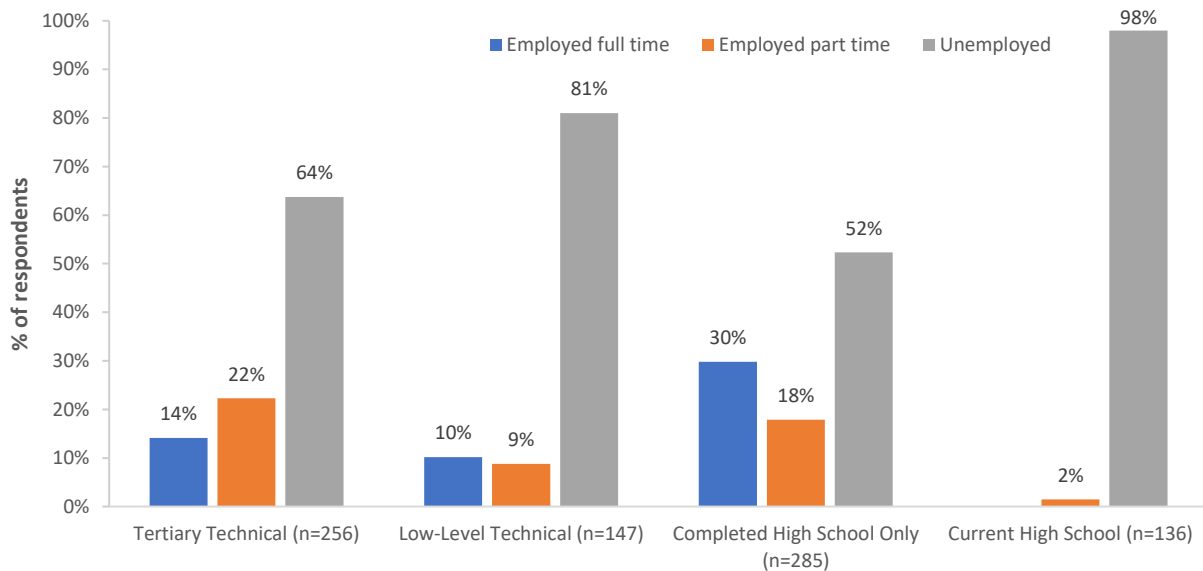
Source of Income	Amount
------------------	--------

Formal job salary	\$12,603
Informal job salary	\$8,251
Parents/guardians	\$4,121
Partner/spouse	\$6,739
Remittances	\$6,400
Someone other than spouse/family	\$3,752
Other	\$5,803

Youth Employment Status

There was a high level of youth unemployment across all four cohorts. Sixty-four percent of tertiary technical students, 80 percent of low-level tertiary technical students, and 52% of youth who ended their educations after high school report being unemployed. The cohort that ended their education after high school was significantly more likely to be employed full time than all other groups. Those who studied or completed tertiary technical education were slightly more likely to be employed part time than those who completed high school. A small percentage (2%) of those currently in high school indicated that they were employed part time.

Figure 6. Youth employment status, by cohort



Students in the tertiary technical cohort and current in high school students most commonly cited their enrolment or planned enrolment in school as a primary reason for not working. The most commonly cited reason for not working among youth who ended their educations after high school was that there were no vacancies in the companies that they applied to (26%) or that they were waiting for an interview. Other reasons listed by the technical group for why they were not currently employed was that they were not qualified or of the desired age for the jobs they wanted.

Table 4. Primary reasons for unemployment, by strata

	Tertiary Technical	Low-Level Technical	High School Only
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Still attending school/planning to attend school	71%	54%	10%
Not qualified for jobs I want	13%	14%	12%
No vacancies at the company I applied to/awaiting interview	7%	11%	26%
Because of my age	4%	3%	8%
No reason	3%	7%	6%
Have not looked sufficiently for one	2%	2%	3%
The competition in my chosen profession	1%	5%	4%
Family reasons	1%	3%	2%
Pregnant/have baby	1%	2%	4%
I was fired recently/contract ended	1%	1%	5%
Other	5%	7%	20%

Four of every ten youth from the tertiary technical cohort indicated that they work 8 hours each day. More than one-third of the lower-level technical cohort work for either 8 hours (36%) or more than 8 hours (36%). Slightly less than half (48%) of those in the tertiary technical group work less than 5 days per week. Those in low level technical group work 6 days (25%), 5 days (28%) or less (29%). Those who completed high school only mostly work 5 days per week (29%).

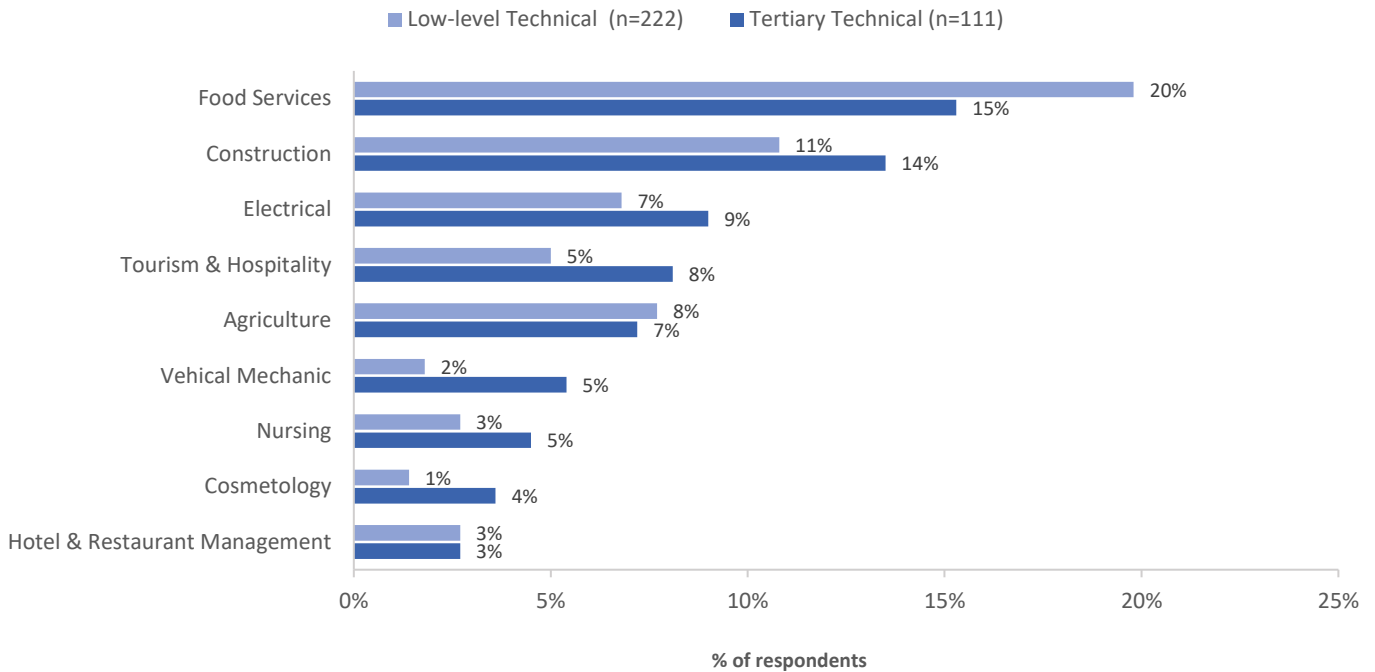
Table 5. Average number of hours worked per day, by strata

<i>How many hours per day do you currently work?</i>	Tertiary Technical (n=93)	Low-Level Technical (n=28)	High School Only (n=136)
Less than 8 hours	35%	28%	17%
8 hours	40%	36%	45%
More than 8 hours	25%	36%	38%

Technical Vocational Subject Areas

Among tertiary technical students, Food Services was the most popular subject area being studied (20% among current students; 28% among alumni). Construction was the second most popular subject area for current tertiary technical students (11%, while Tourism & Hospitality was the second most common subject area pursued by tertiary technical alumni (17%). Low-level technical students were slightly more likely to study subject areas such as Construction, Electrical, and Motor Vehicle Repair than those at the tertiary level.

Figure 7. Top subject areas technical tertiary and low-level technical students are currently studying

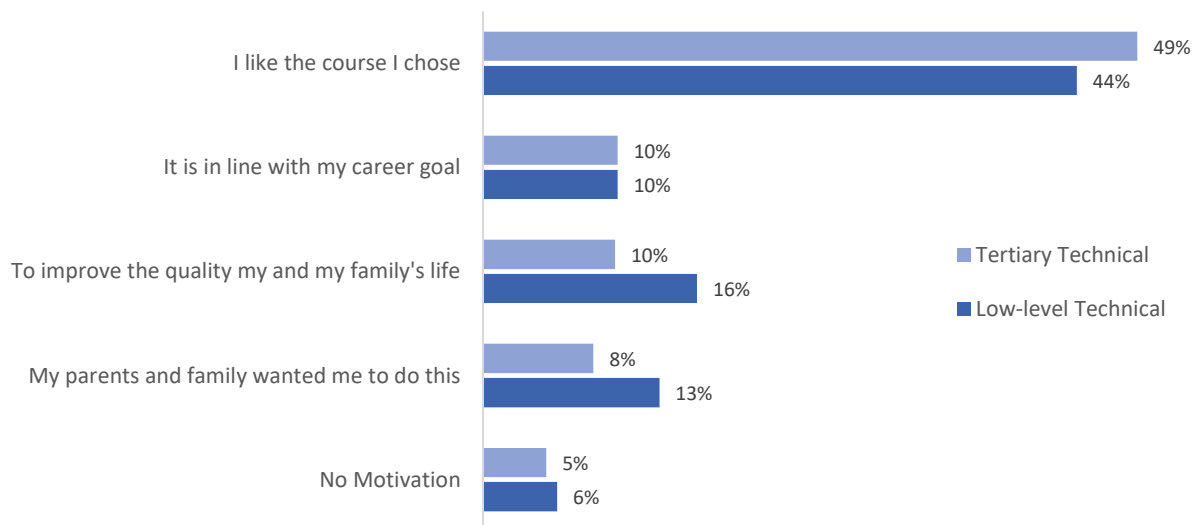


The average duration of tertiary technical programmes across subject matter areas was 13 months, while the average duration of low-level technical programmes was 12 months.

Main Motivation for Course of Study

Both tertiary technical and low-level technical respondents were primarily motivated to complete their course of study because they liked their courses. Notably, only 10 percent from both cohorts stated that their main motivation to study was because the course in line with their career goals. Students also reported being motivated to improve the quality of their own and their families lives.

Figure 8. Top responses: primary motivation for studying



SECTION 2: KEY FINDINGS

INDIVIDUAL BARRIERS

Education and Career Aspirations

The students interviewed in this study believe education is very important to achieving their life and career goals. This view was held by the majority of respondents, irrespective of educational trajectory. More than 90 percent of students endorsed education as very important and felt that furthering their education was very important to their career goals. More than 75 percent agree that their life goals could not be achieved without furthering their education.

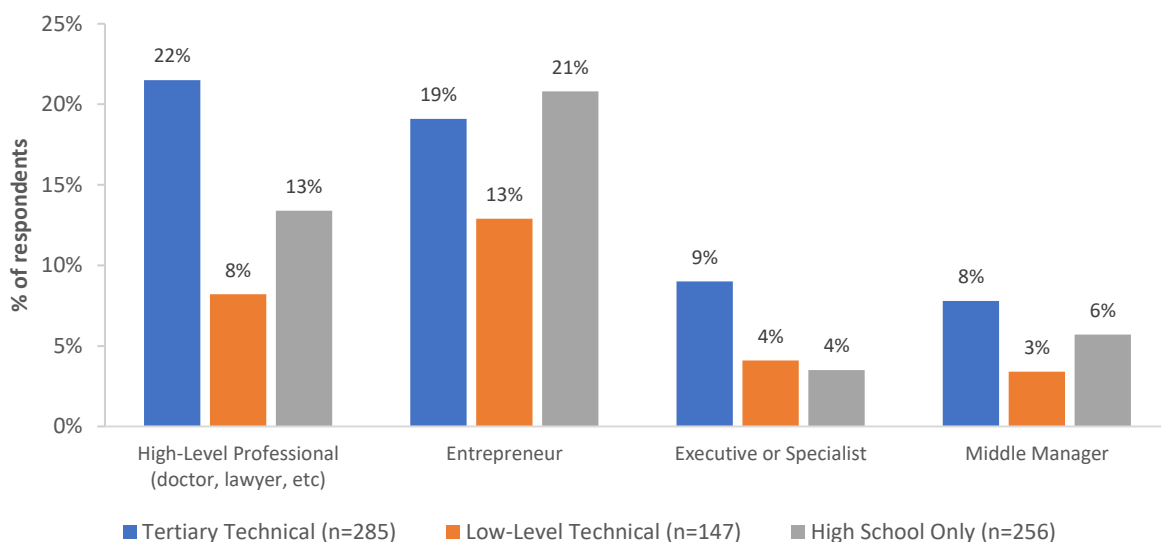
Students who pursued tertiary technical education report significantly higher academic aspirations than those who only completed high school. Overall, the tertiary technical cohort was significantly more likely than those who had completed high school only to list a post-graduate degree—such as a Master’s or PhD—as the highest level of education they wished to achieve. Approximately one-third (33 percent) of respondents stated that nothing could possibly block them from achieving their academic goals. Similarly, more than one-quarter (27%) indicated that nothing could stop them from achieving their career goals.

Table 6. Education aspirations, by cohort

What is the highest level of education that you aspire to achieve?	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High school only (n=285)
High School	0%	1%	7%
Low Level Technical	8%	17%	9%
High Level Technical	16%	10%	6%
Bachelor’s degree	17%	12%	24%
Post-graduate degree	46%	39%	34%

The tertiary technical cohort was also more likely to indicate aspirational career goals. Tertiary technical students were more likely than the other groups to cite high-level career aspirations including professional careers (lawyer, doctor, etc.), high-level executives, and middle managers.

Figure 9. Youth career goals, by cohort



Youth's life goals generally speak to a desire for independence and autonomy. The majority of youth reported a desire for independence within the next 10 years, meaning being able to live on one's own. Youth also expressed a desire for material possessions, and the ability to provide for themselves and their families. Interestingly, about half of the respondents in this study indicated a desire to own their own business.

Notably, just 20 percent of tertiary technical students, 12 percent of low-level technical students, and 11 percent of students who terminated their education after high school indicated a desire to attain tertiary or post-graduate academic credentials.

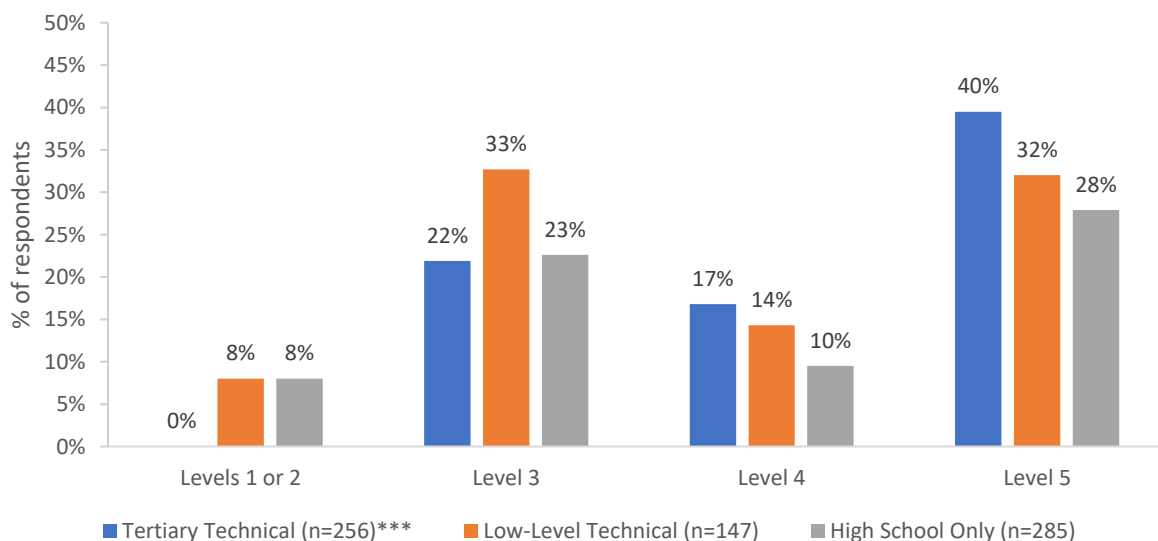
Table 7. Youth's life goals in the next 10 years

	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (=285)
Independence (house, land, live on own)	65.2%	70.7%	74.2%
Achieve material possessions (high level) (car, truck, yacht)	45.3%	55.8%	56.5%
Provide for self or family, gain financial independence, have job	54.7%	48.3%	50.5%
Own business	51.2%	51.0%	52.3%
Family & relationship	41.8%	35.4%	33.9%
Academic success	15.2%	13.6%	20.1%
Tertiary & post graduate qualification	19.9%	11.6%	11.3%
Travel, migrate, work or live overseas	14.1%	8.2%	18.0%

Attitudes towards Technical Education

Students who pursued tertiary technical education were significantly more likely to aspire to complete the highest-level certification (Level 5) offered at technical institutions in Jamaica (40%), as compared to those who only completed high school (28%). About one-third of youth who pursued low-level technical education aspire to achieve a mid-level technical certification (Level 3), while another third aspire to achieve a Level 5 certification. This indicates that a significant portion of low-level technical students are or were enrolled in programs that did not equip them with the credentials to which they aspire. Twenty percent of youth who ended their education after high school were unsure of the highest level of technical qualification they desired.

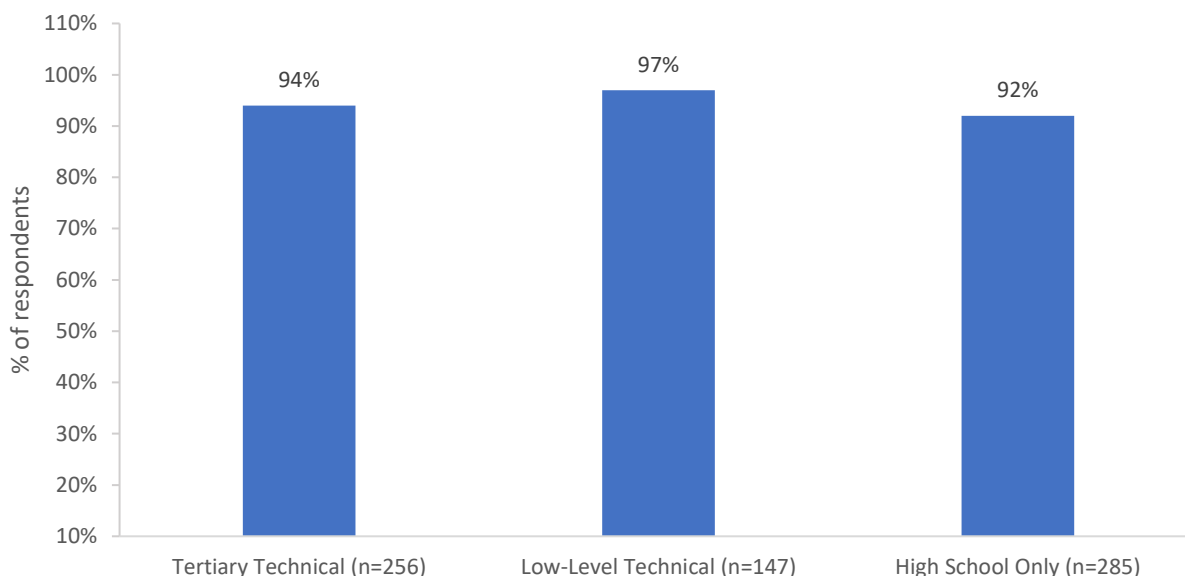
Figure 10. Highest level of technical certification to which students aspire



*** $p \leq 0.000$

The majority of youth interviewed for this study—regardless of educational trajectory—have a positive attitude toward technical education, and more than 90% of all youth believe that having a technical education certification increases an individual’s likelihood of getting a better job.

Figure 11. Percentage of respondents that believe a technical certification makes them more likely to succeed



When comparing the perceived relative value of tertiary technical education to a bachelor’s degree at a traditional university, more 80 percent of students interviewed for this study see technical education as a first choice—even for persons who are qualified to attend a traditional university. Furthermore, 77 percent feel that the highest-level technical education certification (Level 5) is just as valuable as a bachelor’s degree.

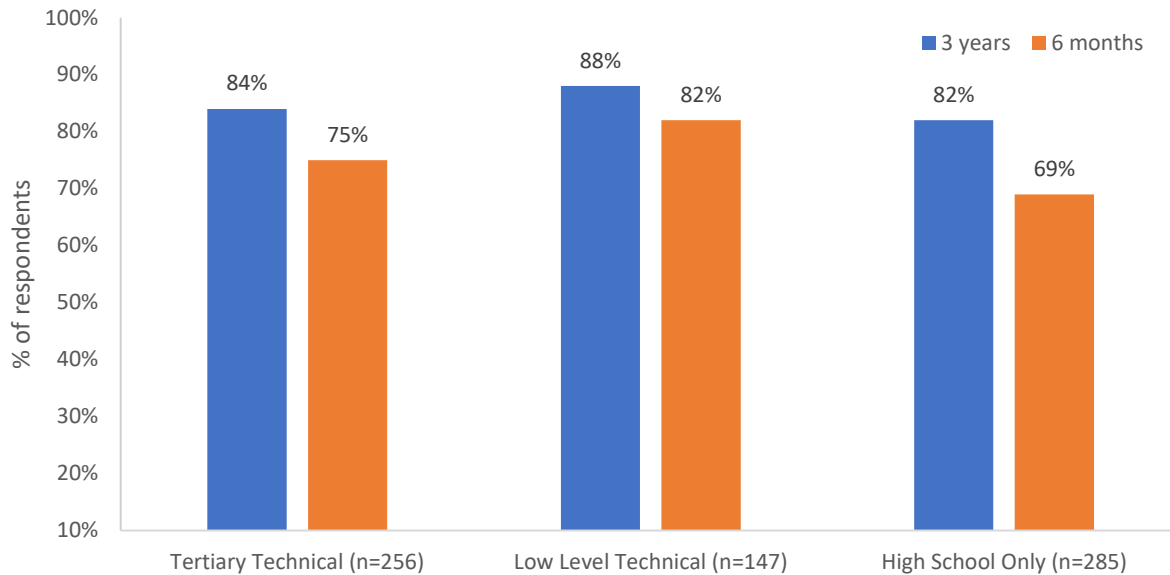
Sixty-nine percent of participants went even further in their view, stating a technical education certification is more likely than bachelor’s degree to help them secure a well-paid job.

Table 8. Youth’s attitudes towards technical education as opposed to traditional university

	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=285)	Total (n=688)
	Percent who Strongly or Somewhat Agree			
Even persons who qualify for university see technical education as a first choice.	81%	84%	77%	80%
The highest-level technical education certificate (Level 5) is as good as a bachelor’s degree.	80%	76%	71%	76%
I am more likely to get a well-paid job if I attend a vocational institution than a bachelor’s university.	75%	67%	65%	69%

The overwhelmingly positive view of technical education among the youth interviewed for this study was underscored by the fact that over 80% of participants indicated they would be very likely to pursue a technical education certificate in the next three years. Approximately three quarters of all participants indicated that they would be very likely to get skilled qualifications in the next 6 months.

Figure 12. Likelihood of pursuing a technical education certificate in the next 6 months or 3 years



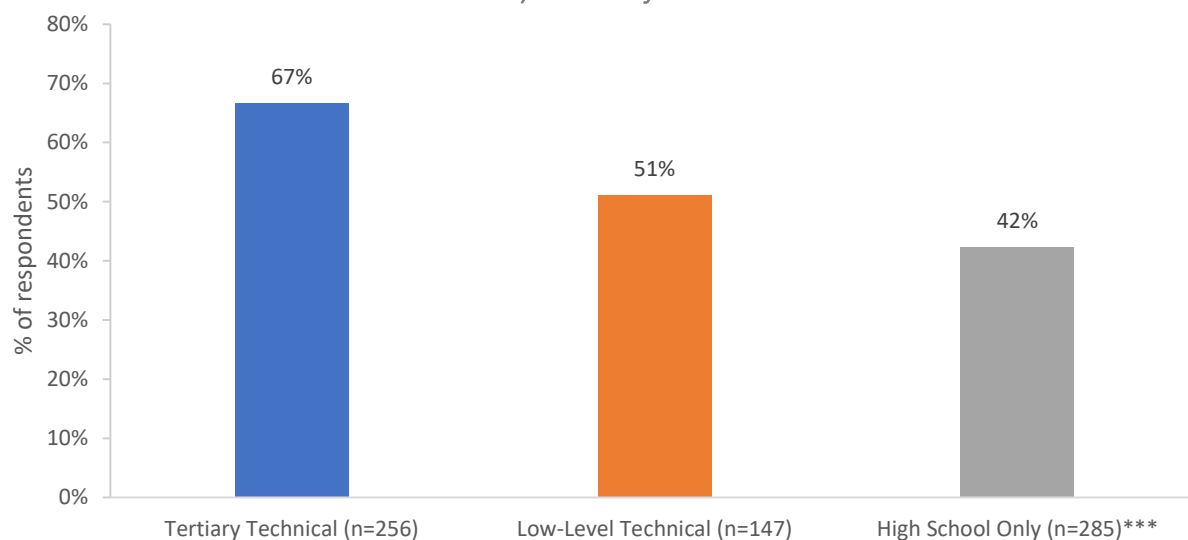
Awareness of Technical Education Opportunities

Despite the overwhelmingly positive views of technical education, 51 percent of youth who ended their education after high school believe that the certifications offered at tertiary technical institutions only allow graduates to secure entry-level jobs, as opposed to management positions. This perception declined amongst the cohort of students who pursued low-level technical education (46%), and further still amongst those who pursued tertiary technical education (36%).

The contrast of these figures against the aforementioned perceptions about the relative value of technical and traditional university education suggest that—especially amongst youth who have not participated in the higher education system—there is a perception that higher education is perhaps necessary, but not sufficient to securing gainful employment and enjoying success in work and life. This may, of course, be a consequence of a lack of awareness of technical education opportunities, and the viable career paths that technical education opens.

Overall, youth who did not pursue technical education—whether at the lower or higher levels—reported relatively low awareness of tertiary technical education opportunities at a tertiary level. This is exemplified by the fact that the cohort of students who ended their education after high school were significantly less likely than the other two cohorts to be aware that technical institutions in Jamaica offer high-level, tertiary technical education programs. This limited awareness may function as a potential barrier as students can't access options they don't know exist.

Figure 13. Proportion of students who are aware that Jamaican tertiary technical institutions offer highest level (Level 5) level certification



*** $p \leq 0.000$

Youth who ended their education after high school were the least aware of the equivalence between technical education certifications and traditional university degrees, further underscoring this group’s limited knowledge of the breadth of opportunities available in technical education in Jamaica. Just 14 percent of this cohort was aware that a Level 4 technical certification is recognized as equivalent to an associate degree, as compared to 48 percent of the tertiary technical cohort. Only 18 percent of the same cohort was aware that a Level 5 technical certificate is equivalent to a bachelor’s degree, as compared to 38 percent of the tertiary technical cohort.

This lack of awareness and knowledge about technical education may act as a barrier to pursuing tertiary education at a technical institution.

Table 9. Percentage of youth who are aware of tertiary certificate university equivalents

	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=285)	TOTAL (n=688)
HEART NVQ-J Level 4 certificate is equivalent to an associate degree. ***	48%	35%	14%	31%
HEART NVQ-J Level 5 certificate is equivalent to a bachelor’s degree. ***	38%	30%	18%	28%

*** $p \leq 0.000$

In addition to being unaware of technical certifications’ equivalence to traditional university degrees, youth who did not pursue technical education were likewise unfamiliar with the skills and knowledge that are attained—and which employers recognize—at different levels of technical education. Only 60 percent of students who left school after high school were aware that a Level 5 technical certificate demonstrates to employers that one is prepared to be a manager or professional worker; this awareness increased to 79 percent of low-level technical students and 81% of high-level technical students.

Table 10. Proportion of youth who correctly identified the competencies attained at each level of technical education in Jamaica (HEART NVQ-J Levels 1-5)

	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=285)	Total (n=688)
Level 1: Directly Supervised Worker	40%	48%	44%	43%
Level 2: Supervised Skilled Worker***	62%	71%	57%	62%
Level 3: Independent/Autonomous Skilled Worker***	83%	80%	64%	75%
Level 4: Para-professional and/or Technician**	75%	70%	59%	67%
Level 5: Managerial and/or Professional Worker***	81%	79%	59%	72%

***p≤0.000,**p≤0.005

Apart from the degree programs offered at HEART, just 26 percent of the youth who participated in this study were aware that the University of Technology of Jamaica offers tertiary level technical education, and as few as eight percent were aware that the University of the West Indies offers tertiary technical degree programs.

Awareness of Technical Careers

More than 95% of all youth who participated in this study agreed that they would further their education if they were sure that they would receive a better paying job upon completion. However, it is clear that many students are unaware of the jobs they would be qualified for with a technical education certification. The lack of awareness of the technical education opportunities available in Jamaica, and the skills and competencies that are gained at different levels of technical education illustrate that, if students are unaware of or misunderstand the opportunities available to them, they are liable to forgo viable opportunities that could benefit them personally and professionally.

FHI 360's Labour Market Assessment in Jamaica identified three priority economic sectors with potential for high employment growth: agrobusiness, wellness tourism, and the creative industries.²⁰ Knowledge of employment opportunities these key sectors, which employ large swaths of technical education graduates, is critical for youth considering technical education opportunities. Of the three key economic sectors, the youth interviewed for this study were most interested in and aware of employment opportunities in wellness tourism, as compared to agrobusiness and the creative industries.

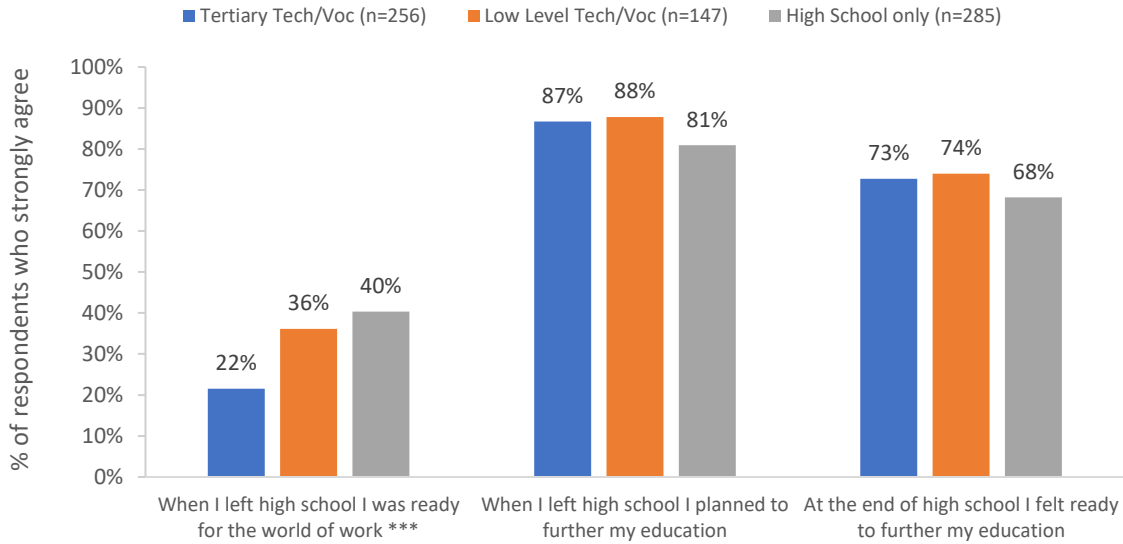
Fifty-three percent of youth who participated in this study stated that their high school gave them the opportunity to work in a company to gain experience and 76 percent report that there was someone like a guidance counsellor or teacher at high school that offered career guidance. Further, just 36 percent of tertiary technical students indicated that their TVET institution offered career services, resume writing, dressing for the interview, career counselling, and mock interviews.

Perceived Preparedness After High School

A general readiness for work immediately after high school may limit the desire to access tertiary technical education. The cohort of student who ended their education after high school was significantly more likely than those who pursued tertiary technical education to strongly agree that "When I left high school I was ready for the world of work." Forty percent of students who left school after high school strongly agreed with this statement whereas only 22% of students who pursued tertiary technical education did the same.

²⁰ FHI 360. Jamaica Labour Market Sector Assessment. 2017.

Figure 14. Perceived readiness for education and work after high school, by cohort

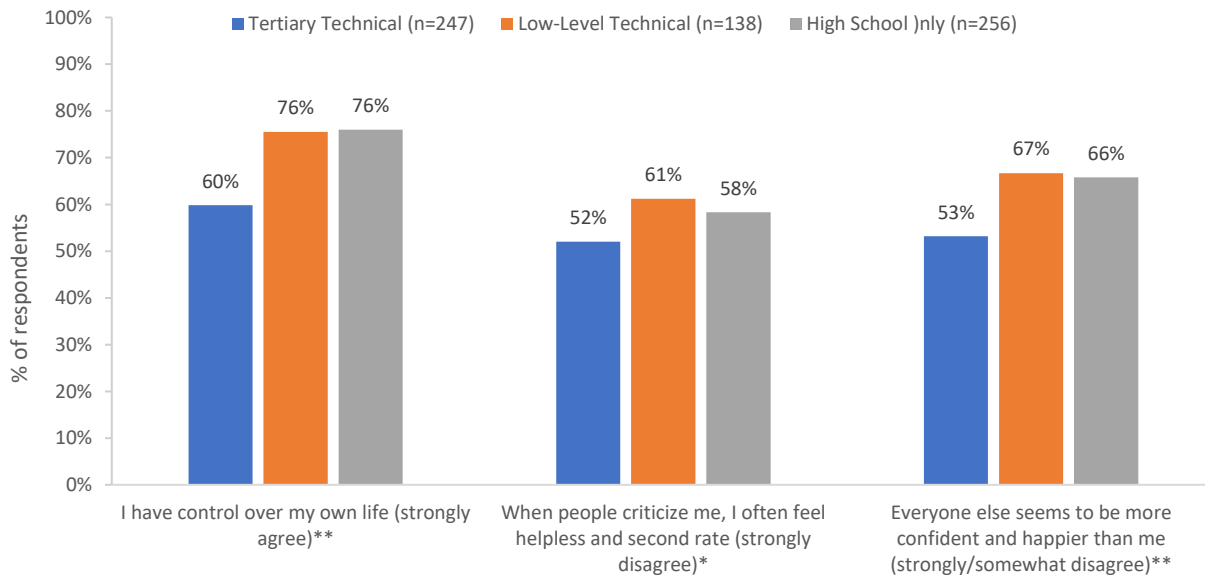


*** p<0.000

Self-Confidence

Interestingly, self-confidence appeared to be inversely related to educational achievement. Youth who had pursued tertiary technical education were significantly more likely to demonstrate lower self-confidence than those who had completed high school only. This cohort was significantly less likely than other groups to strongly disagree that “When people criticize me, I often feel helpless and second rate.” (tertiary technical: 52%, low-level technical, 61%). Youth pursuing tertiary technical education were also less likely to report feelings of autonomy over their lives. Specifically, they were significantly less likely to strongly agree that “I have control over my own life.” (tertiary technical: 60%, high school only: 76%).

Figure 15. Measures of self-confidence, by proxy and cohort

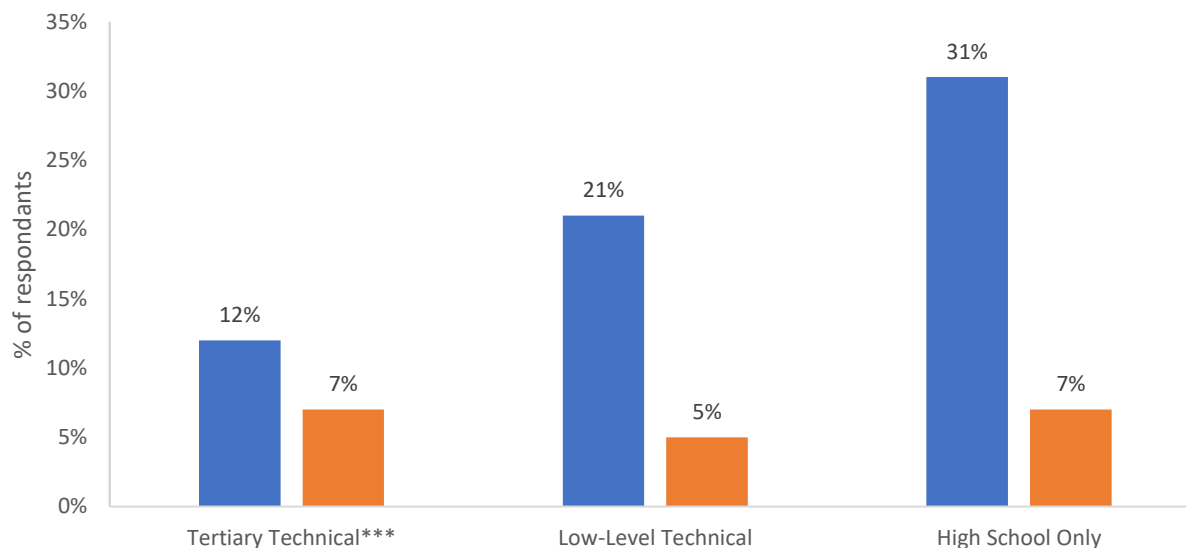


** p<0.005, * p<0.05

Family Responsibilities

Having a child or being responsible for caring for a child or family member was inversely related to educational attainment. The cohort of student who pursued tertiary technical education (12%) were significantly less likely to have a child or some family member that is their responsibility. Those who terminated their education after high school were most likely—and more than twice as likely as the tertiary technical education cohort—to report such responsibilities (31% responsible for a child and 7% responsible for a family member).

Figure 16. Proportion of students that are responsible for a child or other family member

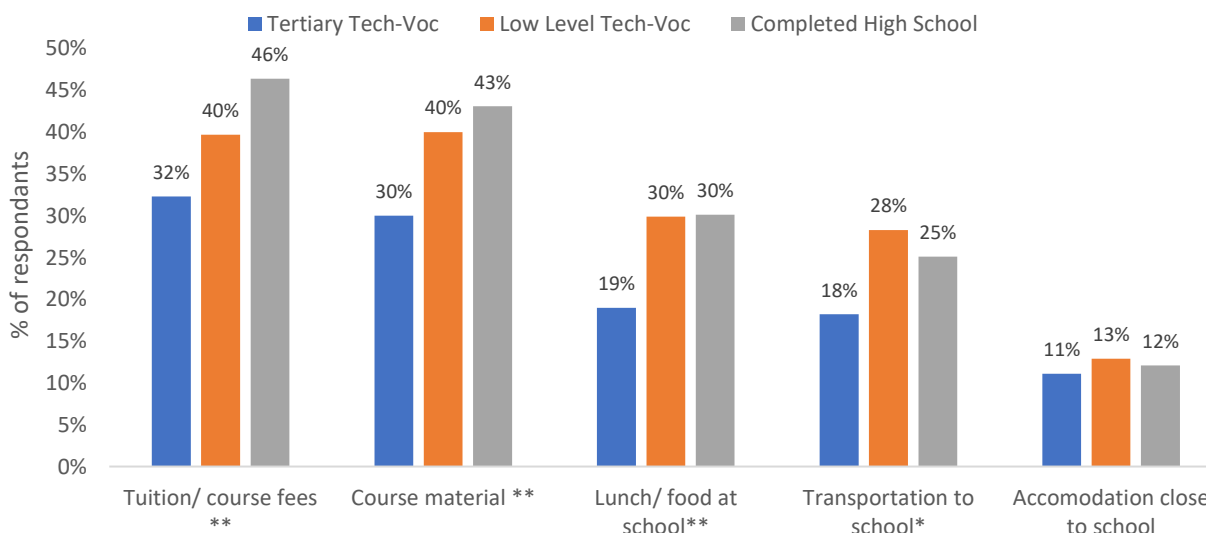


(*** $p \leq 0.000$)

Access to Financial Aid

As expected, those who had pursued tertiary technical education were least likely to report experiencing financial challenges to pay for their studies. Notably, the cohort of youth who ended their education after high school was significantly more likely to report difficulties paying for tuition and course materials, lunch, and transportation.

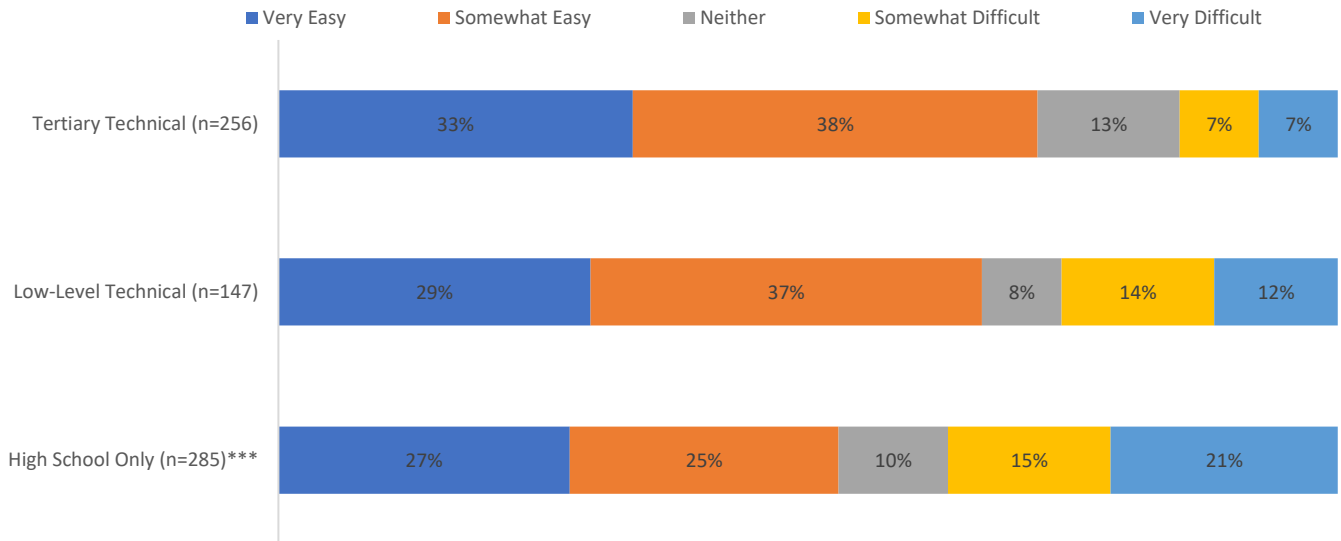
Figure 17. Percent of youth who have experienced difficulties paying for school costs



** $p \leq 0.005$, * $p \leq 0.05$

This same cohort was three times more likely than those pursuing tertiary technical education to report severe difficulties sourcing funding from family to support their studies. In contrast, those currently enrolled in or who completed tertiary technical (38%) and low-level technical education (37%) were significantly more likely to find it somewhat easy to receive financial support from family or spouses to further their education.

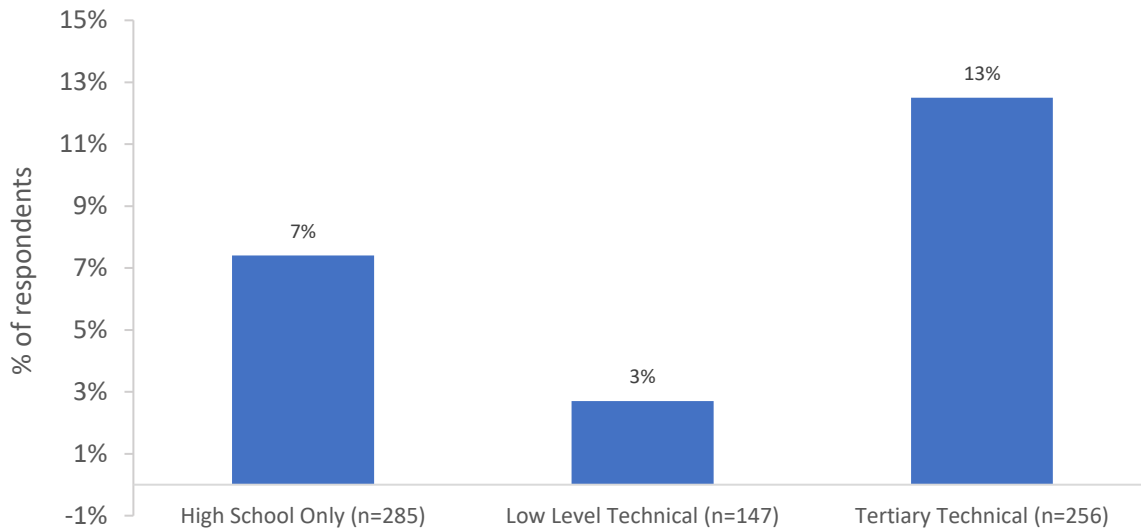
Figure 18. Ease of obtaining financial support from one’s family or spouse



***p≤0.000

Despite financial challenges, less than 15 percent of youth who participated in this study had ever applied for scholarships or financial aid. However, those who pursued tertiary technical education (13%) were significantly more likely to have applied for financial aid compared to those in low-level technical education.

Figure 19. Percentage of students who have applied for financial aid



Twenty-four percent noted that they were discouraged from applying for scholarships because they doubted they would qualify; 40 percent of students who left school after high school felt the same, as did 28 percent of students

who pursued tertiary technical education. Furthermore, many students were discouraged from applying for scholarships due to lacking the necessary grades to obtain a scholarship.

However, even with all the challenges youth see in applying for scholarships, as many as 40 percent of youth who pursued low-level technical education, and those who stopped studying after high school could not think of challenges youth face when applying for scholarships. This may imply that youth are unaware of scholarships opportunities or have not considered applying for financial aid.

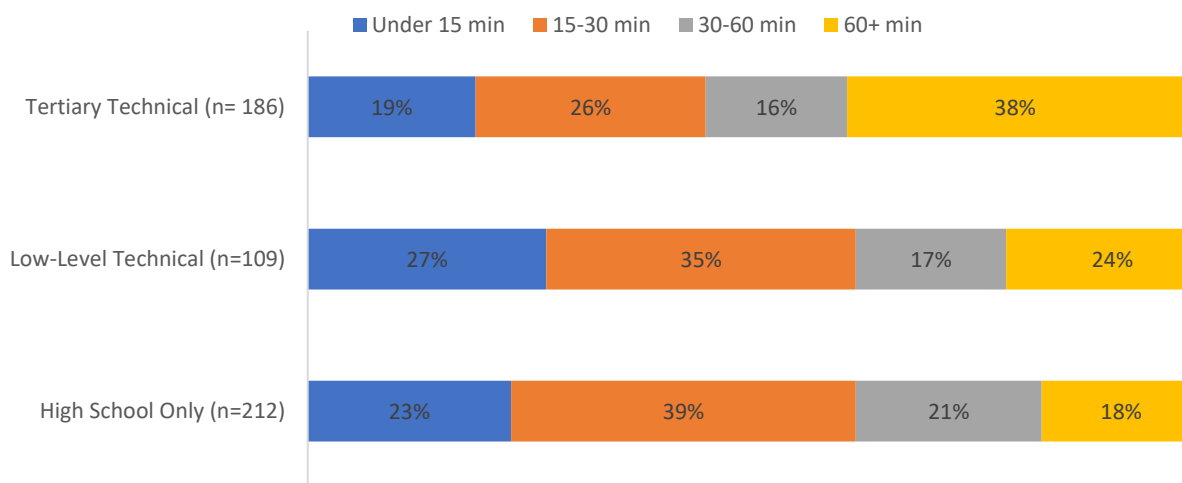
Table 11. Challenges youth face applying for financial aid

What do you think are some of the challenges people may face in applying for scholarships/financial aid?	Tertiary Technical (n=186)	Low-Level Technical (n=109)	High School Only (n=212)
Don't know	28%	40%	40%
Doubt that they would be qualified	26%	24%	20%
Not getting good enough grades	20%	26%	21%
Did not know where to get information	10%	11%	12%
Don't participate in required activities	5%	5%	5%
Other (ability to repay, background, unable to secure guarantor, don't have required documents, etc.)	27%	16%	18%

Access to Transportation

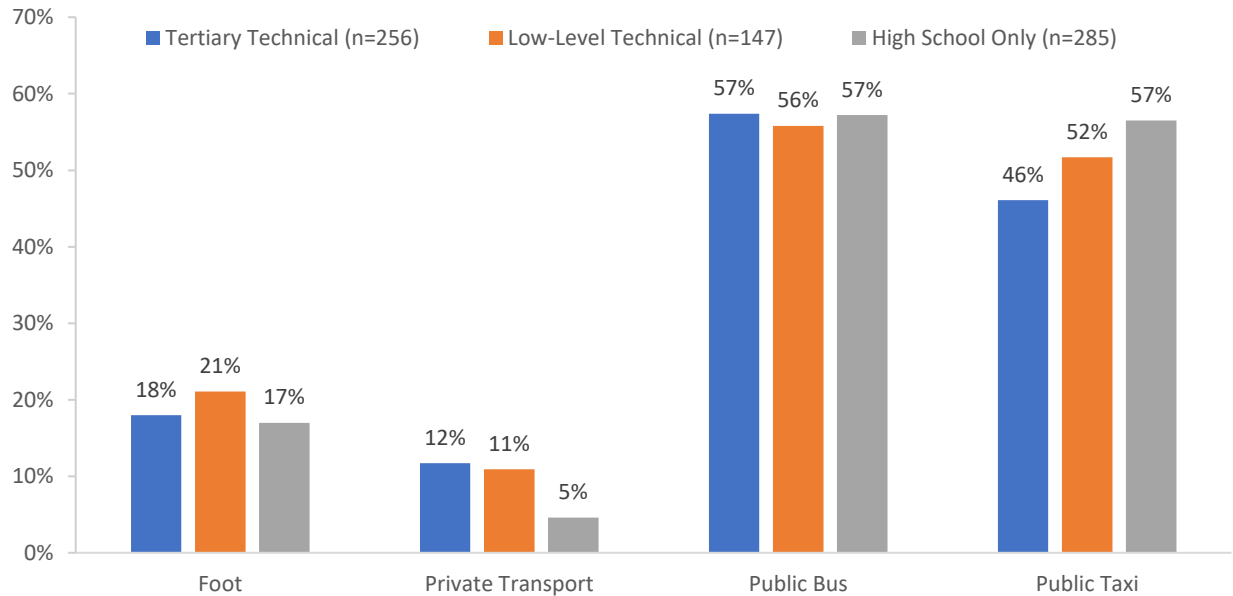
Transportation to and from school did not emerge as a barrier to access. In fact, the majority of youth across all three cohorts lived within 30 minutes of their school. In fact, those who pursued tertiary technical education reported the longest travel time to school; 38% reported travelling more than one hour to reach school.

Figure 20. Distance between home and school



Overall, the majority accessed school through public transportation, whether by public bus or taxi. One-fifth of those pursuing low-level technical education and just under one-fifth of tertiary technical and high school only individuals accessed school on foot. Just over 10 percent of those pursuing or who had pursued technical education (low level and tertiary) reported private transport as their main means of transportation to and from school.

Figure 21. Mode of transportation used to travel to school



Disability

Of all 824 students interviewed for this study, just 10 respondents reported having a disability: two who left school after high school, five who pursued low-level technical education, and three who pursued tertiary technical education. Three students reported having a visual impairment, three reported a physical disability, three reported a learning disability, and two reported having another disability such as a speech impairment.

Four out of the 10 believed that their disability has affected their academic potential; three reported that their disability has affected their likelihood of applying to community college or technical school. What's more, eight of 10 believed their teachers knew how to support them. While students were relatively positive, local disability experts argued that students with disabilities face significant barriers to furthering their education.[†]

Disability experts noted that students with disabilities might not receive the support they need in public primary or secondary schools. For one, public primary and secondary schools often lack the physical infrastructure to facilitate access for students with disabilities, and in general, very few specialized schools for persons with disabilities exist in Jamaica. As such, parents might need to pay for a school that specializes in educating individuals with disabilities or has the resources to facilitate their learning. These schools are generally more expensive than public schools. One interviewee from the Jamaica Council for Disabled Persons noted:

"...You will find that parents are called upon [to pay] JMD \$140,000 (USD \$1,120) per term...Even if I choose to send my child to a prep school, I am not paying that amount."

Access to affordable transportation also emerged as a potential barrier for students with disabilities, as they are forced to shoulder higher costs than those who do not have a disability. For example, one student shared her experience of rising as early as 4 AM to get to school. She noted that she must again wait long hours for the bus after school and does not get home until 9 PM. Another student interviewed for this study stated:

“...In rural areas, access to transportation from home to the training institution is a challenge. For example, I have a wheelchair and there is no formal structured government [transportation] system, [so] a taxi driver will charge me to charter [his vehicle]. You [the able-bodied person] would pay JMD \$100, I [the person with a disability] am going to pay JMD \$2000 to carry my chair and myself to go to school.”

In addition to transportation to and from campus, interviewees noted that students with disabilities also face challenges accessing buildings and facilities at their school or institution. For example, many schools still lack ramp access, preventing persons using wheelchairs from accessing some areas of the school. Students with disabilities might face additional expenses to facilitate their education. For example, a student with a hearing impairment would need to pay for hearing aids or an interpreter. Of course, these additional fees come on top of the tuition, course fees, and supporting expenses, which many students in this study reported difficulties paying.

Jamaica currently has only one technical training centre for persons with disabilities. This training centre is located in the Kingston urban area, which raises access questions for students in suburban and rural communities.

“When you enter institutions, there is no access to accommodate [persons with disabilities]. The materials are not provided in a way that is accessible...They would tell them that they have to find a different school.”

It was also noted that the institutional structure of the technical education system in Jamaica is not equipped to adequately evaluate or certify students with disabilities. An official from the Jamaica Council for Disabled Persons noted how the evaluation and certification structure limits opportunities for students with disabilities, saying:

“HEART does not yet have a training tool that can evaluate the competency [of a person with a disability] based on current limitations. Individuals with disabilities will go to school and be very good at what they do, and they have no formal proof of that.”

Another interviewee seconded the particular disadvantage for students with intellectual disabilities, saying:

“HEART has a masseuse programme that certifies persons who are blind or visually impaired in massage therapy...[but] some of the programmes that persons with intellectual disabilities participate in do not offer a competency certificate. They receive something to say they have gone through the training programme but because they are unable to fit into the systems at HEART, they cannot be certified based on competencies.”

Finally, interviewees noted that there are unfortunate attitudinal barriers towards students with disabilities, among persons across the education system and within their own families. In some rural areas in Jamaica, persons living with disabilities are “hidden” by family members and not given a chance to go to school. Some may start primary school but never move on to secondary or tertiary education, as their family does not believe that a young person with a disability will be a productive member of society.

COMMUNITY BARRIERS

Home Environment

The home environment emerged as an important influence on educational trajectory. To gauge the disposition of the home environment towards educational attainment, the researchers developed scale measuring youth’s perception of the level of emotional support at home.[‡] Based on this scale, just 43 percent of youth reported a high level of support at home, regardless of education attainment.

Table 12. Home support scale

General Home Support Scale	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=285)
High	43%	44%	44%
Moderate	37%	37%	36%
Low	20%	20%	20%
My parents placed a lot of emphasis on education when I was growing up**	84%	76%	77%

*** $p \leq 0.000$

While overall perceived support was similar across all cohorts, youth’s responses varied concerning the relative emphasis on education in the home. Youth from the tertiary technical cohort were significantly more likely than the other cohorts to report that their parents put a lot of emphasis on education (tertiary technical: 84%, high school only, 77%). Youth who ended their educations after high school tended to describe growing up in homes where parents did not push them or emphasize education, or were absent from the home all together:

“When I was growing up like in school [I] never have time for the book work just all about the fun. Like go home [to] watch TV [and] play, all about the fun. My parents overseas so you know [I] didn’t have anybody to focus me.” (Female, Urban, Completed High School Only)

“Never had anybody to push me neither. My mother is not here my father is not really like a father.” (Female, Urban, Completed High School Only)

In contrast, participants who enrolled in and completed technical training described home environments with intimate parental involvement in educational activities, and where parents ensured homework was completed before leisure activities:

“My mom was a pusher. When I come home from school I can’t do anything else but my homework. She has to go through my books before turning on the TV.” (Male, Rural, Current Technical Student)

“My mother... ensures that I know my time table and complete all homework before I go outside or turn on the television... At the end of school term, if my grades are under a certain level then I would hear that ‘you’re not going overseas.’ She’s not only saying it. She means it.” (Male, Rural, Current Technical Student)

“I would say my father is the most emphasizing one. He would call me daily and ask if I had homework and assist.” (Male, Rural, Current Technical Student)

Additionally, youth who pursued technical training described the presence of parents or family members who encouraged and supported them to succeed professionally. This source of motivation often came from parents who communicated an expectation that children should strive for careers—not merely jobs—and be the best they could be.

“I have two brothers who want to become chefs. My dad emphasize that we should have a career and not just a job.” (Male, Rural, Current Technical Student)

Differences in household composition which could impact youth’s educational trajectories also emerged. On average, tertiary technical students come from homes with fewer persons under 18 years old, as compared to the other cohorts. The tertiary technical cohort was also most likely to live with at least one parent (74%), while those who completed high school only were least likely to report living with a parent (58%).

Table 13. Proportion of students living with one or both parents

	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=283)
Both parents or guardians	24%	23%	20%
Single parent or guardian	50%	46%	38%
Total living with at least one parent or guardian	74%	69%	58%

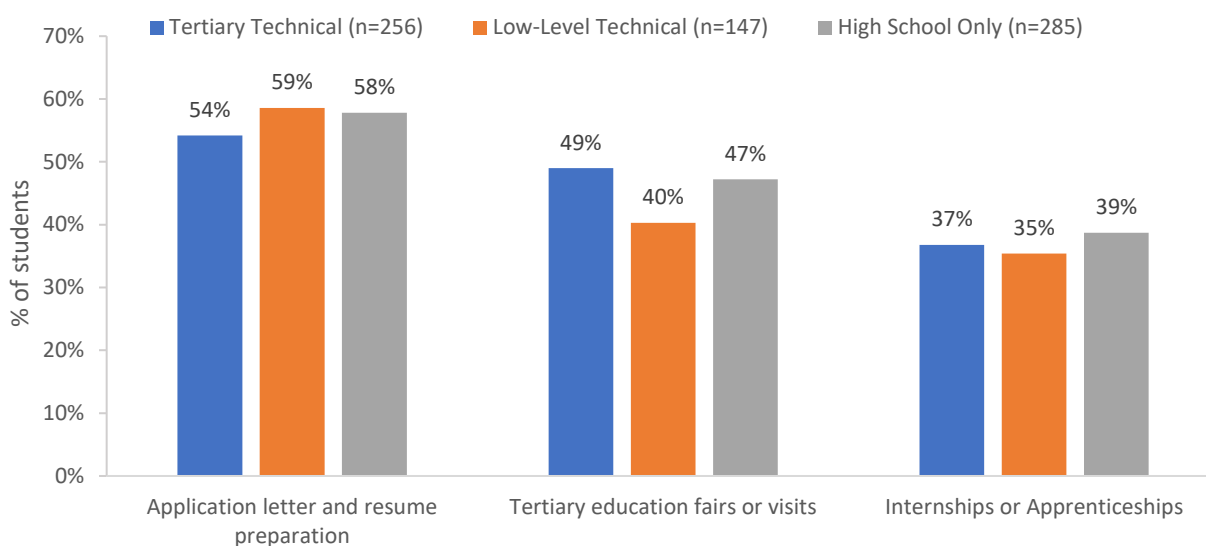
High School Experience

Despite differing educational trajectories, youth who were interviewed for this study were similarly satisfied with their high school experience. At least 80 percent of each group endorsed their high school for encouraging them to further their education. Most were also likely to recommend their school to others (tertiary technical students: 61%, high school only: 65%), and approximately one-half of both groups rated their high school experience excellent or very good (tertiary technical: 51%, high school only: 49%).

Notably, guidance counsellors were almost universally available to students; almost all youth reporting having had a guidance counsellor. Similarly, more than 7 in 10 respondents from each group attended high schools offering guidance counselling as a class. Lack of exposure to career counselling emerged as a possible barrier to tertiary technical education. Despite widespread exposure to guidance counselling, those with tertiary technical education were significantly more likely to report having been offered career counselling (tertiary technical: 63%, high school only: 54%).

While career counselling emerged as a significant point of difference between the higher education cohort and the other cohorts, other student support services were also significantly related. These included programmes that introduced students to post-secondary life, taught application and resume preparation, held post-secondary fairs and expos, and provided work experiences.

Figure 22. Proportion of students who experienced student support services many times during high school



Disciplinary Experiences During High School

While youth were generally satisfied with their high school experiences, differences were noted in the incidence of disciplinary actions. Overall, those who ended their education after high school were more likely to report having received disciplinary actions at school than those pursuing tertiary technical education.

Those whose highest level of attainment was high school were significantly more likely to report having been punished for incorrect uniform (tertiary technical: 17%, high school only: 28.6%) and three times more likely to have been suspended (tertiary technical: 8.6%, high school only, 23%).

On average, those completing high school only had significantly more disciplinary events than those pursuing tertiary technical. (Mean # of events: 1.1 for tertiary technical students, 1.6 for high school only).

Table 14. Proportion of students who experienced disciplinary actions many times in high school

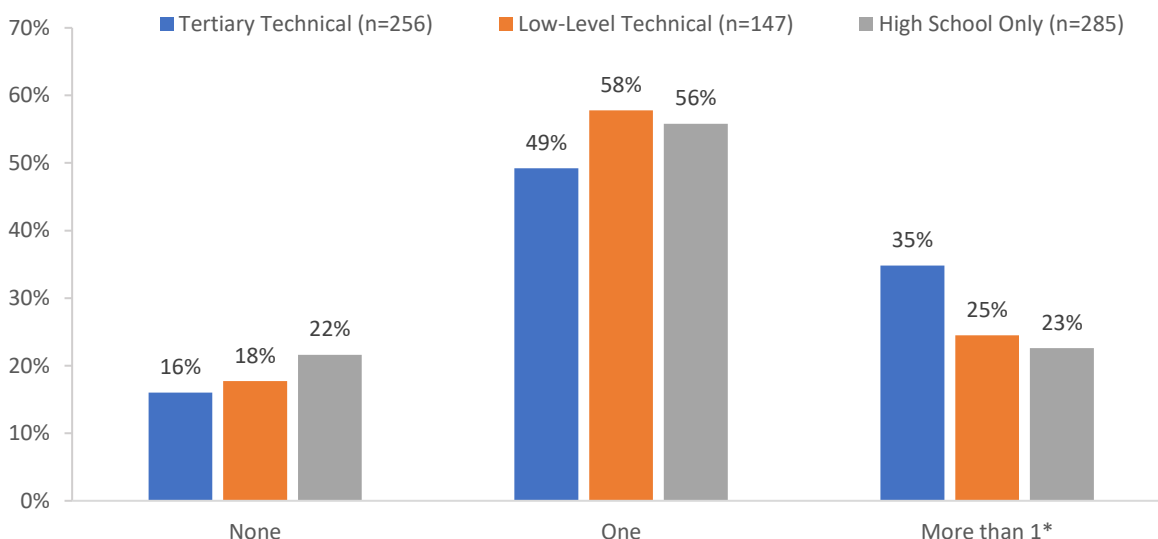
	Tertiary Technical (n=256)	Low-Level Technical (n=147)	High School Only (n=283)
Was punished because of uniform*	17.2	20.4	28.6
Was punished because hair not properly groomed	12.9	15.0	15.5
Was suspended**	8.6	18.4	23.0
Was locked out of school because I was late	23.4	36.1	31.1
Failed a class	24.6	31.3	35.0
Received detention	20.7	21.8	21.2
Was expelled	2.6	6.8	5.7
Average number of events **	1.1	1.5	1.6

* $p \leq 0.05$, ** $p \leq 0.005$

Extracurricular Activity Involvement at High School

While most youth reported involvement in at least one extracurricular activity, tertiary technical students were significantly more likely to be involved in extracurricular activities (tertiary technical: 35%, high school only: 23%).

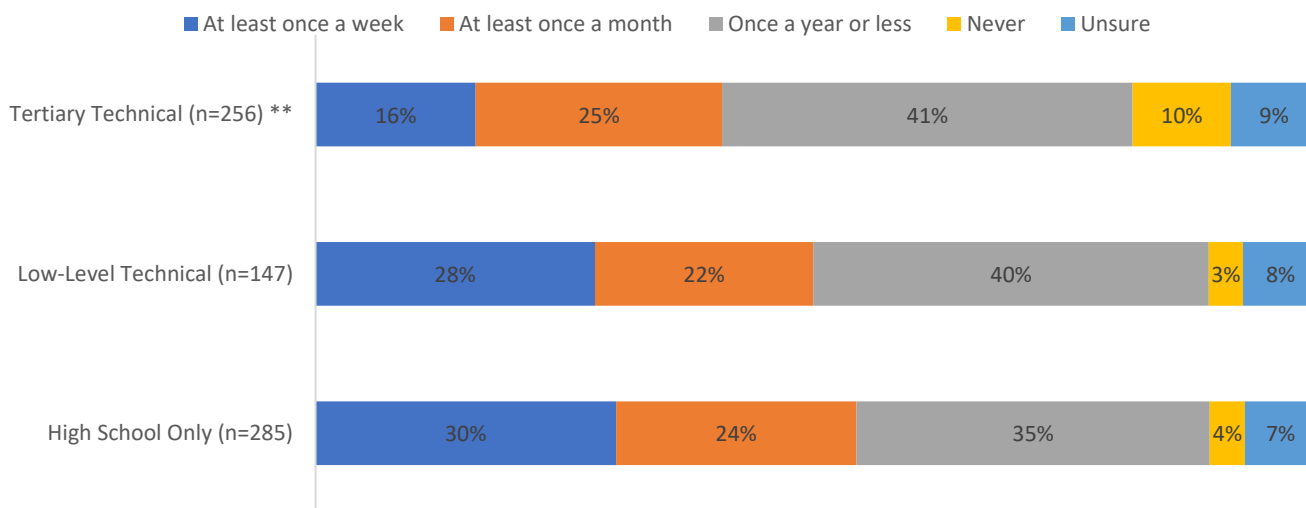
Figure 23. Number of extracurricular activities students participated in during high school



Exposure to Violence at School and in the Community

Exposure to and experience of violence, along with perceptions of safety in the local community emerged as another potentially differentiating issue. The cohort of students who ended their education after high school witnessed the highest frequency of violence of all three cohorts. As many as 30 percent of students who left school after high school reported witnessing violence at least once a week in their community, significantly fewer (16%) individuals pursuing tertiary technical education reported similar experiences.

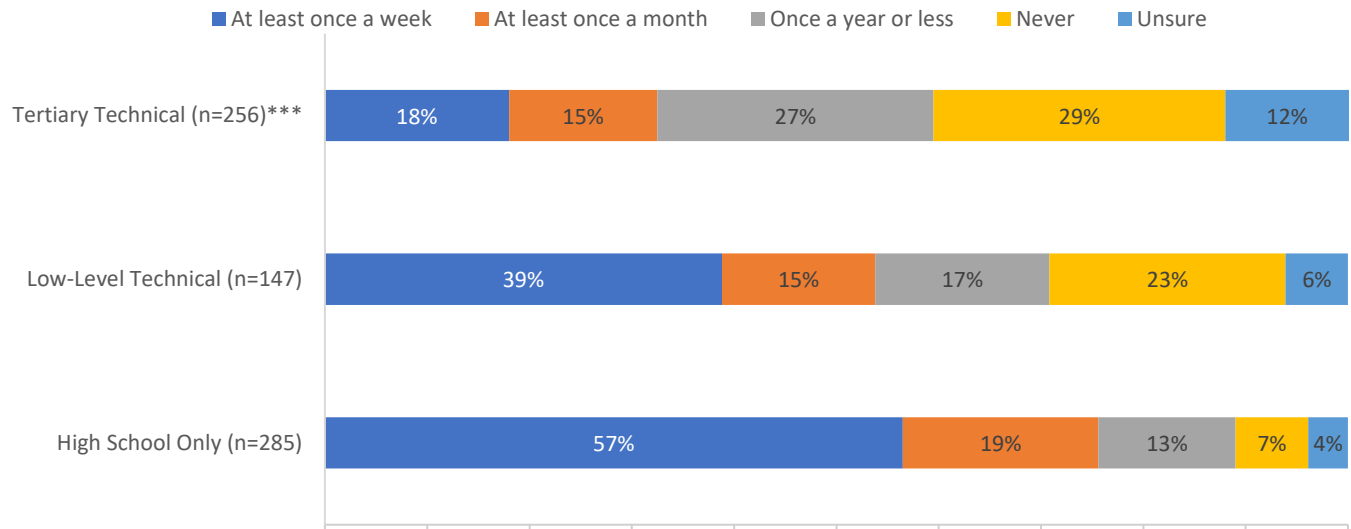
Figure 24. Frequency at which youth witness violence in their communities



**p≤0.005

Similarly, the frequency of violence that youth's witness in school was highest among those who had ended their educations after high school. Fifty-seven percent of this cohort reported witnessing violence at least once a week in their school; significantly fewer (18%) individuals pursuing tertiary technical education reported similar experiences.

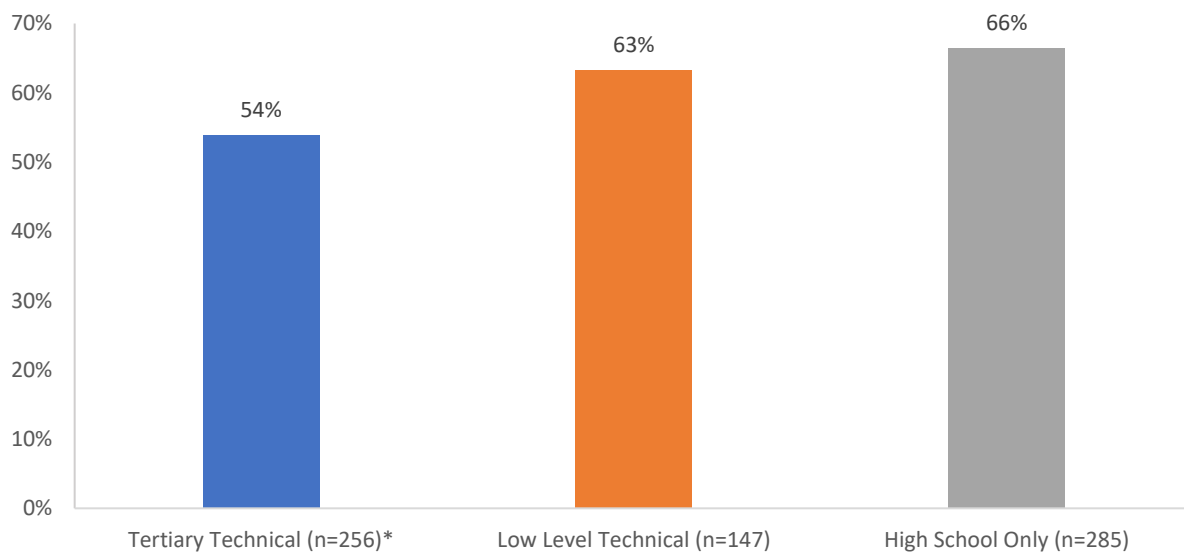
Figure 25. Frequency at which youths witness violence in their schools



***p<0.000

In addition to witnessing less violence within their schools and communities, students pursuing tertiary technical education were significantly less likely than the other two cohorts to report exposure to violence against someone they knew. About one-half (54%) of the tertiary technical group reported exposure to violence, compared to two-thirds (66%) of the high school only group.

Figure 26. Proportion of youth who have witnessed violence being committed against someone they know



*p<0.05

Assaults and stabbings were the most common types of violence witnessed by all groups. Low-level technical students were also likely to have witnessed shootings (23%). One-fifth of those completing high school only reported having witnessed shootings (21%) and robbery (21%).

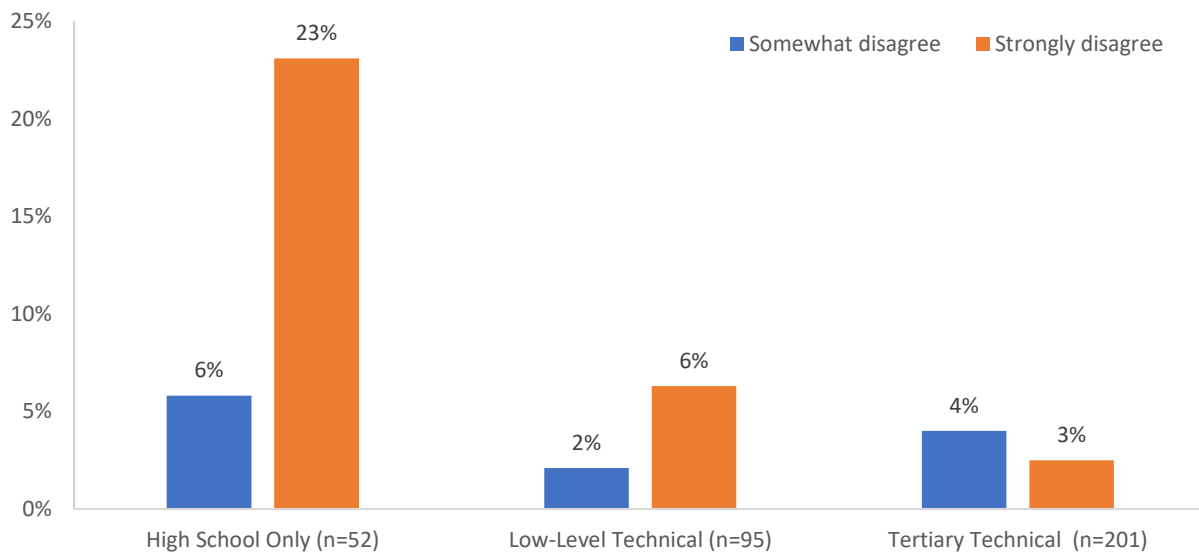
Table 15. Types of violence most commonly witnessed in youth’s communities

	Tertiary Technical (n=138)	Low-Level Technical (n=93)	High School Only (n=188)
Assault	46.4	59.1	51.1
Stabbing	36.2	37.6	39.9
Shooting	13.0	22.6	21.3
Robbery	15.2	11.8	20.7
Domestic violence	12.3	11.8	9.6
Murder	8.7	10.8	8.0
Extortion	6.5	7.5	7.4
Vandalism	4.3	5.4	2.7
Rape, sexual abuse	2.2	1.1	2.7

Perceptions of Insecurity at School and in the Community

The high frequency of violence that students are exposed to in their schools and communities is unsurprisingly correlated with perceptions of insecurity at school. Students who ended their educations after high school—who were most likely to experience violence at home and in the community—were also significantly less likely to feel safe going to and from school, as compared to those attaining post-secondary training to strongly.

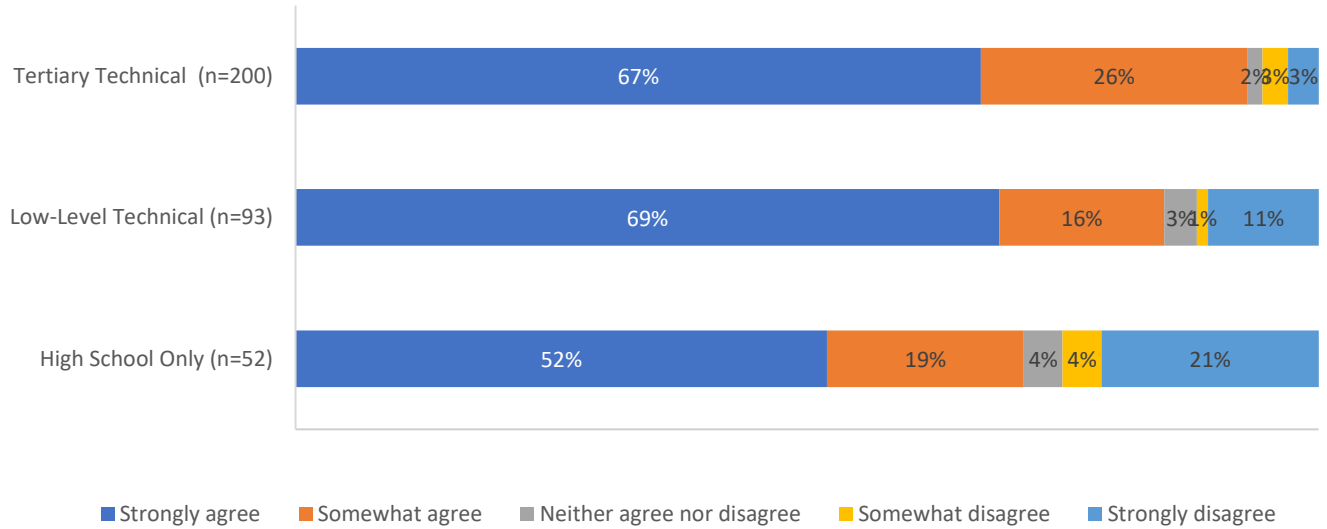
Figure 27. Percentage of students who disagree with the statement: “I feel safe going to and from school”



*** $p \leq 0.000$

Those completing high school only were also significantly less likely to strongly agree that “I feel safe while I am at school.” (tertiary technical: 67%, high school only: 52%).

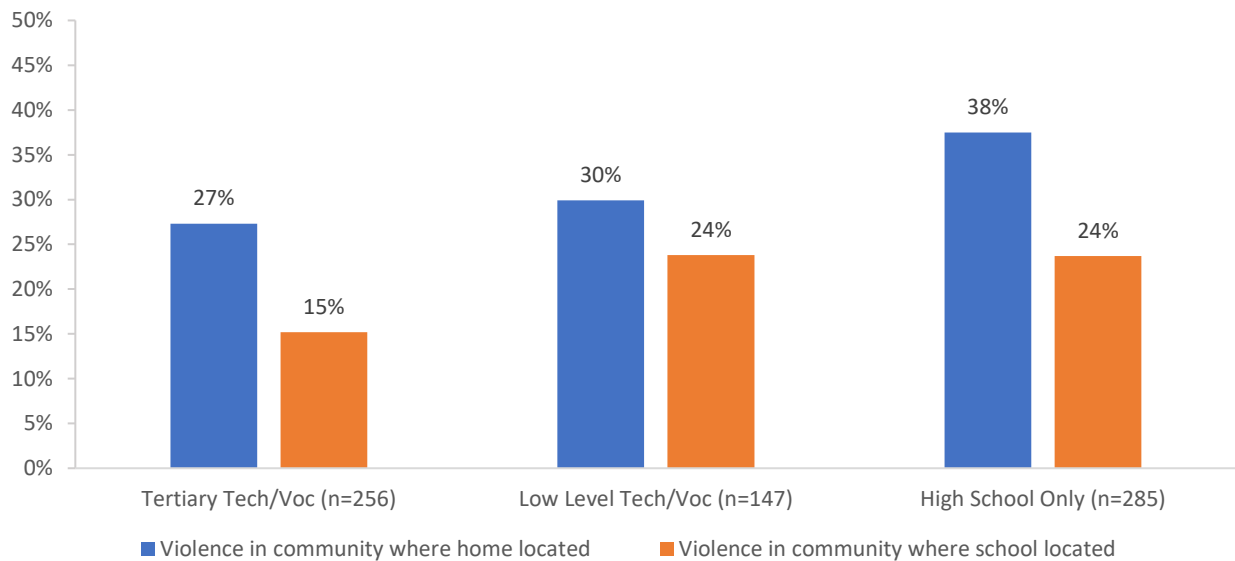
Figure 28. Percentage of youth who feel safe while they are at school



** $p \leq 0.005$

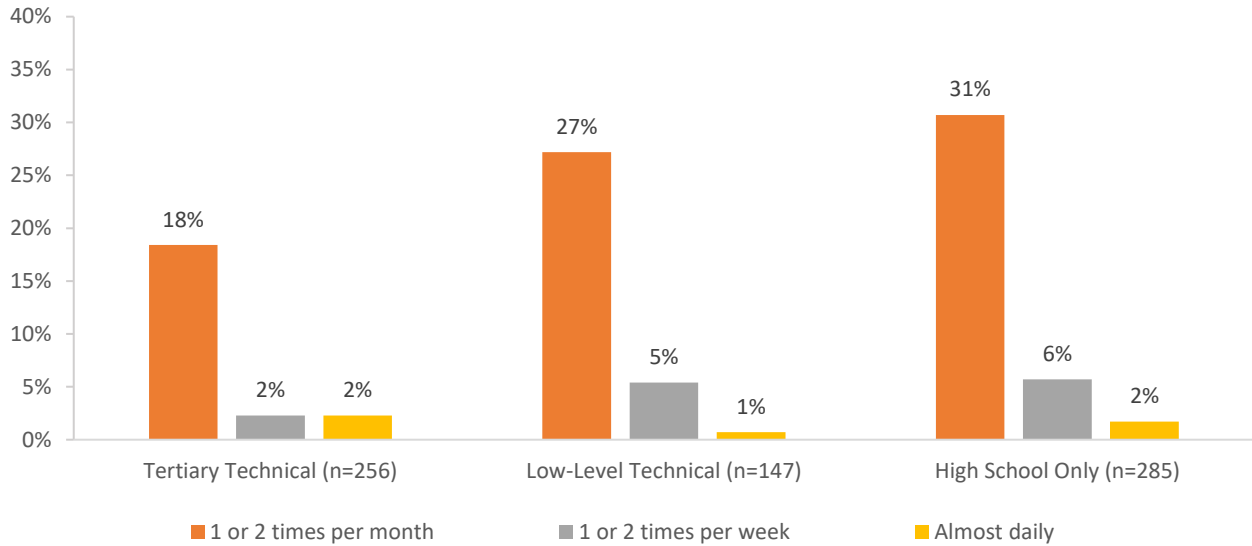
Participants reported that witnessing violence impacted school attendance. Although not statistically significant, those who did not pursue higher education after high school were more likely to report that either they or their peers stopped attending school due to violence in their community (38%) or school (24%). Comparatively, 27 percent of tertiary technical training reported that they stopped attending school due to violence in the community, and 15 percent for the same reason at school. Even for the cohort least likely to experience violence in their communities and schools, these numbers are shockingly high.

Figure 29. Proportion of youth who stopped attending school, or had peers who stopped attending school, because of violence in community or school



Similarly, students who did not pursue higher education after high school were most likely to report missing classes due to violence in school (39%), while the tertiary technical cohort was least likely (22%).

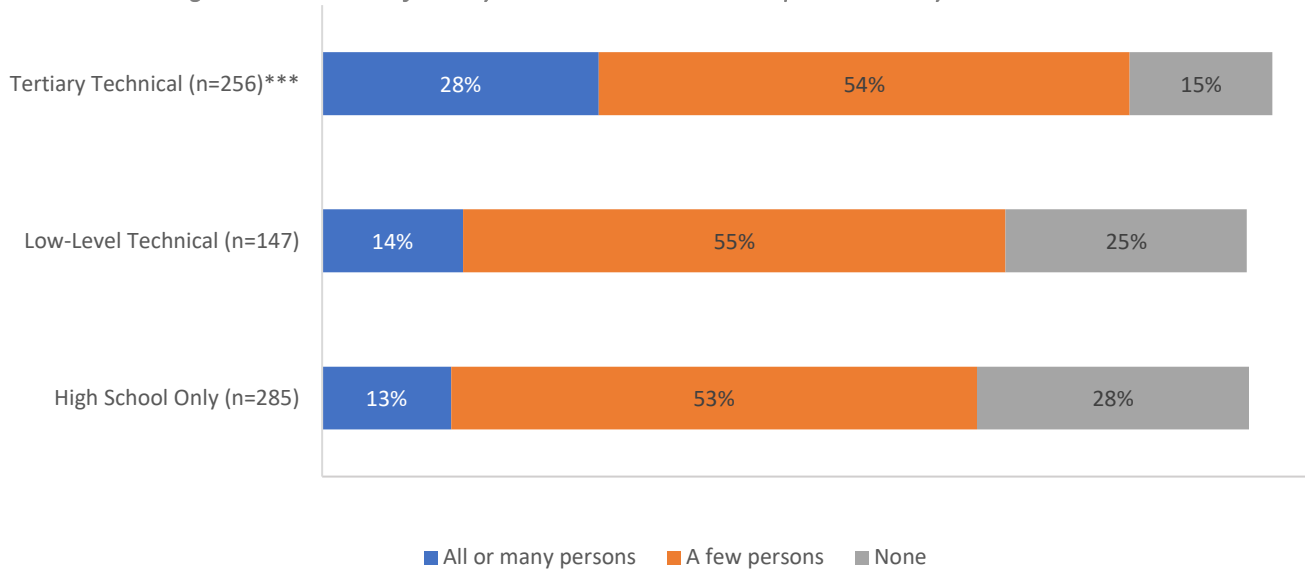
Figure 30. Proportion of youth who have missed classes, or had peers who missed classes, because of violence in community or school



Exposure to Academic Achievement

The tertiary education cohort was significantly more likely to have many or all family members who had completed tertiary education (28%). Inversely, those who terminated their education after high school were significantly more likely to have no family members who had completed tertiary level education (28%).

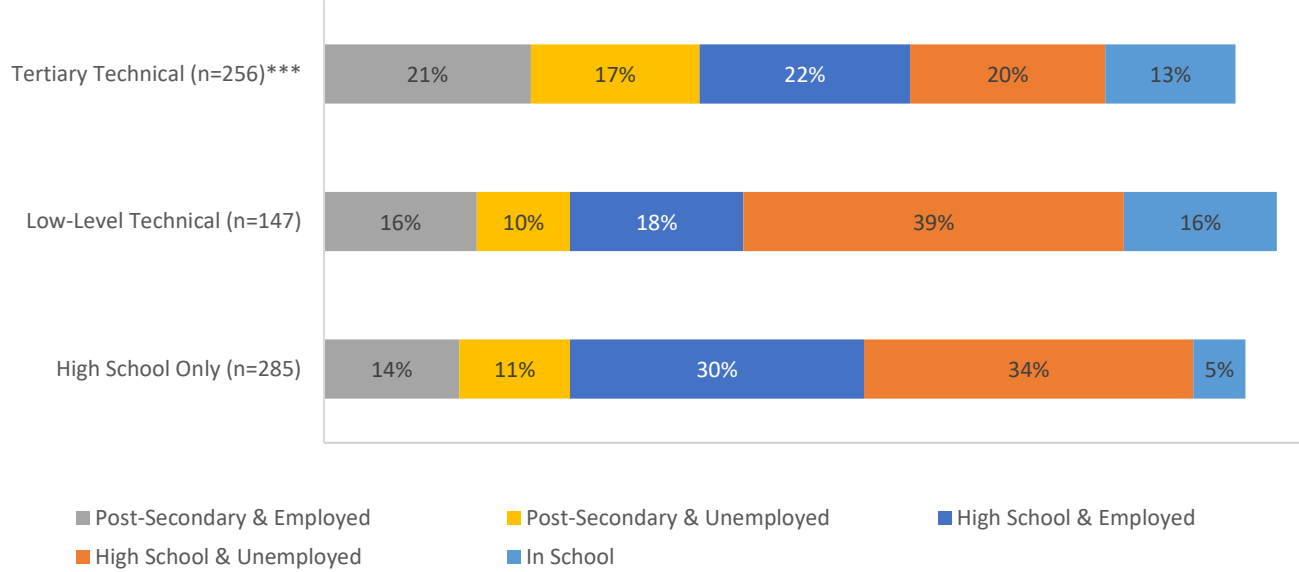
Figure 31. Number of Family members who have completed tertiary level education



*** $p \leq 0.000$

Additionally, youth who pursued tertiary technical education were significantly more likely to have friends who completed some post-secondary training, as opposed to students who ended their education after high school (21%).

Figure 32. Proportion of youth who have friends with post-secondary education or training

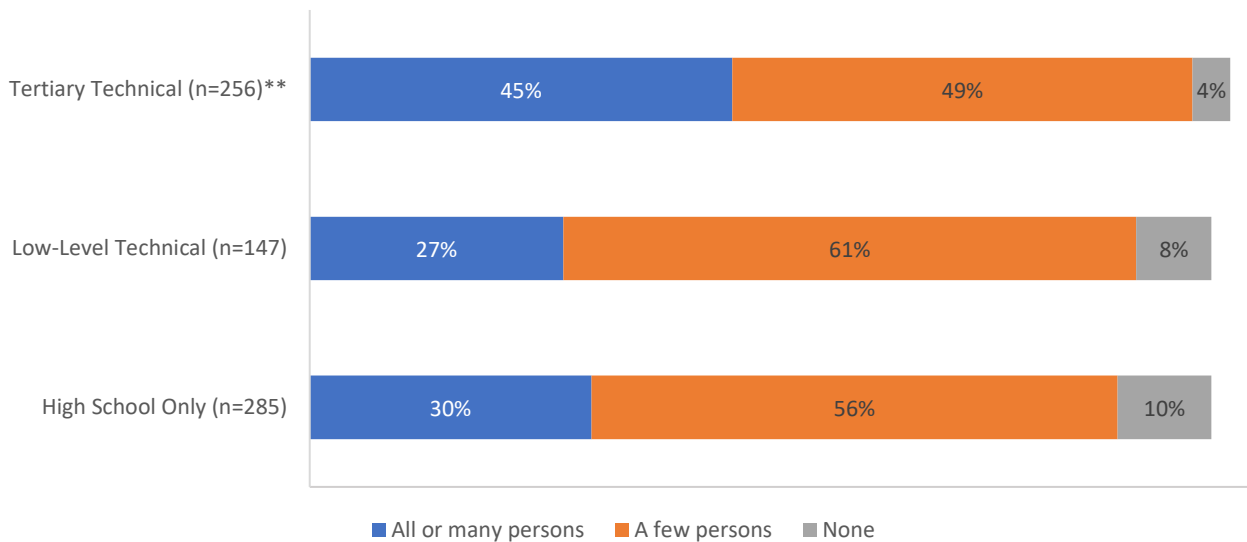


*** $p \leq 0.000$

Exposure to Professional Achievement

Compared to youth who left school after high school, the tertiary technical cohort was significantly more likely to have examples of professional achievement in their immediate community (45%), and significantly more likely to have many or all family members engaged in full-time employment (47%).

Figure 33. Number of persons in youth's family that have successful careers



** $p \leq 0.005$

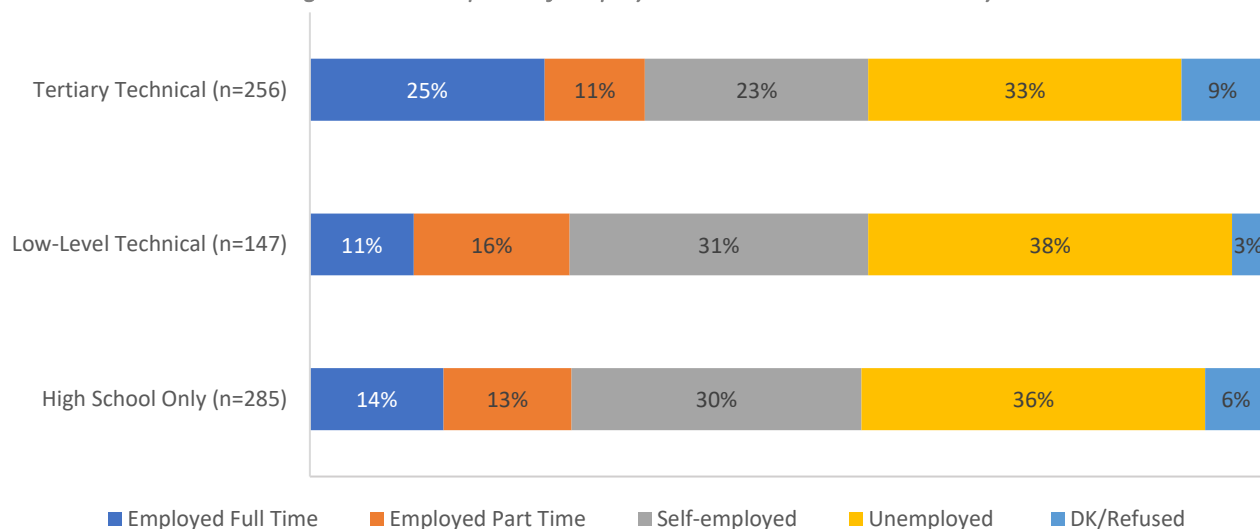
This is significant because, approximately 3 of 4 youth interviewed for this study reported that their career path was influenced by a successful person in their desired professional field. Extended family members including aunts, uncles, cousins, nieces, and nephews were identified as most influential on influencing youth's desired career paths across all cohorts. Parents and siblings were respectively the second- and third-most influential group to influence career path.

Table 16. Family members who most influenced youth's desired career path

	Tertiary Technical (n=186)	Low-Level Technical (n=109)	High School Only (n=212)
Aunt/uncle/cousin/niece/nephew	38%	41%	39%
Parent (mother/father)	34%	26%	26%
Sibling	16%	13%	18%
Teacher	10%	7%	2%
Community member	8%	4%	10%
Other family member	5%	7%	8%
Grandparent	3%	5%	4%

The perception of employment opportunities can impact a youth's decision to invest in tertiary level education. Of all the students interviewed in this study, more than one-third believe that most adults in their communities are employed, either full- or part-time. However, students who pursued tertiary technical education were significantly more likely to believe that most members of their community are employed full time (25%), as compared to the other two cohorts. Approximately, one-third of youth who pursued low-level technical education (31%) and who ended their education after high school (30%) believed that most members of their community were self-employed.

Figure 34. Perception of Employment Status in the Community

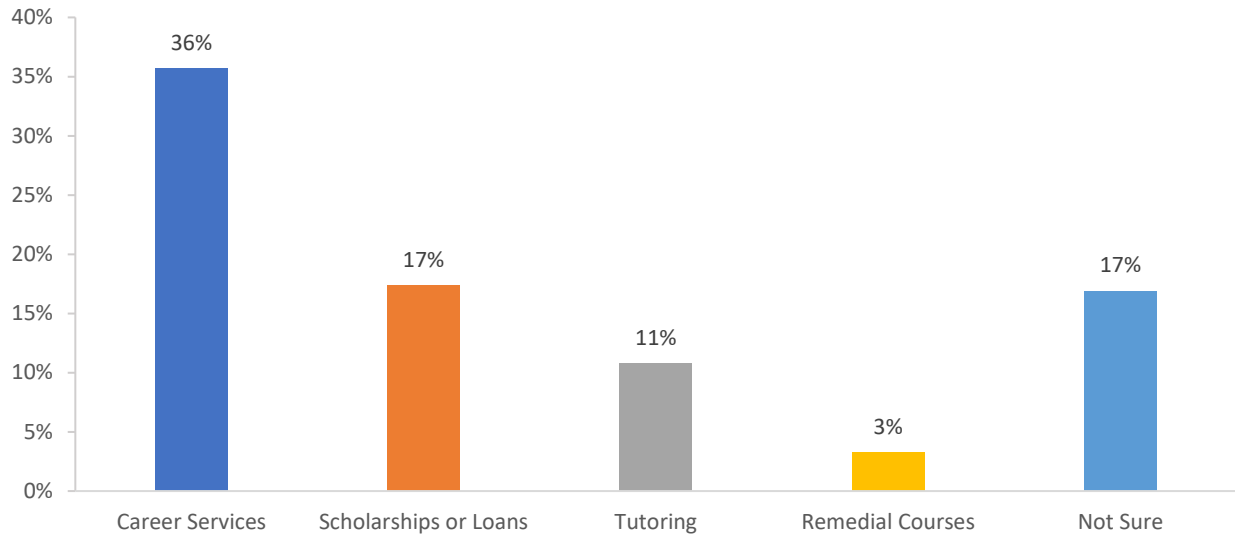


*** $p < 0.005$

Institutional Challenges

Access to high-quality support services—both financial and non-financial—is a significant determinant of low-income students' potential for academic success at the tertiary level. However, for many tertiary technical students, these auxiliary services are unavailable, or not available at the quality necessary to make a meaningful impact. This was found to be the case for tertiary technical students interviewed for this study. Career services were the most readily available student support service, with just 36 percent of tertiary technical students reporting their availability at their institution. 17 percent of students reported that scholarships and/or loans are available at their institution, 11 percent report that tutoring services are available, and just three percent report the availability of remedial courses. As many as 17 percent of tertiary technical students did not know of any student support services offered at their institution.

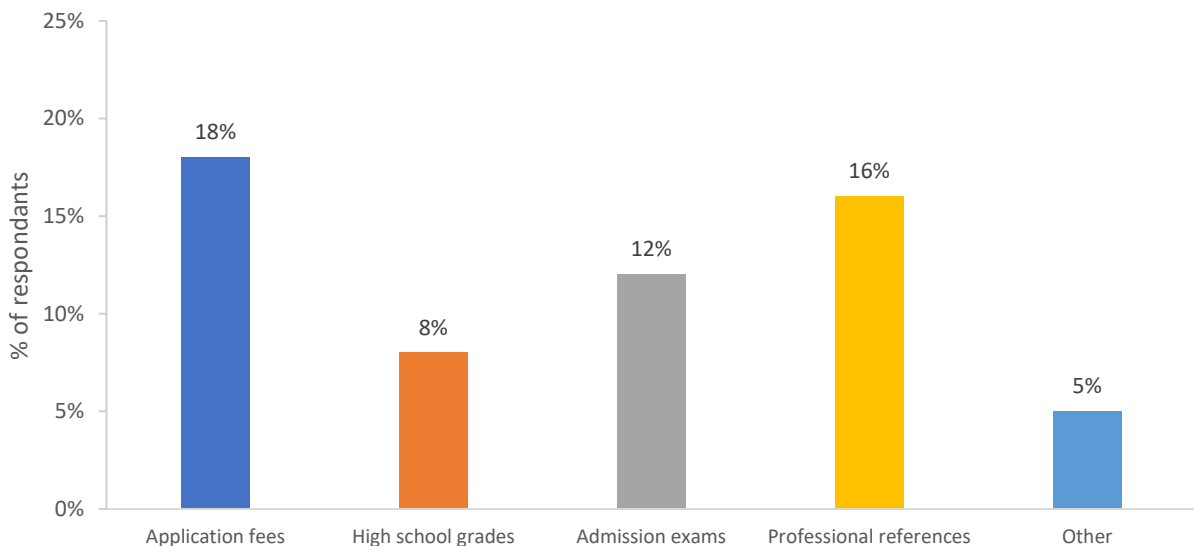
Figure 35. Student support services available at tertiary technical institutions



While student support services tend to be unavailable to tertiary technical students, the students who did report that their institutions had these services were quite pleased with their quality. On average, students rated the support services available at their tertiary technical institutions as *quite good*; career services were rated slightly higher as *very good*. Another barrier that disadvantaged students often face when applying to higher education institutions is the often inaccessible, unfamiliar application process. Both financial requirements such as application fees, and non-financial requirements such as admissions exams, essays, or references can cause students to abandon the application process due to intimidation, resource constraints, or self-doubt. For students interviewed in this study, application fees (59%), good academic grades (50%) and admission exams (48%) were the most commonly listed admission requirements to enter technical institutions.

Of these requirements, 18 percent of tertiary technical students indicated that application fees were the most difficult admissions requirement to fulfil, followed closely by professional references at 16 percent. Admissions exams and good high school grades were less likely to be identified as the most difficult admissions requirement to fulfil, at 12 percent and 8 percent respectively. Notably, 41 percent of tertiary technical students reported that they did not know which requirement was the most difficult to fulfil.

Figure 36. Most difficult application requirement for entering tertiary technical education



GENDER-RELATED BARRIERS

The initial, qualitative investigation of potential gender-related barriers to access and completion of tertiary technical education was guided by the Six Domains of Gender Analysis Framework, developed by USAID's Interagency Gender Working Group. The researchers found no significant differences in students' perceptions, opinions, or preconceived notions about gender issues across the three cohorts of youths. Therefore, the discussion in this section refers to results of qualitative discussions and quantitative surveys with all three target cohorts, collectively.

Regardless of gender, nine of every ten students who pursued tertiary education believed that their programme was equally accessible to both male and female students. Furthermore, males and female youth believe they have equal access to the resources—such as information or financing—needed to participate in tertiary technical education.

However, it is notable that only five of every ten students interviewed for this study believe that tertiary technical education is equally as accessible for pregnant students, as compared to non-pregnant female students.

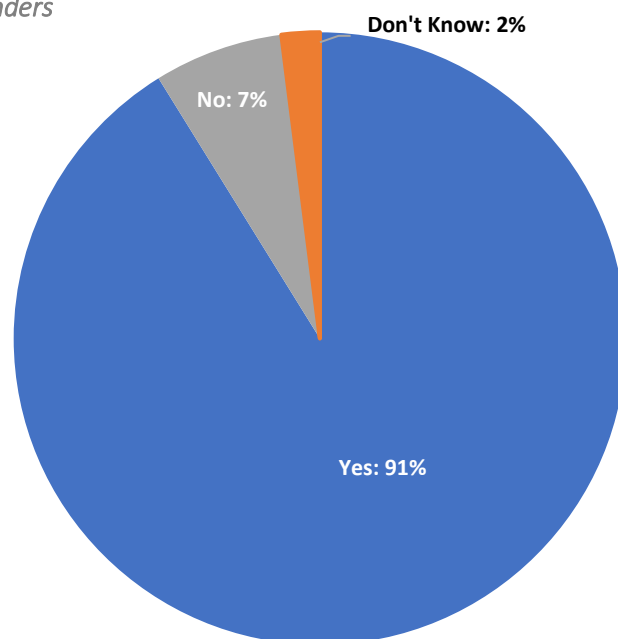
Furthermore, while more than half of the youth interviewed for this study believe that male and female graduates have equal access to job opportunities, male participants were significantly more likely to agree that the labour market provides equal job opportunities for men and women (*males: 75%, females: 65%*).

Stereotypes and Traditional Gender Roles

One reason that 25% of male participants, and 35% of female participants perceive structural differences in opportunities for men and women in the labour market may be due to traditional gender roles and stereotypes. Female study participants tended to aspire to careers that align with professional fields that are traditionally thought of as female-dominated, namely nail technician, nurse, or hairdresser. Similarly, male participants tended to aspire to traditionally male-dominated occupations, such as electrician and policeman.

The alignment of career aspirations with traditional gender roles was particularly noticeable amongst the cohort of youth who ended their education after high school. On the other hand, male and female youth who pursued tertiary technical education showed less gender polarization and more similarity in their career goals, the most popular of which was to become a chef.

Figure 37. Proportion of tertiary technical students who believe their programme is equally accessible to students of both genders



The impact of traditional gender roles on students' career aspirations may be limiting for both male and female students. For example, female students may not be able to visualize themselves working in traditionally male-dominated fields, which would limit their willingness to enrol in these sorts of technical degree programs. Similarly, male students may fail to see career opportunities for themselves in traditionally female-dominated fields, like nursing or the creative industries, which would likewise limit enrolment in tertiary technical opportunities.

The youth interviewed for this study also report that women are expected to fulfil the traditional roles of caregiver and homemaker. As such, the women face the added challenge of balancing unpaid domestic labour with pursuing technical tertiary education or external, paid employment opportunities.

Early Pregnancy

Pregnancy and parenthood present many challenges that are often borne disproportionately by women across all socioeconomic classes. The financial requirements, time commitments, and inflexibility of traditional education and work environments towards the challenges that come with motherhood can present substantial barriers for disadvantaged female youth. As such, there is a necessary trade-off between the investments that a mother can make in caring for and rearing her child, and the investments she can make in furthering her education.

The stigma associated with early pregnancy and extramarital pregnancy is another barrier that young mothers must face in furthering their education. Jarringly, more than 75 percent of the youth who participated in this study felt it is unacceptable for a female student to attend a technical institution while she is pregnant. Very few youth reported that they commonly see women nursing their child at school (males: 14%, females: 20%).

These findings, along with the fact that just 50 percent of students believe that tertiary technical education is as equally accessible for pregnant students, as compared to non-pregnant female students, suggests that pregnancy presents a substantial challenge to both access and completion of technical tertiary education for female students who become pregnant either before or during the course of their degree program.

Female students emphasized the personal challenges they face in returning to school after having a child, and the necessity of relying on other people for support after having given birth:

"Some [mothers] have to be around different guys to get help to go back to school but some of them have to struggle real hard."

Lack of access to consistent child care services was also emphasized as a challenge that mothers face in returning to school:

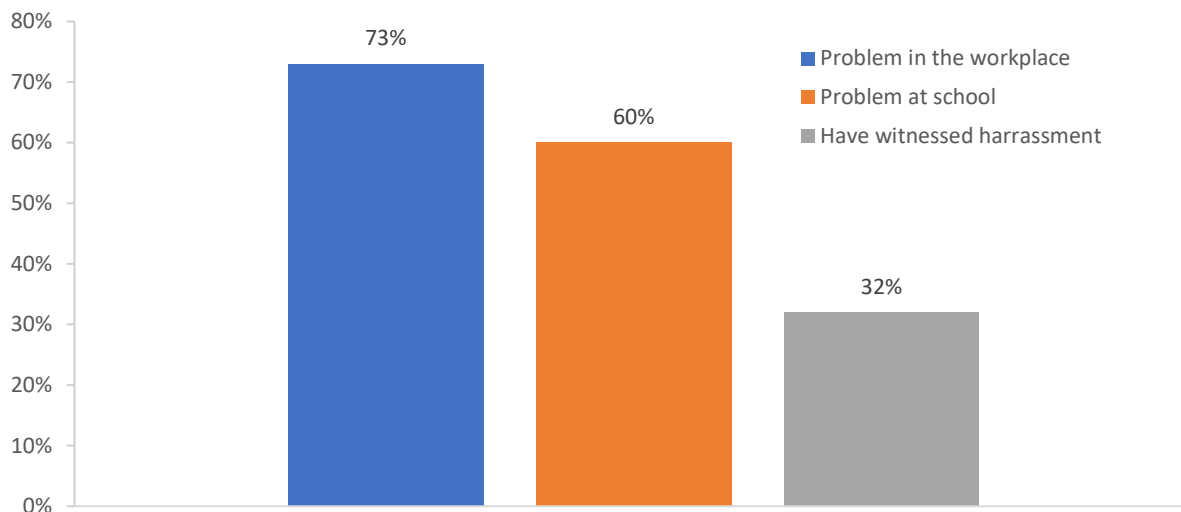
"Well my kids, financial wise [could block my ability to achieve my goals], and even going to school was hard; most time I didn't have anybody to keep them."

Other single mothers spoke about working hard to save money to send themselves to school, and the solutions they found to continue their education:

"I take my daughter to school."

Sexual Harassment

More than half of respondents interviewed for this study believe that sexual harassment is a big problem for women both in the workplace (7 of every 10 persons say this is a big problem) and in the classroom (more than 5 of every 10 persons say this is a big problem).



Female students were more likely than their male counterparts to believe that sexual harassment is a big problem for women in the workplace (*males: 69%, females: 75%*) and in the classroom (*males: 57%, females: 63%*). A little under one-third of youth (32%) have ever witnessed or heard of female students being harassed. This was almost twice as high as those who have seen or heard of males being harassed (17%).

SECTION THREE: BARRIERS HIGH SCHOOL STUDENTS FACE

The barriers to access and completion of tertiary technical education persist in the current cohort high school students. This section provides an examination of the pervasive barriers that current high school students face, illuminating potential avenues by which current high school students might be unable or unwilling to access tertiary technical education. Throughout this section, findings are disaggregated by gender, integrating the analysis of gender-related barriers into the discussions on individual and community barriers.

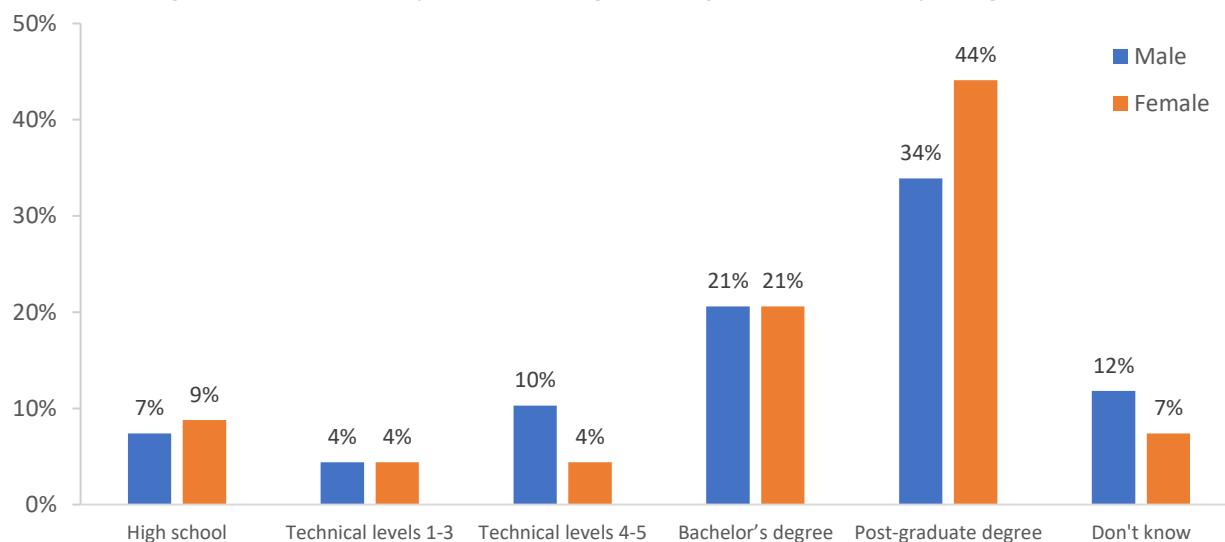
Individual Barriers

Education and Career Aspirations

In general, current high school students were found to aspire to higher levels of education than youth in the other three cohorts. High school girls, in particular, were more likely to have high aspirations; twenty-one percent indicated they aspire to attain a Bachelor's degree, and 44 percent indicated they aspire to a post-graduate degree. Their male counterparts also aspired to university education; however, they were more likely than girl students to aspire to tertiary technical education (10%), or not yet know to which level of education they aspire.

The relatively high educational aspirations reported amongst current high school students is relevant to the finding that students who pursued higher levels of education had higher educational aspirations. Therefore, maintaining high educational aspirations amongst high school students may be important for facilitating their willingness to invest in tertiary technical education.

Figure 38. Education aspirations among cohort of students currently in high school



Awareness of Technical Education

High school students were relatively unaware of tertiary technical education opportunities available to them. Just one-third of participants (males: 36%, females: 32%) were aware that they could achieve a Level 5 certification at a tertiary technical institution. Additionally, high school students were unaware of the competencies gained through

tertiary technical education. Approximately half of high school students could indicate the competencies gained at each level of tertiary technical education.

The analysis of students who had completed high school indicated that those who did not pursue tertiary technical education were relatively less aware of the technical certification levels available to them, and the competencies gained at each level of education. Policymakers should ensure that high school students are informed of the technical education opportunities available to them to remove lack of awareness and information as a barrier to technical education. High school students cannot pursue educational trajectories they are uninformed about.

Table 17. Proportion of high school students who correctly identified the competencies attained at each level of technical education in Jamaica (HEART NVQ-J Levels 3-5)

	Male (n=68)	Female (n=68)	TOTAL (n=136)
Level 3: Independent/Autonomous Skilled Worker	50%	49%	49%
Level 4: Para-professional and/or Technician	59%	49%	54%
Level 5: Managerial and/or Professional Worker	57%	49%	53%

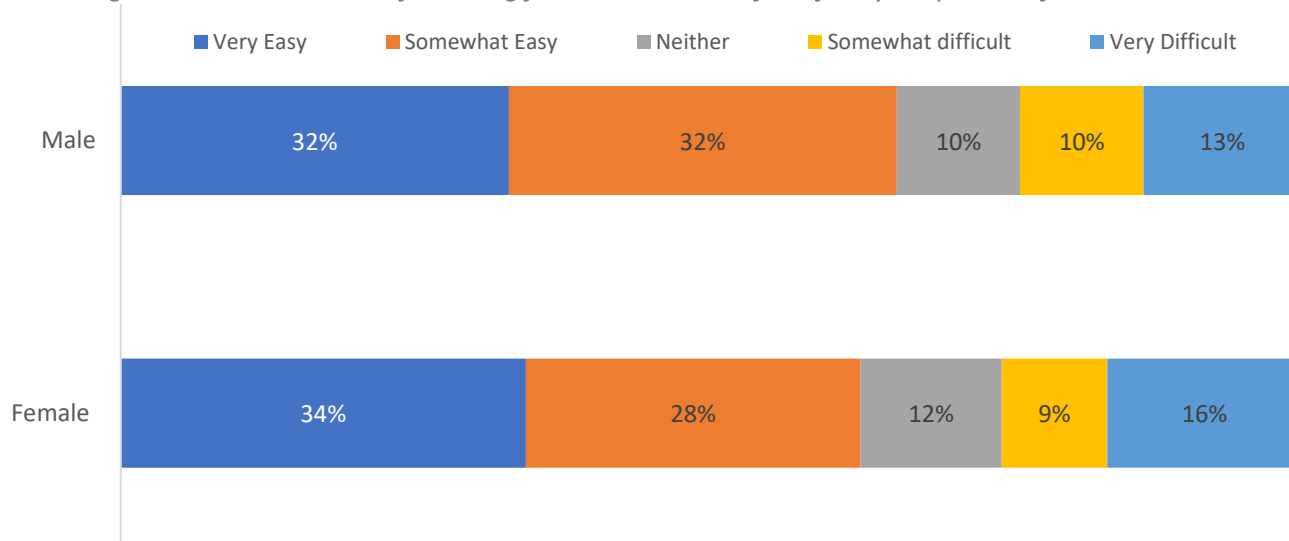
Perceived preparedness for work after high school

Regardless of gender, as many as 63 percent of high school students interviewed for this study believe that they would be ready for the world of work once they complete high school. This is significant, as the students who failed to pursue low-level or tertiary technical education were the most likely cohort of high school graduates to indicate that they were ready for the world of work after high school. This finding may relate to the previous: a low awareness of the technical education opportunities available. It might also relate to the fact that disadvantaged students live in low income communities with relatively little access to high quality employment that requires tertiary education. If students are not exposed to career paths that require tertiary education, they may have difficulty envisioning a future for themselves that requires a tertiary technical degree.

Access to Financial Aid

More than half of current high school cohort believe that it would be easy to receive financial assistance from their family or spouse if they decided to further their education after high school.

Figure 39. Perceived ease of receiving financial assistance from family or spouse to further education



Despite reporting they would have easy access to financing, more than half of the high school cohort indicated that, at some time during high school, they had trouble paying tuition fees or purchasing course materials (50% of males; 54% of females), and just under one-third described challenges purchasing lunch or food while at school (31% of

males; 29% of females). Therefore, one must consider if this perceived ability to access financial support translates into reality. Perhaps access to finance may not serve as an attitudinal barrier, in that students are not discouraged from applying because they don't believe they will be financially supported by their families. However, access to finance may still serve as a barrier in that as low-income students begin to probe sources to finance their tertiary education, they may find their family or spouse to lack sufficient funds, in reality.

Community Barriers

Home Environment

Ninety percent of high school boys and 88 percent of high school girls reported that their parents placed a lot of emphasis on education while they were growing up. This is reminiscent of the finding amongst students who pursued tertiary technical education; strong emphasis on education is associated with attaining higher levels of education.

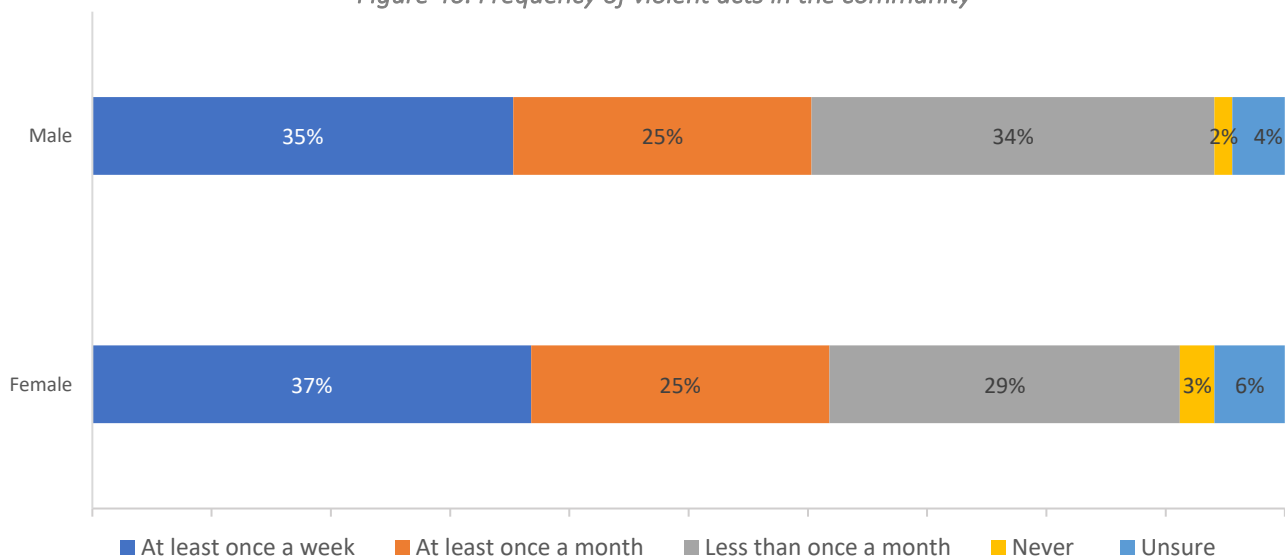
School Experience

High school males were slightly more likely to have frequent disciplinary experiences than their female counterparts. Specifically, more males reported being punished because of uniform (males: 28%, females: 21%) and being suspended (males: 16%, females: 13%). As higher frequency of disciplinary experiences was associated with lower educational attainment, policymakers should consider how handling school indiscipline may inadvertently be stemming students' educational potential.

Exposure to Violence at School and in the Community

More than half of high school students, regardless of gender, indicated that they live in communities that are prone to violence (57% of males; 60% of females). Six of every ten high school student indicated that violent acts occur in their community at least once a month, and 36 percent indicated that violent acts occur at least once a week. More than half of all high school students have witnessed violence against a family member, friend, or schoolmate (69% of male students; 72% of female students).

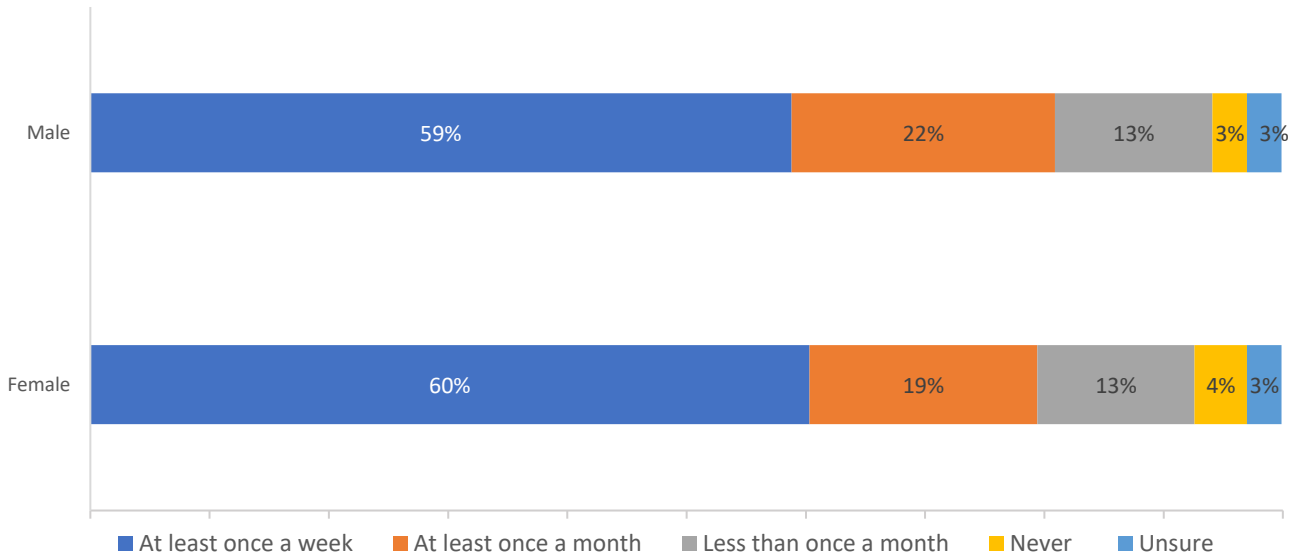
Figure 40. Frequency of violent acts in the community



Witnessing violence in school was a common occurrence for this cohort; 60 percent reported that violence occurred at school at least once a week. This alarming frequency at which high school students see and experience violence should be considered as a potential barrier to both completing high school and pursuing tertiary technical education. The analysis in the previous section indicated that exposure to violence was associated with lower academic attainment. This could be working through a variety of mechanisms. Students that are exposed to

violence are less likely to be able to concentrate in school, and more likely to miss school because they fear for their safety. Both reduce academic potential.

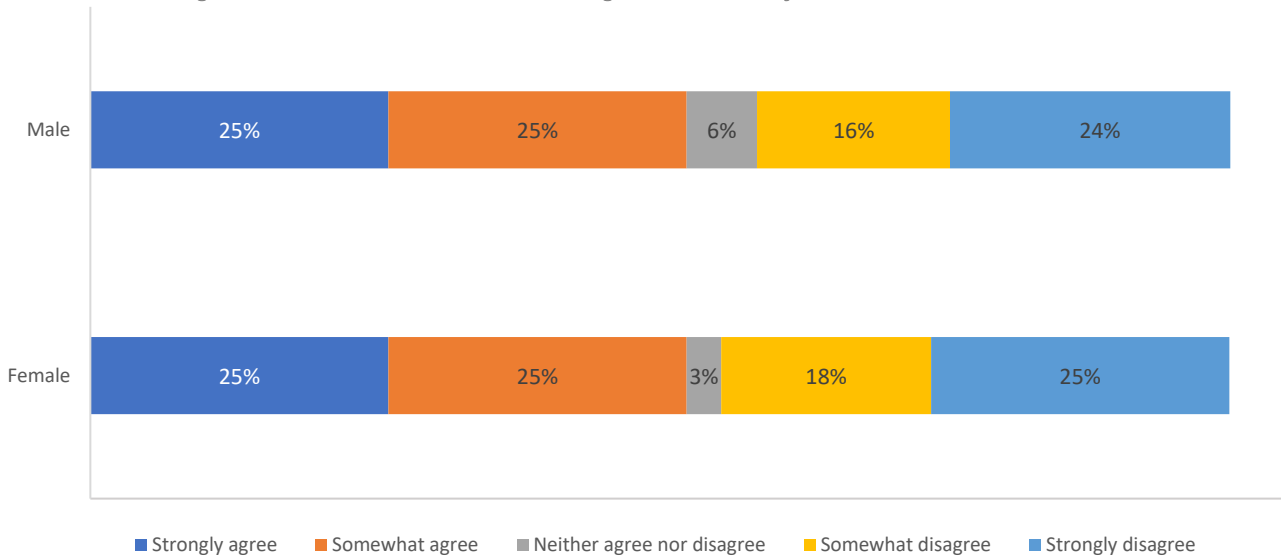
Figure 41. Frequency of violent acts at school



Perception of Insecurity at School and in the Community

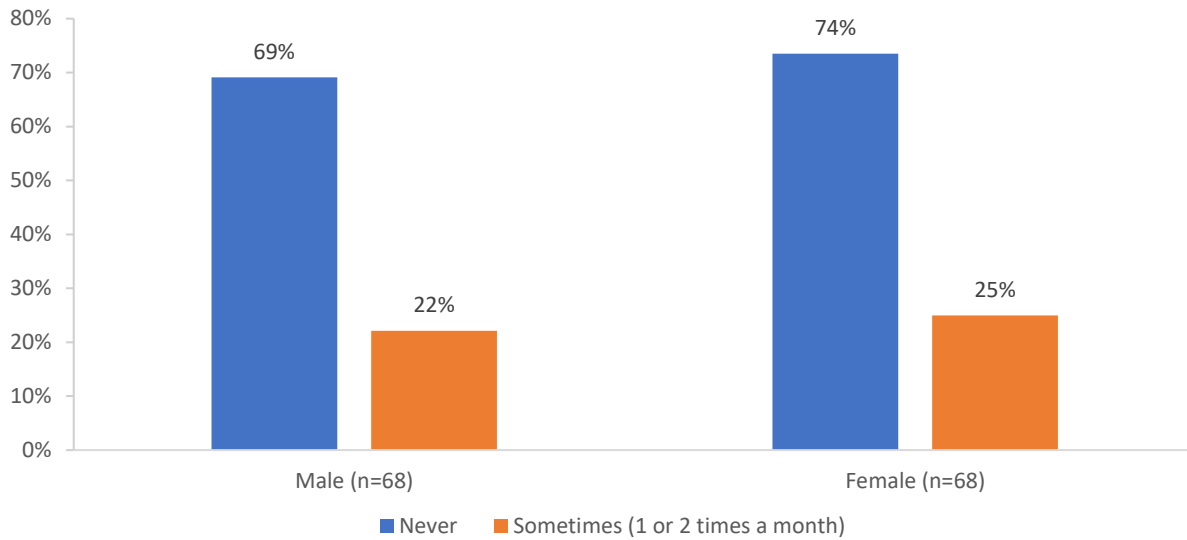
While the actual frequency of violent acts that high school students witness at school is jarringly high, only half of high school males and females agree that a lot of violent acts occur in their schools. Forty percent of boys and 43 percent of girls disagree that a lot of violent acts occur at school. The dissonance between the actual and perceived level of violence in school perhaps speaks to students’ desensitization of what “a lot” of violence looks like.

Figure 42. Extent to which students agree that a lot of violence occurs at their school



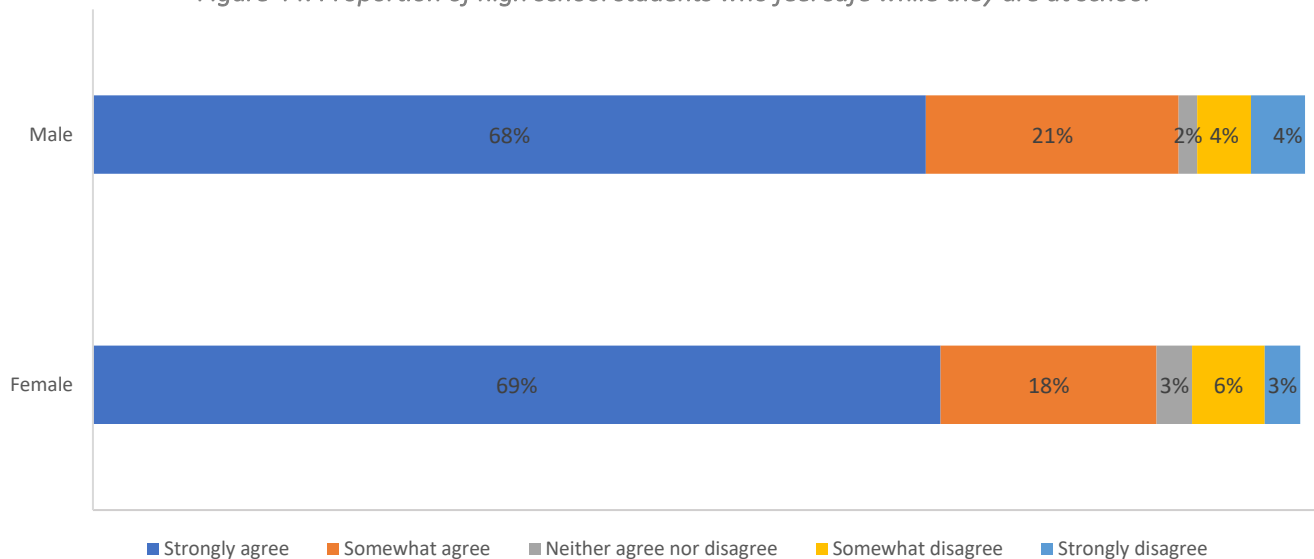
While 69 percent of boys and 74 percent of girls have never missed classes due to violence, more than 20 percent of students of both genders report that they miss school one to two times a month due to violence in their school (male: 22%, females: 25%).

Figure 43. Proportion of high school students who have missed class—or have peers who have missed class—due to violence in school.



Despite the high levels of violence in their schools and communities, most high school students felt safe going to and from school. Males were more likely to strongly agree that they felt safe going to and from school (69%) than their female counterparts (54%). Overall, there was a general sense of safety among high school students while they were at school.

Figure 44. Proportion of high school students who feel safe while they are at school

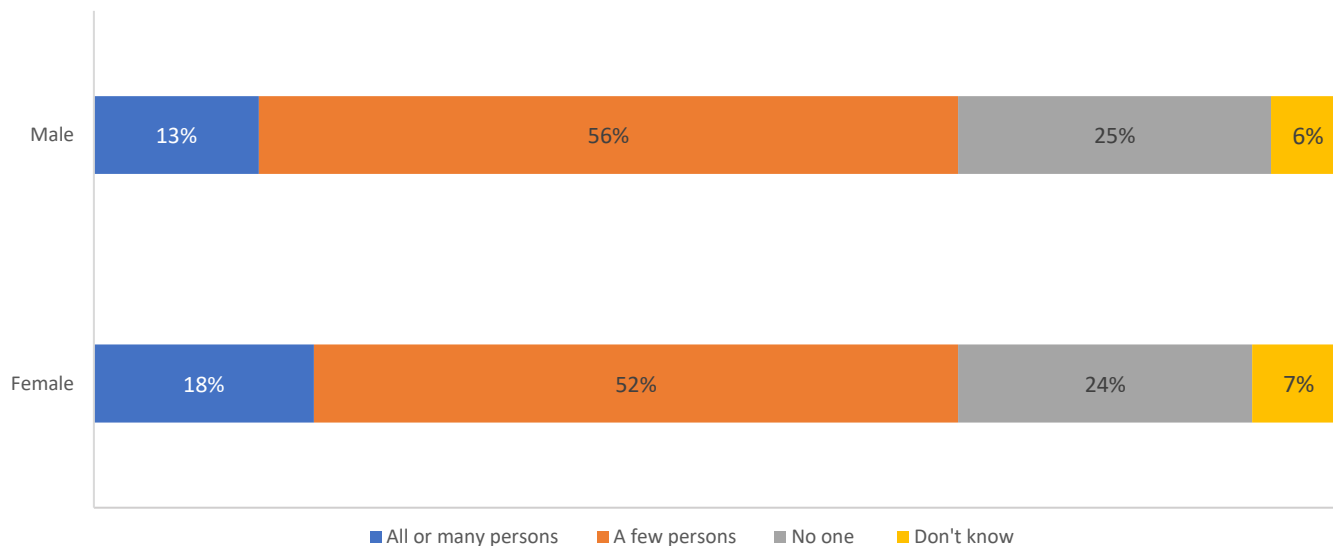


Finally, just fewer than one-third of high school students reported that they or their peers had stopped attending classes because of bullying. Female students, however, were more likely to report having stopped attending classes because of bullying than their male counterparts (males: 21%, females: 31%).

Exposure to Academic and Professional Achievement

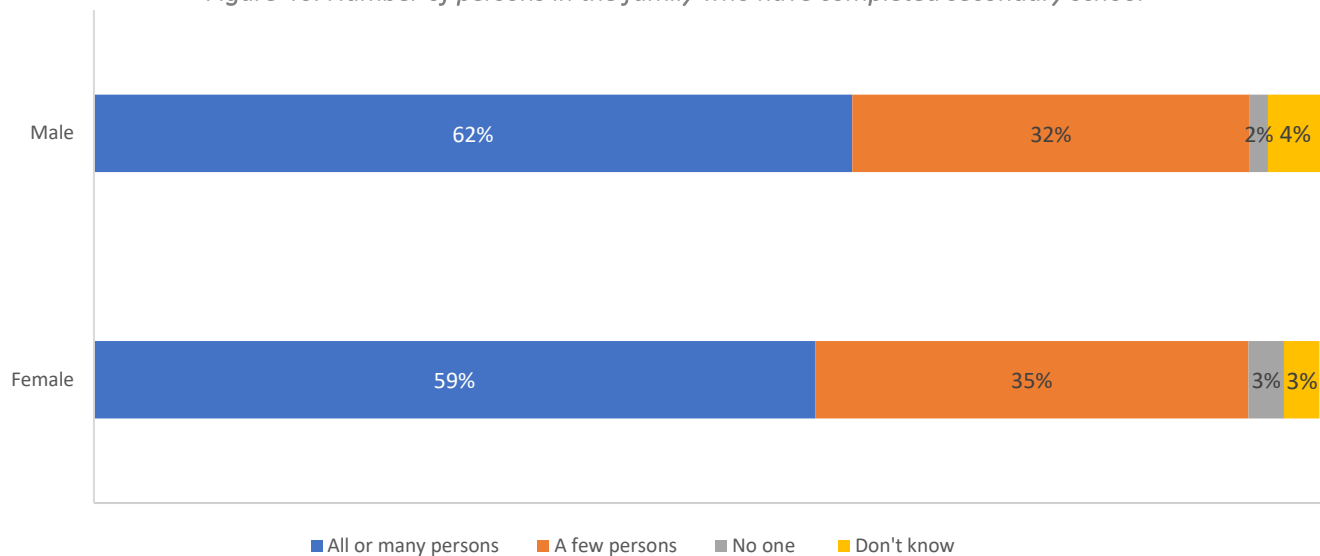
High school students had relatively few role models in their families who might model a successful trajectory to the tertiary education level. Just 13 percent of female students and 18 percent of male students reported that all or many persons within their families had completed tertiary education. This proportion is resonant of the extent of tertiary achievement present in the families of students who ended their education after high school (13%).

Figure 45. Proportion of high school students whose families have attained tertiary technical education



While high school students were exposed to few examples of tertiary-level academic achievement in their families, more than half indicated that all or many persons had at least completed high school.

Figure 46. Number of persons in the family who have completed secondary school



Furthermore, more than one-half of high school students indicated that there are at least a few persons in their families who have been successful in their careers.

SECTION FOUR: DISCUSSION

This study sought to explore potential barriers to access and completion by analysing factors that statistically differentiate the group of students who ended their education after high school from those who pursued tertiary technical education. The researchers used a binary logistic regression model to identify the most important barriers to access and completion of tertiary technical education in Jamaica. The model was statistically significant (*Chi square* = 111.637.138, $p < .000$ with $df=9$), and explained 36.6 percent of the variance in tertiary technical attainment and correctly identified 71.9 percent of cases.

The following factors were modelled as most significantly impacting educational outcome:

- Violence in the school environment
- Family examples of achievement
- Financial challenges
- Awareness of tertiary technical education

Pregnancy or having a dependent family member were also associated with lower educational attainment.

Violence in the School Environment

The frequency of violent acts at school was found to have a moderate and significant relationship with educational outcome. School environments where no violent acts occurred were positively associated with an increased likelihood of achieving a tertiary technical education. Youth who reported never having been exposed to violence at school were 10 times more likely to achieve a tertiary technical education than those who report exposure to weekly episodes of violence at school. Additionally, being from a violence-prone community showed weak but significant negative relationship with educational outcome.

This finding is consistent with a wealth of scientific literature that indicates that violence has negative consequences for youth's mental and physical health, long-term decision making abilities, cognitive skills, and academic potential.^{21, 22} With a homicide rate of 35 per every 100,000 citizens and 55 per every 100,000 men, the epidemic of violence in Jamaica poses a serious concern for the country's economic prosperity, stability and peace.²³

One-quarter of urban Jamaican children between the ages of 11 and 12 have witnessed severe acts of violence; 37 percent report having a family member or close friend that was murdered, 46 percent had seen a dead body, and 44 percent had witnessed a stab-wounding.²⁴ These numbers are not conducive to incentivizing long-term planning or investment in education.

Family Examples of Achievement

Examples of academic achievement within youth's families was positively associated with an increased likelihood of pursuing tertiary technical education. In fact, of all the variables explored in this study, examples of achievement—computed as a composite measure of the number of immediate or extended family members who had completed

²¹ Meeks Gardener et al., 2003.

²² Sharkey, 2012.

²³ World Health Organization. Raw Data. 2015.

²⁴ Samms-Vaughn et al., 2005.

high school, post-secondary training, tertiary level training, and were successful in their career—showed the strongest relationship to attaining tertiary technical education.

Spearman’s correlation analysis on each element of the composite variable showed that having family members who had completed tertiary level training has a weak but significant relationship with educational trajectory. Attainment of tertiary technical education was associated with the presence of many persons in the family who completed tertiary level training. In contrast, only completing high school was associated with the having fewer family examples of tertiary level education.

This finding is supported by a breadth of scientific literature examining the relationship between parents’ level of academic attainment and children’s schooling outcomes.²⁵²⁶ Parents level of education can affect youth’s educational outcomes through a variety of mechanisms. For one, parents with low levels, or no formal schooling may lack the tools to help their children with schoolwork, putting them at a relative disadvantage as compared to their peers whose parents are able to support them academically. Not having an educational role model in the family may also put youth at a disadvantage as advance through the levels of education. Youth who do not have a family member who has successfully navigated tertiary institutional admissions requirements may be discouraged as they pioneer the sometimes-complicated application process.

Relatedly, having few or no family members who have pursued tertiary education may be indicative of the relative value that youth’s families place on education. Parents who don’t see the value of advancing oneself through education may inadvertently or deliberately discourage their children from pursuing higher education. Youth may feel intimidated to deviate from the norm and choose the path that their elders have followed.

Awareness of Tertiary Technical Education

Lack of family examples of achievement is related to another barrier that significantly limits youth’s ability to access tertiary technical education: a lack of awareness of tertiary technical educational opportunities. As illustrated by this study, an awareness of the educational opportunities offered at tertiary technical institutions was associated with an increased likelihood of pursuing tertiary technical education. While it is obvious that youth who have previously pursued tertiary technical education will be more knowledgeable about the opportunities available to them, youth who grow up in poor communities, may be isolated from resources and examples that might expand their concept of technical education, and the opportunities associated with it.

Additionally, in poor communities with few employment opportunities that require advanced degrees, the incentive structure is inconducive to investing in higher education. Youth who are unfamiliar with career paths that require advanced degrees or believe they will have to endure a heavy burden to pursue these career paths such as moving far away from family and friends, may not be incentivized to invest their limited time and financial resources in pursuing a tertiary technical degree.

Financial Challenges

Financial constraints—defined as a composite measure of the ability to receive financial assistance from family and reported challenges paying for tuition or school fees—are an obvious and powerful barrier for youth who wish to pursue tertiary technical education. Youth who were interviewed for this study frequently identified financial challenges as a direct barrier to their access and successful completion of tertiary technical education. This finding supports the recent literature that identifies financial challenges as the main barrier to completing technical

²⁵ Clemens, Michael., 2004.

²⁶ Kahn, Iqbal and Tasneem, 2015.

education programmes in Jamaica.^{27, 28} Thirty-seven percent of youth who dropped out of a tertiary technical degree program identified difficulty paying tuition and course fees as a primary reason for dropping out. Similarly, 21 percent of students who dropped out identified difficulties paying for supporting expenses as a primary reason for drop out. These two categories of financial barriers were the single most common dropout reasons identified by tertiary technical students who had failed to successfully complete their program.

"Well overall, I think what is blocking everyone's goals are financial issues. Most of us don't have the money for that head start, so for me personal problem is financial problems." (Male, Urban, High School Only)

"Sometimes I don't have the money to travel back and forth." (Female, Urban, Current Technical Student)

This barrier exerted even more influence when the participant lacked internal motivation and participants who displayed resiliency, were able to overcome obstacles—financial or otherwise. Some youth reported overcoming their financial challenges by simultaneously working while pursuing their tertiary technical degree programs, or through entrepreneurial ventures which provided funding for school supplies. In some instances, they began these efforts as early as high school:

"In fifth form I was like a young entrepreneur, by lunch time everything gone. Every day I made like over JMD \$3,000...so I use that to pay for lab book, and lab coat. I had [studied food services] in high school and that was expensive, and my dad had the light bill and mortgage to pay." (Female, Urban, Completed Technical)

"I was working in Juici Patties so I can pay for my vocational school. How I came up with that idea is when I saw another person in makeup art she was working and paying for school." (Female, Rural, Completed Technical)

However, this obviously brings with it additional challenges, as tertiary degree programs can be demanding, and not all offer part-time or flexible nights and weekends options. Students who were forced to drop out of their tertiary technical degree programs often cited the fact that they dropped out because of their need to work and earn money; this again, is supported by the recent literature.^{29, 30} Thus both poverty and an institutional system that is inflexible to the needs of low income students are a threat to accessing and successfully completing a tertiary technical degree program.

Very few (12%) SBAC respondents who attend/attended TVET institutions stated that their school offered scholarships. In general, most (92%) respondents never even attempted to apply for a scholarship. Students identified not having good grades, uncertainty if they were qualified, and lack of knowledge of where to go for information as the main challenges to getting financial aid or scholarships.

The ILA notes that while all students can apply to the Students Loan Bureau (SLB), there are still barriers. The grants provide less funding for those attending technical institutions than for those attending UWI or UTECH. While the

²⁷ Lindo et al., 2016.

²⁸ Shalienks & Gluszynski, 2007.

²⁹ Lindo et al., 2016.

³⁰ Shalienks & Gluszynski, 2007.

survey did not ask about loans from SLB specifically, few respondents from the technical cohort spoke about institutions offering student loans.

Pregnancy and Children

Although responsibilities such as having a child did not emerge as a predictor in the regression model, Spearman's correlation analysis showed an association between children and educational attainment. Having a child or another dependant family member showed a weak but significant relationship with educational outcomes. Ending one's education after high school was associated with the presence of these types of responsibilities.

Pregnancy also emerged during focus group discussions as a barrier to tertiary technical education, particularly for females. Young women who experience early or unwanted pregnancy face a plethora of associated barriers including an extra financial burden, stigma at school, and in some cases, withdrawal of support from their families.

“My grandmother would say, ‘I have seen it happen a lot of times when young girls get pregnant, the person just abandon them it’s just literally you and the guy’s responsibility and sometimes the guy is not there.’” (Female, Rural, Completed Vocational)

Female students who have children—especially those who do not have the consistent support of spouse, partner, or their family—may also lack access to childcare, causing them to drop out of school. Seven percent of students who were forced to drop out of their tertiary technical programme cited pregnancy as the primary reason for dropout. An inability to manage the workload to properly manage the workload was also commonly cited as a reason for dropout, so one can imagine what this workload might entail for a single mother.

“The work load like, when the instructor them a gi[ve] them maybe the work load like it too much and she can hardly manage to get her assignment them done on time.” (Female, urban, completed high school only)

Parental opinion about the importance of post-secondary education impacted participation.³¹ Students whose parents perceived post-secondary education to be important were less likely to drop out of school. They also stated that, as parental education increases so, does the educational level of their children.

³¹ Shalienks & Gluszynski, 2007

APPENDIX

Spearman's Correlation

SBAC Correlation: High School vs Tertiary Technical			
	r	Significance	Base
Highest level of education would like to achieve	0.09	0.037	539
When I leave (left) high school I am/was ready for the world of work	0.147**	0.001	535
I have control over my own life	0.166**	0.000	539
My parents placed a lot of emphasis on education	-0.091	0.034	539
Do/did you receive career counselling at your high school?	-0.105	0.017	516
Thinking about your high school experience, how frequently did any of the following things happen? [Was punished because of uniform (too tight, too short)]	0.135**	0.002	539
Thinking about your high school experience, how frequently did any of the following things happen? (Was suspended)	0.195**	0.000	539
Experience of violence	r	Significance	Base
Have you ever witnessed violence being committed against a family member/friend/schoolmate?	0.122	0.005	534
How often do violent acts occur in your community?	0.186	0.000	539
How often do violent acts occur in your current school, or previous if not currently in school?	0.456	0.000	539
Is the community that you live in prone to violence?	0.244	0.000	502
Have you or any of your peers missed classes because of violence in school?	-0.164	0.000	539
There is a lot of violence in the community where I live	.212**	0.000	496
I feel safe going to and from school	-0.134	0.033	253
I feel safe while I am at school	0.18	0.004	252
A lot of violent acts occur in my school	0.27	0.000	239
Have you or anyone you know stopped attending some classes because they were being bullied?	0.109	0.013	522
Examples of achievement: How many persons in your family:	r	Significance	Base
Have completed secondary/high school	-0.123	0.005	522
Have done further training after secondary/high school	-0.194	0.000	510
Have completed tertiary level education/training	-0.224	0.000	513
Are successful in their career	-0.168	0.000	520
Have children or family member to take care of	0.209	0.000	539
Financial Challenges (current/last school)	r	Significance	Base
To further your studies after high/secondary school, how easy would it be to receive financial assistance from family/spouse?	-0.184	0.000	534
It is(was) difficult to pay my tuition/course fees	0.134	0.002	532
It is(was) difficult to purchase course materials such as text books/items for practical courses	0.152	0.000	533
It is/was difficult to buy lunch/food at school	0.143	0.001	532
Tertiary Awareness (Agree or Disagree)	r	Significance	Base
NVQ-J Level 3 shows you are competent to be an Independent Skilled Worker	-0.22	0.000	539
NVQ-J Level 4 shows you are competent to be a Paraprofessional or Technician	-0.168	0.000	539
NVQ-J Level 5 shows you are competent to be a Managerial or Professional Worker	-0.235	0.000	539
Based on what you know or have heard, what is the highest level of certification you can achieve at a vocational school such as HEART?	0.32	0.000	377

Regression Analysis

Variables	B		SE	OR
Constant	- 1.009	*	.401	.365
Examples of achievement	.302	**	.09	1.352
Financial difficulties (had difficulties)	-.255	*	.103	.775
Frequency of violence in school				
>Once a month	.747		.480	2.111
Once a month	.817	*	.402	2.264
>Once a year	1.175	*	.510	3.237
Once a year or less	1.606	***	.372	4.984
Never	2.324	***	.393	10.213
Awareness of tertiary technical				
Not aware	-.943	***	.263	.389
Responsibility (child/family member)				
None	.501		.298	1.650

-2LL=369.055

$X^2=111.637$; df=9; $p \leq .000$;

Nagelkerke R²

36.6%

Hosmer and Lemeshow Test

$p=.371$

Classification Accuracy

71.9%

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END NOTES

* The Advance Program defines disadvantaged youth as those who have completed secondary school but have limited access to tertiary technical education. This includes rural and the urban poor, youth living in communities with high crime or violence, indigenous people, and those marginalized due to ethnicity, gender, religion, disability, or sexual orientation or identity.

† In depth interviews with four key disability experts from the following institutions:

- Jamaica Council for Disabled Persons (public relations officer)
- The Abilities Foundation (principal and student)
- Government Official (senator)

‡ The scale showed good internal validity (Cronbach's alpha score of .784), and included the following questions:

- *There is (was) someone in my family I can (could) turn to for advice and help with school*
- *My parents/guardians placed a lot of emphasis on education while I was growing up*
- *My parents/guardians care about me*
- *There is (was) someone in my household to help me with my homework*
- *My family supports me*
- *There is (was) an adult in my home I can (could) talk to about personal issues*
- *There is (was) someone at home who expects me to do well*



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