

2021

Psychosocial and Academic Outcomes of De-shifting Three-Year High Schools in the Republic of Trinidad and Tobago

Joanne Shurland
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Education Policy Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Joanne Shurland

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Karine Clay, Committee Chairperson, Psychology Faculty

Dr. Rachel Gallardo, Committee Member, Psychology Faculty

Dr. Chet Lesniak, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2021

Abstract

Psychosocial and Academic Outcomes of De-shifting Three-Year High Schools in

the Republic of Trinidad and Tobago

by

Joanne Shurland

MEd, Framingham University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Counseling Psychology

Walden University

August 2021

Abstract

The vision of the first postcolonial leader of Trinidad and Tobago was to build a nation of citizens who were educated. Education for All drove the new post-independence government in 1962 with a focus on free and equal education. This was achieved by using a three-year double shift schooling system to provide two school cycles in the morning and afternoon. This system was implemented in the early 1970s but was fraught with challenges. After achieving its Education for All mandate, the government de-shifted the three-year double shift schools and converted these to five-year full day schools by 2008. This study reviewed the impact of the de-shifting initiative on the academic achievement and psychosocial wellbeing of at-risk students in these schools through a theoretical lens of educational change and self-determination. An evaluative mixed methods case study approach was used to address the effectiveness of the rollout of the initiative, factors that could support academic achievement and wellbeing, and making change initiatives more effective. Five administrators from three schools were interviewed, and 13 teachers completed online surveys. Interview responses were coded and responses from surveys were analyzed manually. There were no significant changes in terms of academic achievement of these students, and while stigma persists, many of these students have experienced agency using the new five-year school system. Due to challenges faced during the COVID-19 pandemic, this study should be repeated with a larger sample to include perceptions and opinions of students expected to benefit from changes. Positive social change can occur by promoting community awareness and full stakeholder inclusion in decision-making.

Psychosocial and Academic Outcomes of De-shifting Three-Year High Schools in

the Republic of Trinidad and Tobago

by

Joanne Shurland

MEd, Framingham University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Counseling Psychology

Walden University

August 2021

Dedication

I dedicate this work to the glory of God for only he has given me the endurance to persevere. I thank the Lord who reminds us to “Commit to the Lord whatever you do, and he will establish your plans” - Proverbs 16:3

Acknowledgments

Along this journey, I have had one shining light who listened to my stories, encouraged me when I was uncertain, and had no doubt that I could do this. Thank you so very much Althea Roche for always being there for me. I would also like to thank my committee members, Dr. Clay and Dr. Gallardo for being so understanding and supportive throughout this process.

I want to particularly thank the Ministry of Education for graciously allowing me access into the high schools to conduct my research. A special thank you to all of the staff and administrators who chose to take part in this study during the COVID-19 pandemic when it was such an uncertain time in education.

Finally, to my darling children who saw me working hard and knew just how and when to slow me down for my own sake. All my love to you Ellie and Tijani!

Table of Contents

List of Tables	v
List of Figures	vi
Chapter 1: Introduction to the Study.....	1
Background of the Study	3
Problem Statement	8
Purpose Statement.....	11
Significance of the Study	12
Nature of the Study	12
Types and Sources of Information or Data	14
Analytical Strategies	14
Research Questions.....	15
Theoretical Framework.....	15
Definitions of Terms	17
Assumptions.....	19
Scope and Delimitations	20
Limitations	20
Positive Social Change Impact	21
Summary and Organization	22
Chapter 2: Literature Review	25
Double-Shift Schooling	28
Definition and Rationale.....	28

SDT	38
SDT and Extrinsic Motivation	39
SDT and Intrinsic Motivation	42
Role of SDT in Student Wellbeing and Academic Achievement	44
Change Theory	45
Change Theory and Educational Change	45
Considerations for Educational Change	48
Change Implementation	51
Conclusion	52
Chapter 3: Research Method	55
Research Setting	58
Research Method and Design	59
Research Design	60
Role of the Researcher	66
Methodology	68
Population and Sample	68
Sources of Information or Data	70
Instruments Used, Rationale, and Sources	71
The Pilot: Survey and Interview	71
Data Collection Process	72
Validation Procedure	75
Summary	76

Chapter 4: Findings and Data Analysis	78
Consent for Data Collection.....	79
The Pilot.....	79
Observations and Adjustments to the Pilot.....	81
Data Collection	82
Triangulation and Data Saturation	83
Rigor and Trustworthiness.....	84
Threats to Validity	85
Participants.....	86
Data Analysis	88
Quantitative Analysis.....	88
Qualitative Analysis.....	89
Results.....	90
Discovering Themes	90
Summary	109
Chapter 5: Discussion, Conclusions, and Recommendations.....	111
Summary of Findings.....	112
Interpretation of the Findings.....	113
RQ1	114
RQ2	115
RQ3	118
Limitations of the Study.....	121

Recommendations.....	122
Improving Sampling	123
Learning from the Findings	124
Future Research	126
Implications for Social Change.....	127
Conclusion	129
References.....	131
Appendix A: Recruitment Email (All Participants).....	158
Appendix B: Recruitment Email (Administrator).....	161
Appendix C: Confirmation Email – Principal/Vice Principal	162
Appendix D: Online Teacher Survey Questions.....	163
Appendix E: School Administrator Interview Questions	167
Appendix F: MOE Approval to Conduct Research	169
Appendix G: Request and Permission to Use Instruments	170

List of Tables

Table 1. Graduate and Nongraduate Comparisons of Secondary Schools in Trinidad and Tobago (1977).....	8
Table 2. Type of Secondary Education Offered in Trinidad and Tobago	26
Table 3. Summary of Double-Shift Challenges Found in Literature.....	35
Table 4. Implementation of the De-Shifting Process in Trinidad and Tobago.....	49
Table 5. Survey Participants Profile	87
Table 6. Change in Math and English CSEC Pass Rates From 2010 to 2016.....	93
Table 7. Thematic Groups, RQ1 Interview Questions.....	95
Table 8. Survey Responses	99
Table 9. Survey Responses Breakdown.....	100
Table 10. Thematic Groups, RQ2 Interview Questions.....	104
Table 11. Thematic Groups, RQ3 Interview Questions.....	107

List of Figures

Figure 1. Differences in Enrollment of Students in Secondary Schools.....	3
Figure 2. Differences in Performance of Students in Four Secondary Schools.....	10
Figure 3. Results of Education Articles Search	61
Figure 4. Process Map for Ensuring Reliability and Validity.....	75
Figure 5. Development of Pilot Survey and Interview Questions	81
Figure 6. Math and English Pass Rates.....	96

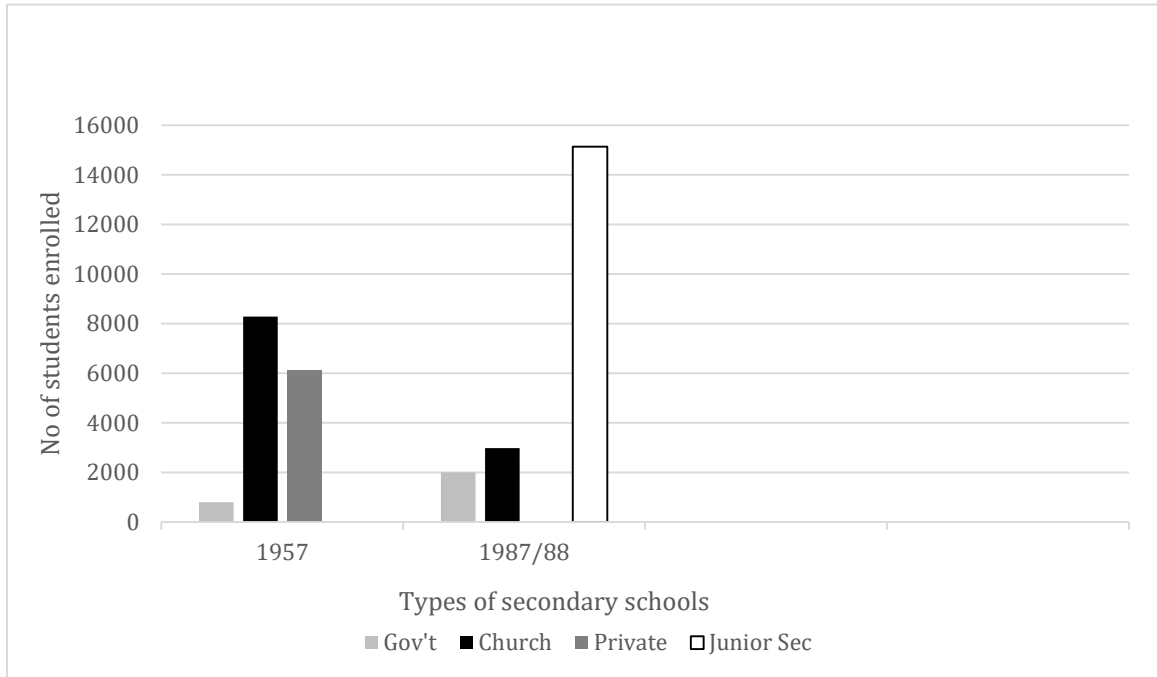
Chapter 1: Introduction to the Study

Between 1930 and 1960, not all children were provided access to secondary school education in Trinidad and Tobago. This luxury was only available to middle and upper-class citizens. After years of post colonization, Trinidad and Tobago's government and education system still functioned following the British tradition (Lochan, 2014). When Trinidad and Tobago (T&T) gained its independence in 1962, the young postcolonial government saw an opportunity to offer secondary education to not only the middle and upper classes but all working-class families. The population of Trinidad and Tobago is now comprised of 40% Indo-Trinidadians, 37.5% Afro-Trinidadians, and 22.5% combination of mixed race, Asian, Syrian, and other ethnicities (Steinbach, 2012).

A 3-year or junior secondary shift system was therefore proposed and implemented from 1968 to 1983. These new schools admitted more students (see Figure 1) and provided a diverse curriculum that catered to students with varying interests. In 1957, there were no junior secondary schools. Government (796 or 5.2% enrolled), church (8,285 or 54.5% enrolled), and private schools (6,106 or 40.2% enrolled) accounted for 15,187 students enrolled in school. In 1988, after the implementation of the junior secondary shift system, government (1,933 or 9.6% enrolled) and church (2,978 or 14.8% enrolled) schools accounted for 4,911 students, while junior secondary schools alone accounted for 15,138 or 75.5% of student enrollment, increasing total secondary school enrollment by 24%. There is no record of any private school enrollment during this period. The benefit of this system was it allowed all primary school students taking

the Common Entrance Examination (CEE) access to not only secondary education, but also academic instruction and technical/vocational and craft skill-training as these students' needs demanded (Alleyne, 1996; Burnham, 1992).

The focus of many primary schools was on techniques needed to master and pass the CEE with top marks, thus allowing students access to prestige church schools. Students who were not in the top percentile were placed in government or junior secondary schools. Many students who scored less than 30% in the CEE were assigned to junior secondary or shift schools, along with another 50% of average performing students (UNESCO, IBE, 2010/11). These students who struggled academically and still had to attempt examinations during year three and later at year five in secondary school became a challenge of the double shift model. This model describes a system of providing education where two separate groups of administrators, teachers, and students share the same school building, at different periods of the day (Bray, 2008). The failure of students to be successful when taking national and regional examinations such as the National Certificate of Secondary Education (NCSE), the year three examination, and Caribbean Secondary Examination Certificate (CSEC), the year five examination, was a cause for the reassessment of the junior secondary school model.

Figure 1*Differences in Enrollment of Students in Secondary Schools*

Note. Differences in enrollment of students in secondary schools pre and post ‘1968 -1983 Draft Education Plan’. Adapted from “Education and Social change in Trinidad & Tobago, Education and Society in the Creole Caribbean”, by P. Burnham, 2011, p. 215-336.

Background of the Study

Trinidad and Tobago are two islands formerly colonized by the British, Spanish, French, and Dutch. They were made a twin island state ruled by Great Britain in 1889. As was common in other Caribbean colonies, a large proportion of the population was comprised of enslaved Africans. When slavery was abolished in 1838, a labor shortage ensued, and indentured workers came from China and India. In the mid-1880s, secondary education in the Republic of Trinidad and Tobago was modeled after Queens Collegiate

School, a British public school for the elite. This school was the embodiment of scholarly achievement for boys and the first public school of its kind. It prepared students spending over 5 years of learning traditional subjects to successfully take Cambridge School Certificate examinations (Burnham, 2011). In 1836, the Catholic church opened St. Joseph Convent, the first secondary school for girls which was a finishing school. Secondary education at the time was available to the elite and middle class of society who had access to private schooling.

The perpetuation of British institutional structures without enough emphasis on national culture, context, and educational facilities that met the needs of the Trinidad and Tobago citizenry effectively perpetuated inequity in terms of quality of education and educational facilities available to secondary school aged students in Trinidad and Tobago (Hickling-Hudson, 2014). As noted earlier, Trinidad and Tobago gained independence from its last colonial ruler Britain in 1962, and became a republic in 1976 (Blair, 2013). In the late 1960s, the government of the Republic of Trinidad and Tobago (GoRTT) focused on the junior secondary model which catered to boys and girls aged 11 to 14. This system involved a double-shift model, allowing for fulfillment of the Education for All United Nations mandate (James, 2014).

Junior secondary schools accommodated students who did not attain required scores to enter five or seven-year secondary schools, and in some cases, were deemed academically at risk (Antoine & Ali, 2016; Mills, 2015). Three-year or junior secondary schools were introduced into the education system of Trinidad and Tobago from 1972

onwards, in response to the government's 1968 mandate of free secondary education for all children (Burnham, 1992), which is discussed in the 1974 Plan for Educational Development in Trinidad and Tobago 1968-1983. This 15-year plan specified the building of new schools which in effect would accommodate approximately 35,000 students and fulfill the goal of educating all children at the secondary level by 1983 (James, 2014). Baker (2007) said the junior secondary system was demotivating and resulted in adverse effects to students mainly in rural neighborhoods, who had to manage a different language (standard English as opposed to Creole) and behaviors different from their own.

Demotivation occurred at both the teacher and student levels of instruction and learning because the teachers at the junior secondary schools felt they were not included in policy formation by nonpractitioners, there was no real attempt by policymakers to improve teacher training for junior secondary teachers, and expectations to produce students who were academically successful without requisite abilities of qualified teachers, contributed to teacher demotivation. The students at the junior secondary schools were impacted by low expectations in terms of their academic ability, teacher absenteeism or lateness to school, and lack of significant certification after completing the 3-year double shift program. The perpetuating colonial class divide caused socialization issues among the staff and students at some junior secondary schools, which led to disruptive behavior, academic failure, attrition, and stigmatization of students who could not cope (Connell, 1993). By 1983, 85% of primary school students in Trinidad

and Tobago graduated to 3-year schools, while 64% graduated to public senior secondary schools or assisted secondary schools. The government of Trinidad and Tobago differentiated schools with the titles: junior, senior secondary/senior comprehensive schools, and denominational schools (Lochan, 2014). The Trinidad and Tobago government's plan based on its *15-Year Plan for Educational Development (1968-83)* document, proposed building new schools in the country, with the focus being at the secondary level. These new schools would accommodate co-ed students (James, 2013). This construction plan originally proposed the building of 45 new 3-year schools that would accommodate 33,500 students on a two-tiered or shift system. By the end of construction, only 21 new 3-year secondary schools were built, and these accommodated 38,800 students in a morning and afternoon shift system, from 7:30 to 12:15 and then 12:30 to 5:10 pm., each day of the week.

Students had an 8-week school break during the months of July and August. At the end of three years of instruction, students who were aged 14 and above were reassigned to 5-year secondary or technical/vocational schools to complete two further years of secondary education. These students were expected to take CSEC examinations to further academic professions or pursue technical vocational education and training (TVET) certification through the National Examinations Council (NEC) in preparation for the workplace (Morris & Powell, 2013). This system was practical to afford primary school students who had to take the CEE at 11+ eligibility to graduate to secondary schools (De Lisle, 2012).

Early in the government's planning stage of providing Education for All in Trinidad and Tobago, the 3-year junior secondary school model was identified as a short-term plan to be adjusted to the 5-year secondary school model (Burnham, 2011). This 5 year model was never concretized in the *15-Year Plan for Educational Development (1968-83)* document. The implementation of the junior secondary school plan had its challenges; some of these included shorter school days, reduced instructional time, lack of proper supervision, fewer opportunities for adolescents to engage in socialization and participate in extracurricular activities, students who displayed behavioral problems, lack of appropriate training for teachers, and disinterest in school work leading to poor academic performance (Mills, 2015). Students experiencing the de-shifted school model who are not academically strong and are not focused in the classroom can be at risk for academic failure. These at-risk students may display a lack of motivation, frustration, and dispassion among other sentiments influenced by social, environmental, or domestic situations. Carrington (1978) said in 1977, five years after junior secondary schools were built, of the 1,110 students registered for exams, only 184 graduated. Junior secondary students made up the most students enrolled at secondary school (see Table 1).

The plan therefore to de-shift junior secondary schools by 2008 came at a time when the government succeeded in placing all primary school students into secondary schools. It was also in response to addressing previously mentioned challenges. Table 1 indicates the difference in success rates at the junior secondary, government secondary, assisted secondary (denominational) and senior comprehensive schools. Although more

students were afforded secondary education at the junior secondary schools, only 16.5% as opposed to 61% at the government schools, 69% at the assisted schools, and 64% at the senior comprehensive, graduated. It is in this context that the review of the de-shifted 3-year junior secondary school model is approached. The government planned to de-shift 3-year schools to 5-year secondary schools by September 2006 (James, 2014). The de-shifting initiative process finished for all 25 schools by the end of 2008.

Table 1

Graduate and Nongraduate Comparisons of Secondary Schools in Trinidad and Tobago

School Type	Enrollment	Graduates	Non-graduates
Junior Secondary	1,110	184(16.5)	926(83.4)
Government Secondary	910	554(60.8)	356(39)
Assisted Secondary	786	541(68.8)	245(31.1)
Senior Comprehensive Secondary	420	268(63.3)	152(36.1)
Total	3226	1547(47.9)	1679(52)

Note. Graduate and nongraduate figures are rounded to the next whole number. Adapted from “Education and development in the English-speaking Caribbean: A contemporary survey” by L. D. Carrington, 1978. <https://repositorio.cepal.org/bitstream/handle/11362/28480/S7800093.pdf?sequence=1>.

Problem Statement

James (2014) said that the Trinidad and Tobago government did not consider the country’s prevailing sentiments about education and educational outcomes or

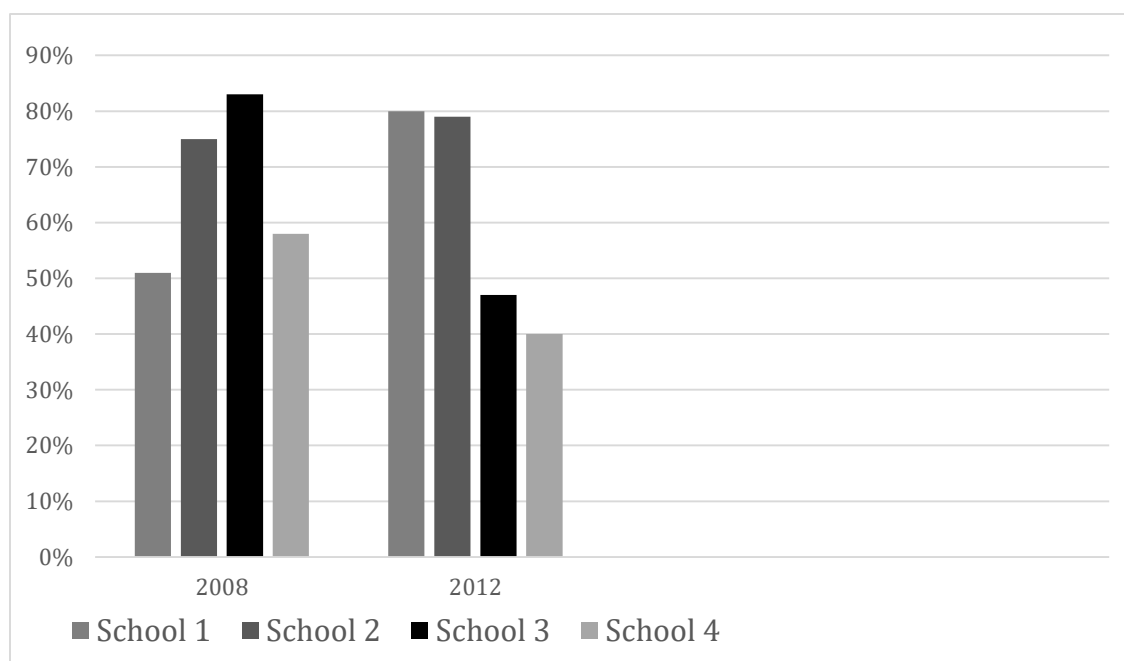
psychosocial concerns of students before implementing the double-shift system. They instead focused on a political mandate to offer education to a portion of the nation's secondary school-age students using the double-shift system. Antoine and Ali (2016) discussed the transition of transfer students from the 3-year junior secondary system to a 6-year secondary school experience and highlighted challenges of transitioning such as inability to cope academically, difficulty making new friends, psychological issues, larger class size, and general difficulty acclimatizing. Students all experienced adjustment problems and did not significantly improve in terms of academic performance.

Shoshani and Steinmetz (2014) noted that in the pursuit of academic success in the United States since the 1980s, the mental health of students has not been given much attention. Mills (2015) said many students experience frustration, behavioral challenges, and lack of self-confidence in order to cope with their work. Even after the de-shifting process, incoming academically at-risk students tend to be unsettled and exhibit dysfunctional behaviors. Reduction of class size along with supportive guidance counseling for students was also an option to improve student learning. Ashong-Katai, (2013) stated that the quality of instruction, short contact hours, and the absence of Arts, Sports, and Moral Education from the curriculum were challenges experienced in the double-shift system. In reviewing the elimination of the Ghanaian double-shift system, she noted that students may benefit from longer contact hours and more careful supervision in order to minimize delinquency. She suggested that general school infrastructure, school resources, and teaching and learning resources could be improved.

Much of the latter research focused on evidence related to increased instruction time, delinquency and better supervision (Garcia et al, 2012 as cited in Ashong-Katai). The overall findings, however, indicated that there was some improvement in academic performance (see Figure 2), but not in all schools

Figure 2

Differences in Performance of Students in Four Secondary Schools



Note. Differences in performance of students in four secondary schools pre and post de-shifting (2008 and 2012). Adapted from *Abolition of the double shift system of schooling in Ghana: policy and its implementation in the basic public schools: A case study of schools under the Accra metropolitan assembly*, by L. N. Ashong-Katai, 2013, Master's Thesis. University of Oslo.

<https://www.duo.uio.no/bitstream/handle/10852/35818/FinalxThesisxDocumentxforxsubmission.pdf?sequence=1&isAllowed=y>

After the completion of the de-shifting initiative in Trinidad and Tobago and 7 years of students taking CSEC examinations at these schools, there is little research focusing on de-shifting efforts in the current 5-year secondary system and their impact on academic performance of students now registered in de-shifted schools.

The intention of this study, therefore, was to ascertain positive and negative aspects of de-shifting initiatives and their impact on the academic achievement and psychosocial wellbeing of at-risk secondary school students in the Republic of Trinidad and Tobago.

Purpose Statement

The primary purpose of this evaluative mixed methods case study was to examine the effectiveness of the secondary school de-shifting initiative, as well as its impact on academic achievement outcomes and psychosocial wellbeing of at-risk secondary school students in the Republic of Trinidad and Tobago. This study addressed experiences of staff at de-shifted secondary schools in T&T during the transition process and their reflections on the aftermath of de-shifting. A review of benefits and challenges encountered during the de-shifting process was used to offer recommendations for the adjustment of the new five year de-shifted schools and findings of the study will be available to the government of Trinidad and Tobago for use by policymakers. These recommendations may be used to address issues or concerns in the secondary school system that can cause barriers to student success. In this regard, the Minister of Education

may find benefits from results to help identify areas where de-shifted school activities can be improved, adjusted, or restructured.

Significance of the Study

In a global environment, education is the impetus for personal success, and in Trinidad and Tobago the vehicle for the government's implementation of the United Nation's Education for All initiative (James, 2014). It is essential to understand if this de-shifting initiative has benefited overall Vision 20/20 goals for Trinidad and Tobago and catered to the needs of particularly at-risk students. Cubukcu (2017) said at-risk students who underachieve do not have confidence, need approval, are fearful, and cannot self-regulate. To date, there has been little review of the impact of de-shifting of 3-year secondary to 5-year secondary schools from 2010 to 2016, but many reports of the regional test results. Findings of this study can be used by the government of Trinidad and Tobago to review the current 5-year secondary school system to address any psychosocial issues and student achievement outcomes attributed to junior secondary school experiences. A review of the secondary school system can afford policymakers an opportunity to determine how students identified as at risk can achieve success and make valuable contributions to the social and economic capital of Trinidad and Tobago.

Nature of the Study

The process of the junior secondary school de-shifting rollout in Trinidad and Tobago was explored in this study. I used an evaluative case study approach with concurrent triangulated and mixed methods data. I preferred this approach because I was

able to collect both types of data simultaneously from each school, and I reviewed quantitative data to determine if it supported or refuted the qualitative data that I collected. Since there has been little review of school de-shifting as it relates to psychosocial wellbeing and academic success of students, the study is unique. Its focus was experiences and recollections of school administrators and teachers who experienced school de-shifting after 2010. I conducted interviews with the administration of three converted schools (pseudonyms are used to identify the schools in this study, Youran High School, Valley High School, and Southern Academy High School) to reveal patterns or themes generated from experiences of staff, which indicated the descriptive richness of narrative data. This approach was therefore suited to the review of information accumulated from 2010 to 2016. I implemented a stratified purposeful approach to sampling to provide a variety of reports and identify similar patterns from specific participants' experiences. Quantitative data collected from the three schools and the Division of Educational Research and Evaluation (DERE) of the Ministry of Education (MOE) was used to add support to interpret reports of participants. Observations of six administrators were recorded with the same semi-structured questions used for each participant.

The intent of face-to-face interviewing is to record data from preset queries to gather specific information (Jamshed, 2014). I sent online questionnaires to all consenting teachers who were on staff when schools were shifted to record their impressions of the de-shifting experience. An analysis of surveys informed the evaluation

of the de-shifting process, and a comparison of the findings (both qualitative and quantitative) was made once data were reviewed.

Types and Sources of Information or Data

School administrators primarily provided data for this mixed methods study along with teachers who responded to online questionnaires. I adjusted the Quality Education survey instrument already developed by Dr. Karine Clay who granted permission for its use. Interview questions focused on experiences of participants regarding the academic performance of students, psychological impact of de-shifting on them, along with issues faced in both 3-year and 5-year school systems. This data was purely qualitative and used to discover themes and patterns relating to psychosocial wellbeing and academic performance of students post de-shifting. The DERE and MOE provided secondary sources of data which included a summary of Math and English pass rates of students who took CSEC examinations between 2010 and 2016.

Analytical Strategies

Quantitative data included information gathered from CSEC examination results collected over 7 years and showed increases or decreases in percentage pass rates over the period under review. NVivo coding software was considered to determine themes, but eventually primary data was manually coded based on repetitive patterns or themes that emerged from one on one interviews. Relevant permissions were granted to engage three secondary schools, each of which has a staff population of over 50 teachers. All staff members, as explained previously, were invited to participate in the data gathering.

Smaller sample sizes of about 30 to 60 participants are most common for educational studies (Slavin, 2008; Suter, 2012). Before formal data collection began, a pilot study was conducted at a nonparticipating high school to ensure the effectiveness of survey instruments.

Research Questions

RQ1: To what extent has the de-shifting initiative in the Republic of Trinidad and Tobago met its objectives of academic achievement and psychosocial wellbeing for at-risk students?

RQ2: What follow up programs and steps can be implemented to help de-shifted secondary schools address the psychosocial wellbeing of students and sustain successful educational change in the Republic of Trinidad and Tobago?

RQ3: What steps can be taken to make change initiatives more effective so that the psychosocial wellbeing and educational needs of at-risk students in the Republic of Trinidad and Tobago are achieved?

Theoretical Framework

Theoretical frameworks used in this study were Fullan's theory of change and Ryan and Deci's self-determination theory. Most educational change is mandated from an official source and because there is little collaboration, which leave educators marginalized (Clement, 2014). Ryan and Deci (2000) said an individual chooses to make his or her own decisions (autonomy), where results are borne from skill and knowledge (competence), and the individual has a feeling of being validated and appreciated by

others (relatedness). These factors determine psychosocial well-being and personal fulfillment (Jang et al., 2016; Silva et al., 2014; Taylor et al., 2014).

Berlach (2010) said three key stakeholders are crucial collaborators in the educational change process: the government, the public service, and teachers. Fullan (2006) said change actions must include critical components such as motivation, which indicates that stakeholders have a desire to embrace change; capacity building, where staff develop new capabilities when positive pressure is exerted; learning in context, where staff is given supportive supervision and best practices are modeled by expert practitioners.

Essential as well in Fullan's change actions are; changed settings so that best practices are spread out externally to other school community networks; self-reflection of one's teaching practice; the collaboration of all stakeholders in education; and resilience, which is a disposition to stay the course and adjust as necessary. I discussed findings regarding these change indicators and evidence during the de-shifting of three junior secondary schools in this study.

Beycioglu (2014) said education as a national priority to improve student success, is seen as highly valuable by the public, but education change is often the focus of governmental policy taken from a top-down perspective. Whether change initiatives are successful or not depends on attitudes of change implementers and agendas of change initiators. How management and leadership of the school handles self-management, responsibilities to governing bodies, and daily operations to achieve success is dependent

on relevant stakeholders' ability to embrace change (Kershner & McQuillan, 2016). A more in-depth discussion of self-determination and change theories is pursued in Chapter 2 as they relate to the topic of de-shifting and its impact on 3-year secondary schools.

Definitions of Terms

The following terms were defined in this study:

Academically at risk: Students who based on some assessment method, do not attain required reading or numeracy skills necessary for their age group, can belong to disenfranchised groups (racial, low socioeconomic, minority, or other), and may not have support at home or in their neighborhoods to access the best educational opportunities (Levin, 2017).

Afro-Trinidadian: An individual of African descent who is a native of Trinidad or Tobago (Figueira, 2010).

Common Entrance Examination (CEE): A selective national test that determines the placement of students transitioning from primary to secondary school based on test performance before 2001 (De Lisle, 2012).

De-Shifting: Junior secondary schools transitioning from a 3-year program that operates on a morning (7:15 am to 12:15 pm) and afternoon cycle (12:30 pm to 5:30), to a 5-year program with a whole day cycle, usually from 8:00 am to 2:30 pm.

Denominational: In the Trinidad and Tobago context, this refers to schools that are owned and managed by ecclesiastical authorities (MOE, 2012).

Indo-Trinidadian: An individual of East Indian descent who is a native of Trinidad or Tobago (Figueira, 2010; Hosein, 2012).

Junior secondary school: An institution which operates classes on a shift system. The first shift is conducted during morning hours and the second shift during afternoon hours. Junior secondary schools provide instruction to children between the ages of 12 and 14 (Alleyne, 1996; GoRTT, MLA, 1966).

Middle class: A segment of the population in Trinidad and Tobago, who are privileged and between the upper and lower class. Privilege is determined by the ability of these persons to access private schools at the primary or secondary level (Burnham, 1992).

Primary school: A school which caters to the academic needs of students who have completed a 5-year Montessori program and enter a system where they integrate into class groups called standards. Primary school students enter school at the age of 5 until age 11 to 15, when they are fully prepared to take the National Secondary Entrance Assessment (SEA) examination, formally known as the CEE (GoRTT, MLA, 1966).

Psychosocial: Factors relating to social or environmental impacts on a person's mental and emotional health that can affect wellbeing and are related to how a person interacts with others or in particular situations at school, work, or in other social situations (Vizzotto et al., 2013).

Secondary schools: Schools which provide whole-day instruction to students from 11 to 20 years of age, who are organized together into five or six class groups, called

forms where Form One students are age 11 to 15, and graduating Form Six students are 18 to 20 (GoRTT, MLA, 1966).

Senior secondary school: Also known as a senior comprehensive school, this facilitates the education of students who are between 12 and 20 in an academic or vocational/technical program that prepares them for level one craftsman or technician certification. This school type also receives 14-year-olds from the junior secondary school system (Carrington, 1978).

Shift System: The practice of conducting classed for two groups of students in one school facility, with two shifts of different students in the morning and again in the afternoon (Bray 2008; Singadi et al. 2014). In most cases, double shift schools begin after 7:00 am and close at 12:15 pm, and start again from 12:20 pm to around 5:00 pm, amounting to two 5-hour sessions (Bervell, et al., 2014; Sagyndykova, 2013).

Upper class: A segment of the population in T&T, who are a privileged, wealthy and are at the highest class level in society, above the middle and lower class (Burnham, 1992).

Assumptions

In preparing to evaluate the de-shifting initiative, I made some assumptions. I assumed all teachers meeting the criteria for the study made an effort to participate in the questionnaire responses. I also assumed the teachers volunteering for the study in the target secondary schools were truthful in their responses to the survey questions; teachers volunteering for the study would agree to participate in the focus group aspect of data

collection; data collection would be completed within a three month period (or in a school term); and the administrators identified at the three schools would be available when data collection began.

Scope and Delimitations

The focus of this evaluative study was experiences of staff regarding the academic performance of students experiencing the new five year system of schooling, after the de-shifting process. The study reviews a period from 2010 to 2016 only. Data were collected from three de-shifted secondary schools over a 5-week period to allow for absences or immediate unavailability of test records.

New teachers to the teaching service at the time of data collection who were on staff were excluded from the study since they did not have the requisite experience regarding de-shifting. I did not review comparisons between selected secondary schools as they pertained to the academic success of students post de-shifting. The study involved using the change and systems theories to provide benefits to educators and MOE policymakers since it relates to improving the secondary school system.

Limitations

A major limitation of this study was that many teachers qualified to be in the study did not want to participate, thus reducing the sample size. This affected the completion time of the study because I allowed many months to pass in the hope that more teachers who met the criteria would participate in the study. Schools were advised of the time during which research would be conducted; however, due to the COVID-19

pandemic, interactions with administrators by phone were challenging. I made a provision for teachers to have an extended amount of time to submit their questionnaires online, but this was not beneficial. While the staff population at the de-shifted schools represent the diversity of staff in the general population, this study did not constitute a random sample. The participants had to fit the criteria of experiencing the junior secondary model as well as the five year model, post de-shifting. Additionally, it was important to consider that the management of school could have an impact on teachers' experiences and thus influence their responses, but in this case, current administrators at each of the three schools were in the role of teachers at the time of the shift system.

Since qualitative data is a part of this mixed methods study, it might be difficult to determine the reliability and validity of the study, along with its possible replication.

Positive Social Change Impact

This study has potential for educators at secondary schools in terms of understanding clearly what changes can be made at the school level to address the academic achievement of students. Along with academic achievement, students' mental and social wellbeing can be enhanced by incorporating personal strength skills programs in schools.

By extension, the MOE of Trinidad and Tobago can also assist these and other de-shifted and public schools by rewriting policies that are suited to the needs of at-risk students and students in general. This may lead to standards of education that are improved in an environment that is rich in strategies, applicable to student achievement,

and can be sustainable in the future. Not only will adjustment or improvement strategies benefit the Republic of Trinidad and Tobago, this will apply to other developing nations who also appreciate benefits of a restructured education system which can be instrumental in building human capital.

Students should not only have to strive to be academically successful but must also be psychologically healthy (Pietarinen et al., 2014), and be provided with the best options for education so they can contribute to broader communities. Policymakers can pursue the goal of developing educational institutions so that students achieve self-sufficiency and become contributors to society (Mitchell, et al., 2015). The value of a restructured education system can lead to changed mindsets that value education, changed structure and differentiated function of staff, and capacity for changing growth in terms of populations of smaller nations (Patil, 2012).

Summary and Organization

The government of the Republic of Trinidad and Tobago (GORTT) has been mostly silent regarding the performance of de-shifted secondary schools as it relates to values derived from de-shifting initiatives. Changes from the de-shifted junior secondary school model to the five-year secondary school model came after 2008 when the government succeeded in placing all primary school students in a government secondary school or senior or comprehensive secondary school that was newly constructed. Several challenges were highlighted before de-shifting that the initiative was expected to alleviate. The main concern was the high rate of academic failure of secondary school

students at junior secondary schools and the impact on these students' psychosocial wellbeing. Trinidad and Tobago government's Education for All plan describes a hope that all secondary school students will be productive and innovative persons ready to enter the national workforce, and was a consideration in the de-shifting initiative.

This study involved evaluating the impact of the de-shifting initiative after 7 years for students at converted 5-year secondary schools and how the de-shifting initiative may have impacted their social and emotional wellbeing. A mixed methods approach was used, where the primary data were qualitative and consisted mainly of interviews and questionnaires with participants selected for this study, in addition to secondary data from CSEC results from 2010 to 2016 for each school. Suggestions are available to the government based on findings of the study. The government can apply results of the study to regional territories that also employ a selective method of placing students in secondary schools.

Chapter 2 includes a review of literature regarding the use of the double-shift system, challenges and rationales to de-shift, extensive information related to the topic of educational change, at-risk students' academic performance and psychosocial wellbeing in secondary schools, and related theoretical underpinnings. In Chapter 3, I review the methodology and discuss philosophical perspectives along with the rationale for choosing a mixed methods design as well as recruitment, study participants, and the study setting. I describe the research design, sample size, and data collection procedures. An analysis and

summary of collected data is presented in Chapter 4, while Chapter 5 includes interpretations of results, implications based on research questions, and relevant literature, along with implications for positive social change and recommendations.

Chapter 2: Literature Review

The primary purpose of this evaluative mixed methods case study was to examine the effectiveness of the secondary school de-shifting initiative and its impact on the academic achievement outcomes and psychosocial wellbeing of at-risk secondary school students in the Republic of Trinidad and Tobago. Education plays a significant part in every child's life. On entering high school, students have already experienced the structures and expectations for attaining successful academic achievement. However, there can be large scale policy changes initiated by government policymakers. Kershner and McQuillan (2016) said changes happen in the school system in staffing, structure, and management which can cause challenges or bring benefits to schools. Rikkerink et al. (2015) said a need for school effectiveness and improvement can be the impetus for change in the school environment. While changes in school structure are necessary at times, Clement (2014) said school change initiated by the government without consultation with key stakeholders can be derailed.

Along with examining psychosocial and academic outcomes of students in secondary schools, I described the double shift system and evaluated the subsequent de-shifting initiative implemented by the government of Trinidad and Tobago, and its impact on students and teachers who were directly affected. Double shift schools were introduced as part of the education system in Trinidad and Tobago in 1972 to accommodate students who did not achieve when taking the CEE (now known as the SEA). This placement examination gave students access to government or

denominational 5-year high schools. The three-year double-shift schools that were built from 1968 to 1983 afforded many students secondary school spaces but registered students based on their success in the CEE (see Table 2). Sagyndykova (2013) notes that while there were concerns with the ability of the students registered for the morning or afternoon shift, all of the students placed in the three-year double-shift schools received a fair chance of basic secondary education.

Table 2

Type of Secondary Education Offered in Trinidad and Tobago

1830s – present Assisted Public (Denominational)	Post 1869 – present Public (Government)	1972-2008 (Shifted) & Post 2008 – present
7 Year school	5 -7 Year school	5 -7 Year school
5 -7 Year school Governed by Church Board	Local School Board setup	Local School Board set-up
Academic achievement – High	Academic achievement - Average- High	Academic achievement - Average - Low

Note. Adapted from “Nationhood from the schoolbag: A historical analysis of the development of the secondary education in Trinidad and Tobago,” by M. H. McD. Alleyne, 1996. Washington, DC: Organization of American States.

De-shifting is the term used to describe the conversion of two-shift or double-shift schools to whole day schools to lengthen the teaching time of staff during the school day (Elsayed & Marie, 2015; Sheryn, 2011). Though this is the basic premise of de-shifting,

different countries had varying objectives based on their individual needs. Trinidad and Tobago's reasons involved providing quality education for all students in practical full-day school situations, as well as diminish misbehavior within social groups and curtail nonattendance. De-shifting 3-year secondary schools became the Trinidad and Tobago government's response to many calls from citizens to ensure all students received five year full day secondary education. Literature relating to the topic of de-shifting three year double shift secondary schools to five year single shift secondary schools in the Republic of Trinidad and Tobago is limited. Research can be found however on the two-shift system highlighting de-shifting and conversion of these schools in other regions such as Singapore, Maldives, Africa, and Europe. In Trinidad and Tobago, at-risk students were not receiving the most benefits from double-shift schooling (Alleyne, 1978; Burnham, 2011).

This review is focused on current research regarding double shift schools and de-shifting, the self-determination and change theories in an educational context, and policy implementation relative to change. The impact of educational reform on academic achievement and student psychosocial wellbeing is discussed. Data for this literature review came from EBSCOhost, PsycINFO, ERIC, ProQuest, Google Scholar, doctoral dissertations, government documents from government organizations both internationally and the Republic of Trinidad and Tobago, working papers, and some UN publications. The following search terms were used in this study: *double-shift schools, de-shifting, school effectiveness, academic achievement, educational change, psychosocial wellbeing,*

self-determination, policy implementation, education change. Articles sourced were only in English, and the research method used was mainly a qualitative approach. The majority of literature was published after 2013 to maintain the applicability to current experiences.

This chapter has been arranged into three topical areas: background of double-shift schools and reasons for de-shifting, how the self-determination and change theories are relevant in an educational context, and policy and implementation of educational change for academic achievement of at-risk students. I address the double-shift system, challenges and benefits of the system in terms of academic achievement, and psychosocial wellbeing of students through a review of the literature.

Double-Shift Schooling

Definition and Rationale

The idea of double-shift education originated in the early to mid-1900s, when there was economic decline in countries such as Britain and America during and after World War I and II and a need to accommodate many displaced students. After the UN's mandate of Education for All was initiated in 1990, developing countries implemented education policies that sought to afford all children access to education, but because of limited financial resources, many opted for the double-shift model. Bray (2008) defines the double shift model and identifies the various forms and rationales, challenges and benefits of the double-shift model. Several governments of developing countries used this model as the government of Trinidad and Tobago did, to provide education for both

primary and secondary school students at a low cost. (Arceo-Gomez, et al., 2016; Ashong-Katai, 2013; Cacho et al., 2019; Lusher & Yassenov).

Double-shift schooling refers to a situation where one school facility accommodates two shifts of different students in the morning and then in the afternoon (Bray, 2008; Singadi et al., 2014). In most cases, double shift schools begin after 7:00 am and end close to 12:15 pm. Classes start again around 12:20 pm to around 5:00 pm, which amounts to two-five-hour sessions. Double-shifting does not only occur in developing countries; Some first world countries such as the United States, Britain, Germany, Singapore, and India have implemented this system (Bray, 2008; Silova, & Brehm, 2013). Several countries, both developed and developing have used this type of schooling in order to facilitate the Education for All mandate for example, Bangladesh, Brazil, China, Jamaica, Philippines and Senegal.

Governments of developing countries with low economic capacity and growth have used this model to provide school spaces to accommodate more students, particularly in rural or impoverished areas. These developing countries usually have rapidly growing school-age populations but insufficient resources to build new schools. This system effectively reduced the cost of providing educational opportunities for many children. The shift system introduced in Trinidad and Tobago in 1968 was considered by the population to be imposed on the country by the Trinidad and Tobago government as a temporary measure and implemented to accommodate the large numbers of students needing placement at the secondary level. There was a general sense of segregation since

the shift system did not offer the same instruction time afforded to students at five year schools. The population was concerned about the social outcomes, supervision, and academic problems of students attending double shift schools (Alleyne, 1996; Burnham, 1992). In Florida, double shift schooling is utilized to cushion the effects of hurricanes which might cause the closure of schools during prolonged recovery from this type of natural disaster, without putting pressure on limited state resources (Sagyndykova, 2013). Likewise, Cacho et al. (2019) noted that double shift schooling is used in the Philippines as a temporary measure after natural disasters. In Mexico, the shift system is used to mitigate the effects of low resources on the country's education system and to be current with UNESCO's education for all policy.

Much of the literature on double-shift schooling focuses on several key areas; teacher/student contact time and interaction, curriculum delivery, social challenges of students, shared facilities management, co-curricular and extra-curricular activities, and the academic performance of students particularly by morning or afternoon shift (see Table 3). Like Trinidad and Tobago, Ghana implemented the high school double-shift system as a temporary plan to accommodate more students where physical plants were not available (Ashong-Katai, 2013; Bervell, et al., 2014). The country's economic situation could not support spending on the construction of new schools and as was done in Trinidad and Tobago (Nakhid, et al., 2014), the Ghanaian government used this method as part of their education reform plan. The initial idea of utilizing this type of schooling as a temporary facility, did not materialize due to the sheer demand for school

placement for all students and the lack of financial resources to build more schools. In Trinidad and Tobago double shift schools accommodated two different sets of teachers on each shift, whereas, in the Ghanaian system, the same teachers taught on both sessions due to the shortage of qualified teachers (Arceo-Gomez et al., 2016; Ashong-Katai, 2013). Much of the literature relating to double-shift schooling discusses the academic ability of morning and afternoon shift students and how the time of day might impact students' success (Dimitrova, 2017; Martin, et al., 2016; Shapiro & Williams, 2015).

Challenges Faced in Double-Shift Schools

Early in the introduction of shift schooling in Trinidad and Tobago was the public sentiment that the three-year shift system promoted non-supervision of school children, encouraged social dysfunction, boredom, aggressive group behavior in some, poor academic achievement, less teacher/student class time and reduced extra-curricular or sporting activities (Burnham, 1992). One of the main concerns previously mentioned with the double-shift type system was the supervision of students out of school during either the morning or afternoon periods (Hincapie, 2016; Kurebwa, & Lumbe, 2015). There was low attendance on the afternoon shift period, lack of attention, and general fatigue of students. These students also exhibited some social dysfunction, including behavior issues (Fabregas, 2017). Although there is much discussion in the literature regarding the behavior of afternoon shift students, there is limited mention of behavior issues among morning shift students. The Ghanaian, double-shift system experienced challenges such as truancy of students, pressure on teachers to deliver the curriculum to

students, with little time to achieve this, insufficient furniture and resources, and poor academic outcomes for the students in this system.

Ashong-Katai (2013) determined that the double shift saw less contact time between teachers and students, reduced syllabi, tired students and teachers in the afternoon hours, poor socialization, poor academic achievement, and limited access to extra-curricular and athletic activities. The findings also indicated that the double-shift produced students who were prone to social dysfunction such as, delinquency, risk-taking behaviors with little emotional capital developed. Many also had little self-confidence and low self-esteem. In the Philippines, Cacho et al. (2019) conducted a study of a double-shift initiative which became necessary due to unavailability of classroom space. This initiative was a short-term solution for the Philippines which lasted one month. In this study, the use of a double-shift system did not reveal many of the challenges observed in countries employing long-term double-shift sessions.

Mexico's double-shift system experienced similar challenges described earlier in the Trinidad and Tobago experience, among these, were lower student achievement on the afternoon shift, and the possibility of student attrition. Though student achievement on either shift is affected by several factors such as; teacher training and interaction with students, peer ability, parental support, among others, there is insufficient empirical research to suggest that one shift is superior to the other (Fabregas, 2017; Munoz-Pedroza, 2016; Sagndykova, 2013). Apart from the effect of double-shift schooling on the students, there was also the challenge of maintaining the very infrastructure

facilitating the education of multiple students. Kurebwa, and Lumbe, (2015) and Mapolisa et al. (2016) point out that teachers found classrooms from either the morning or afternoon shift left in undesirable conditions. Sharing the same classroom space proved challenging since personal items could be lost, notes on the chalkboards would be erased, and furniture was often worn or damaged.

In total, the literature regarding the challenges faced in double-shift schools is similar, but most importantly the class time interaction of teachers with their students and the academic performance of students seems to be the most constant concerns with this system.

Perceptions of stakeholders regarding a better shift might be attributed to a selective system of assigning students to double shift schools in the process used in primary school promotion examinations such as, Trinidad & Tobago's Secondary Entrance Examination [SEA], which was formally known as the Common Entrance Examination (CEE), Ghana's Basic Education Certificate Examination [BECE], and Mexico's Certificate of Primary Education (CEP), for entrance to one of the Schools of Sciences and Humanities [CCHs] The literature suggests that the double shift system, though useful for most developing countries as a temporary means to achieve Education for All was fraught with many challenges depending on the specific culture utilizing this option. While the shift system afforded some families the ability to use children in economic pursuits, others were concerned about non-supervision during the evening hours mainly, and the negative social behavior observed. Governments that implemented

the double-shift model had to manage their scarce teacher and educational resources to provide instruction to students.

In African countries, especially, the infrastructure was noted to be inadequate and in poor condition. The outcome of this initiative to provide equitable access to education, in most cases did not achieve the relative performance successes expected among the many students served (Ashong-Katai, 2013; Bervell et al., 2014; Kurebwa & Lumbe, 2015).

Rationale for De-shifting

In Trinidad and Tobago, the building of junior secondary schools afforded the government a mechanism to provide affordable free secondary education to the nation's children. In the plan for education reform, which spanned fifteen (15) years from 1968 - 1983, the government planned on five years of mandatory secondary education for students. The shift system allowed students access to instruction on a morning or afternoon but not without challenges. Many students were unsupervised during the non-school period; extra and co-curricular activities were limited; there was also the challenge of untrained teachers; students' academic achievement was poor; some students displayed negative social behavior. These concerns among others, motivated the government to pursue the abolition of the double-shift Junior Secondary school system in Trinidad and pursue the abolition of the double-shift junior secondary school system in Trinidad and Tobago (Alleyne, 1996). In assessing the 1968- 1983 15-year plan, there was concern

Table 3*Summary of Double-Shift Challenges Found in Literature*

No	Author(s)	Limited teacher/Student interaction	Limited curriculum delivered	Social/Behavioral issues	Limited co-extra, curricular activity	Infrastructure problems Cost of resources	Poor student performance especially PM shift	High teacher/student ratio
1.	Acero-Gomez et al. (2013)			√			√	
2.	Ashong-Katai (2013)	√	√	√	√	√	√	√
3.	Bervell et al. (2013)	√	√	√		√	√	
4.	Burnham et al. (2011)			√	√		√	
5.	Cacho et al. (2019)	√					√	
6.	Cardenas & Cruz (2017)	√						
7.	Dimitrova (2017)						√	
8.	Fabregas (2017)	√		√			√	√
9.	Hincapie (2016)			√				
10.	Kurebwa & Lumbe (2015)	√	√		√	√	√	
11.	Lusher & Yasenov (2016)						√	
12.	Munoz-Pedroza (2016)			√				
13.	Sagndyko va (2013)	√	√				√	
14.	Sheryn (2011)	√	√	√			√	
15.	Singadi et al. (2014)	√	√		√	√		

surrounding the process of de-shifting and the cost involved, however, the low performance of the students on the regional and other external examinations and the fact that many of these students were unsupervised during the day compelled the government to de-shift all junior secondary schools in Trinidad and Tobago by 2009.

In their research looking at the benefits of five or more years of secondary education, Clark and Bono (2016) analyzed the transitioning of low performing students to non-elite (4-year) secondary schools and high achieving students to elite (6-year) secondary schools in the United Kingdom and discovered that a selective system was used to place high-performing students, much like the system used in Trinidad and Tobago. In Trinidad and Tobago, students who are academically strong fill places in high-performing denominational or 5-year secondary schools. Six-year school attendance increased the probability of post-education for males by 3.5 years and about 3 years for females. The likelihood of girls achieving qualifications 2 years after compulsory secondary education ended, increased by 56%, and for males, this increased their potential of earning degrees by more than double compared to the control group or those with low scores who did not attend elite schools. Students having shorter secondary school attendance may have been distracted by at-risk behavior and peer interaction that prevented postsecondary education.

In other territories the arguments for de-shifting schools stemmed from the specific challenges noted earlier. In the African context, Ashong-Katai (2013) stated the reasons Ghana de-shifted schools were to; improve the quality of education, prevent

truancy, increase teacher student contact time, to improve student performance, and to preserve school facilities. Results from other research pointed to the negative impact of the double-shift system for many stakeholders (Bervell, et al., 2013; Kurebwa & Lumbe, 2015; Singadi et al., 2014), although Orkodashvili, (2009) noted that poor academic performance was not always an outcome of double-shift schools. Latin American researchers' review of double-shift schooling, revealed similar challenges to those of their African counterparts. However, more focus was placed on the inequity of the selection process (Munoz-Pedroza, 2016; Sagndykova, 2013). Hincapie (2016) illustrated the benefits of whole day schooling and noted that Chile and Uruguay already employ full-day school systems, while Colombia offers parents mixed options of full-day and double-shift schools. They pointed out that a longer school day can have a positive impact on student achievement, but this is not empirically proven for all schools. The overall results highlight the fact that in many developing countries, the double-shift system has encountered challenges. Challenges range from reduced supervision of students, the inequitable selection of students to shifts, the impact on infrastructure, among others. However, the system has achieved the goal of providing education for a multitude of students who would not otherwise have received such an opportunity.

The discussion of the double-shift system in various countries has provided several insights into the benefits and challenges faced in this system, and the impact for policy-makers and parents. It gives a limited view; however, of the effect on the children within the system and how they managed the vagaries of policies expected to improve

their position and develop their academic potential. It is important, then, to look at the students' needs in the school system and their ability to achieve psychosocial well-being and the opportunities to excel academically.

SDT

What a student chooses to accomplish in the classroom is dependent on several factors. The subsequent actions result from intrinsic or extrinsic motivation and volition. A self-determined student is one who can do work independently, relate to their environment, and who is competent at the tasks in which they engage. These factors comprise the basis of a student's psychosocial health (Jang et al., 2016; Ricard & Pellelier, 2016; Taylor et al., 2014). The aim of governments of many developing countries after the United Nations mandate of Education for All at Dakar in 2000 is to ensure access to education for all children, however, whether governments consider all of the factors that promote successful learning, other than a student's ability to go to school, is also relevant.

In Trinidad and Tobago, the government looked at diversifying the academic program to a more vocational and craft-oriented curriculum so that unprepared students at the primary level could still receive certification after five years of secondary education (Alleyne, 1996). Also, in the Trinidad and Tobago context, Antoine and Ali (2016) noted that students who left the double-shift system and entered a senior comprehensive school to complete their secondary education experienced challenges with self-confidence, socialization with peers, poor attitudes, and dysfunctional behavior due to the difficulty in

adjusting to the new environment without the support of familiar peers. Other researchers noted a lack of motivation and low self-esteem among students of the double-shift system (Ashong-Katai, 2013; Thomas, 2014), a lack of self-determination, and an inability to develop self-efficacy and self-worth (Baker, 2007).

Self-determination as conceptualized by Deci and Ryan (2000) is a theoretical perspective that investigates the outcomes of human motivation, whether autonomous or externally directed. Many researchers have conducted studies surrounding self-determination, but the question of what causes students to pursue actions that fulfill basic needs might provoke ideas regarding the causes of personal success or challenge in the educational context, along with identifying how motivation relates to self-efficacy and well-being. The answers to these questions might provide insight into the psychosocial and academic impact of the de-shifting process on the students who attended double-shift schools. The social aspect of the school context is relevant since it can point to the factors that impact students' behavior from an environmental or external motivational perspective. The culture within which a student lives also has a part to play on expectations for students (Ryan & Deci, 2012; Thomas 2014). How parents, teachers, and society value education and the effort in achieving academic success has been shown to impact the psychological health and well-being of students (Ryan & Deci, 2016).

SDT and Extrinsic Motivation

Motivation, as it relates to students, can be viewed in two ways; the desire to engage in learning activities/strategies, with the aim of gaining academic achievement or

the drive to engage in behaviors based on beliefs or values that are not inspired by external factors (Sinclair et al., 2017). Much of the research on student motivation describes *intrinsic* and *extrinsic* motivation and how these affect the student's experiences in the school environment (Ricard & Pelletier, 2016; Ryan & Deci, 2012; Taylor et al., 2014). Silva et al. (2014) posit that the type and quality of motivation are essential in determining the outcome of individual action. They note the effects of relationships and other environmental factors on personal activities and the amount of help (need-support) the individual might receive in achieving his or her success. Likewise, Jang et al. (2016) said teacher support is vital for students to develop independent learning. However, they go a step further to suggest that knowing and utilizing student's favorite learning methods in classroom instruction improves the chances of student success and self-efficacy. In the earlier review of the double-shift system, the literature revealed challenges with teacher-student relationships in the school environment and how those relationships impacted on students' experiences in the double-shift structure (Antoine & Ali, 2016; Ashong-Katai, 2013; Kurebwa, & Lumbe, 2015).

Parents are important in supporting students' pursuit of academic success. As the primary providers of children and in most cases, the source of teaching cultural norms and value systems, parents or care providers play the most instrumental role in the extrinsic motivation and self-determination of students by teaching them and supporting them to determine what value there is in education. Teachers and peers are also critical

motivators of promoting self-determination (Pietarinen, et al., 2014). Mitchall and Jaeger (2018) looked at the ways parents, and other caregivers motivated their dependents to pursue a college education. They noted parents' ability to be collaborative by providing meaningful interaction, as opposed to an 'anything goes' position was necessary for developing student independence. Students reports of parental or caregiver support indicated that these influential adults played vital roles in developing students' sense of autonomy most, before competence and relatedness.

Duineveld et al, (2017) determined in their research that both mothers and fathers were instrumental in encouraging the development of their charges' independence during movement from one school level to another and their support and guidance promoted academic success and well-being. These parents support their children by understanding the child's motivations, helping them to make responsible decisions, and promoting initiative and creativity. In another study, parent support was a variable in determining dropout probability, this study's findings also showed the impact of relatedness to peers (peer support), in completing the high school program (Ricard & Pelletier, 2016). Overall, however, parental support was the most significant factor regarding autonomy and students' self-esteem over long-term periods. However, while extrinsic motivation can propel future academic success or goal achievement, in many cases, the accomplishment comes at a psychological cost often resulting in anxiety, feelings of being pressured, and ultimately impacting well-being.

SDT and Intrinsic Motivation

Thomas (2014) reported in her research to determine students' interest or lack of interest in school work at a high school in Trinidad, that intrinsic motivation (interest), teacher interaction, parental support, and peer support were the main factors in predicting students' success. Though, teacher support was most significant in the students' interest in school work. Baker (2007) also highlighted these factors in their study of teacher impact on student success and their findings similarly indicate as does current research, that positive teacher interaction influences student success (Pitzer & Skinner, 2017).

A student who chooses a course of action in his or her learning, because of an innate desire is said to be intrinsically motivated. Multiple research studies have found that intrinsic motivation promotes personal success and self-efficacy (Dubé, et al., 2015; Orsini, et al., 2015; Taylor et al., 2014). When students internalize particular desires based on their values or beliefs, a level of self-awareness and independence become evident. The information or knowledge that a student gains takes on relevance, and they have an unclouded, purposeful intention that is manifested by language and behavior which is positive and growth sustaining (Van der Kaap-Deeder et al., 2016; Cerascoli et al., 2014; Vansteenkiste et al., 2018). When students have choices and are nurtured in school environments that are supportive and collaborative, in addition to encouraging active learning and independence, the student can self-actualize and feel that he or she is in charge of their understanding (Orsini, et al. 2015). In the junior secondary or double shift environment, the suggestion was that the extensive infrastructure and the procedure

of students moving around the compound to specialized classrooms, promoted in many cases disengagement from the ability to effectively interact in and ultimately internalize the learning process. Assignments, projects, and other learning methods were controlled and directed solely by teachers without giving students much choice to decide how they learned (Thomas, 2014; Baker, 2007). Studies have noted that students who feel independent and can determine how they learn, find value and relevance in what they do in school (Evans & Boucher, 2017; Vansteenkiste et al., 2018).

While desire and curiosity can motivate students, the fostering of a supportive and relevant environment to the student promotes the internalization of the subject matter. Students also want to feel capable of handling the task they engage in, and successfully completing it. They may take on individual responsibility for their success because they can appear to be smart, have more opportunities later in their lives, or find joy in the discovery of knowledge. When the intrinsically motivated student finds satisfaction in identifying their interests, the actions they take in determining the engagement of learning becomes relevant to their goals. The Vansteenkiste et al., 2018 study indicated students do not always need external drivers to develop ownership or internalization of behaviors. Findings also showed that external motivation once fully internalized, complemented intrinsic motivation.

Taylor et al. (2014) conducted a meta-analysis of the influence of intrinsic motivation on academic achievement. Their findings indicated that intrinsic motivation was the most important factor having a positive impact on academic performance over

time, which built on students' sincere desires, ability to choose, supported autonomy, and which promoted well-being. Duineveld et al. (2014) however, put forward a compelling argument on how intrinsic and extrinsic motivation affect performance. In their meta-analysis which reviewed forty years of research articles, the findings suggest that intrinsic and extrinsic motivation are key drivers of self-determined learning that co-exist to result in student success but intrinsic motivation was a better predictor of well-being.

Role of SDT in Student Wellbeing and Academic Achievement

Self-determination focuses on an individual's ability to fulfill basic needs, but in specific nurturing environments that produce psychological well-being along with the successful accomplishment of identified goals. When a student internalizes beliefs, behaviors, and values because self-motivation has taken place, the student achieves a sense of ownership, self-confidence, and well-being (Ryan & Deci, 2016). The student's satisfaction of being competent, independent, validated, and relevant in a group is the culmination of personal accomplishment that he or she has achieved the 'standard' within the institution or another social arena; and is the impetus for taking his or her place in the world. Pietnarian et al. (2014) said that the student's experience in the school context is moderated by the actions of the teachers and peers, along with the support of parents. These supportive actions are - being positive, accepting, fostering success, building the self-esteem, and efficacy of the student to be psychologically healthy, which results in the overall well-being of the student. Likewise, Bailey and Phillips (2016) support the role teachers can play in the building of confidence in intrinsically motivated students and

strengthening of their mental health. They reported that classroom environments that encourage collaboration and engagement, apart from promoting well-being, also predicts academic success.

Additionally, autonomy, competence, and relatedness, as identified in self-determination theory are applicable cross-culturally. In a study in Portugal, students there showed similar frustration when learning, if they had little opportunity to be autonomous (Cordeiro et al., 2016). They also did not feel accomplished. Other international studies in Europe, South America, and China, align with the results of Deci & Ryan's early research on self-determination as well as the observations by researchers in the Trinidad and Tobago context that students can benefit from the positive interactions of their teachers (Antoine & Ali, 2016; Baker, 2007; Thomas, 2014).

Overall, students' wellness result from a positive outlook and reinforcing social interactions from significant others. Van der Kaap-Deeder, et al. (2017) observed the most support coming from key influencers in their lives are their mothers, siblings and teachers.

Change Theory

Change Theory and Educational Change

Change is a natural phenomenon in life and is a part of all systems and processes. The same occurrence is evident in social and organizational functions. While there have been many models of change over time, Kurt Lewin (1890-1947) may be considered the creator of change systems. His student Lippitt, and later followers such as Schein,

Jacques, and Robbins helped to develop change theory (Cummings et al., 2016) from the famous unfreeze, change, refreeze model which became the basis for the various modern change models. The basic model suggests a process where there is some reason or situation that demands change (propelled by an instigator of change), next, there is a plan of action (the goal) to implement change and a process of communicating with others. Finally, the change process is operationalized and consolidated as the new organizational policy (the social impact of change). Change however, in organizational situations, is based on the premise that there is merit in adopting a new system as opposed to the current system. The instigator may apply pressure, and resistance might be the response of the implementers.

Berlach (2010) argues that change is often met with resistance if there is no real desire to change (from within) and that the most successful change results from intrinsic motivation as opposed to external forces. When one resists change, it is often in the form of live confrontation, subtle negative engagement, or veiled compliance. The process therefore, must be one that is negotiated carefully (Hussain et al., 2018). Michael Fullan, a Canadian authority on change policy also promotes change processes but focuses more specifically on education change and change implementation. His observation of resistance determined that persons expected to work in a new environment are not always vested and on board. The call for change is often 'top-down' with little or no collaboration, and instigators do not consider the context and culture within which change must occur (Fullan, 2016; 2009).

Educational change is not a new concept. Several countries reviewed their systems of education based on the growing needs of the population and implemented reforms. Bourgon (2008) as cited in Berlach (2010) suggests that national reform policy must be cost-effective and incur as little negative outcomes as possible to accrue long-term benefits. The most common reason for education reform is the development of skilled people as well as the ability of each citizen to have access to social mobility and economic comfort (De Lisle et al., 2010; Jasaveric & Kuka 2016; Mitchell et al., 2015; Zajda, 2015). England led the world in education reform in 1997 with a national Literacy and Numeracy improvement program for all 11 year old students. Other countries such as, Finland, Hong Kong, South Korea, and Singapore implemented systems to improve their education systems and can be considered some of the countries with the most successful education systems today.

Fullan (2006) highlights seven factors that must be considered to facilitate change, these include: desire and volition, development of persons involved in the change, situational learning opportunities, shared wide-scale learning, self and shared-reflection, the involvement of all parties, and persistence with flexibility. KarMee et al. (2016) reviewed these seven factors and confirmed three key facts after Fullan (2006) which are: change is not automatic, leadership must be knowledgeable, and results may only be evident years later. In Trinidad and Tobago, the impetus for educational change was driven mainly by an outcry for equity in the secondary school system by parents and guardians (Alleyne, 1996; Burnham, 2011; James, 2014) along with the government's

planned phased program to de-shift by 2008. The process of change does not occur overnight. For example, in an Australian model, three identified phases were initiation, development, and consolidation (Pendergast et al., 2015). The same three-phase model has been termed initiation, implementation, and institutionalization (Baglibel et al., 2018; Hargreaves et al., 2010). The Australian system-wide change involved the movement of a national student cohort from primary level to secondary level and changing the structure of these two levels of education. In the Trinidad and Tobago context, the de-shifting of junior secondary schools was a phased activity similar to the Australian experience (see Table 4.)

Considerations for Educational Change

When education change is system-wide, it is usually politically motivated and involves the implementation of the reform policy in all the affected schools at the same time. Affected schools are expected to work through change adjustment as a collaborative group of educators. This process of change suggests that some pressure could be utilized to fulfill goals and deadlines. Whatever the rationale for change, in most countries, improved academic performance of students is often included in the rhetoric (Berlach, 2010; James, 2014; Rikkerink, 2015; Sheryn, 2011).

However, while governments may introduce national education reform, the schools and students along with the general community all must be considered

Table 4*Implementation of the De-shifting Process in Trinidad and Tobago*

INITIATION	DEVELOPMENT	CONSOLIDATION
1-2 Years	2-5 Years	Complete Roll-out 5-10 Years
Introduction of the policy	Pilot of de-shifting process	Completion of the de-shifting process
Explanation of de-shifting process to stakeholders	Review and adjust methodology	Review and engagement with personnel and other stakeholders
Identify and record needs for quality and success	Devise and roll-out support mechanisms for stakeholders	Check of institutions that are not ready
Plan timeline for support before implementation	Check for and repair Challenges	Evaluate entire process
(clear communication with support)	(shared practice with support)	(solidification of the new system with support)
Initiation	Implementation	Institutionalization

Note. Adapted from “The education change model as a vehicle for reform: Shifting year 7 and implementing junior secondary in Queensland,” by D. Pendergast, K. Main, G. Barton, H. Kanasa, D. Geelan, and T. Dowden, 2015, *Australian Journal of Middle Schooling*, 15 p. 6-7, and “Second international Handbook of Educational Change,” by A. Hargreaves, A. Lieberman, M. Fullan, and D. Hopkins, 2010, Vol. 23, p. 71, Springer Science & Business Media.

However, while governments may introduce national education reform, the schools and students along with the general community all must be considered (Luttenberg et al., 2013). There are three major players in the education change process

the state entity, the state employees, and the teachers (Berlach, 2010). Berlach however, neglects significant players in the process, the parents, who literature has shown to be instrumental in the academic success of their children, therefore their acceptance of proposed change would be vital. However, in reviewing the challenges of educational reform, Burner (2018) does recognize the importance of including parents by noting that parents should be engaged in a discussion about the impact of the change on their children. Hargreaves et al. (2010) observe change that is initiated by policymakers does not ensure that at the institutional level, the change will occur. Governments form policy and monitor practice implemented by teachers, but autocracy without stakeholder inclusion in decision-making often produces angst and disillusion. The top-down model of change policy and roll-out becomes challenging to manage when there is little or no collaboration and interaction with the implementers of the changed policy, the teachers. (Clement, 2014; Wood 2018). Politicians sell jargon to their political advantage but have no real accountability in the classrooms, leaving educators to facilitate reform (Berlach, 2010).

Change is determined to be driven by implementers in the field as opposed to the bureaucratic proclaimers of reform, yet all three entities (state entity, state employees, and teachers) must work together to effect successful change (Naicker, & Mestry, 2016). In the history of education, the bottom-up approach to change management however, is rarer (Baglibel et al., 2018). Localized school approaches to mandated change can achieve success if staff feel vested in it, if they are included in change decisions, and if

aligned to the vision and mission of the school. Also, when teachers are enthusiastic about change, their positive feelings are perceived to relate to rewards for their students' learning (Hargreaves, 2004 as cited in Clement, 2014) and can influence the long-term success of the reform. In the Trinidad and Tobago context, the system-wide education reform in the late 1990s to early 2000 was the de-shifting process of junior secondary schools and communities, parents, and teachers welcomed this change. While there were some concerns, the process was implemented and institutionalized over a period of time.

Change Implementation

When school change is expected to be initiated by school principals, as mandated by the state entity, the process follows a three-phase system towards successful implementation of change practices. The second stage of development or implementation sees school staff operationalizing the change. Several factors at this stage can determine the outcome of change implementation. Schechter and Shaked (2017) identify leadership and support for school staff as the key aspects of the implementation process. School principals represent the central figure or voice among stakeholders (state entity, teachers, and parents). Likewise, Brezicha, et al. (2015) state that leadership is critical to successful school reform and assert that motivation, support of staff, and having a practical vision for the school builds encouragement and trust along with working together to accomplish success. Other literature observes the importance of effective management and leadership in the change process, which should endorse adequately trained and developed staff for a successful institution and successful students (Fullan

2016; Jašarević, & Kuka, 2016). Change also involves discomfort where some staff may view adjustments, reorganization, changed practice, and external monitoring of mandated change as pressured change.

Teachers who implement politically mandated system reforms must feel involved, empowered, informed, and acknowledged for their efforts (Hussain et al., 2018). Leadership must be inspirational and trustworthy and show teachers the willingness to join together and commit to change, for the benefit of all stakeholders. A transformational and visionary leader can use a national change mandate to improve upon the performance of students and the developments of their staff. Some considerations in the management of change for administrators/leaders include; knowing your context, sharing perspectives on the rationale and need for change while building relationships. The administrator/leader who outlines the new model or what has to be changed, identifies to staff how the changed structure is to work and encourages teamwork, has a good possibility to be successful.

As with any process, there may be adjustments to the model, which must be reviewed as feedback to the implementers of the change (Hayes, 2018). There must also be a seamless flow of communication from the implementers to the administrators/leaders to prevent confusion, obstructions, or other adverse actions.

Conclusion

The review of literature focused on several concepts related to the issue under study. The entire process of system-wide reform has an impact on all of the stakeholders

in the education system. The de-shifting and conversion of three year junior secondary (half-day) schools to five year whole day secondary schools was Trinidad and Tobago's education change experience. In looking at the research conducted on de-shifting, the findings in the majority of cases showed that de-shifting was a politically devised policy meant to develop nations of skilled and trained citizens. The meaningful interaction of parents and especially teachers in students' learning experience has been observed to impact their emotional and psychosocial well-being positively. Also, parental interaction increases the opportunities for academic success if the relationships are supportive and nurturing (Jang, et al., 2016), but can be negative if there is little or no meaningful interaction from parents and teachers (Antoine & Ali, 2016). While the change was mandated to ultimately improve the academic performance of students and provide equity in education, there has been no real engagement of students to partner in the change process for their own sake. Burner (2018) suggests that the discussion on educational change could include students. Further, there has been no extensive research to discover the psychosocial impact of de-shifting on stakeholders.

This study, therefore, can cause the reader to reflect more closely on how feelings about education change impact stakeholder expectations and outcomes and can add to previous literature. Data collection from participants about their experiences during the de-shifting process, along with the review of exam results over the seven years after de-shifting has shed light on this phenomenon. This study adds to the literature on the outcomes of change on student achievement and psychosocial well-being from the

perspectives and memories of the educators who experienced the process. The expected standard for change success has been identified repeatedly in the literature as a collaborative culture that includes all stakeholders affected by the change for long-term success (Naicker, & Mestry, 2016).

Chapter 3: Research Method

The preceding literature review explored the rationale for implementing half-day or shifted schools as well as subsequent reasons provided by governments of various countries using the double shift model, to de-shift. The focus of this study was to review the impact of the de-shifting initiative and psychosocial wellbeing and academic success of students deemed at risk. Much of the literature regarding de-shifting suggests that the half day school model was useful in providing educational opportunities for all children (Ashong-Katai, 2013; Kurebwa & Lumbe, 2015; Munoz Pedroza, 2016; Sheryn, 2011); however, anticipated outcomes involving better academic performance and reduced behavioral and social challenges of students have not always happened. In this study, the following qualitative research questions were explored and answered:

RQ1: To what extent has the de-shifting initiative in the Republic of Trinidad and Tobago met its objectives of academic achievement and psychosocial wellbeing for at-risk students?

RQ2: What follow up programs and steps can be implemented to help de-shifted secondary schools address the psychosocial wellbeing of students and sustain successful educational change in the Republic of Trinidad and Tobago?

RQ3: What steps can be taken to make change initiatives more effective so that the psychosocial wellbeing and educational needs of at-risk students in the Republic of Trinidad and Tobago are achieved?

I gathered data concurrently for this mixed methods study. I hypothesized that after evaluating CSEC exam results over a 7-year period, there would be no significant changes in terms of academic achievement of at-risk students in the 7 years after de-shifting.

This chapter highlights the setting for research collection, which took place primarily in three secondary schools. I outline philosophical perspectives, the research design and approaches used to collect and analyze data, and methods of research. Additionally, a description of the pilot study, issues involving validity and trustworthiness, processes used to analyze data, and ethical considerations are highlighted in this chapter.

Before the process of collecting, sorting, and analyzing data for this study, the four philosophical perspectives of post-positivism, social constructivism, advocacy/participatory view, and pragmatism were considered to determine which would best guide the proposed research (Rahi, 2017). These perspectives are defined in the following paragraphs. A philosophical viewpoint is essential when conducting research because it supports the researcher's position and sets the groundwork for determining the research methodology to be used

The postpositivist view is that there is a scientific and factual basis for everything. There is no room for subjectivity or bias and there is a clear indication of cause and effect (Bishop, 2015; Offermans & Glasbergen, 2017). A qualitative approach to research may therefore suit this perspective. The social constructivist sees the world through the lens of

collaborative learning where individuals create meaning and understanding actively (Amineh & Asl, 2015). Discovery is continuous within environments and what becomes the learner's reality is built upon this discovery. A qualitative approach suits this perspective because participants provide their own understanding and views of their experiences. The researcher can then infer meaning and interpret reports. The researcher who uses an advocacy/ participatory approach which is also known as action research considers using a mixed methods approach to data-gathering and involves participants in the process by inviting their opinions and views. This approach also involves initiating change (Naaranoja, et al., 2014).

The pragmatic approach to research allows the researcher to consider what works in the context of the research questions under review, and these become the focal point of conducting the study. Life evolves and changes, and truths are uncovered when observing social situations and actions of individuals (Korte1 & Mercurio, 2017; Morgan, 2014). Biddle and Schafft (2015) said engaging in pragmatic research emphasizes gathering of knowledge that is not always error-free but has an outcome borne from various experiences that can impact problem-solving. As a result of this philosophy, the researcher might suggest recommendations for policy changes or other social and institutional initiatives. Moreover, researchers using a pragmatic approach often employ a mixed methods research design and may use interviews, focus groups, questionnaires, and other test results. Consequently, the pragmatic perspective was used in gathering data for this mixed methods study.

Research Setting

Three de-shifted secondary schools located in various parts of Trinidad and Tobago were targeted for the study: Valley High School, Southern Academy High School, and Youran High School (not the real names). While Trinidad and Tobago are islands in a small republic covering 1980 square miles of territory (approximately 1840 square miles for Trinidad and 120 square miles for Tobago), the three schools are located in distinctly different regions. Valley High is in an urban city and has a total of 710 students. The Southern Academy has an enrollment of 452 students and is located in a rural town, and Youran High, located in the Central region of Trinidad, has 683 students on the register. The factor common to each of the three schools is that students are assigned there by the MOE based on SEA scores ranging from 30% (lower required) to 75% (upper required) and are often zoned based on their place of residence. For this study, all staff members, vice principals, and principals were invited to participate. For all three schools, the number of participants was expected to total approximately 75. Principals and vice principals were interviewed to capture their experiences of pre de-shifting and post de-shifting phases at schools.

Due to the COVID-19 pandemic, some plans were adjusted during the data collection process. Questionnaires were distributed online by me, and completed and returned in the same manner by participating teachers. Interviews with administration occurred either virtually or in person, and analysis of the results occurred later. Statistical archival data from the DERE MOE included students' grades between 2010 and 2016

and were incorporated to address issues involving student achievement. This information was made available by the DERE and was sent via email to me. Rich qualitative data collected from interviews with administrators highlighted experiences and challenges not only of administrators, but also staff and students during the shift period as compared to the current de-shifted environment. Venkatesh et al. (2013) noted that can provide a variety of opposing or complementary ideas and that using both types of data collection during this mixed methods approach can strengthen findings regarding research questions under review.

Research Method and Design

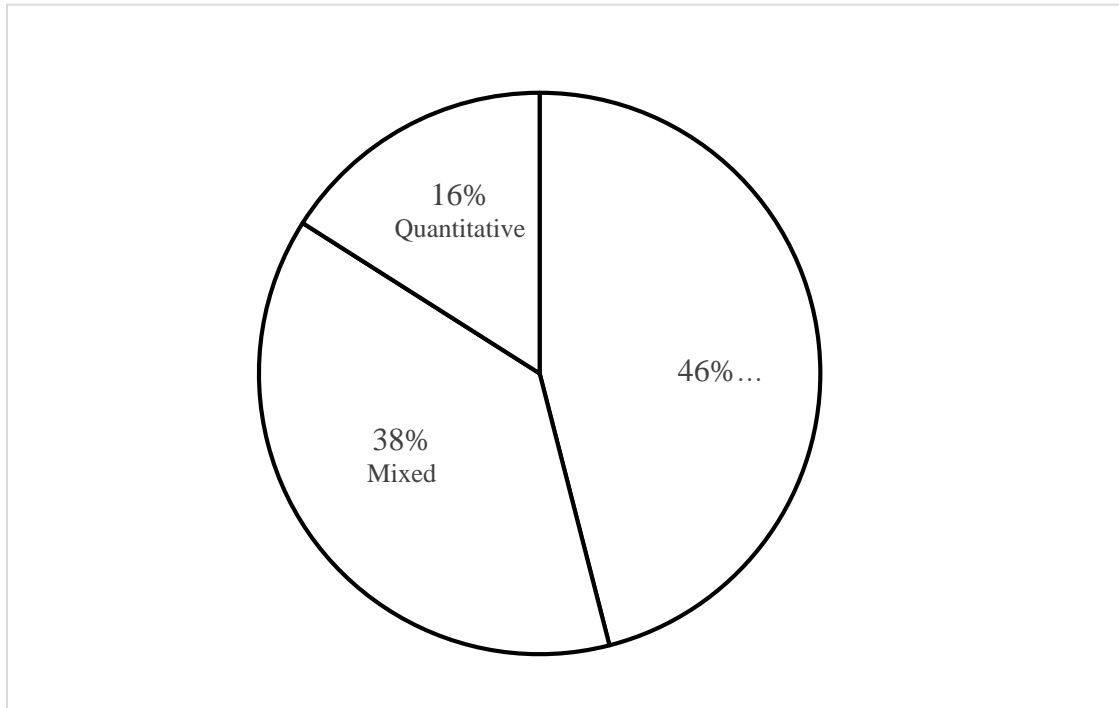
A mixed methods approach is defined as the combination of quantitative and qualitative methodologies in a research study (Wei & Lin, 2017). Mc Kim (2017) noted that between 2010 and 2019 over 2500 mixed method studies were recorded in research as opposed to just over 500 from 2000 to 2004, indicating the value of using an integrated design method approach. It helps to form an understanding of the topic under review using numerical data and participant social interactions. Mixed methods research involves triangulation and several research formats to gather data. Both quantitative and qualitative methods are prone to errors (Turner et al., 2017). Therefore, my aim was to strengthen the rigor of the study by combining methodologies to answer the research questions. The mixed methods approach can be beneficial because of rich responses of the participants. Generic qualitative research along with the examination of secondary

data may assist in building information regarding research questions and outcomes of the de-shifting process.

McKim (2017) said combining qualitative and quantitative methodologies in a mixed method design added value to the research by validating findings, improving the understanding of the results and allowing readers to appreciate the importance of the topic under review. In a search of 50 random articles in education journals, 38% of the studies reviewed from 2014 - 2018 were written by researchers utilizing the mixed method approach. While this may not seem like a large number in context, 46% of articles were written using the qualitative approach (see Figure 3).

Research Design

A thoughtful approach to research design based on the questions to be answered surrounding the specific research topic indicates the researcher's attempt to address construct validity, uncover answers to the research question(s), give a balanced report and broader view of the findings, and add to the body of knowledge regarding mixed methods research (Turner et al., 2017; Mc Kim, 2017; Schoonenboom, & Johnson, 2017). These actions allow for a quality study. The proposed study employed an evaluative case study, implementing concurrent triangulation in a mixed method approach. The researcher used a qualitatively driven method along with the collection and review of quantitative data to explore and clarify the responses of the participants.

Figure 3*Results of Education Articles Search*

Case study research inquiry involves the engagement in a study with the purpose of exploring individuals' experiences and responses to an event, situation, or phenomenon in their own words. Creswell and Creswell (2017) noted that this research strategy has a specified time limit where various forms of data collection methods are employed. It also involves a comprehensive exploration of the phenomenon by using various data sources. These can be interviews, observations, questionnaires, focus groups, journals and archival data, among others (Harrison et al., 2017; Burkholder et al., 2016).

Furthermore, case study research is used often in social science disciplines for example education, health, business, and psychology.

Three examples of the use of case studies in research are Watson's famous 1920 Little Albert conditioning experiment (Watson & Raynard, 1920), the child slave labor revelations of the Cadbury chocolate company (Chatterjee, & Elias, 2016), and the review of concerns surrounding the transitioning of special needs students from high school to tertiary level education (Bridges & Maxwell, 2015). These studies illustrate the different disciplines where case studies have been utilized in psychology, business, and education. Accordingly, case study research as a qualitative research approach provides readers with an understanding of lessons taken from experiences, illustrates feelings and opinions of participants, and helps the reader to connect with the meaning of cultural nuances of participant views. Other advantages are limiting the scope of the study to the context and timeframe specified and collecting various types of data to support validity and trustworthiness of the study and to provide more flexibility in the structure of the design (Rahaman, 2017).

While there are significant advantages in case study research, as opposed to other research strategies, the general low regard of qualitative research in the scientific community based on continuous controversies attributed to its use, necessitates the identification of several disadvantages of this research method. For example, results from case study research cannot be generalized to entire populations, and sample sizes are generally small and purposeful (Gustafsson, 2017; Zainal, 2007). The rigor and validity

of the study come into question because there may be researcher subjectivity and personal bias (Barkley 2006; Krusenivik, 2016), along with invalid findings due to participant bias). Also, data analysis is more difficult when trying to identify patterns and themes. This involves a longer time and cost burden (Baškarada, 2014) as opposed to the analysis of pure numerical data.

In the pursuit of understanding the impact of the de-shifting process that took place in Trinidad and Tobago from early 2000 to the end of 2008, concurrent triangulated mixed method data gathering was implemented in the study. This study focused on several voices in the high school setting to arrive at a holistic picture of comparative or differing results of the phenomenon. The reflections of teachers who were in service before, and after the de-shifting process at three high schools were explored thus providing several reports of the same phenomenon.

Using concurrent triangulation allowed me to explore the results from two approaches (qualitative and quantitative), using the qualitative approach as the focus for understanding the answers to the research questions. In addition, a concurrent triangulation approach also allowed me to coordinate collection of each type of data efficiently and purposely from each school, while combining the quantitative data so that it could support or refute the qualitative data that was more prominent in this study. Because there has been scant review of school de-shifting as it relates to psychosocial wellbeing and academic success of students, the study is unique. The focus of data collection was the school administrators and teachers who experienced the shift system

and subsequent de-shifting over the past seven years. Interviews with the administration of the three de-shifted schools in this study, were conducted to reveal the patterns or themes generated from the experiences of the staff. Secondary numerical data, along with the questionnaires, were also collected to determine the answers to the research questions.

The collection of data in a concurrent triangulated study allows for the combining of data collection methods which improve the internal and external validity of the study. This study focuses on triangulation and how the collection methods complement each other). The results of the quantitative data gathered from the survey questionnaire and CSEC scores, were able to complement the topical patterns identified.

Two relevant studies show examples of concurrent triangulation. Odanga, et al. (2015) explored the role of gender on teachers' self-efficacy in Kenyan high schools in their quantitative/qualitative design by first administering questionnaires for the quantitative data collection process. Teachers were then interviewed and their reports audio taped during the qualitative data collection sessions. These interviews ranged in time from 20 minutes to 50 minutes. Triangulating the study allowed for the identification of certain contextual details not possible to uncover if the study used solely a quantitative or qualitative design. Another study evaluated the results of athletic activity and its impact on children's health in a community project using the Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) model. The researchers used a qualitative/quantitative approach facilitating in person interviews, along with administering a 14 item questionnaire in this concurrent triangulated mixed

method study (Koorts, & Gillison, 2015). The triangulation in this study helped to endorse the data collected using different methods and increase the validity of the results. Though both studies encountered contradictions in the findings from the quantitative and the qualitative data, these contradictions were opportunities to determine explanations for the contradictory evidence.

The strength of the concurrent triangulated approach used in this study is that it supported internal validity when all of the data collection was completed to answer the research questions. Researchers can also achieve external validity when the results of a study can be transferred to other research settings (Wium, & Louw, 2018) and can be applied to other participants in similar situations in other locations (Ponce, & Pagán-Maldonado, 2015; Wium, & Louw). The concurrent triangulation approach is appropriate for use in this research since it helped to achieve complementary findings of the participants' reports with the numerical data where the question of academic achievement was concerned. Warfa (2016) noted the shorter time for data collection and analysis in concurrent designs is one reason why this type of design one of the most frequently used in mixed method research. It also helped the researcher to be focused on efficient time management because both types of data were collected in a parallel manner.

However, there are also weaknesses of this data collection method that are noteworthy. There may be concerns that equal weight is not placed on each method of data collection, there may be a difficulty in pursuing effectively any novel findings when the data is being reviewed, there can be contradictions in the results from quantitative and

qualitative results and these may become a challenge to manage, and the required technical ability to ensure validity and interpretation of the results may require a research specialist (Creswell & Plano Clark, 2018; Santos et al., 2020).

Role of the Researcher

In conducting this case study, I clarified that the de-shifting of three year schools is being investigated under the premise that this phenomenon took place in the Trinidad and Tobago context and culture and therefore should not be generalized to other territories. The names of the three schools were changed to ensure confidentiality of the participants. The actual experiences of the participants who lived through the process in the Trinidad and Tobago experience compared to those described in related literature are reported in the study. My role in the data collection process was being the primary data collection instrument, a non-participant, and a participant observer; contact with participants was to conduct interviews. The participants were made aware of the goals of the study and the importance of their part in it, both in the written introduction to the consent request and in staff briefings.

Although I was an administrator in one of the high schools in Trinidad and Tobago, I did not know the staff at the participating high schools. There was, therefore, no threat of personal bias based on familiarity of members of the teaching fraternity. I interviewed participants following strict interview protocol and did not engage them in a personal manner during data collection. I experienced the process of de-shifting before my past role as principal, and therefore I have an interest in other educators' experiences

(and thoughts) of the impact of this change in the Trinidad and Tobago education system. I was a teacher within the shift system for 14 years before becoming an administrator as such, I cannot be unaffected by the reports of the participants. However, there would be advantages to my membership in the teaching fraternity (Unlner, 2012). For example, I had an intimate understanding of the double shift system, the ability to discern nuances of participants' reports of secondary school life and I was afforded some deference as a member of the teaching fraternity.

Additionally, there is the danger of unconsciously forming interpretations of stories based on my own experience and inadvertently leading interview questions based on my knowledge of the shift and de-shifted systems. I will need to disclose to administrator interviewees that their responses should focus on their own experiences and not on answers they may deem correct.

Researchers must also consider ethical issues. To attend to any matters of this nature, I clarified my position as the main instrument in the data collection process and reported all International Review Board (IRB) permissions to participants. Along with the relevant authorizations, I provided an overview of the study I was undertaking and emphasized the necessity for participant consent to record verbatim their reports and to safeguard the privacy, confidentiality, and accuracy of the statements provided (Sanjari et al., 2014; Sutton & Austin, 2015).

Participants were treated with the utmost dignity and respect, and I discussed arrangements with the administration regarding the locations for conducting their

interviews. Finally, I informed the administrators how their information would be safeguarded when they provided consent, and this information regarding the protection of electronic data was included in the recruitment email. Additionally, I worked with the IRB regarding arrangements for securing electronic and paper records of participants. All electronic data is stored in an external drive, while paper records are stored in duplicate. Both types of data are secured in locked areas, and only shared with the Ministry of Education as evidence for future policy formation, decision-making, and as a course of courtesy to the employer. I advised the schools' administration that they would be provided access to the results of the study.

Methodology

Population and Sample

I sought the relevant permissions to engage three secondary schools, each of which has a staff population of over 50 teachers. All staff members, as described previously, were invited to participate in the data gathering. Several studies show that smaller sample sizes of about 30 - 60 participants are most common for educational studies (Suter, 2012; Slavin 2008). Sampling was implemented using a purposeful approach, which research has shown to provide a wide variety of reports along with the opportunity to identify similar patterns in the participants' experiences. This purposeful approach as noted by Palinkas et al. (2015) is a sampling strategy used to gather information that is familiar to participants, rich in content, and that is relative to the topic under consideration; in this case, the de-shifting process. Patton (2015), van Manen

(2014), and Yin (2011) as reported in Gentles, et al. (2015) all use similar definitions for purposeful sampling. The researcher, when considering purposeful sampling, must know the availability of the participants and persons who can recall their experiences clearly and intelligently so that the resulting data is useful for analysis. I recruited participants who have all experienced the shift system before de-shifting and the eventual de-shifting process. This method is termed total population sampling where all of the teachers who fit the criteria for sampling are included in the data collection (Etikan, et al., 2016). The participants were teachers from the previously identified secondary schools that were shifted and are now de-shifted five year schools.

The sample size is also an essential factor in conducting reliable research. There is no prescribed formula for determining sample size in qualitative research. The value of information gathered from the participants is where the focus lies therefore, smaller sample sizes are generally accepted (Gentles, et al., 2015; Moser, & Korstjens, 2018; Palinkas et al., 2015). While a conservative number of 25-30 surveys, three focus groups made up of four to six persons each, as well as a maximum of ten open-ended interviews with school administrators from each school was desirable, the eventual samples were dependent on the number of teachers on staff at each school from the period during the shift system. I requested permission from the principals of the selected schools to check the appointment dates of participants to the school through the school's Annual Statistical Returns registry, but this was not possible due to the COVID-19 restrictions. After being provided the email addresses of the qualifying teachers, I had no choice but to give a

brief explanation to them on the purpose of the study via e-mail. No teacher was offered monetary compensation for participating in this research study.

All participating teachers met the criteria of being on staff at their schools prior to the de-shifting process and are still teachers at the schools identified in this study. The researcher contacted all identified school principals by phone and sent off all Ministry of Education approvals to them via email. Participants who consented to be a part of the research study were sent recruitment emails (see Appendix A). Principals who consented to take part in the study including the vice-principals were also sent recruitment emails (see Appendix B), and confirmation emails (see Appendix C). Each administrator interviewed has been in service for over 20 years and entered the teaching profession as qualified teachers.

Sources of Information or Data

I sourced the data for this mixed methods study primarily from interviews with school administrators and an online teacher survey. This data is purely qualitative and were used to discover themes or patterns. Quantitative data collected from the three schools was used to support or dispel the ideas or observations of the participants. These observations were recorded from six administrators who were each interviewed using the same survey questions. The intent of face-to-face interviewing was to record the administrators' recollections through semi-structured preset questioning (Jamshed, 2014) and to gather specific information relating to junior secondary school de-shifting.

I emailed questionnaires to all consenting teachers who were on staff during the shift system to record their impressions of the de-shifting experience. I used the interview and survey questions to focus on the experiences of the participants regarding the academic performance of students, the psychological impact of de-shifting, and a comparison of issues faced in both the three year and five year school systems post de-shifting. I coded the questions to inform an evaluation of the de-shifting process. The secondary source of data was retrieved from the DERE and the MOE and focused on an analysis of the pass rates of students who took the CSEC Mathematics and English examinations between 2010-2016. Finally, I reviewed the data and did a comparison of the findings (both qualitative and quantitative).

Instruments Used, Rationale, and Sources

The instruments used were adjusted from a previous study. Permission to adopt the teacher surveys and interview questions was given by the author who was previously approved by the IRB (see Appendix H). All instruments, permissions, and other documents are located in the appendices. The participants chose one response for each 18 questions from a 6-item Likert scale represented as Strongly Disagree, Disagree, Neutral, Strongly Agree, Agree, and No Opinion.

The Pilot: Survey and Interview

Malmqvist et al. (2019) said pilot studies are often used in the social sciences and are either test runs for the larger study where instruments are proven or a condensed version of the larger study. The pilot helps to gauge factors such as collection time,

usefulness and content of survey questionnaires (Williams-McDean, 2019) as well as identifying any data collection problems. The International Review Board (IRB) for Human Subject Research activity granted approval and the participants were invited through an email sent to their personal Ministry of Education email account. I invited twenty teachers and two administrators who met the inclusion criteria for the study to take part in the pilot. These teachers were not part of a cohort of teachers from the schools selected for the final study, but comprised of a purposeful sample of teachers who I recruited via email (see Appendix A). Participants were able to consent or decline participation upon receiving the email invitation. I explained the nature of the study and the reasons for the pilot study, which was a smaller version of the actual study. The reasons for conducting the pilot included determining optimal numbers of participants and the effectiveness of the recruitment as well as testing the survey instruments and methods (Ishmail et al. 2018; Lowe, 2019).

To ensure transparency of the data collection, all instruments, consents, and permissions are added to the appendix of the study document. An external reviewer was resourced as technical help in reviewing the interview and survey questions specifically for this study. This study was approved by the IRB under approval number 03-17-20-0242185.

Data Collection Process

The process of data collection for the study was carried out to evaluate the psychosocial and academic outcomes of de-shifting three year high schools in Trinidad

and Tobago. As noted in chapter one, the government achieved their mandate to provide education for all via five year secondary schooling. This initiative was undertaken by the government to address the issue of unsupervised students during the school day, to afford students the opportunity to participate in co-curricular activities, and to allow them to have more positive social interactions.

The pilot study was effective for the final development of the survey and interview questions. It also gave the researcher valuable tips for time management and engagement protocol with the participants. Participants for the pilot were sourced from a de-shifted school not identified in this study, but study participants were recruited solely from the three schools described in this study.

After contacting the administrators at the schools, I explained my reasons for selecting their schools for the study. I discussed the methods to be used for data collection with the administration, with the promise to send the results to them at the completion of the work. Other teacher participants received an email introduction and invitation because of their absence from school due to the COVID-19 pandemic. I explained to the administrators my familiarity with the education system and my role as an education administrator in a three year shifted, and later de-shifted school several years prior to this study. While I would have had contact with educators in the district where I previously worked, the schools in this study are located outside of the education district in which I worked. I was therefore not familiar with the administrators in the study but monitored my interactions with them for signs of reactivity. Reactivity relates

to the effect the researcher has on the interviewee or the effect some other factor has on the participant that can affect their responses (Mitchell, 2009; Lavrakas, 2008).

I recruited a university professor to audit or review the administrator interview responses. I allowed a maximum of five (5) months to collect data from the identified schools through survey monkey due to the COVID -19 pandemic situation. There was one day scheduled for each of the five administrator interviews. I received the CSEC results from 2010 to 2016 via email from the DERE at the MOE. I later telephoned the principals for approval to send out email requests to relevant staff to take part in the surveys, after which the interested teachers participated in the online survey anonymously. The approximate time allotted for the administrator interviews was 45 minutes with 15 minutes for follow-up interaction. The average time for these interviews was about one hour and ten minutes. The focus groups were not achieved due to the disinterest of the teachers.

Analytical Strategies

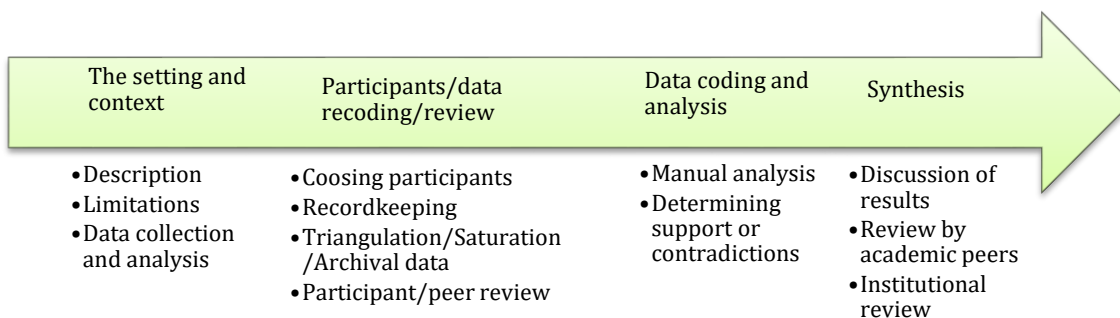
The quantitative data reflected information gathered from questionnaires given to the relevant teachers and CSEC examination results collected over a seven year period, which was reviewed using simple mathematical calculations. The primary data was coded based on repetitive patterns or themes that emerged from face to face interviews. Along with this qualitative approach, I analyzed the surveys and archival secondary data from the schools without a sophisticated software package since it was sufficient to indicate comparisons via percentages, increases or decreases in numerical data.

Validation Procedure

As the researcher and the instrument of data collection, I carefully considered institutionalization characteristics of the research (see Figure 4) by considering possible personal subjectivity and bias among other factors that might impact the credibility of the study. Member checking is one factor that allowed participants to review records that is, their interview transcripts for accuracy. I also utilized an online survey, face to face interviews and statistical data as other sources of data to compare findings and determine consistency, and included neutral peer reviewers to audit the data gathering process and findings.

Figure 4

Process Map for Ensuring Reliability and Validity



Note. A process flow map showing the steps the researcher will take to ensure reliability and validity. Adapted from “Validity in qualitative research: A processual approach” by P. Hayashi Jr, G. Abib, and N. Hoppen, 2019. *The Qualitative Report*, 24, p. 105. Copyright 2019 by Paulo Hayashi Jr, Gustavo Abib, Norberto Hoppen, and Nova Southeastern University.

Providing a clear explanation of the methods applied by the researcher is a good way of indicating validity of the study's findings (Noble & Smith, 2015; Ledford & Gast, 2018). Reliability equals trustworthiness in qualitative research or the ability of the study to remain consistent after several replications. Validity aligns to rigor in qualitative research, which involves triangulation, cross-checking information gathered, data saturation, and confirmation of participants' involvement via feedback (Hayashi, Abib & Hoppen, 2019; Ledford & Gast; Cypress, 2017). I ensured that the study was robust and throughout the process by defining and identifying the setting, any limitations to the context, the methods of data collection and its analysis. I identified how participants were chosen, how data was reported/recorded, and the triangulation methods used. I ensured saturation occurred and reviewed data integrity by participants and academic peers, as well as validating archival data by the Ministry of Education. I manually coded and analyzed the data and concluded by synthesizing the results in a clear discussion and review of the findings by academic peers and institutional authority.

Summary

In the previous section, I presented a review of the focus of the study and outlined the research methodology. This methodology was derived from the research questions to be answered on the outcomes of de-shifting three year high schools in Trinidad and Tobago and how this phenomenon impacted the psychological well-being and academic achievement of students.

An evaluative case study approach was selected along with review of archival numerical data for the overall mixed method design. The effectiveness of the chosen design in social science research, and the rationale for selecting a mixed method design for this study were highlighted.

For each school, approximately 20 teachers were recruited for the study in a purposeful approach to selecting participants. Teachers who did not experience the shift system were not qualified to participate in the study. The teacher surveys, archival data, and administrator interviews were designated to answer research question 1, the administrator interviews focused on all three research questions along with certain survey questions, and three interview questions were used to answer research question 3. In this chapter the importance of trustworthiness, validity, and ethical procedures to be followed throughout the study is presented to the reader.

The results of the data are reviewed in Chapter 4. Chapter 5 includes limitations, possible recommendations for stakeholders, and ideas for future research. I discuss as well, implications for social change and conclusions of the research.

Chapter 4: Findings and Data Analysis

This evaluative mixed methods case study was undertaken to determine the impact of the secondary school de-shifting initiative on the academic achievement outcomes and psychosocial wellbeing of at-risk secondary school students in the Republic of Trinidad and Tobago. To this end, data were analyzed to explore the following research questions:

RQ1: To what extent has the de-shifting initiative in the Republic of Trinidad and Tobago met its objectives of academic achievement and psychosocial wellbeing for all at-risk students?

RQ2: What follow up programs and steps can be implemented to help de-shifted secondary schools address the psychosocial wellbeing of students and sustain successful educational change in the Republic of Trinidad and Tobago?

RQ3: What steps can be taken to make change initiatives more effective so that the psychosocial wellbeing and educational needs of at-risk students in the Republic of Trinidad and Tobago are achieved?

In previous chapters, I outlined the study, background information, the problem being investigated, and the purpose of the study. The context of this study was discussed in Chapter 2, along with previous empirical research related to the topic of de-shifting. Additionally, the theoretical framework was discussed. The setting was described along with my philosophical perspective, the design and methodology of the study, participant selection, instruments used, and the data analysis plan.

I took into consideration restrictions imposed on movement and contact with participants due to the global COVID-19 pandemic and countrywide school closures. In this chapter, I discuss how the pilot was conducted and any adjustments made to the method of data collection as well as particular challenges encountered during the data collection process. While a focus group component was part of the initial design of the pilot study, no teachers agreed to participate in focus groups. The results of the data collection process are highlighted along with an analysis and explanation of themes that were uncovered during interviews. A summary of findings concludes this chapter.

Consent for Data Collection

All necessary permissions were obtained before data collection could begin. Consent forms were emailed to all participants, who returned emails to me for administrator interviews, along with completed surveys compiled using SurveyMonkey. Return emails indicated administrators' consent to participate in the study. All participants took part in the study of their own free will. The majority of data collection was done remotely. Southern Academy and Youran High interviews were conducted by phone. The principal and vice principal at Valley High School consented to in-person interviews.

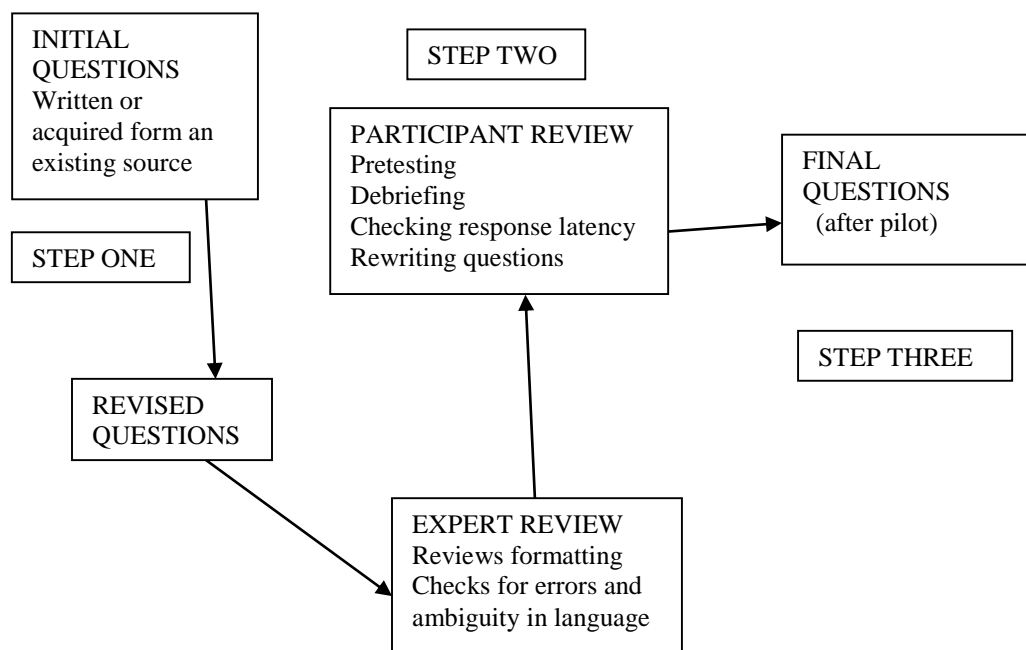
The Pilot

Of the 20 teachers invited, nine consented to complete the survey and only the principal completed the interview by phone. The vice principal declined to participate. None of the nine teachers who consented to participate in the survey agreed to be a

member of the proposed focus group; therefore, this aspect of the data collection was unsuccessful (see Figure 5).

The pilot included a 25-item survey and nine semi-structured interview questions as the method of data collection. Along with qualitative data, archival statistical data from the Ministry of Education was analyzed. Interviews lasted approximately 70 minutes and allowed me to become familiar with the pace of semi-structured open-ended questioning and note if there were any difficulties when responding to questions. The principal understood all questions. In one case, there was an overlap in response from one question to another (question 4 to question 5). I explained differences between questions, making a note of this occurrence in the verbatim interview transcripts, which clarified for the administrator what was being asked. I recorded verbatim responses to interview questions on a standard 8 ½ x 17 legal notepad and reviewed survey responses for themes. The average completion time was approximately 8 minutes.

There were minimal adjustments to the wording of a few survey questions. Adjustments were made to ensure clarity and understanding of each question for participants and especially to gauge response latency or time taken to complete each item. The most noticeable concern at the end of the pilot was the small number of participants as well as lack of administrators apart from one principal. I was not able to visit the school since institutions were closed due to the COVID-19 pandemic and the principal who participated in the pilot preferred to respond by telephone. Data collection was therefore, restricted solely to remote methods that included emails, phone interviews, and

Figure 5*Development of Pilot Survey and Interview Questions*

WhatsApp messages (some teachers requested the survey link be sent directly to their phones).

Observations and Adjustments to the Pilot

I made adjustments to some interview questions to better fit the topic of the study. Interview questions using the word psychosocial were modified to remove that word before the word well-being. The phrase psychosocial wellbeing was explained to interviewees during the introduction and subsequently shortened to well-being. Interview question #7 was adjusted to read: “What are some steps that can address any challenges being experienced among at-risk students since de-shifting has been implemented at your

school?” Interview question #9 was adjusted to read: “What do you feel are some factors that can support psychosocial well-being and academic achievement of at-risk students in a de-shifted school like yours?”

All survey and interview questions were designed to answer the study’s three research questions to ensure effective measurement of the topic. The pilot allowed me to allocate time effectively for the actual research, and during this process, there were no changes to the order of interview questions or surveys. I questioned each administrator using a prepared script and read questions in the order that they were listed.

Data Collection

The process of data collection for the study was carried out to evaluate the psychosocial and academic outcomes of de-shifting three year high schools in Trinidad and Tobago. As noted in Chapter 1, the government achieved their mandate to provide education for all via five year secondary schooling. This initiative was undertaken by the government to: address the issue of unsupervised students during the school day; to afford students the opportunity to participate in co-curricular activities; and to allow for more positive social interactions among students.

The pilot study was effective for the final development of the survey and interview questions that gave the researcher valuable tips for time management and engagement protocol with the participants. Participants for the pilot were sourced from a de-shifted school not identified in this study, but study participants were recruited solely from the three schools described in this study.

After contacting the administrators at the schools, I explained my reasons for selecting their schools for the study. I discussed the methods to be used for data collection with the administration, with the promise to send the results to them at the completion of the work. Other teacher participants received an email introduction and invitation because of their absence from school due to the COVID-19 pandemic. I explained to the administrators my familiarity with the education system, and my role as an education administrator in a three year shifted, and later de-shifted school several years prior to this study. While I would have had contact with educators in the district where I previously worked, the schools in this study are located outside of the education district in which I worked. I was therefore not familiar with the administrators in the study but monitored my interactions with them for signs of reactivity. Reactivity relates to the effect the researcher has on the interviewee or the effect some other factor has on the participant that can affect their responses (Bickman & Rog, 2009; Lavrakas, 2008).

Triangulation and Data Saturation

As noted in Chapter 3, a concurrent triangulated approach was identified to gather data for this study. The use of anonymous surveys, interviews, and statistical data from various sources added to the bank of evidence (Creswell & Creswell, 2017). The responses from the survey questions, the interviews with the administrators, and the data from the DERE were sufficient to answer the research questions. This between methods triangulation approach was used to guard against any flaws in either the quantitative or qualitative data gathering (Fusch, et al., 2018) and to enhance the reliability and validity

of the research. For this study, data saturation was also managed by ensuring that the research questions were precise. Suri (2011) asserts that the saturation of data relies heavily on where the information comes from and whether the questions asked are specific and purposeful. The use of open-ended questions that are targeted allowed for faster data saturation. Administrators interviewed in this study declined to have their responses recorded.

Rigor and Trustworthiness

I looked at four guidelines in ensuring trustworthiness. The choice of a mixed methods case study approach and the instruments used to gather data to answer the research questions, along with peer review, member checking and disclosing any personal biases ensures credibility. Describing the study process in detail for all aspects of the process provides researchers with similar study interests the ability to repeat this study ensuring dependability, while transferability allows other researchers to determine whether the results of this study can be utilized in other research settings, contexts, or populations. Finally, I disclosed any personal biases that may have arisen in the course of data collection ensuring confirmability. Some examples of how rigor was established are the administrators interviewed were asked to review their responses to check for accuracy of the recorded information. I also gave them an opportunity to explain their responses to prevent misinterpretation. This process amounted to member checking once I completed the transcription of the responses, and ensured that all administrators validated their

statements. All questions were administered in exactly the same manner with all of the administrators and all reports were recorded verbatim on an 8 ½ x 17 legal notepad.

Also, in validating the interview data, I used a descriptive validity approach to report the facts as stated by the administrators. I remained neutral and objective in receiving and reporting the information and was careful to avoid experimenter bias. The methods used in collecting data amounted to a level of rigor within the study.

Threats to Validity

These can be internal or having an impact on the procedural efficacy of the study. They can also be external or having an impact on the transferability of the findings, depending on how the study is designed. In this qualitatively driven mixed-methods case study, the goal was to convey authenticity of the participant's experiences. As the main instrument in the study, I had to be unbiased, accurate, and honest to prevent experimenter bias. The understanding that I directed almost all aspects of the research caused me to raise some questions to guide the validation process and to assure internal validity such as: determining whether the study design was robust; whether the sample was adequate to allow for saturation and answering the RQs, whether I was neutral or displayed any bias.

I also considered whether the instruments were reliable and allowed for triangulation, also whether the collection of the participants responses was complete, accurately reported, objectively interpreted, additionally whether there was external verification and a complete audit done. To ensure external validity, a researcher must be

able to align the findings of the study to similar cases or theoretical positions. This can be achieved by describing in detail everything about the study (for ease of replication) and using several data collection methods (Creswell & Creswell, 2017).

Participants

The sample was specific to three schools thus, six administrators would comprise the interviewee sample. Johnson, et al. (2020) explain that the research sample should be determined by how much relevant information can be gathered and the amount of information collected. Also, the quality of the information must be robust.

The participants for the actual research were teachers from the three schools identified in this study and their profile information is shown in Table 5. The administrators interviewed were comprised of two male principals, one male vice principal and two female vice principals. One current principal did not meet the criteria for participation. None of the teachers who completed the online survey or their schools was identified to ensure complete confidentiality. I received the completed surveys online through Survey Monkey. This service does preliminary analysis of the responses of the participants which I arranged based on the research questions to be answered.

Youran High School and Southern Academy administrators consented to do their interviews via telephone. Both the principal and vice principal at Valley High consented to have in person meetings for their interviews. Each administrator was engaged in a review of the recorded information after the interview to ensure accuracy of their responses (Creswell & Creswell 2017). The process of data collection from the three

schools spanned a total of 5 months due to COVID-19 pandemic and the inability to capture the special population for this study effectively.

Table 5

Survey Participants Profile

Role	n	Level of Education	n	Level taught	n	Years in Service	n
Teacher I	3	Technical College	4	F1 (58.3%)	7	11-15	1
Teacher II	1	Undergraduate	2	F2 (58.3%)	7	16-20	4
Teacher III	4	Graduate	3	F3 (66.7%)	8	21-25	4
Head of Department	1	Postgraduate	}	F4 (75.0%)	9	26-30	2
Dean	3	Postgraduate					
TOTAL	12		13				13

Note. One teacher declined to disclose his/her role and level taught. *F* = Form (class level)

All schools in the Republic of Trinidad and Tobago remained closed throughout the collection of data and the response was not very promising from the survey returns. The focus group process was eventually removed as a data collection option due to the disinterest of teachers at the three schools. Byrom (2020) said that there have been challenges in gathering data, along with distress over possible study extensions for students conducting research during the COVID-19 pandemic period.

Data Analysis

The results are presented around the research questions which were analyzed in several stages. Stage 1, I assigned the interview and survey questions that were relevant to the study's three research questions in three groups. Stage 2, the quantitative results were organized manually in charts on separate letter sized pages for ease of interpretation and related to RQ1 only. Stage 3, the qualitative responses from the interviews were collated and coded manually on legal size pages. Stage 4, the statistical data was integrated with the interview and survey responses and results were described. Stage 5, all of the results were sent for external peer review.

Quantitative Analysis

I collected the results of the survey from Survey Monkey while the CSEC pass rates from the Ministry of Education's research and evaluation department were transcribed to several charts and analyzed manually. No software program was utilized. I developed charts reflecting the profiles of the teachers who responded from the first five survey questions; the CSEC pass rates for Math and English over a seven year period (see Figure 6); the change in pass rates for Math and English over the seven year period between 2010 – 2016 (see Table 6); survey responses for questions 6-25; and a survey response breakdown chart.

The survey questions 6 to 9, 13, 17 to 19, 21, 22, 24 to 25 and interview questions 1, 3 and 4 were relevant to RQ 1. The CSEC pass rates were also used to give an indication of the academic performance of students from the three schools in the study for

the periods between 2010 to 2016. Survey questions 14, 24 and 25 along with interview questions 5, 6 and 7 were pertinent to RQ 2. The responses from interview questions 2, 8 and 9 were used to answer RQ 3. No survey questions were used to answer this research question. The questions posed to administrators sought to determine if there were any significant changes after the de-shifting of three year high schools in Trinidad and Tobago as it related to student's psychosocial well-being and academic achievement. The results from each instrument are presented based on the themes identified.

Qualitative Analysis

On a legal sized page, the three RQs were recorded in three columns and the key phrase from each were first highlighted to keep me focused on the essence of the question. The survey and interview questions relevant to each research question were written underneath each RQ. The key phrases for each RQ are as follows: RQ1 – met its objectives; RQ2 – follow up programs and steps; and RQ3 – change initiatives more effective. These key phrases assisted in determining the eventual findings from the data.

The coding process began with the key words in a process known as pre-coding. Coding is further explained in the results section of this chapter. The data from the administrators' responses were organized into three draft tables similar to what is shown in Tables 10 and 11. The analysis of the administrators' reports was managed through a step-by-step process beginning with the re-reading of the responses several times to get an appreciation of any similarity in the content. I then organized the responses in a table on separate legal sized paper that indicated each administrator's response for each of the

nine (9) interview questions. With a highlighting pen, the key words and phrases were identified and marked with a note made on the same page listing the repeated words or phrase. The responses were identified for each RQ, recorded on separate pages by relevant interview questions, and the key words and phrases were highlighted. I then recorded the highlighted words and phrases at the bottom of the same page and crosschecked them with the original master sheet for accuracy.

The key words and phrases were organized in a word document on tables, re-read and adjusted by themes as indicated in the relevant tables using the notes made of the administrators' explanations to ensure that the coding did not depart from their intended meanings. Finally, I recorded the interpretations and incorporated these into the results. Every individual may read a phrase and interpret a theme based on his or her context. I recorded the explanations of the administrators to accurately reflect their ideas and experiences in the final themes (Miles et al., 2018). All manual notes were photographed and transferred to an 8GB flash drive while the actual physical notes and tables were placed in duplicate manila files and locked in a secured location. I then sent off the notes and tables to an external peer reviewer at the local university to ensure that experimenter bias was not present in the findings.

Results

Discovering Themes

I developed all of the research questions in this study around the theoretical framework of the study that related to educational change and self-determination.

Additionally, I used these theoretical frames to guide the process and to discover the themes that emerged from the interviews with school administrators. To discover the themes in the responses of the administrators, I applied the coding technique. Coding is a process of organizing dense text into manageable groupings or chunks. In this study, the experiences of the administrators were broken down into understandable themes or ideas. This helps the reader understand and make sense of the information (Elliott, 2018; Saldaña, 2016). The survey questions were also used to answer RQ 1 and RQ 2. Vaismoradi, et al. (2016) explains that themes are ideas, concepts or elements that have similar references but usually cover a range of broad meanings and may have subdivisions or subthemes. I reread all of the text recorded during the interview and then grouped the themes together based on key words and ideas repeated within a particular context.

Verbatim manual coding or in vivo coding was used rather than the NVivo-11 software indicated in chapter one due to the difficulty in accessing the software. The coding was done by carefully recording the responses of each administrator (Miles et al., 2018) manually and identifying recurring words and phrases along with looking for commonality among the administrators' responses. The repeated words and phrases were used to determine the themes for all of the research questions. The rich, quality data was collated and grouped into the themes: five year program, completion/belonging, academic success (RQ 1); vocational skills, self-development/counseling, mentorship/remediation,

parents (RQ 2); guidelines and resources, planning/leadership, curriculum change, IT, teacher training, and support/caring (RQ 3).

RQ1

This research question sought to identify whether the objectives of academic achievement and well-being of students were achieved post de-shifting. After explaining to the administrators, the definition of psychosocial well-being, the participants were able to share their experiences of this concept for the at-risk students (see Table 7).

Along with the interviews and surveys, the statistical data from the Ministry of Education was used to record any changes in academic performance in math and English within the three schools in this study. The pass rates over the seven year period of review indicate that academic performance is inconsistent and that in both core subjects of math and English, the improvements seen were not made in the same years for each school. The average pass rates have not managed to consistently meet or cross the 50% mark over the seven year period (except in one school, in three years), therefore no significant trend among the de-shifted schools in this study is seen for academic gains over the seven year period in these two subjects.

Table 6*Change in Math and English CSEC Pass Rates From 2010 to 2016*

		CSEC Pass Rates and % Change by Year													
SUBJECT	SCHOOL	2010	2011	+/-	2012	+/-	2013	+/-	2014	+/-	2015	+/-	2016	+/-	
MATH	Valley HS	2	5	+3	14	+9	6	-8	7	+1	12	+5	11	-1	
	Youran HS	8	9	+1	7	-2	8	+1	2	-6	38	+36	30	-8	
	Southern Academy HS	14	12	-2	6	-6	15	+9	18	+3	36	+18	13	-23	
ENGLISH	Valley HS	45	41	-4	8	-33	12	+4	9	-3	30	+21	29	-1	
	Youran HS	41	55	+14	15	-40	30	+15	16	-14	58	+42	79	+21	
	Southern Academy HS	41	44	+3	29	-15	41	+12	32	-9	44	+12	39	-5	

Note. The table shows the % of students who were able to pass the exams in math and English from 2010 to 2016. Source: Division of Educational Research and Evaluation (DERE) 2019

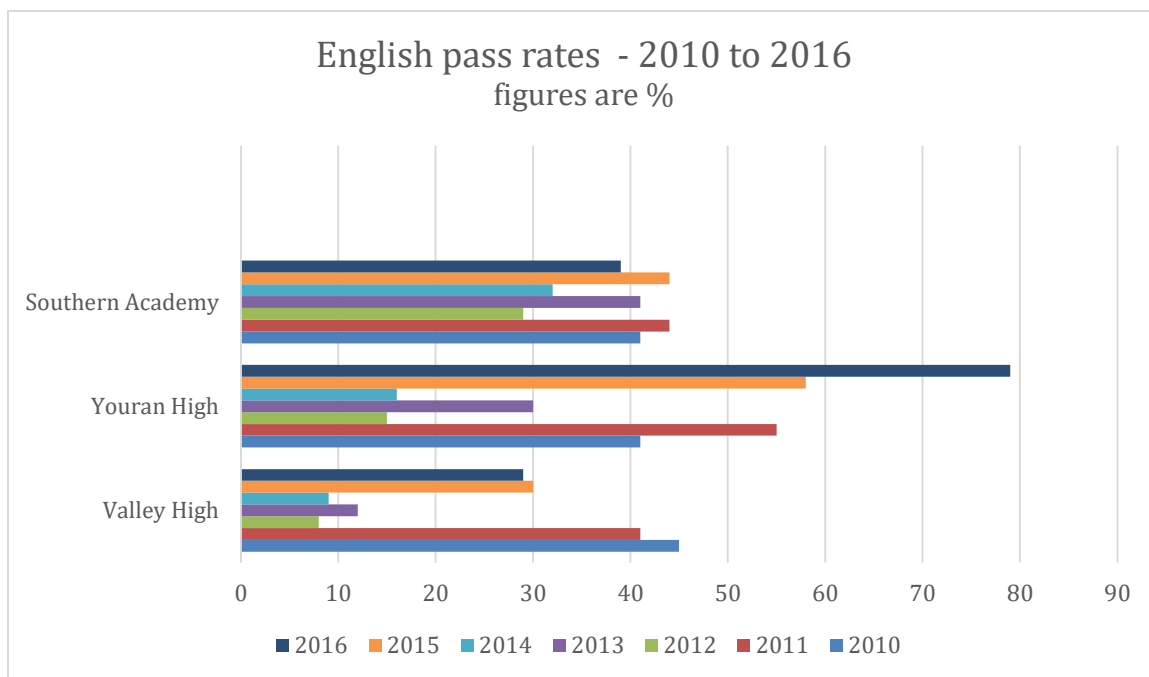
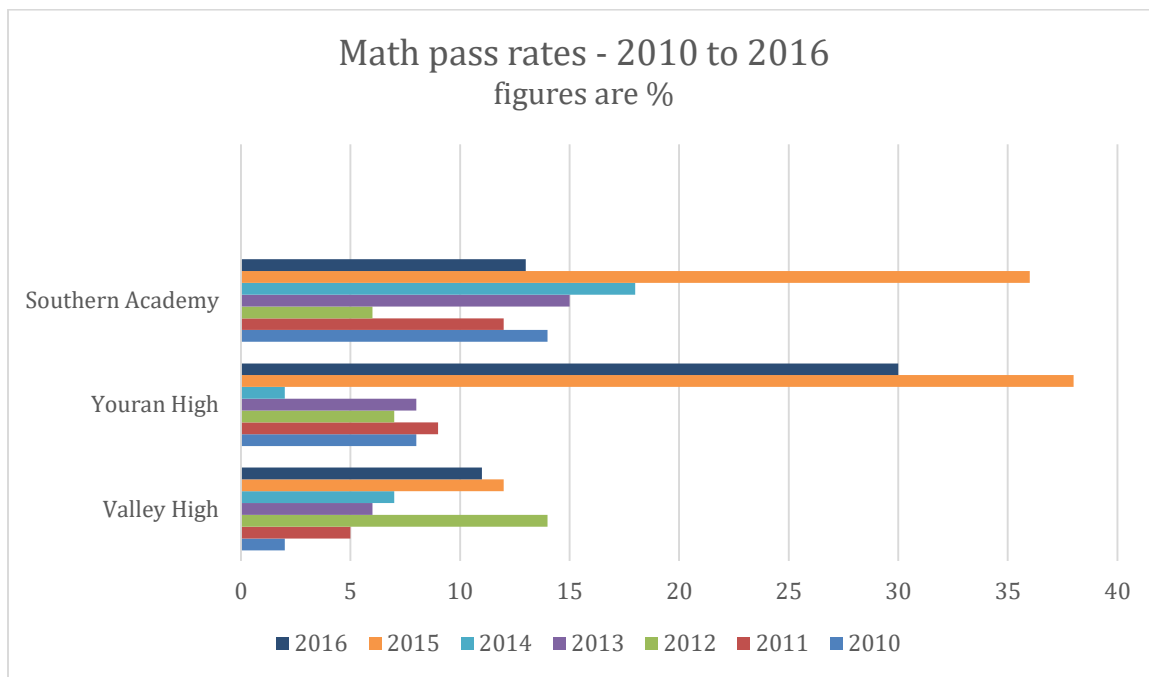
Valley High school recorded slight improvements in math pass rates in four years (2011, 2012, 2014 and 2015). There was no improvement in English pass rates after 2010. Youran High recorded improvements in math pass rates in 2011, 2015 and 2016, their English pass rates improved in four of the seven years (2011, 2013, 2015 and 2016). Southern Academy saw improvements in math between 2013 - 2015 and had improvements in English in 2011, 2013 and 2015. There was an improvement in performance in all three schools, in the seven year period in both math and English, in 2015. The reasons for this increase in the three schools was not identified in this study. The data on academic performance by school also indicates that each school had varying changes over the seven year period. For example, the math pass rates over the seven year period at Valley High indicate consistent improvement though the overall percentage pass rate remains low. Likewise, at Southern Academy, the English pass rates over the seven year period have been constant around a 38.6% average. The overall pass rates seen in all three schools indicate that the student academic performance is not strong, but at Youran High, in 2015 and 2016, the English pass rates seem to be trending upward.

Table 7*Thematic Groups RQ1 - Interview Questions*

Key terms	Themes	Summarized quotes of administrators
Q1. What is your perception of the value of de-shifting junior secondary schools, in Trinidad and Tobago, as it relates to student achievement and student psychosocial well-being?		
Full day. Whole day	Full five year program	“They have a feeling of completion with a start and end”.
	“Completion”	“They are now part of a five year cycle “There is more supervision and learning Taking place”. “Whole day more beneficial to the students”.
Q3. What is the greatest impact on student achievement and well-being in Trinidad and Tobago that can be directly or indirectly attributed to the de-shifting initiative?		
Seamless transition.	“Belonging”. Buy-in	“Seamless transition from lower school to upper school”.
Five year system of education	Ownership and pride	“Students now have the opportunity to belong to something”. “Children could come to school for the whole day as other schools that are five year”. “...happy to be on par with other five year schools”.
Q4. Given the performance of the shift system in Trinidad and Tobago prior to de-shifting, tell me about any significant impact since the implementation of the whole day school you have noticed?		
Academic achievement	“Academic Success”	“Students can fulfill their educational aspirations in one place”. “Now we are seeing the academic achievement in the eyes of the public”. “Management had the opportunity to create a culture of success”. “Attitudes of children...one of focus...wanting to be successful”.

Figure 6

Math and English Pass Rates



From the interview responses, the administrators had a common belief that students want to perform well, but the de-shifted schools did not meet the needs of all students. Also, they noted that there was a need for more remedial staff, and there was still little achievement of CSEC passes. All but one administrator felt that there were gains made towards students' well-being but more work was needed. From the teachers' survey, the five relevant questions showed that 55.4% of the teachers disagreed that academic achievement has improved since de-shifting, 23% agreed that academic achievement has improved since de-shifting, and 21.5% of teachers were neutral about academic achievement.

The administrators related attitudes or feelings of the students' well-being after de-shifting and described these as belonging, pride and ownership; feeling equal to peers in five year schools and having increased motivation. They also shared observations about attendance being poor due to poverty and limited access to nutrition, the stigma of attending junior secondary school was not removed, and there was low self-esteem. Principal 1 reported that there is still a psychological burden, and a low perception of self. From the teachers' survey responses relating to the questions on well-being, the thirteen relevant questions showed 51% of the teachers surveyed disagreed that students experienced well-being, 30.1 % agreed that students experienced well-being, and 18.9 % were neutral about well-being. The survey results are shown in Table 8 and Table 9. I reviewed each of the three questions used to gather the opinions of the administrators for

the qualitative aspect of this RQ to determine the relevant themes present based on the participant's responses.

Interview Question 1

Themes 1-2: Full Five Year Program and Completion. Administrators felt their students had an opportunity to become more serious because of the five year program, as opposed to the three year model of half-day instruction where students in the afternoon session were tired and lethargic. Students in the five year program showed a sense of purpose to perform and now feel vested in the traditional five year high school program. The administrators felt that there was more learning taking place in the classroom. However, two administrators felt that the stigma of the three year model still lingered and that some stakeholders view these schools as marginalized. Not all expectations for change in the five year model have been met.

Interview Question 3

Themes 3-4: Belonging/Buy-in, Ownership and Pride. The administrators spoke about finality and a seamless transition through the grades. The students feel that they belong to something and many are proud of their school. Some want to be successful but again, there was the mention of the stigma that still affects the students. There is also the pervasive belief of members of the community that stigma still follows the students in the new five year system.

Table 8*Survey Responses*

Survey Question No.	Strongly agree	Agree	Neither agree or Disagree	Disagree	Strongly disagree
6.	1	7	3	2	0
7.	1	5	3	4	0
8.	0	3	2	8	0
9.	0	4	2	7	0
10.	2	6	2	2	1
11.	0	8	3	2	0
12.	0	2	2	9	0
13.	1	5	1	6	0
14.	1	1	3	7	1
15.	0	5	0	7	1
16.	0	6	2	4	1
17.	0	4	2	5	2
18.	0	3	2	7	2
19.	0	2	5	5	1
20.	2	2	3	6	0
21.	0	1	1	9	2
22.	0	3	2	6	2
23.	1	2	3	6	1
24.	0	3	2	7	1
25.	0	1	4	6	2

Table 9*Survey Responses Breakdown*

Code	Response	n	Percentage %
2	Strongly agree	9	3.5
1	Agree	72	27.7
0	Neither agree nor disagree	47	18.1
1	Disagree	115	44.2
2	Strongly disagree	17	6.5
TOTAL		260	100.0

Interview Question 4

Theme 5: Academic Success. In terms of significant impacts since de-shifting, the administrators felt that the atmosphere has changed and that they could work on a culture of success. Students want to excel academically, and teachers also feel compelled to improve their own level of competency to provide more support for students to be successful. However, one principal noted that there were “no results academically” and that whole school success is still a long way off.

It was clear from the responses for RQ 1 that the administrators believe the de-shifting of the three year high schools have afforded the students who were placed at these schools an opportunity to be on par with their peers in existing five year schools but some stigma and self-esteem issues remain. There is also more work to be done in improving academic performance.

RQ2

To answer RQ2, the questions 5, 6 and 7 from the administrator interviews were analyzed along with questions 14, 24 and 25 from the teacher survey. The administrators were passionate about this topic since they all felt more could be done by the policymakers to implement basic support programs for the students. The key words and themes derived from the interviews and survey responses are shown in Table 10. Administrators discussed peer and alumni support, incorporating an adjusted curriculum that increases access to vocational training, access to remedial teachers and an approach to pastoral care that involves support by guidance officers, social workers and involved parents.

Of the three questions used to answer RQ 2, responses from the teacher survey indicated that of the programs or steps introduced at the schools to address well-being and academic achievement, 15.4% agreed that these programs were adequate, 23% were neutral regarding follow up programs and 61.5% disagreed that the follow up programs were adequate after de-shifting. The recurring themes of vocational skill training, student self-development involving counseling, mentoring or parental support indicated what the administrators felt were immediately needed to impact the experiences of at-risk students at the de-shifted schools. Each of the three questions used to gather the opinions of the administrators were reviewed to determine the relevant themes which are now discussed.

Interview Question 5

Themes 1-3: Peer Support, Self-Development and Mentorship. When asked about positive experiences since de-shifting, one administrator noted that some students became responsible. The children can now own their education and are praised and motivated at award functions and other events by past students that allow them to show their pride. The encouragement motivates the younger students. They noted that since de-shifting, many staff members want to show their skills in preparing students for the national exams (prior to de-shifting, students went on to five year high schools to prepare for national exams).

Interview Question 6

Themes 4-6: Technical Training, Counselling and Remediation. The administrators shared that student's access to non-academic pursuits such as Caribbean Vocational Skills (CVQ) options is available but limited and there was some adaptation to the curriculum for the very weak students (those achieving < 30% in the placement exam) in the form of remedial programs and some specialized projects for at-risk students. They reported that there was more support from social workers and guidance counselors, which was not available before de-shifting.

Interview Question 7

Themes 7-9: Remediation, Parent Education and Targeted Social Programs. The items reported by the administrators that need continual attention (discipline, attendance and punctuality) were issues that are borne from social problems such as poor parenting

and low socioeconomic status and poverty. Academically poor students who need remediation are prone to low self-esteem. They also noted that parents are ill-prepared to support their children. One administrator observed that at-risk students have no access to computer technology, and another felt that there should be a closer relationship with law enforcement and social services agencies to support struggling families.

RQ3

The results for the last research question were derived solely from the interview responses given by the school administrators. The administrators identified change initiatives, and this was a clear sore point for all of them. Each of the three questions used to gather the opinions of the administrators are presented with their summarized quotes from their responses (see Table 11) followed by the verbatim reports of the administrators.

Interview Question 2

Themes 1-3: Guidelines/Resources, Planning and Leadership. Principal 1 said, “There was little meaningful collaboration with principals to assess the needs for this change. The roll-out was rushed and our staff had more questions than answers. There were no clear structures to follow for implementation by the Minister of Education.” Vice Principal 1 reported, “We had two years of our oldest groups because we needed new buildings, the MOE did not meet requirements for the Form 4s and 5s immediately. There were also other needs not met.”

Table 10*Thematic Groups RQ2 - Interview Questions*

Key terms	Themes	Summarized quotes of administrators
Q5. What are some positive experiences since de-shifting have you observed regarding student academic performance and overall student well-being at your school?		
Alumni involvement	Peer support	“Children were praised at award functions by alumni and this increased their motivation”
	Self-development	“Maturity, responsibility kicked in”
Mentor	“Mentorship” programs	“Students can perform in technical areas” “Alumni mentor students who in turn help the younger ones”
Q6. What are the benefits that are being experienced among at-risk students since de-shifting has been implemented at your school?		
CVQ options Curriculum	Technical training	“CVQ options and adapted curriculum facilitated by the MOE for weaker students
SW, GO available	Counseling	“In-house SW and GO work with students to identify their God-given talent” ...here as ‘safe space’
Remedial staff	Remediation	“MOE provided remedial staff to assist 30% students. This had a good impact” “Reading programs through MOE... impacted significantly”
Q7. What are some steps that can address any challenges being experienced among at-risk students since de-shifting has been implemented at your school?		
Remedial teachers	“Remediation”	“We need remedial teachers this helps with self- esteem”
Parents	Parent education	“Parent attitudes are poor” “Parents are resistant, they need to understand needs of their children”
	Targeted social programs	“...because of the poverty, ...need to access nutrition”

Principal 2 said, “There was no clear plan in place. Principals had to chart a way based on the school context. We got no tools to create a new school. We even had to manage the staff re-adjustment and re-assignment.”

Vice Principal 2 stated, “MOE did not have a plan regarding preparing staff from both shifts. No coming together happened. There was a top-down approach to de-shifting, that’s all!”

Vice Principal 3 reported, “It was not a comfortable time, there were no set standards and guidelines. Everything was left to internal administration. All the mechanisms, the infrastructure was left to the principal. MOE did not send guidelines to assist and support. Established [five year] schools provided support.”

Interview Question 8

Themes 4-7: Change, Research, Teacher Training, and Community Issues.

Principal 1 said, “They [MOE] need to adopt a collaborative approach with administration. There do exist five year schools that are successful. What are their best practices? Communication should be purposeful and clear. If time is spent on providing necessary resources and infrastructure..., teachers are not trained in special education.”

Vice Principal 1 reported, “The MOE must recognize what is not working! School does not meet the needs of all our students. We have to take a look at trade opportunities for these children, collect the data and follow through on the results.”

Principal 2 said, “It seems that there is no desire for affected schools to perform better and to treat with the challenges found here. The needs of a changed curriculum etc. are

Table 11*Thematic Groups RQ3 - Interview Questions*

Key terms	Themes	Summarized quotes of administrators
Q2 What is your opinion of the roll-out of the de-shifting initiative by the Ministry of Education at your school?		
Standards and Guidelines	Guidelines/Resources	“...we needed new buildings” “MOE did not meet requirements...” “No set standards and guidelines” “...no clear structures to follow...”
Plans	Planning	“MOE did not have a plan regarding preparing staff” “...no clear plan in place”
Administration	Leadership	“Everything left to internal administration” “There was a top-down approach to de-shifting...”
Q8 In your opinion, what steps can the [Ministry of Education] policymakers take to foster overall student success and effective change initiatives at the school and national levels?		
Curriculum change	Change	“The need of a changed curriculum is not treated with urgency” “...look at trade opportunities.”
Data	Research	“...collect the data, follow through on results” “...need evidence-based research”
Pretraining	Teacher Training	“Pretraining of teachers in education choose teachers carefully”
Social development	Community issues	“MOE must work in collaboration with Social Development to identify challenges...as well as Law Enforcement...”
Q9 What are some factors that can support psychosocial well-being and achievement of at-risk students in a de-shifted school like yours?		
Environment	Teacher awareness	“An environment with resources...to build Positive mindsets” “...must have an environment that is comfortable” “...community awareness is needed...”
	Support Caring	“...that children get some level of support” “...influence of peers also plays a part”

not treated with urgency. Nothing was put in place to produce effective change.”

Vice Principal 2 stated, “Pre-training of teachers in education and the philosophy must be done. MOE should choose teachers carefully including specialists. Leadership must have vision and use evidence based research with accountability.”

Vice Principal 3 reported, “MOE must work in collaboration with social development to identify socioeconomic challenges, as well as with law enforcement. We need workable solutions to solve the community issues.”

Interview Question 9

Themes 8-10: Environment, Support and Caring. Principal 1 said, “Parent education and community awareness is needed. Social and family support services are vital to experience school effectively. MOE is too authoritative and not team oriented in policy formation. Teacher training at all levels in developing a balanced child is lacking.”

Vice Principal 1 reported, “Relationship building at all levels, the MOE with administrators and teachers, teachers with parents and students. The influence of peers also plays a part in the achievement of at-risk students. It is very important to the child’s ability to achieve.”

Principal 2 said, “An environment with resources. School culture must be strong to assist with psychological well-being. Systems must be in place to build positive mindsets.

Investing in specialized teachers, leadership training for administrators.”

Vice Principal 2 stated, “It has a whole lot to do with achievement. Teachers must have buy-in. The perception of the community about stigma have to change. The teachers have

expectations but are not shown appreciation. This can affect their ability to motivate students.”

Vice Principal 3 reported, “If the home environment is comfortable...the child will ultimately do better ... if the child gets some level of support, their maturity will improve. They must be psychologically balanced to do well.”

RQ3 involved change initiatives of the government of Trinidad and Tobago. The rollout of the de-shifting initiative and factors supporting well-being and academic achievement will be reviewed first, before closing with how policymakers could foster effective change initiatives. The meaning that was brought forward from interviewing these administrators, after their responses were recorded, are as follows:

Regarding the roll-out of the exercise, all of the administrators explained that the process was less than efficient and merely accomplished a change in the structure of the school day from the old shifted system to the new de-shifted model. The challenges of the new system concerning staffing, infrastructure, curriculum, collaborative decision-making, and perhaps some confusion among staff about roles and responsibilities in the new system, were evident to these administrators who continued to manage their schools as best they could. In discussion about the factors that can support psychological well-being and academic achievement, the administrators felt that the stigma of the three year school system is deeply ingrained in these schools. In many cases, the schools are still considered under-performing and more support that can be given by the Ministry of Education in remedial staffing, teacher training, but especially through social programs to

support parents and communities which in turn can support the students. They have noted that the students have the capacity and want to achieve. They noted the benefit from peer support and outfitting the school environment with resources to meet the students' psychological and intellectual needs.

Overall, in response to the goal of making change initiatives more effective, the administrators' reports of the deficits in the process became the factors they felt were needed for fostering effective change. The behaviors to foster effective change were identified by the administrators as collaboration with stakeholders, evidence-based practice guided by research results, curriculum review and reform to meet the needs of the changing student, sound leadership borne from teacher pre-training and partnership with social service organizations and other state institutions.

Summary

The preceding findings in this case study examined the outcomes of de-shifting three year high schools in Trinidad and Tobago and particularly, the impact of the de-shifting initiative on the psychosocial well-being and academic achievement of the students. I followed the research process to ensure that participants' confidentiality was preserved and there was transparency throughout the process. An audit trail was maintained by following an organized and process-oriented approach including clear descriptions of the narratives and the limitations faced during the study. The topic under review was suited to a case study design and the instruments used were effective for gathering the data. The researcher secured the necessary permissions from the MOE in

Trinidad and Tobago and the IRB to conduct this research (approval #03-17-20-0242185). All ethical research procedures were followed including consent, disclosure about the study, and threat of personal harm.

Chapter 5: Discussion, Conclusions, and Recommendations

This chapter restates the purpose of the study and reviews main findings in response to the research questions. It includes intentions of the study, key findings, and a discussion of outcomes of the de-shifting process in Trinidad and Tobago organized around the three research questions. This discussion includes recent literature on the topic along with the theoretical framework used in this study. In this chapter, limitations that were experienced are described and recommendations for future study are provided, in addition to implications and opportunities for influencing social change. Ending comments conclude the chapter.

The main purpose of this evaluative mixed methods case study was to examine outcomes of the secondary school de-shifting initiative and any impact on academic achievement and the psychosocial wellbeing of at-risk secondary school students in the Republic of Trinidad and Tobago. The government of Trinidad and Tobago used the shift system as a short-term method of educating as many high school-aged children as possible to fulfill the United Nations mandate of Education for All and always intended to eventually revert to a 5-year model (Burnham, 2011; James, 2014). From the initiation of the government's (1968-1983 15-year plan, there were statements from concerned parents that highlighted challenges. Some identified issues of at-risk students being underserved, and others claimed that students and teachers were demotivated, with teachers needing more training and parents complaining that students did not have enough learning time and supervision (Ashong-Katai, 2013; Figuera & Ferreira, 2014).

This study involved examining what administrators experienced regarding academic outcomes and psychosocial impact since de-shifting, how teachers feel about the process, and what statistics show regarding academic achievement.

Summary of Findings

Overall findings were determined from the three research questions which were:

RQ1: To what extent has the de-shifting initiative in the Republic of Trinidad and Tobago met its objectives of academic achievement and psychosocial wellbeing for at-risk students?

RQ2: What follow up programs and steps can be implemented to help de-shifted secondary schools address the psychosocial wellbeing of students and sustain successful educational change in the Republic of Trinidad and Tobago?

RQ3: What steps can be taken to make change initiatives more effective so that the psychosocial wellbeing and educational needs of at-risk students in the Republic of Trinidad and Tobago are achieved?

Findings suggest that there are still challenges in terms of the structure of these de-shifted schools based on data derived from three schools involved in this study. Data over 7 years shows academic achievement is inconsistent and unpredictable as it relates to pass rates and is probably influenced by unidentified variables. The pass rates over the period have not trended over 50% for math between 2010 and 2016 in these three schools, and only one school had a pass rate in English which crossed the 50% mark in 2015 and 2016. This could be the beginning of an upward trend for this school. Educators

reported that stigma and self-empowerment are still sources of concern, though some students are willing to take control of their academic success. All administrators believe that the 5-year model has brought students some feeling of ownership and opportunity to complete high school.

De-shifting is usually a politically-driven process, as is the decision to create a shifted schooling system (Kurebwa & Lumbe, 2015; Rikkerink et al., 2015;). Improving academic achievement, stigma of underperformance, teacher training, and impressions from community members where these schools are located were common factors (Burnham, 1992).

Each research question is reviewed with relevant findings discussed in turn, and these findings are a direct response to research questions highlighting themes that were identified in Chapter 4.

Interpretation of the Findings

The study involved discovering psychosocial and academic outcomes of de-shifting of 3-year high schools in the Republic of Trinidad and Tobago by reviewing shifted education in the country and what has been said in research about shifted schools in other territories. The change theory was considered as it relates to educational change and how children are encouraged to succeed through the concept of the self-determination theory.

RQ1

From the interviews with administrators, the main points shared surrounded the experience of the students and the attainment of their self-fulfillment and their academic success. One of the purposes of the de-shifting initiative in Trinidad and Tobago was to allow students the opportunity to enjoy a full day of instruction like students at established 5-year high schools.

Principal 1 said, “students are able to become part of the 5-year cycle...[but] the stigma was not removed.” This concern involving stigma was repeated by a few administrators, and as noted in Chapter 1, a byproduct of the separation of students placed at these schools due to their socioeconomic status or class divide. Many of these students, therefore, continue to be stigmatized.

As noted in Chapter 2, there were challenges with academic achievement among students in previously shifted high schools due to the structure of the schooling itself, including poor infrastructure and access to learning resources, poor or lack of training for teachers, poor attendance and fatigue of students, and the lack of perceived ability of these students (UNESCO, IBE 2010/11). Academic achievement was low among these schools (Antoine & Ali, 2016; Mills, 2015). The expectation of realizing sustainable academic success among the students benefiting from the de-shifting process was ill-conceived without ensuring the investment by the implementers, and strong and effective school leadership to sustain the changes (Fullan 2016)

Administrators were vocal about the absence of review of relevant curriculum (particularly for at-risk students), adequate training for all teachers and social support systems. The plan was not clear to the implementers which necessitated staff adjustment and remediation for very weak students. As seen in the literature regarding shifted schools, the manner of implementing policies was always top-down (Clement, 2014; Wood 2018).

The government of Trinidad and Tobago neglected careful collaboration with the persons implementing and applying the change as reflected in the pass rates reported over the seven years captured in this study.

Although the research question focuses on meeting the objectives of academic achievement and psychosocial well-being, an outcome that was not anticipated was the agency de-shifting afforded students to be motivated to succeed and to self-actualize. Also, the pass rates of the core subjects highlighted in this study were not sufficient to indicate academic gains that may have occurred in the represented schools, due to the absence of other subject areas. This may have shown a different perspective of academic achievement at these de-shifted schools. It may be useful in the future to look at a range of subjects to see if academic achievement over some period post de-shifting, does occur outside of mathematics and English.

RQ2

Another reason for implementing the shifted model of three year high schools was to allow high school-aged students not only access to academic instruction but also the

ability to pursue technical vocational skill training (Alleyne, 1996; Burnham, 1992) as well as to opt to pursue the technical vocational certification (Morris & Powell, 2013). Some of the administrators interviewed noted that the technical vocational program was a viable option to be utilized for the benefit of disadvantaged students to develop their skills. For example, two administrators agreed that there was some academic progress, but not enough technical vocational areas, another pointed out that there were CVQ options available for students who are weaker, and noted that those students had the ability to be qualified as craftsmen/women.

It is notable that in the three year model, some students were less interested in school as evidenced by rebellion, attrition, lack of self-confidence, and other behavioral complaints (Mills, 2015; Thomas 2014). Antoine and Ali, (2016) shared in a study that students from the three year model who moved on to the five year de-shifted system experienced difficulties coping academically and had troubled peer interaction. Based on the reports of the administrators and teachers surveyed, there are still some problems of adjustment. These adjustment concerns have been attributed to poverty and low academic achievement as articulated in the interviews with school administrators, and are corroborated in Ashong-Katai's (2013) report of the Ghanaian experience.

It is clear however, that when students began their education in the five year de-shifted system, they appeared more settled and connected to the school. The admission of two administrators confirmed this sentiment. They noted that the attitudes of children

changed being focused and wanting to be successful. Vice Principal 1 shared that “students attending a full-time institution were on par with other five year schools.”

Another factor that was discussed in the administrator interviews, was the importance of parental support for these students and an understanding of the needs of students during their psychosocial development and journey to academic success. The literature on multiple shift schooling and de-shifting refers to the importance of parental support as a key ingredient to success (Fabregas, 2017, Munoz-Pedroza, 2016, Sagndykova, 2013) and generally report that families were concerned about non-supervision and the negative behavior among peers because of the shift system, but students’ expectations and attitudes are also reliant on their parents’ and teachers’ views of education as a means of achieving success (Ryan & Deci, 2016).

Apart from fostering a positive value system in students, parents can encourage, motivate, and support at-risk students to achieve autonomy (Mitchall & Jaeger, 2018). Parental support when children move to new schools (Duineveld, et al., 2017) helps to develop responsibility and can prevent dropout (Richard & Pelletier, 2016) before graduation. This is a well-known indicator in the research of students’ ability to succeed and self-actualize and was mentioned in the interviews of the school administrators, where it was noted that parents’ attitudes are poor and some are resistant to changes necessary to support their at-risk children. These administrators understood the importance of parents as key motivators and believers of their children.

RQ3

Education has been used as a vehicle to foster the building of human capital and drive economic development for many countries. Education reform as it applies to nation building signifies an approach to improvement of current practice initiated by policymakers in government for the benefit of all involved in education at both institution and national levels. Educating all children became a popular national development policy for many governments in a period of expanding international literacy levels, supported by UN organizations such as UNESCO and UNICEF (Torres, 1999). After Trinidad and Tobago's independence in 1962, the new post-colonial government began a campaign to educate all of the nation's children (Alleyne, 1996). The shift to reform the existing model to a more inclusive and standard experience for all children resulted in the de-shifting of three year schools in 2006 (James, 2014).

The nature of educational change in this study focused on a change in the Trinidad and Tobago education system after the three year, double shift model of education was no longer deemed beneficial to the students it served. The literature on education change indicates that there are three stages of the change process: the situation necessitating change is identified, a goal is determined and the change is implemented and finally consolidated (Cummings, et al., 2016). The importance of sound and prudent leadership both at the central government and institutional level determined the outcome of the de-shifting initiative. However, while the administrators in this study were aware of the national de-shifting initiative, all were less than impressed with the roll-out and

most participated in the veiled compliance (Berlach, 2010; Hall, & Mc Ginity, 2015) mentioned in chapter two. Veiled compliance refers to a reaction to change where educators respond and work with policymakers and/or supervisors to implement the change, but have underlying concerns or discomfort with the process.

Some of the evidence of this discomfort was noted in the responses to the roll-out of the de-shifting initiative. For example, vice principal 2 noted “there was a top-down approach to de-shifting, that’s all!” and, “It was not a comfortable time...no set standards and guidelines.” Principal 1 explained, “the roll-out was rushed and our staff had more questions than answers.” Vice principal 2 charged that, “nothing was put in place to produce effective change.” It became clear from these administrators’ responses that the implementation of the de-shifting initiative began in a manner that caused uncertainty and more questions than answers due to nonengagement of the implementers of the change. The literature has noted consistently the importance of involvement and collaboration with key stakeholders in the school change and reform process (Luttenberg, et al. 2013; Clement, 2014; Wood, 2018).

Most of the concerns expressed by the administrators have been echoed by the researchers who studied the impact of shifted schooling initiated and mandated by the governments where the studies were conducted. It is established that policymakers, teachers, and other stakeholders are the main groups to consider in the education change process (Berlach, 2010). From the reports of the administrators, the missing factor in achieving a smooth and successful de-shifting process was effective leadership and

management from the central government. By collaborating with the central government, school change could be carefully managed by encouraging the right mindsets of the implementers who can be compelled to buy-in through motivation by school leaders who, being the persons on the ground, have to lead the daily charge to achieve successful change. While the importance of leadership was articulated by all of the administrators, there was much less discussion surrounding the ways to foster and maintain nurturing school environments. In the literature, the student's positive school environment impacts success and well-being (Antoine & Ali, 2016; Kurebwa, & Lumbe, 2015).

The administrators emphasized the lack of understanding of the parents regarding the needs of their children, though they did understand the value of a healthy environment to nurture the success of the students. For example, two principals noted, that culture and relevant resources were necessary to promote environments that foster student well-being, and that school was their safe space. Another principal felt that whole day school gave kids this comfort and it had a positive impact in fostering maturity and responsibility in some students. In chapter two, it was noted that the social context and environmental perspective impact student success. Students need strong and positive relationships to thrive (Silva et al., 2014) along with encouragement from teachers who demand high expectations (Jang, et al., 2016). The schools were assigned social workers and guidance officers who worked well with the students. Some remedial teachers who were assigned at these schools before de-shifting had a positive impact on the at-risk

students resulting in improved performance. The environment is not only about place but about people, which adds benefit to student success.

The explanation of the preceding findings indicates that there is still some stigma attached to the de-shifted three year double shift school and without careful planning with stakeholders, inadequate human and physical resources cannot meet the academic and psychosocial needs of the students. Students are more settled in the de-shifted five year schools and they feel they have the capacity and agency to achieve success. Seven years post de-shifting however, the academic results have not significantly improved. In some cases, students' poverty and challenges with academic achievement have caused adjustment problems in the five year system, which can be mitigated to some extent by the support of teachers and other school professionals, but most importantly by parents and guardians.

Limitations of the Study

Several limitations of this study are worthy of review. Due to the nature of the study, the sample population was specific and needed to meet a particular criterion to participate. These participants needed to have worked at de-shifted schools before 2008 and continue to be employed at the schools after de-shifting. This criterion would have limited the numbers of participants significantly due to the turnover of teachers to these schools over the period.

Therefore, the sample was low. The lack of interest impacted the ability of the researcher to run the focus groups originally planned as another means of data collection,

along with possibly impacting the generalizability and reliability of the study. The plan to interview focus groups was eventually withdrawn, affecting triangulation since a large means of accessing data was the focus groups that if completed, may have complimented or contrasted the findings of the administrator interviews and survey. I approached the Ministry of Education to include three schools in this study and again, this decision to use three schools could have been one of the factors in the low number of participants in this study.

The onset of the COVID-19 pandemic caused a significant impact on the time it took to gather data since schools in Trinidad and Tobago were closed immediately, and the population was also placed on lockdown for the next two months. Calls to school principals to share teachers' Ministry of Education email addresses went unanswered even after lockdown, since administrators manned their schools using a rostering system. When contact was made and correspondence sent off to the qualifying teachers, the return of surveys was painfully slow and only 13 participants eventually completed the online surveys after 6 months. Teachers did not feel obliged to engage in this study online. The feeling of uncertainty regarding the outcome of the pandemic among administrator participants also led to general anxiety of the researcher who was working within a finite timeframe.

Recommendations

The findings of this research are in line with previous studies regarding the de-shifting of schools where the literature discussed in chapter two found that there was

inadequate communication and planning from central government with school staff to consolidate the new initiative as noted in change theory (Baglibel, 2018; Pendergast, 2015), that no significant academic improvement achieved post de-shifting (Ashong-Katai, 2013), that parent, teacher, and peer support are important for psychosocial well-being and academic success of students. This fosters self-confidence and self-efficacy and is a key aspect of self-determination theory (Ryan & Deci, 2016; Thomas, 2013), also that the whole-day model as opposed to a shifted model of schooling has positive outcomes for students (Cacho et al, 2019; Hincapie, 2016).

After noting the alignment of the literature on de-shifting to the findings of this study, and the limitations found in the study, these limitations can be reviewed for future research. The recommendations are therefore presented based on some of the stated limitations and findings.

Improving Sampling

After conducting this study, it was found that the number of schools in the sample should be increased to ensure maximum returns for anonymous surveys and the assembly of focus groups to enhance data gathering. This would automatically increase the number of administrators available for interviews. The inclusion of more subjects other than mathematics and English Language from the archival data capture could also provide a better appreciation of academic performance by each school and by extension, be a better representation of the entire population. Notwithstanding the challenges faced by the onslaught of the COVID-19 pandemic, which exacerbated the difficulties surrounding

data collection, the overall benefit of increased sampling would be improved triangulation and data saturation to achieve more robust validity and reliability (Hayashi, et al., 2019).

Learning from the Findings

Partnering with Stakeholders

As a means of learning from the results of this study, policymakers can utilize the salient points from the theory of educational change as detailed in Fullan's 2006 *Change Theory: A Force for School Improvement*. The theory explains that collaborating early in the process, along with communication and training for the parties involved can prevent resistance and foster buy-in, thus achieving successful implementation. Hussain, et al. (2016) also noted that negotiation with implementers of change also is key to avoid negativity, confrontation, or veiled compliance. While the participants in school reform are continually identified as the state, school administrators, and teachers (Berlach, 2010), students and parents who are major recipients impacted by school reform are often omitted. In making future adjustments to school reform, it is suggested that all stakeholders be included in decision-making to realize the expected goals. This can be initiated by engaging in meaningful national consultations as well as media and advertising campaigns in the communities where schools are located to be beneficial in achieving a feeling of inclusion by all involved.

Along with inclusion, follow-up inquiry by policymakers on how schools are managing change has not always been evident and should be added to the plan for change initiatives to be truly effective.

Reform That Fits the Context

Blair (2013) states that educational change should be led through a context-specific examination of the relationship between scholars of teaching and learning and the society in which they find themselves, and relates directly to an understanding of the experience of stakeholders at the school level, yet attention should be focused on the phrase “context-specific.”

MOE policymakers found it necessary based on their achievement of providing education for the majority of the nation’s secondary school students to de-shift three year secondary schools. While this move was necessary and indeed demanded by many, the context for change making may not have been carefully examined. In chapter one, the government’s goal was to provide the opportunity of education in academic and vocational instruction for all secondary school students, to allow for building human capital (Morris, & Powell, 2013). However, nation building requires carefully determining the skills and capacity needed for its human capital to advance the nation economically and productively (Agbo, 2005).

The government should therefore align change initiatives in de-shifted schools to suit the needs of the communities and by extension, the nation. For example, in fishing communities, schools can focus on training their youth for modernizing, sustaining, and

managing the fishing industry, along with offering academic and vocational courses to develop industry and create job opportunities for future job seekers. The same approach can be used in communities with other identified industry traditions and preferences. The government can also ensure there is a system for meaningful and relevant teacher training in instruction, supervision, leadership, and management where central government takes the lead to engage school supervisors and principals through a bottom-up approach. “It means understanding through consultation, observation, and analysis...” (Roche, 2017, p. 146) and where the structured interschool best practices can be shared and documented.

As noted in chapter two, a motivated teacher positively impacts students (Pitzer & Skinner, 2017). Additionally the T&T government can optimize academic achievement and psychosocial development and well-being in the new technological age for students and teachers, considering the aspects of self-determination theory by monitoring the importance of experience to learners, harnessing the interests of students through gaming, electronic learning, virtual reality, and the use of various other technology tools to encourage independence, skill development, and relating to peers, need to be considered to achieve the goals of developing an empowered and competent student (Ryan, & Deci, 2020).

Future Research

Some of the challenges discovered in conducting this study indicate the need for the study to be repeated. The sample size should be increased by adding at least three schools to take part in the research, this might achieve a survey sample of at least 100

teachers, and 10 administrators who could take part in the administrator interviews, along with identifying at least four focus groups that might produce a total of at least 16 reports. Future research is also recommended to investigate more deeply the experiences of students and their parents, who as noted earlier, have been neglected in most of the literature on de-shifting regarding their reflections on change policy and implementation. Based on the findings relating to academic achievement and psychosocial well-being, there should be consideration given to further research focusing specifically on other variables that may have an impact on students' ability to succeed in these two areas. This can allow policymakers to concentrate on those variables to improve student success.

Implications for Social Change

The results of this study have endorsed the fact that policymakers who initiate change are not fully collaborative with the implementers of change in the process of education change as noted in the several reports by various researchers and administrators interviewed for this study.

The implications for change emerging from this research are clear. Policymakers need to understand the benefits to be derived from the timely review of change initiatives so that adjustments can be made upon review to repair gaps, or to share significant best practices that can be disseminated to all schools participating in the change initiative. Additionally, engaging a culture of collaboration and inclusion consistently from the bottom-up can engender trust from the implementers of change who can then feel that they are truly part of the decision-making.

At the school level, when principals manage and lead with the same motivation as policymakers to ensure that teachers, parents, and students form an integral part of planning for the benefit of the students, the tenets of self-determination and self-efficacy can be maximized for administrators, teachers and students alike.

This study also can have the impact of illustrating the importance of policy formation coming from context specific needs that are determined by the collection of data to inform the next steps. Educators at secondary schools, following the mandates of the policymakers, can then implement plans that are borne from a clear understanding of the adjustments that must be made to address the academic achievement and self-efficacy of students. Some of the administrators noted that the inclusion of community and social services can also aid in this process, which can move to build community awareness and aid in the process of successful education change and reform.

The MOE of Trinidad and Tobago can also become a change initiator in the Caribbean region and a model for other Caribbean territories by facilitating meaningful collaboration in bottom-up approaches, rather than the top-down methods in which this de-shifting process seemed to have been rolled out. This may open the door to networking with school district stakeholders for a more responsive approach to change initiative management that the school administrators interviewed for this study seem to favor. The strategies of change can be shared not only with our regional neighbors but also with developing countries as suggested in chapter one to encourage the development of human capital.

Policymakers have the opportunity of using this research to consider the recommendations that can help students to achieve competence and self-efficacy to contribute to society one community at a time. When there is an appreciation for the value of education through engaging community stakeholders to see the benefits of education, social change can flourish.

Conclusion

The MOE achieved their goal of providing education for all secondary school aged students by building schools and utilizing a double-shift system to maximize instruction. The research presented in this paper provided a background for the roll out of the de-shifting process by reviewing the historical context of education in Trinidad and Tobago and the MOE's long-term educational plans to 2020. While the government communicated a national plan for de-shifting three year schools to the public, as germinated by the political mandate, the strategies for rolling out, managing, and reviewing the process were unclear to the educators implementing the changes.

The theoretical frameworks used to guide the study indicate that in change theory, successful change does not occur because the stages and indicators of change are completed, but rather when the implementers of the change are enthusiastic, feel ownership, and are appreciated. Likewise, the responses of administrators and the survey responses indicate a clear missing link in the process of school change, which are, the students who are not mentioned as having a voice in the monumental changes that affected their lives. Self-determination theory as a construct that explains the motivation,

social interaction, and accomplishment of students describes how not only students can achieve well-being and academic success, but also the stakeholders at the school level.

When all stakeholders are truly involved in systematic research, planning, decision-making, and implementation of change initiatives, institutions can achieve academic competence, a culture of togetherness, and personal fulfillment. Continued stigma was identified as a factor in the ability of some students at the converted five year schools to fully maximize educational opportunities. There must be a paradigm shift in the bureaucratic approach to educational change where a more collaborative, bottom-up, problem solving approach is actioned throughout the process. A closer look has to be taken at how educators are trained to execute the important tasks of instruction, management, supervision, and leadership.

In posturing for educational change or educational reform, the process can be less frustrating if the will to change involves national support, along with a view that education needs constant innovation and the development of emotionally secure students.

References

- Arceo-Gómez, E. O., Campos-Vázquez, R. M., & Muñoz-Pedroza, C. M. (2018). Double-shift high Schools and school performance: Evidence from a regression discontinuity design. <https://www.cedlas.econo.unlp.edu.ar/wp/wp-content/uploads/Mu%C3%B1ozPedroza.pdf>
- Agbo, S. A. (2005). Myths and realities of higher education as a vehicle for nation building in developing countries: The culture of the university and the new African diaspora. *Contemporary Issues in Education*.
<http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=452D67839B8A3FA76F4B76127E76D950?doi=10.1.1.556.2516&rep=rep1&type=pdf>
- Alleyne, M. H. McD. (1996). *Nationhood from the schoolbag: A historical analysis of the development of the secondary education in Trinidad and Tobago*. Organization of American States.
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16.
- Antoine, S., & Ali, S. (2016). Transfer and transition: Students' experiences in a secondary school in Trinidad and Tobago. *Caribbean Curriculum* 24, 141-178.
<https://journals.sta.uwi.edu/ojs/index.php/cc/article/viewFile/782/724>
- Ashong-Katai, L. N. (2013). *Abolition of the double shift system of schooling in Ghana: Policy and its implementation in the public basic schools: A case study of schools under the Accra metropolitan assembly* [Master's thesis, University of Oslo].

<https://www.duo.uio.no/bitstream/handle/10852/35818/1/FinalxThesixDocumentxforxsubmission.pdf>

Baglibel, M., Samancioglu, M., & Crow, G. M. (2018). Factors affecting the sustainability of educational changes: A mixed method research. *Cogent Education*, 5(1), 1-14.

<https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2018.1502395>

Bailey, T. H., & Phillips, L. J. (2015). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance, *Higher Education Research & Development*, 35(2), 201-216.

<https://doi.org/10.1080/07294360.2015.1087474>

Baker, M. P. (2007). *An investigation into the relationship between students' statements and perceptions of their success and failure and their teachers' expectations about their achievement generally but specifically in English Language*. [Doctoral dissertation, University of Sheffield].

https://etheses.whiterose.ac.uk/3034/2/440861_VOL_1.pdf

Barkley, D. L. (2006, October). The value of case study research on rural entrepreneurship: Useful method? The Joint ERS-RUPRI Conference, Washington, DC, United States.

Başkarada, S. (2014). Qualitative case study guidelines. *The Qualitative Report*, 19(40), 1-18. <https://apps.dtic.mil/sti/pdfs/ADA594462.pdf>

Berlach, R. G. (2010). The cyclical integration model as a way of managing major

educational change. *Education Research International*, 2011, 1-8.

<https://doi.org/10.1155/2011/963237>

Bervell, B., Sam, A. C., & Boadu, K. (2013). The nature of the shift schooling system in Ghana: Implications on pedagogy. *Mediterranean Journal of Social Sciences*, 4(4), 25.

<https://www.richtmann.org/journal/index.php/mjss/article/view/4>

Beycioglu, K. & Kondakci, Y. (2014). Principal leadership and organizational change in schools: A cross-cultural perspective. *Journal of Organizational Change Management*, 27(3), 1-4.

<https://www.emerald.com/insight/content/doi/10.1108/JOCM-06-2014-0111/full/html>

Bickman, L., Rog, D. J., & Hedrick, T. E. (2009). Applied research design: A practical approach. *Handbook of Applied Social Research Methods*, (2nd ed.), 3-43.

<https://dx.doi.org/10.4135/9781483348858.n1>

Biddle, C., & Schafft, K. A. (2015). Axiology and anomaly in the practice of mixed methods work: Pragmatism, valuation, and the transformative paradigm. *Journal of Mixed Methods Research*, 9(4), 320-334.

Blair, E. (2014). Academic development through the contextualization of the Scholarship of Teaching and Learning: reflections drawn from the recent history of Trinidad and Tobago. *International Journal for Academic Development*, 19(4), 330-340.

- Bourgon, J. (2008). The future of public service: a search for a new balance. *Australian Journal of Public Administration*, 67(4), 390-404.
- Bray, M. (2008). *Double-shift schooling: Design and operation for cost- effectiveness* (Vol. 90). Commonwealth Secretariat.
https://inee.org/system/files/resources/UNESCO_IIEP_2008_Double-shift_schooling.pdf
- Brezicha, K., Bergmark, U., & Mitra, D. L. (2015). One size does not fit all: Differentiating leadership to support teachers in school reform. *Educational administration quarterly*, 51(1), 96-132.
- Bridges, J. M., & Maxwell, G. M. (2015). Early college high schools: A proposed solution to secondary transition services. *Journal of Case Studies in Education*, 8, 1-10.
- Burkholder, G. J. Cox, K. A. & Crawford, L. M. (Eds.) (2016). *The scholar-practitioner's guide to research design* (pp. 227-244). Laureate Publishing.
- Burner T. (2018). Why is educational change so difficult and how can we make it more effective? *Forskning og Forandring*, 1(1), 122–134.
<https://doi.org/10.23865/fof.v1.1081>
- Burnham, P. (2011). Education and social change in Trinidad and Tobago. In M.G. Smith & L. Comitas (Eds). *Education and Society in the Creole Caribbean* (pp. 277-410).

- Byrom, N. (2020). COVID-19 and the research community: The challenges of lockdown for early-career researchers. *Elife*, 9, e59634.
<https://elifesciences.org/articles/59634>
- Cacho, R. M., Cacho, L. C., & Raneses, M. M. (2019). Decoding double shift effects on pupils, parents and teachers' lived experiences: Alternative inputs for policy improvement. *International Journal of Research Studies in Education*, 8(1), 77-88. http://consortiacademia.org/wp-content/uploads/IJRSE/IJRSE_v8i1/3009_ijrse_final.pdf
- Carrington, L. D. (1978). Education and development in the English-speaking Caribbean: A contemporary survey. UNESCO, ECLA, DEALC/16.
- Cavaliere, F. (2010). *British schools during World War II and the educational reconstruction*, Munich, GRIN Verlag. <https://www.grin.com/document/320046>
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40 year meta-analysis. *Psychological Bulletin*, 140, 980-1008.
- Chatterjee, S., & Elias, J. (2016). *Cadbury: An Ethical Company Struggles to Insure the Integrity of its Supply Chain*. SAGE.
- Clark, D., & Bono, E. D. (2016). The long-run effects of attending an elite school: Evidence from the United Kingdom. *American Economic Journal: Applied Economics*, 8(1), 150-176.

- Clement, J. (2014). Managing mandated educational change. *School Leadership & Management*, 34(1), 39-51. <https://doi.org/10.1080/13632434.2013.813460>
- Connell, R.W. (1993) *Schools and Social Justice*. Philadelphia: Temple University Press.
- Cordeiro, P., Paixão, P., Lens, W., Lacante, M., & Sheldon, K. (2016). Factor structure and dimensionality of the balanced measure of psychological needs among Portuguese high school students. Relations to well-being and ill-being. *Learning and Individual Differences* 47(2016) 51-60.
<https://estudogeral.sib.uc.pt/bitstream/10316/46929/1/Artigo%20Learning%20and%20Individual%20Differences.pdf>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. SAGE publications.
- Cubukcu, F. (2017). Learner autonomy, self-regulation and metacognition. *International Electronic Journal of Elementary Education*, 2(1), 53-64.
- Cummings, S., Bridgman, T., & Brown, K. G. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human Relations*, 69(1) 33-60.
- Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimensions of Critical Care Nursing*, 36(4), 253 - 263.

- Datnow, A. (2020). The role of teachers in educational reform: A 20 year perspective. *Journal of Educational Change*, 1-11. http://atrico.org/wp-content/uploads/2019/11/Datnow2020_Article_TheRoleOfTeachersInEducational.pdf
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268. https://users.ugent.be/~wbeyers/scripties2011/artikels/Deci&Ryan_2000.pdf
- De Lisle, J. (2012). Secondary school entrance examinations in the Caribbean: Legacy, policy, and evidence within an era of seamless education. *Caribbean Curriculum*, 19(2012), 109-143.
- De Lisle, J., Smith, P., Keller, C. & Jules, V. (2012). Differential outcomes in high-stakes eleven plus testing: the role of gender, geography, and assessment design in Trinidad and Tobago. *Assessment in education: Principles, Policy & Practice*, 19(1), 45-64. <https://openpsych.net/forum/attachment.php?aid=485>
- Dimitrova, V. (2016). The afternoon effect: differential impacts on student performance in math and history. <http://2017.economicsofeducation.com/user/pdfsiones/047.pdf?PHPSESSID=1t1udjb0nj10bvqi0sfn26gbi7>
- Dixon, R. A., & Hutton, D. M. (2016). STEM and TVET in the Caribbean: A framework for integration at the primary, secondary, and tertiary levels. *Caribbean Curriculum* 24(2016), 1-26.

- Dubé, F., Granger, N., & Dufour, F. (2015). Continuing education for high school resource teachers and their sense of self-efficacy. *American Journal of Educational Research*, 3(6), 707-712.
- Duineveld, J. J., Parker, P. D., Ryan, R. M., Ciarrochi, J., & Salmela-Aro, K. (2014). The Link between perceived maternal and paternal autonomy support and adolescent well-being across three major educational transitions. *Developmental Psychology*, 53(10), 1-17.
- Elliott, V. (2018). Thinking about the coding process in qualitative data analysis. *The Qualitative Report*, 23(11), 2850-2861.
<https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=3560&context=tqr>
- Elsayed, A., & Marie, O. (2015, September). How does reducing years of compulsory schooling affect education and labor market outcomes in a developing country? In *Economic Research Forum (ERF)*. 1-14.
- Etikan, I., Abubakar Musa, S., & Sunusi Alkassim, R. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*. 5(1), 1-4.
- Evans, M., & Boucher, A. R. (2015). Optimizing the power of choice: Supporting student autonomy to foster motivation and engagement in learning. *Mind, Brain, and Education*, 9(2), 87-91.
- Figueira, D. (2010). The discourse of CLR James. In *The Politics of Racist Hegemony in Trinidad and Tobago*. (pp. 21-42). iUniverse

- Figuera, R., & Ferreira, L. A. (2014). Teach me to write; but respect'meh right: A critical exploration of vernacular accommodation in tertiary education for all in Trinidad and Tobago. *Research in Comparative and International Education*, 9(1), 56-82.
- Fullan, M. (2016). Implementation: Amplify change with professional capital. *The Learning Professional*, 37(1), 44 - 56.
- Fullan, M. (2009). Large-scale reform comes of age. *Journal of Educational Change* 2009(10), 101-113. <https://link.springer.com/content/pdf/10.1007/s10833-009-9108-z.pdf>
- Fullan, M. (2006, November). Change theory: A force for school improvement (Seminar Series paper No 157). Jolimont, Victoria: Centre for Strategic Education.
- Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19 - 32.
- Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in Qualitative Research: Insights from an overview of the methods literature. *The Qualitative Report*, 20(11), 1772-1789.
http://www.miguelangelmartinez.net/IMG/pdf/2015_Gentles_Sampling_Qualitative_Research_TQR.pdf
- Government of the Republic of Trinidad and Tobago, Ministry of Education (2012). Education sector strategic plan: 2011-2015.
http://planipolis.iiep.unesco.org/sites/planipolis/files/ressources/trinidad_and_tobago_strategic_plan_2011-2015.pdf

Government of the Republic of Trinidad and Tobago, Ministry of Legal Affairs. (1966).

The Education Act: chapter 39:01 of 1966.

https://rgd.legalaffairs.gov.tt/laws2/alphabetical_list/lawspdfs/39.01.pdf

Gustafsson, J. (2017). Single case studies vs. multiple case studies: A comparative study.

Hall, D., & McGinity, R. (2015). Conceptualizing teacher professional identity in neoliberal times: Resistance, compliance and reform. *Education policy analysis archives*, 23(88), 1-15. <http://dx.doi.org/10.14507/epaa.v23.2092>

Hargreaves, A., Lieberman, A., Fullan, M., & Hopkins, D. (Eds.). (2010). *Second International Handbook of Educational Change* (Vol. 23). Springer Science & Business Media.

Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017, January). Case study research: foundations and methodological orientations. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 18(1), 1-17.

Hayashi Jr, P., Abib, G., & Hoppen, N. (2019). Validity in qualitative research: A processual approach. *The Qualitative Report*, 24(1), 98-112.

<https://nsuworks.nova.edu/tqr/vol24/iss1/8>

Hayes, J. (2018). *The theory and practice of change management*. Macmillan International and Palgrave

Hincapie, D. (2016). *Do longer school days improve student achievement? Evidence from Colombia* (No. IDB-WP-679). IDB Working paper series.

<https://www.econstor.eu/bitstream/10419/146467/1/IDB-WP-679.pdf>

- Hosein, G. J. (2012). Modern Negotiations: Indo Trinidadian Girlhood and Gender Differential Creolization. *Caribbean Review of Gender Studies*, 6, 1-24.
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2016). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, 3(2018), 123-127.
- Ihantola, E. -M., & Kihn, L. A. (2011). Threats to validity and reliability in mixed methods accounting research. *Qualitative Research in Accounting and Management*, 8(1), 39-58.
- Ismail, N., Kinchin, G., & Edwards, J. A. (2018). Pilot study, does it really matter? Learning lessons from conducting a pilot study for a qualitative PhD thesis. *International Journal of Social Science Research*, 6(1), 1-17.
https://eprints.soton.ac.uk/416716/1/11720_44548_1_PB.pdf
- James, F. (2014). The school improvement policy context in Trinidad and Tobago. *School Effectiveness and School Improvement*, 25(3), 469-485.
- Jamshed, S. (2014). Qualitative research method-interviewing and observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87-88.
www.ncbi.nlm.nih.gov/pmc/articles/PMC4194943/
- Jang, H., Reeve, J., & Halusic, M. (2016). A new autonomy-supportive way of teaching that increases conceptual learning: Teaching in students' preferred ways. *The Journal of Experimental Education*, 8(4), 686-701.

https://selfdeterminationtheory.org/wp-content/uploads/2016/09/2016_Jang_etal_JournalofExperimentalEducation.pdf

- Jašarević, F., & Kuka, E. (2016). Management change in education. *Metodički obzori: časopis za odgojno-obrazovnu teoriju i praksu*, 11(23), 92-101.
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, 84(1).
- KarMee, C., Hussin H., Nair, R. S., Sofeira, N., Binti, N., Kadir, A., & Bin Jusoh, Z. (2016). The relevance of the seven premises discussed by Fullan's change theory in higher education in Malaysia. *The Social Sciences*, 11(9), 2206-2209.
- Kershner, B. & McQuillan, P. (2016). Complex adaptive schools: Educational leadership and school change. *Complicity: An International Journal of Complexity and Education* 13(1), 4-29.
- Koorts, H., & Gillison, F. (2015). Mixed method evaluation of a community-based physical activity program using the RE-AIM framework: Practical application in a real-world setting. *BMC Public Health* 15(1), 1102-1111.
- <https://link.springer.com/content/pdf/10.1186/s12889-015-2466-y.pdf>
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice*, 24(1), 120-124 <https://doi.org/10.1080/13814788.2017.1375092>

- Korte, R., & Mercurio, Z. A. (2017). Pragmatism and human resource development: Practical foundations for research, theory, and practice. *Human Resource Development Review*, 16(1), 60-84. <https://doi.org/10.1177/1534484317691707>
- Krusenvik, L. (2016). Using case studies as scientific method: advantages and disadvantages. <https://www.diva-portal.org/smash/get/diva2:1054643/FULLTEXT01.pdf>
- Kurebwa, M., & Lumbe, A. (2015). Teachers' voices: Challenges of double-shift sessioning in Gweru urban primary schools. *International Journal of Innovative Research and Development*, 4(3).
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. SAGE Publications. <https://doi.org/10.4135/9781412963947>
- Ledford, J. R., & Gast, D. L. (2018). *Single case research methodology: Applications in special education and behavioral sciences*. Routledge.
- Levin, H. (2017). *Accelerated schools for at-risk students* [CPRE Report]. https://repository.upenn.edu/cpre_researchreports/104
- Lochan, S. (2014). *Recent Developments in Trinidad and Tobago (2000-2010): Early Childhood Care, Primary and Secondary Education*. In E. Thomas (Ed.). *Education in the Commonwealth Caribbean and Netherlands Antilles* (pp. 380 - 398). Bloomsbury.

- Lowe, N. K. (2019). What is a pilot study? *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 48(2), 117-118. [https://www.jognn.org/article/S0884-2175\(19\)30006-1/pdf](https://www.jognn.org/article/S0884-2175(19)30006-1/pdf)
- Lusher, L., & Yassenov, V. (2016). Double-shift schooling and student success: Quasi-experimental evidence from Europe. *Economics Letters*, 139, 36-39.
- Luttenberg, J., Carpay, T., & Veugelers, W. (2013). Educational reform as a dynamic system of problems and solutions: Towards an analytic instrument. *Journal of Educational Change*, 14(3), 335-352.
- Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring rigor in qualitative data analysis: A design research approach to coding combining NVivo with traditional material methods. *International Journal of Qualitative Methods*, 17, 1–13.
- Majid, M. A. A., Othman, M., Mohamad, S. F., Lim, S. A. H., & Yusof, A. (2017). Piloting for interviews in qualitative research: Operationalization and lessons learnt. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073 - 1080.
- Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the pilot study: A neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies. *International Journal of Qualitative Methods*, 18, 1-11.
<https://doi.org/10.1177/1609406919878341>

- Mapolisa, T., Khosa, M. T., Ncube, A. C., & Tshabalala, T. (2016). Effects of double sessioning to quality education in Mzilikazi district primary schools: Teacher's perceptions. *Nova Journal of Humanities and Social Sciences*, 4(1).
- Martin, J. S., Gaudreault, M. M., Perron, M., & Laberge, L. (2016). Chronotype, light exposure, sleep, and daytime functioning in high school students attending morning or afternoon school shifts: an actigraphic study. *Journal of biological rhythms*, 31(2), 205-217.
<https://journals.sagepub.com/doi/pdf/10.1177/0748730415625510>
- Maxwell, J. (2009). *The SAGE Handbook of Applied Social Research Methods*. SAGE Publications.
- McKim, C. A. (2017). The value of mixed methods research: A mixed methods study. *Journal of Mixed Methods Research*, 11(2), 202-222.
<https://www.didier-jourdan.com/wp-content/uploads/2017/04/MM-and-Graduates-students.pdf>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative Data Analysis: A methods Sourcebook* (4th ed.). SAGE Publications.
- Mills, A. I. (2015). *Experiences of Remedial Tutors in a High-Risk Government Secondary School in Trinidad* [Doctoral dissertation, University of the West Indies].
<https://uwispace.sta.uwi.edu/dspace/bitstream/handle/2139/41188/Alana%20Mills.pdf?sequence=1&isAllowed=y>

- Mitchall, A. M., & Jaeger, A. J. (2018). Parental influences on low-income, first-generation students' motivation on the path to college. *The Journal of Higher Education, 89*(4), 582-609.
- Mitchell, K. A., Elias, M. J., Branche, C., & Terrelonge, A. (2015). Building human capital through education. *The International Journal of Education and Research, 3*(8), 197-216.
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry, 20*(8), 1045-1053.
- Morris, H. A., & Powell, C. M. (2013). Delivering TVET at the secondary level: A practical approach. *Caribbean Curriculum 21*, 1-18.
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice, 24*(1), 9-18. <https://doi.org/10.1080/13814788.2017.1375091>
- Muñoz Pedroza, C. M. (2016). Double-shift high schools and school performance: Evidence from a regression discontinuity design. (Seminar No. 251). <http://www.cedlas.econo.unlp.edu.ar/wp/wp-content/uploads/Mu%C3%B1ozPedroza.pdf>
- Naaranoja, M., Kähkönen, K., & Keinänen, M. (2014). Construction projects as research objects—different research approaches and possibilities. *Procedia-Social and Behavioral Sciences, 119*, 237-246.

- Nakhid, C., Barrow, D., & Broomes, O. (2014). Situating the education of African Trinidadians within the social and historical context of Trinidad and Tobago: Implications for social justice. *Education, Citizenship and Social Justice*, 9(2), 171-187.
- Naicker, S. R., & Mestry, R. (2016). Leadership development: A lever for system-wide educational change. *South African Journal of Education*, 36(4), 1-12.
- Odanga, S. J., Raburu, P. A., & Aloka, P. J. (2015). Influence of Gender on Teachers' Self-Efficacy in Secondary Schools of Kisumu County, Kenya. *Academic Journal of Interdisciplinary Studies*, 4(3), 189.
- Offermans, A., & Glasbergen, P. (2017). Spotlights on certification and farmers' welfare: crossing boundaries in social scientific research. *Development in Practice*, 27(8), 1078-1090. <https://doi.org/10.1080/09614524.2017.1360249>
- Orkodashvili, M. (2009). *Double-Shift Schooling and EFA Goals: Assessing Economic, Educational and Social Impacts*. Unpublished manuscript. Vanderbilt University <https://doi.org/10.2139/ssrn.1630889>
- Orsini, C., Evans, P., & Jerez, O. (2015). How to encourage intrinsic motivation in the clinical teaching environment: A systematic review from the self-determination theory. *Journal of Educational Evaluation and Health Professions*, 2(8) 1-10.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed

- method implementation research. *Administration Policy in Mental Health*, 42(5): 533-544. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4012002/>
- Patil, N. P. (2012). Role of education in social change. *International Educational E-Journal*, 1(II), 205-210.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE.
- Pendergast, D., Main, K., Barton, G., Kanasa, H., Geelan, D., & Dowden, T. (2015). The education change model as a vehicle for reform: Shifting year 7 and implementing junior secondary in Queensland. *Australian Journal of Middle Schooling*, 15(2), 5-19.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76-85.
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.674.8560&rep=rep1&type=pdf>
- Pietarinen, J., Soini, T., & Pyhalto, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. *International Journal of Educational Research* 67(2014) 40–51.
- Pitzer, J., & Skinner, E. (2017). Predictors of changes in students' motivational resilience over the school year: The roles of teacher support, self-appraisals, and emotional reactivity. *International Journal of Behavioral Development*, 41(1), 15-29.

- Ponce, O. A., & Pagán-Maldonado, N. (2015). Mixed methods research in education: Capturing the complexity of the profession. *International Journal of Educational Excellence*, 1(1), 111-135.
- Quainoo, E. A., Quansah, F., Adams, F., & Opoku, E. (2020). Comparative review of educational reforms, policies, and systems: A Case of China and Ghana. *Journal of Comparative Studies and International Education (JCSIE)*, 2(1), 5-22.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences* 6(2), 1-5.
<https://pdfs.semanticscholar.org/d957/e1a07a961a572ce70f7d5845cb423ac8f0be.pdf>
- Rahman, M. S. (2017). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language “testing and assessment” research: A literature review. *Journal of Education and Learning*, 6(1), 102-112.
<http://hdl.handle.net/10026.1/16598>
- Ricard, N. C., Pelletier, L. G. (2016). Dropping out of high school: The role of parent and teacher self-determination support, reciprocal friendships and academic motivation. *Contemporary Educational Psychology*, 44-45(2016) 32-40.
- Rikkerink, M., Verbeeten, H., Simons, R. J., & Ritzen, H. (2016). A new model of educational innovation: Exploring the nexus of organizational learning,

distributed leadership, and digital technologies. *Journal of Educational Change*, 17(2), 223-249.

Roche, S. (2017). Listening to the grass roots: Bottom-up approaches to lifelong learning. *International Review of Education*, 63, 145-152.

<https://link.springer.com/content/pdf/10.1007/s11159-017-9634-5.pdf>

Ruel, E. E., Wagner, W. E., & Gillespie, B. J. (2016). *The Practice of Survey Research: Theory and Applications*. SAGE.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61(2020), 1-11.

<https://doi.org/10.1016/j.cedpsych.2020.101860>

Ryan, R. M., & Deci, E. L. (2016). *Facilitating and hindering motivation, learning, and well-being in schools: Research and observations from self-determination theory*. In K.R. Wentzel, & D. B. Miele (Eds.), *Handbook on motivation at schools* (pp. 96-119). Routledge.

Ryan, R. M. & Deci, E. L. (2012). Multiple identities within a single self: Self-determination theory perspective on internalization within contexts and cultures. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of Self and Identity* (pp. 225-240). Guilford Press.

- Ryan, R. M., & Deci, E. L. (2000). Self-Determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Sagyndykova, G. (2013). *Academic Performance in Double-shift Schooling*. Unpublished manuscript, Nazarbayev University.
https://research.nu.edu.kz/ws/portalfiles/portal/15041326/DSSpaper_Gali
- Saldaña, J. (2016). *The Coding Manual for Qualitative Researchers*. SAGE.
- Sanjari, M., Bahramnezhad, F., Khoshnava Fomani, F., Shoghi, M., & Cheraghi, M. (2014). Ethical challenges of researchers in qualitative studies: the necessity to develop a specific guideline. *Journal of Medical Ethics and History of Medicine*, 7(14), 1-6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263394/pdf/jmehm-7-14.pdf>
- Santos, K. D. S., Ribeiro, M. C., Queiroga, D. E. U. D., Silva, I. A. P. D., & Ferreira, S. M. S. (2020). The use of multiple triangulations as a validation strategy in a qualitative study. *Ciencia & saude coletiva*, 25, 655-664.
<https://www.scielo.org/pdf/csc/2020.v25n2/655-664/en>
- Schechter, C., & Shaked, H. (2017). Leaving fingerprints: principals' considerations while implementing education reforms. *Journal of Educational Administration*, 55(3), 242-260.

- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(2), 107-131. <https://link.springer.com/article/10.1007/s11577-017-0454-1>
- Shapiro, T. M., & Williams, K. M. (2015, Spring). The causal effect of the school day schedule on adolescents' academic achievement. Society for Research on Educational Effectiveness [Conference session]. Society for Research on Educational Effectiveness (SREE), Washington, DC, United States.
- Sheryn, A. (2011). Improving efficiency of schooling in the Maldives: Is de-shifting a desirable policy direction? [Master's thesis, Massey University]. https://mro.massey.ac.nz/bitstream/handle/10179/2486/02_whole.pdf?sequence=1&isAllowed=y
- Shoshani, A., & Steinmetz, S. (2014). Positive psychology at school: A school-based intervention to promote adolescents' mental health and well-being. *Journal of Happiness Studies*, 15(6), 1289-1311.
- Silova, I., & Brehm, W. C. (2013). The shifting boundaries of teacher professionalism. Education privatization (s) in the post-socialist education space. In T. Seddon, & J. S. Levin (Eds.), *Educators, Professionalism and Politics. Global Transitions, National Spaces and Professional Projects* (pp. 55-74). Routledge. <https://doi.org/10.4324/9780203073940>

- Silva, M. N., Marques, M. M., & Teixeira, P. J. (2014). Testing theory in practice: The example of self-determination theory-based interventions. *The European Health Psychologist, 16*(5), 171-179.
- Sinclair, J., Bromley, K. W., Shogren, K. A., Murray, C., Unruh, D. K., & Harn, B. A. (2017). An analysis of motivation in three self-determination curricula. *Career Development and Transition for Exceptional Individuals, 40*(3), 175-185.
- Singadi, G., Goronga, P., Gatahwi, L., & Mutangirwa, L. (2014). Teachers' and students' perceptions of double session schooling on ordinary level students' performance in geography. *The International Asian Research Journal, 2*(1), 18-27.
- Slavin, R. E. & Smith, D. (2008, March 3-4). *Effects of sample size on effect size in systematic reviews in education*. [Paper presentation]. Society for Research on Effective Education meeting, Crystal City, VA, United States.
http://bestevidence.org.uk/assets/eff_sample_size_review_Mar_2008.pdf
- Steinbach, M. (2012). Obstacles to change in teacher education in Trinidad and Tobago. *The International Education Journal: Comparative Perspectives, 11*(1), 69-81.
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal, 11*(2), 63. <http://dro.deakin.edu.au/eserv/DU:30064369/suri-purposefulsampling-postprint-2011.pdf>
- Suter, W. N. (2012). *Introduction to Educational Research: A Critical Thinking Approach*. (2nd ed). SAGE.

- Sutton, J. and Austin, Z. (2015). Qualitative research: data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226-231.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PmC4485510/>
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: the unique role of intrinsic motivation. *Contemporary Educational Psychology* 39 (2014) 342-358.
- Torres, R. M. (1999). *One decade of Education for All: The challenge ahead*. International Institute of Educational Planning.
<https://repositorio.minedu.gob.pe/bitstream/handle/20.500.12799/4128/One%20decade%20of%20Education%20for%20All%20The%20challenge%20ahead.pdf?sequence=1>
- Thomas, E., (Ed.). (2014). *Education in the Commonwealth Caribbean and Netherlands Antilles*. Bloomsbury.
- Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, 20(2), 243-267.
- Twining, P., Heller, R. S., Nussbaum, M., & Tsai, C. C. (2017). *Some guidance on conducting and reporting qualitative studies*.
- UNESCO, IBE (2010/11). World data on education (7th ed.).

http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Trinidad_and_Tobago.pdf

Unluer, S. (2012). Being an Insider Researcher While Conducting Case Study Research.

The Qualitative Report, 17(29), 1-14. <https://nsuworks.nova.edu/tqr/vol17/iss29/2>

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100 - 110. <http://dx.doi.org/10.5430/jnep.v6n5p100>

Vanclay, F., Baines, J. T., & Taylor, C. N. (2013). Principals for ethical research

involving humans: Ethical professional practice in impact assessment Part I. *Impact assessment and project appraisal*, 31(4), 242-253.

Van der Kaap-Deeder, J., Wouters, S., Verschueren, K., Briers, V., Deeren, B., &

Vansteenkiste, M. (2016). The pursuit of self-esteem and its motivational implications. *Psychologica Belgica*, 56, 143-168.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5854109/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5854109/>

Van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017).

Children's daily well-being: The role of mothers', teachers', and siblings'

autonomy support and psychological control. *Developmental Psychology*, 53(2),

237-251. <http://dx.doi.org/10.1037/dev0000218>

van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in*

phenomenological research and writing. Left Coast Press.

- Vansteenkiste, M., Aelterman, N., De Muynck, G., Haerens, L., Patall, E., & Reeve, J. (2018) Fostering personal meaning and self-relevance: A self-determination theory perspective on internalization. *The Journal of Experimental Education*, 86(1), 30-49. <https://doi.org/10.1080/00220973.2017.1381067>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS quarterly*, 37(1), 21-54.
- Vizzotto A.D.B., de Oliveira A.M., Elkis H., Cordeiro Q., Buchain P.C. (2013). Psychosocial Characteristics. In: Gellman M. D. & Turner J. R. (Eds.). *Encyclopedia of Behavioral Medicine*. Springer. https://doi.org/10.1007/978-1-4419-1005-9_918
- Warfa, A. R. M. (2016). Mixed-methods design in biology education research: Approach and uses. *CBE-Life Sciences Education*, 15(4), 1-11. <https://doi.org/10.1187/cbe.16-01-0022>
- Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. *Journal of Experimental Psychology*, 3(1), 1-14. <http://pages.ucsd.edu/~sanagnos/watson1920.pdf>
- Wei, L., & Lin, H. (2017). Not a one-size-fits-all methodology: A survey of mixed methods. *Journal of Advances in Education Research*, 2(2), 97-102.
- Williams-McBean, C. T. (2019). The value of a qualitative pilot study in a multi-phase mixed methods research. *The Qualitative Report*, 24(5), 1055 - 1064.

- Wium, A. M., & Louw, B. (2018). Mixed-methods research: A tutorial for speech-language therapists and audiologists in South Africa. *South African Journal of Communication Disorders*, 65(1), 1-13.
- Wood, P. (2018). Overcoming the problem of embedding change in educational organizations: A perspective from Normalization Process Theory. *Management in Education*, 31(1), 33-38.
- Yeong, M. L., Ismail, R., Ismail, N. H., & Hamzah, M. I. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *The Qualitative Report*, 23(11), 2700 – 2713.
- Yin, R. K. (2011). *Qualitative research from start to finish*. Guilford Press
- Zainal, Z. (2007). Case study as a research method. *Jurnal kemanusiaan*, 5(1), 1-6.
- Zajda, J. (2015). Globalisation and the politics of education reforms: History education. In *Nation-building and history education in a global culture* (pp. 1-14). Springer.
<http://ndl.ethernet.edu.et/bitstream/123456789/57391/1/17.pdf.pdf#page=21>

Appendix A: Recruitment Email (All Participants)

TO: (Email address of teacher)

FROM: (Email address of researcher)

RE: Research Study invitation

Dear Staff member,

My name is Joanne Shurland. I am a doctoral student at Walden University, located in Minneapolis, Minnesota, USA. The study I am conducting is in fulfillment of a degree in Counseling Psychology and my supervisor's name is Dr. Karine Clay.

My study will investigate *the psychosocial and academic outcomes of de-shifting three year high schools in the Republic of Trinidad & Tobago*. It might show me if the secondary school de-shifting initiative was effective or not, and its impact on the students' academic success and their psychosocial well-being. All of you would have experienced the shift system, and if you are willing, I would like you to share your experiences post de-shifting, and how it impacted the students and you. You have a wealth of information. I'd like to discover what, if any changes have occurred since de-shifting eleven years ago. This is an invitation to be a part of the study which is totally voluntary. I will be collecting data virtually via an on-line survey, and through a focus group. This is the link for the survey

<https://www.surveymonkey.com/r/postDe-shift20>

There will be information about consent on the first page of the survey. The focus group consists of a maximum of six and minimum of four persons. I will provide information about the focus group in an email. You can give consent via email. Persons who are interested in being a part of the focus group will be assigned a code identifier so your name will not be used at all. All of the documents for this study will be kept in a safe, the location of which is only known to me.

If at any time anyone who has agreed to participate wants to withdraw, you can without any problem, this is your right. The information you provide will be shared only as results of the study and statements that any participant makes will be ascribed to you by a code number. Because of the nature of focus groups, the content of the discussions has to be audiotaped for accurate transcription. Again, I want to reassure you that this information will be stored in a secure safe.

There will be a consent page at the beginning of the on-line survey which, if you agree to complete the survey, will direct you to click a button to continue. It consists of 25 questions and will take approximately 5 minutes to complete.

If you agree to be in the focus group further instructions will be provided via email once you confirm your interest in an email to me. The focus group session will last approximately 30 minutes during the lunch period, and will consist of 6 questions. An example of one of the questions is

Describe any changes in the students' behavior or attitude since de-shifting"

Because this is a research paper, the responses you provide in interviews or focus groups will be quoted directly when printed in a scientific journal, but you will in no way be identified. All data collected in this study will be stored by the researcher on a storage drive that will be kept in a safe. You will have access to what has been recorded to verify accuracy of the information provided. When the project is completed, all recorded data will be destroyed after 5 years. Data analysis of the group sessions and statistical data from your survey responses will be used in publication.

Sincerely,

Joanne Shurland - PhD Candidate

Walden University

Appendix B: Recruitment Email (Administrator)

TO: (Email address of administrator)

FROM: (Email address of researcher)

RE: Research Study invitation

Dear Principal/Vice Principal,

My name is Joanne Shurland. I am a doctoral student at Walden University. I will be conducting a research study to investigate *the psychosocial and academic outcomes of de-shifting three year high schools in the Republic of Trinidad & Tobago*. I am completing this research in fulfillment of my doctoral degree in psychology.

I am inviting you to participate in this research. For this study, I am recruiting administrators who were in this position prior to de-shifting in 2008. I will not use your name in the study, nor will the location of the school be identified. Only your responses to the interview questions will be included in my study.

Attached to this e-mail is the informed consent form. This form is an explanation of my study. If you choose to participate, please type the words, "I consent...".

Sincerely,

Joanne Shurland - PhD Candidate

Walden University

Appendix C: Confirmation Email – Principal/Vice Principal

TO: (Email address of the administrator)

FROM: (Email address of the researcher)

RE: Research Study confirmation

Dear Principal/Vice Principal,

You have indicated interest in my research study to investigate *the psychosocial and academic outcomes of de-shifting three year high schools in the Republic of Trinidad & Tobago*. In responding to this email, please indicate an available day and time between 11:00 a.m. to 1:00 p.m. to conduct the interview online. Please see the consent form also included.

Sincerely,

Joanne Shurland - PhD Candidate

Walden University

Appendix D: Online Teacher Survey Questions

Please answer the question in each category, before completing the survey

1. What is your age? 20 - 29 30 - 39 40 - 49 50 - 59
2. What is your position? Teacher I Teacher II Teacher III HOD
DEAN
3. What year group do you teach? Form 1 Form 2 Form 3 Form 4
Form 5 (check all that apply)
4. How many years have you been teaching? 1 - 5 6 - 10 11 - 15 16 -
20 21 - 25 26 - 35
5. What is your highest level of education? Technical College Undergraduate
 Graduate Postgraduate

6. The school environment encourages mutual respect among all students and staff.
Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree
7. The school environment promotes cooperation and sharing among all students and staff.
Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree
8. There is a strong learning environment and school culture at my school.
Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree
9. The learning environment encourages caring, collaboration, and creativity among all

students.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

10. The school has established clear expectations of student participation during instruction.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

11. The school works with parents to support all students and especially, at-risk students.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

12. Students feel that instruction reaches them at all learning levels.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

13. All students are encouraged to share their views and develop new ideas.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

14. At-risk students are provided more opportunities to work with peers and receive extra instructional support where necessary since de-shifting occurred.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

15. De-shifting has improved the attendance of at-risk students, and all students, in general.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

16. Students express more confidence in achieving academic success since de-shifting was implemented.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

17. Less students are involved in disciplinary issues since de-shifting was implemented.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

18. Students are more punctual, regular, and eager to be in school since de-shifting was implemented.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

19. Students are more motivated, happy, and interactive with peers and teachers now, more than they were before de-shifting.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

20. Academic performance has improved since the school has been de-shifted.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

21. There are few suspensions now for behavioral issues than there were prior to de-shifting.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

22. All stakeholders are comfortable with the tone of the school and the whole day 8:00 am to 2:30 pm schedule.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

23. Teachers are able to spend more time on individualized instruction, student development, and extra-curricular activities now, more than prior to the de-shifting initiative.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

24. The policymakers have added more programmes to address overall student well-being since de-shifting occurred.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

25. The policymakers have achieved their objectives for improved academic achievement and student well-being since de-shifting occurred.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY

Appendix E: School Administrator Interview Questions

1. What is your perception of the value of de-shifting Junior Secondary Schools, in Trinidad and Tobago, as it relates to student achievement and student psychosocial well-being?
2. What is your opinion of the roll-out of the de-shifting initiative by the Ministry of Education at your school?
3. What is the greatest impact on student achievement and well-being in Trinidad and Tobago that can be directly or indirectly attributed to the de-shifting initiative?
4. Given the performance of the shift system in Trinidad and Tobago prior to de-shifting, tell me about any significant impact since the implementation of whole day school, you have noticed?
5. What are some positive experiences since de-shifting you have observed regarding student academic performance and overall student well-being at your school?
6. What are the benefits that are being experienced among at-risk students since de-shifting has been implemented at your school?
7. What are the challenges that are being experienced among at-risk students since de-shifting has been implemented at your school?
8. In your opinion what steps can the [Ministry of Education] policymakers take to foster overall student success and effective change initiatives at the school and national levels?
9. What do you believe psychosocial well-being has to do with the achievement of at-

risk students in a de-shifted school like yours?

THANK YOU FOR TAKING THE TIME TO PARTICIPATE IN THIS
RESEARCH!

Appendix F: MOE Approval to Conduct Research



Appendix G: Request and Permission to Use Instruments

Joanne Shurland
Sat 28/12/2019 7:26 PM

To: Karine R. Clay

Dr. Clay,

I am requesting permission to utilize your instruments for my research study.

The psychosocial and academic outcomes of de-shifting 3-year high schools in the Republic of Trinidad & Tobago.

I have noted that your study had a similar topic in education.
Please acknowledge your consent, and I look forward to hearing from you.

Joanne Shurland
PhD Doctoral Candidate
A00242185

Karine R. Clay
Sun 29/12/2019 5:08 PM

Joanne Shurland

Thank you Ms. Shurland for your request.
Yes I approve the use of and any needed modifications you may require when using the instruments within my dissertation.

Dr. Clay