RELATING PARENTS' EDUCATIONAL ATTAINMENT TO STUDENTS' ACADEMIC
PERFORMANCE IN SELECTED PRIMARY SCHOOLS IN RURAL JAMAICA

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By Steadley Isaac McPherson

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Approval of the Thesis

RELATING PARENTS' EDUCATIONAL ATTAINMENT TO STUDENTS' ACADEMIC PERFORMNCE IN SELECTED PRIMARY SCHOOLS IN JAMAICA

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Abstract

RELATING PARENTS' EDUCATIONAL ATTAINMENT TO STUDENTS'
ACADEMIC PERFORMNCE IN SELECTED PRIMARY SCHOOLS IN JAMAICA

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Low academic performance in some primary schools in Jamaica remains a concern to education sector stakeholders in spite the interventions made over the years to improve it. The purpose of this explanatory sequential mixed-methods study was to examine the influence of Parents' Educational Attainment (PEA) on children's academic performance. Questionnaires were used to extract information from a purposively drawn sample of 144 students, and 144 parents. In addition, an online focus group (FGD) discussion using FGD protocol was done with fourteen (14) parents.

Quantitative data were analysed using both descriptive and inferential statistics. Results showed that parental educational attainments had a positive influence on children's educational outcomes explaining up to 26 percent of variations in the children's' academic achievement. There was also a positive association between parental involvement in educational programmes and initiatives and the student's academic performance and educational outcomes with a mean of 4.023. However, the study revealed that parental educational attainment was not a reliable predictor of children's educational outcomes as it explained only 26 percent of the variations in the educational attainment of the children leaving 74 percent to other factors outside the study.

The study concluded that parental educational attainment influences children's academic though, it was not a reliable predictor. The study recommends promotion of positive parenting skills and creation of homework centres to assist both learners and parents. Future research could focus on sector wide factors that influence children's educational attainment in Jamaica.

Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

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Non-Use of AI:

I acknowledge that during the study, I have not used any AI tools to create, proofread or produce any text or ideas related to any draft or final versions of this thesis.

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Dedication

I whole heartedly dedicate this doctoral study to my three granddaughters, Laelle, Nayla and Shemaiah McPherson as well as my nephew Orville and my wife Patricia who have always been my number one encourager. Reading for this degree would not have been possible without the constant encouragement that you gave along the journey even when I felt like giving up. I truly believe my success is a shared one among us. Thank you, Orville and Pat, for always being there when I needed you most. Your willingness to listen when I wanted to talk about the problem before putting the ideas on paper is greatly appreciated. I have learnt from this journey that perseverance is the key to success and that the Lord finishes anything that he has started. I will never be able to repay you fully. Once again, thank you very much.

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I express my sincere gratitude to those who have personally, and professionally helped me on this journey to complete this study.

Firstly, I thank my supervisor, Dr. Asiimwe Specioza, who worked assiduously to provide me with her expertise. Her love, and encouragement were invaluable contributions (when I felt like giving up), and the synergy that brought this dissertation to its completion.

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Finally, I owe so much to my family, friends, and other colleagues for their encouragement on the journey. Thank you for being there for me.

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List of Abbreviations

ESSJ   Economic and Social Survey Jamaica

ESTP   education System Transformation Programme

GFL/NT   Grade Four Literacy/Numeracy Test

GOILP   Grade One Individual Learning Profile

GSAT   Grade Six Achievement Test

GTDT   Grade Three Diagnostic Test

HBI   Home-based Involvement

JSLC   Jamaica Survey of Living Conditions

MOE   Ministry of Education

MLSS   Ministry of Labor and Social Security

NAEP   National Assessment of Educational Progress

NET   national educational Trust

OECD   Organization of Economic Co-operation

PISA   Programme for International Student Assessment

PI   Parents' Involvement

PEP   Primary Exit Profile

PEA   Parents' Educational Achievements

PATH   Programme of Advancement through Health and Education

PIOJ   Planning Institute of Jamaica

SBI   School-based Involvement

SES   Socio-economic Status

SFP   School Feeding Programme

SGD   Sustainable Development Goal

SLT   Social Learning Theory

UNICEF   United Nation Children's Fund

UNDP   United Nation Development Programme

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CHAPTER 1: INTRODUCTION

Background to the Study

This section provides the background to the study. It is arranged into subsections including an introduction, government as a partner in education, parents as partners in education, personal experiences in education, and the parent in educational experience of Jamaica.

Introduction

In the last two decades, education has been placed in the spotlight of national agenda so much so, that a study was carried out by the Task Force on Education Reform in Jamaica in 2004 and later by the Jamaica Education Transformation Commission in 2021. These studies culminated in what is referred to as the Education Transformation Task Force on Education. The first report was commissioned by the then Prime Minister of Jamaica, the Honourable Percival J. Patterson, referred to as the Davis report of 2004, named after the Task Force Chairman Dr. Rae Davis. The second report was commissioned by the Honourable Andrew Holness, Prime Minister of Jamaica and was chaired by Professor, the Honourable Orlando Patterson.

The first report underscored the underperformance of the education system and crafted a particular profile of an educated Jamaican as the vision to be achieved by the year 2030 through Jamaica National Development Plan. The profile of the "educated Jamaican" is characterized by:

(1.) Love for the learning experience and possess an attitude of a lifelong learner, always developing wisdom and knowledge.

(2.) Be holistic, well rounded, with agility of mind, adjusting to different situations and responsible for his decision making.

(3.) Speak an additional language and possess the minimum entry requirement for college.

(4.) Be a productive citizen – a worker, responsible for his/her own personal economic advancement and empowerment.

(5.) Contribute to national development by being socially aware, conscious of what is good for society, committed to sustainable lifestyle and development as well as possess spiritual consciousness and maturity, tolerant of diversity and rooted in his/her 'Jamaican-ness' (Task Force on Educational Reform Final Report,2004).

The second Task Force report (2021) was carried out by Professor Orlando Patterson highlighted the facts that it would take a good education system to overcome the challenges of economic stagnation and social instability and underscored that education is the primary engine of social and economic growth (Jamaica Education Transformation Commission, 2022). It is expected to generate income for the individual that will promote social mobility and well-being as well as the skills and knowledge and the mode of thinking that will drive the economy. It will also promote the values that nourish the national culture and social stability. The report recognizes that the education system is entangled with three major crises such as:

(1) It fails to educate the majority of children described by the World Bank as "learning crisis".

(2) It faces administrative crisis in terms of its organizational and strategic coherence which leads to accountability problem and inefficiency.

(3) Learning loss experienced by our children due to COVID-19 pandemic that must be remedied in short order. As a result, the Task Force calls for supportive role of parents and other stakeholders for an approach of collaborative teaching and learning as a strategic approach to deal with the problem in education.

The Jamaica Education Transformation Commission (2021) appointed by the Honourable Prime Minister Andrew Holness highlighted that Jamaica needs a system of education to overcome the challenges of economic stagnation and social instability. It underscores that education is the primary engine of social and economic growth that helps to generate individual income that will promote the mobility of the individual well-being, produces the skills, knowledge, and the mode of thinking as well as to promote the values that nourish the national culture, civil society, and societal stability. It highlights that the education system has three major crises. Firstly, it fails to educate the majority of children described by the World Bank as "learning Crisis." Secondly, it faces administrative crisis of organizational and strategic incoherence and in accountability problem that leads to inefficiency. Thirdly, it faces a crisis brought on by COVID-19 pandemic within the context of learning loss in our nation's children that must be addressed almost immediately.

The value of education to human growth and development within the framework of the fulfilment of the National Development Plan cannot be overemphasized and it is for this reason that the low academic performance of students cannot be accepted by anyone or any institution of society. Education plays a significant role in the lives of people, and helps them shape a safer society to live in. It is a source of better citizenship in any community. Education helps people to grow, and develop as responsible citizens. These aspects tend to suggest that the educational process should be holistic, and all pervasive in society. Implicitly, this starts with the home environment where parents are the pivot of such a

process. Moreover, as providers for the basic needs of the children, both mother and father perform a significant role in the education of their children. They have a primary, and an unequivocal responsibility for the education of their children, including providing scholastic materials, emotional support, and safe home environment for learning. Therefore, many legislations globally, have made it mandatory for parents to take ultimate role in the education of their children.

Empirical studies have demonstrated that educated guardians such as mother and father are more likely to have children with higher educational attainment than their uneducated counterparts (Ahmad & Naejema, 2013; Breen & Goldthorpe, 2014; Jackson, 2014). Seemingly supportive of this claim, Jackson (2014) demonstrates a presence of a theoretical link between education, and life opportunities which contribute to individuals' behaviour to function in a modern world, facilitating their decisions on the life they want to lead. Parents, as the main stakeholders of education, have significant roles as guardians of their children's education.

Epstein (2011) illustrated the significant part that parents play in the lives of children. Epstein shows that parents provide cognitive, psychological, and socio-emotional support to children in their educational process. This is in addition to providing the physical needs like scholastic materials, fees, feeding, shelter, and medical care to the children to enable them study. Asiimwe and Magunda (2017) in support of the assertions of Epstein determined that parents were enablers of children's academic attainment. However, for this study, while the claims demonstrate a presence of a relationship between parents' support and academic achievement, variations across levels of education, space, and time may exist.

Government as a Partner in Education

Government as partners in education has a significant role to play in human development of a country. Human development is the bedrock of any thriving economy of

the world. It can be construed as the process of broadening peoples' choice while at the same time raising the level of well-being of a people. That is, raising the quality of life of the populace. In order to do this, some priorities would have to be made. Some of these priorities are: (a) to ensure that the people of the country are educated; (b) to be able to see that the populace lead a long and healthy life; and (c) to be able to ensure that your people enjoy a reasonable minimum standard of living (UNDP, 1997). The opportunity to be educated is the fundamental choice to be taken and it is the central axle of the wheel of the economy that holds the other parts of the economy together.

Education is the axis of the wheel of development for all countries. It is not considered to be a luxury, but instead a basic right of a people. The right to an education is a proclamation in the Charter of Universal declaration of Human Rights (1948). Article 26.1 states that "Everyone has the right to education…" and in the same breath, Article 26.2 states that "Education shall be directed to the full development of all human personality…" The right to education is repeated in Article 28.1 of the Convention on the Rights of the Child (1989) which outlines that "State parties recognize the right of the child to education and with a view in mind to achieving that right progressively and on the basis of equal opportunity." And in Article 29.1 (a), in which the state parties agree that, the education of the child should be directed, to "the development of the child's personality, talents, and the mental and physical abilities to the fullest potential"

To make sure all heads of government subscribe to the business of education, a world conference on education was held in 1990 in Jomtien, Thailand. At this world conference, the call for universal quality education was echoed with specific references to poor nations of the world. Thus, a consensus of international education was developed and adopted that education was the single most fundamental element for combating poverty of all nations (UNICEF, 1999). Almost two decades have passed and education and human development

that was to be priory has taken a backseat in the life of our Jamaican people. Successive governments have done very little to remove education from the gutter of the Jamaican landscape, though having subscribed to the various charters of rights to education. Amidst the echoes of leading financial institutions like the International Monetary Fund (IMF) and the World Bank, that privatization is insufficient to provide economic growth, it was emphasised that the development of human capital through education should be given high considered in the equation of development. Regional economies like Jamaica are challenged to achieve growth and development through education. If not careful, this underdevelopment of the human capital is likely to become an obstacle to growth and therefore the inequalities in education that fuelled the cycle of poverty coupled with low educational achievement continue to be perpetuated within families, communities and the nation as whole.

Following the commitment to UNESCO 2030 agenda, governments across the world have made commitments to support education to meet the educational targets, and to realize the consequent benefits of education (Dodman, 2021). The government undertook several measures to ensure that the educational sector improves in line with the Sustainable Development Goals (SDGs). These, among others included a focus on building skills ideal for a knowledge-based economy. To ensure that the knowledge-based economy is built, Jamaica received a loan of US$16 million from the World Bank to undertake education transformation and capacity building in key agencies (World Bank, 2015). These agencies included National Education Inspectorate, Jamaica Teaching Council, Regional Education Authorities, and the National Education Trust. These agencies were established to support the National Transformation Programme such as the Education System Transformation Programme (ESTP), which has the main objective to improve the efficiency, accountability and performance of the education system. Through each agency, a number of strategies were implemented to improve education for the nation's children, such as, capacity building for

teachers through the Jamaica Teaching Council and the National Parenting Commission through the National Education Trust (NET).

As noted by the World Bank (2015), the focus of government was to develop the capacity to engage with other partners such as the parents to foster education especially, at lower levels such as the early childhood education, and primary education. For example, the National Parenting Commission of Jamaica manages the National Parenting Support Policy in the country. This policy provides two salient things; firstly, it defines effective parenting from a Jamaican perspective, and secondly, it sets out the government's approach to supporting, and strengthening positive parenting practices in the country. The presence of this policy has enabled parents to partner with government in building the capacity of the parents to take responsibility of the educational requirements of the children, and to ensure that they are supportive of government policy on education.

In the World Bank's most recent report on human capital, it articulates that Jamaica has a learning crisis of high enrolment and poor educational performance that is getting worse contributing to its declining Human Development Index (HDI) score. It argues that the country's score and rank have declined due to poor educational performance (Jamaica Education Transformation Commission, 2021). The Task Force calls for a supportive role of parents and other stakeholders for a collaborative approach to teaching and learning to lift the level of teaching and learning in the schools.

The Jamaican education system consists of four levels. Level one is the Early Childhood Education (3-5 years). The early childhood institution consists of Basic/Infant schools and Departments. These institutions form the feeder institutions to the level two institutions which are the primary schools. The Primary level institution caters for children between the ages 6-12 years. The primary level is the bedrock of the educational system. It is the important foundational phase of a child's life. It constitutes the foundational years in a

child's educational life, where the child develops Foundational Literacy and Numeracy (FLN) skills. It is typically the first stage of formal education following after the pre-school or kindergarten education in most countries. In Jamaica, the primary curriculum begins at grade one through to grade six. The age of six years is the age at which the child is admitted to grade one and terminate at the age of twelve years of age, at which time the child would have completed grade six and is now ready to transition into high school. The six years of primary education is compulsory. The students begin to write the Primary Exit Profile Examination beginning at grade four through to grade six where the final stage (PEP 6) is done. This examination transitions students to the secondary level which is level three of the education system.

Level three is the secondary level (12-18) years, and level four is the tertiary level (19-24) years. The enrolment data for 2018 (JSLC, 2019) revealed 12.3 percent for Early Childhood, 28.1 percent for Primary schools, 24.3 percent for secondary, and 5.9 percent enrolment at the Tertiary level. Regrettably, 29.3 percent of the Jamaican children were not enrolled in school due to a myriad of problems associated with socio- economic factors such as poor parenting, lack of lunch money, lack of bus-fares, and boredom. In that same reference period, data from the Ministry of Education showed an average daily attendance of only 86.1 percent at the Primary Level and 75.3 percent at the secondary level. To this end, 13.9 percent of the primary cohort were not in primary school and 24.7 percent of the secondary cohort was not in school either. To address this problem, the government instituted the Programme for Advancement through Health and Education (PATH) to alleviate the problem by providing assistance for the most vulnerable of society. In addition to the PATH, there is a government funded School Feeding Programme (SFP) which was designed to improve the nutritional standing of students, enhance regular attendance as well as to improve students' learning capacity. This programme is a part of the Government's Social Protection

initiative and has two integral parts: the Nutri-bun and Milk/Drink as well as the Traditional cooked meals (JSLC, 2019).

One of the mandates of the Education Transformation Task Force was to deal with the attendance in school so that literacy, numeracy and performance of the schools can fall in line with the goals that were set out to be achieved by 2030. For the reference period, 13 percent absenteeism of the primary school cohort from school is a serious indictment on the Education Ministry against the education philosophy of equity and accessibility for all. The researcher is of the view that if the gap in school attendance is not filled, the purpose of vision 2030 as the goals for realising full education would not be fully realized.

Not only are primary and secondary schools' students provided with assistance from the PATH programme, and the School Feeding Programme, the National Textbook Loan Scheme was established to cater for grades 1-13 of all public primary and secondary schools. In complement to these, parents are advised to purchase supplemental texts that will enrich their children's learning experience on the advice of their teachers. Terminal examinations that are taken at the secondary level of the education system are the Caribbean Secondary Examination Certificate (CSEC) and the Caribbean Advanced Proficiency Examination (CAPE). The CSEC examinations passed with the minimum of five subjects including mathematics, English language and a Science subject qualifies a student for admission into college.

Government Examination Machinery

The government examination machinery that is administered in the primary schools consists of   the Grade One Individual profile (GOILP), the Grade Three Diagnostic Test, and the Primary Exit Profile Examination that is administered at grades four, five and six. From PEP 4, the Ministry of Education is able to pull the literacy and numeracy performance of the

students and is able to assess the readiness of the students for PEP six. Below sets out the national assessments taken at the various grade levels.

The Grade One Individual Profile (GOILP). This is an instrument for auditing students' cognitive, social and interpersonal skills and how they integrate themselves in the learning environment. The data gathered is useful to the teacher of grade one. Here the teacher uses the date to identify the student's specific learning needs entering grade one. This assessment instrument takes into account both individual and group administration, from this data gathered, the teacher is able to develop suitable activities or programmes to meet individual learning needs as well as group needs of the students within the class setting. The information gathered forms the reference data on the child and allows the teacher to track the child's performance in years to come.

Grade 3 Diagnostic Test -This is a curriculum based- test that is administered once the child has completed grade 3 curriculum. The instrument is administered in two core subject areas: Language Arts and Mathematics in the month of June, close to the end of the school year. The instrument is designed to identify strengths and weaknesses of the students relating grade three curriculum. The results are processed at the Ministry's Assessment Unit and the result are sent back to the respective schools who will analyse the results and make the appropriate adjustment in teaching strategies and intervention for the students as well as to make the necessary adjustment for incoming students. The data sent back are extremely important for teaching and learning exercises since they are used by the grade three teacher in planning the lessons for the incoming grade three students in terms of what needs more attention. This may need to revisit the teaching strategies in teaching difficult concepts. The data also allows for the current grade four teacher to put in place the strategies and intervention to deal with the deficiencies uncovered by the tests.

PEP 4 Tests. The Primary Exit Profile Tests for grade 4 are administered at the end of grade 4 year. It is composed of numeracy and literacy in terms of reading, writing, and comprehension skills. It aims to identify levels of mastery in mathematics, reading, and writing and comprehension skills. The data gathered from these tests are expected to be used in guiding the students with the appropriate enrichment activities. Students moving over to grade 5 will get the benefits of the intervention in deficient areas.

Primary Exit Profile. This is an examination that replaced the Grade Six Achievement Test (GSAT). It is administered in fourth, fifth and sixth year. PEP 6 which is administered near to the end of Grade Six. It is an examination that is taken to transition students from the primary level to the secondary level of the school system. The results for these exams are not presented in a manner that utilizes percentage scores, but instead are presented in achievement levels with scaled scores per subject. There are four achievement levels: Beginning, Developing, Proficient and Highly Proficient.

The beginning level is the level at which the student shows little or no evidence of the requisite competencies that are required at this specific grade as outlined by the National Standard Curriculum (NSC). Students achieving this level will require constant on-going and intensive support as they transition to the next grade level. Students achieving the developing profile shows that the students have showed limited evidence of the necessary proficiencies as dictated by the NSC and will require support specifically targeting the areas where the students are most deficient in when they transitioned to the next grade.

The students who exhibit proficiency are the ones who showed sufficient evidence in proficiency that is necessary at this grade as specified by the NSC. These students are ready to transition to the next grade and they may require little academic support in order to function at the transitional stage. Students, who have exhibited a highly proficient profile are

those students who have demonstrated a superior level of proficiency that is required to function at this stage in their grade level. Again, this is specified by the NSC that sets out the parameters. Each subject has a parallel range of scores that are based on scaled scores resulting from the students' raw scores.

Parents as Partners in Education

In spite of all the government's efforts through its agencies to boost students' performance in school, the fact remains that parents are the first teachers of their children and it is oftentimes argued that 'children learn what they live. Looking at how the parent execute their responsibility within in the context of the socialization of their children, it is safe to conclude that parents can carry out an important function in the occupational and educational trajectory of the life of their children (Asiimwe & Magunda, 2017). This view supports earlier assertions by Cohen (1987) in his thesis "parents as educational model, and definers." In Cohen's work, he highlighted that parents have a remarkable impact on children's educational aspirations, and attainment which is principally due to modelling that is an imprint on the young mind. Consequently, it would seem that parents' educational attainment influences students' academic outcomes. This view was supported by Dubow et al., (2009), Kalil et al., (2012), and Benner, Boyle and Sadler (2016) who demonstrated in their studies that parents' educational levels strongly influence their children's educational, and economic opportunities.

While the above views in general support the primacy of parents' contribution to the academic attainment of children, there seems to be a dearth of literature that speaks to parents' educational attainment, and its influence on children's educational outcomes at the first two levels of their schooling. Numerous studies have been done on how parents get involved in school and how their participation impacted the learning process of children in a

positive way. For example, Cheadle and Amato (2011), point to the fact that parents and caregivers who are educated are more likely to be involved in their children's education, and Cabrera et al. (2018) supported the view by adding that this was a key factor in adolescents' educational success. These claims may not explain the situation in the case of Jamaica that has moved forward to deliberately build the capacity of the main caregivers to play their role in the education of their children. In addition, in the context of this study, the literature does not provide empirical evidence of the extent to which the educational attainment of the parents was influencing the performance of children in primary school.

Parents by virtue of their natural instinct, feel strongly about the academic and physical development of their children. They are the chief nurturers of their children's development, to the point that some parents will do anything to ensure that the children reach these milestones in their lives. As a result of the challenges arising from the so called "children development climate," parents see these challenges as a time of joy when the children reach a milestone or a time of stress, trying to get their children to where they want them to be (Ceka & Murat, 2016). The child's education begins with the first day of the life of the child and continues into adulthood where learning is gained through different life experiences demonstrated by members of the family and the environment of the child. Because of the role that parents play in the life of their children in preparation for school and their involvement in school activities, and from the facts that they are directly or indirectly affected by what goes on in schools render them to be stakeholders and partners of the system.

Personal Experiences in Education

Based on the researcher's vantage point as an educator, there is a gap in parents' involvement that needs to be bridged in the context of parents' educational attainment in

order to raise students' educational outcomes at the primary, and secondary levels. This is increasingly becoming a subject of interest amongst educators as they try to raise the bar in students' attainment levels. Teachers in small multi-grade schools particularly those located in rural areas of Jamaica have continued to lament students' poor work attitudes as well as lack of interest in educational pursuits. This is coupled with the inability of parents of all ages to engage their children meaningfully at home with school related activities that stimulate them to learn. To narrow this gap in parenting, and in teaching and learning, teachers have had to develop innovative strategies to assist students in after school sessions to complete tasks that should be done by parents. In so doing, some schools have instituted evening classes free of cost to the students to sit and complete school work under teacher's supervision before they leave for their homes for fear of students not submitting the work the following day or on the due date of the task.

Those common occurrences question the level of supervision in the home as it relates the home assignments and parental responsibility. It is felt amongst teachers that once the child gets homes, there will be no works done as a follow up of the schoolwork in the home. This cannot be so, because in most cases, the teachers give home work to re-enforce concepts taught in school and they expect that parents will assist the children in these activities. Some students argue that they have no one at home to assist them with homework even though they may want to do the task. Some students who have the desire to do well in school often times visit their friends' homes and seek help from outside the homes without the knowledge of their parents. When parents are chided for the lack of cognitive and intellectual support given to children at the Parents Teachers' Association meetings, they chorused that students' work nowadays is beyond their educational levels.

Some parents argue that they have graduated from schools many years ago and are not able to remember how to do the work, while some said that the work these days is much

harder than those given to them in their time of attending school. It can therefore, be argued, that where parents are low achievers, they sometimes pass on this low value on education to their children. Hence, the children themselves are not intrinsically motivated to become high achievers as education is not embraced in the homes. Besides, many parents do not make the effort to assist their children even if they can. Some parents are quick to say, "we cannot bother, because we left school long time ago".

Gleaning from personal experience as an educator, there are intervening factors that could impact the results of the study which are cultural or contextual factors that are unique to particular rural areas of Jamaica that may impact the findings of the study. In most rural communities in Jamaica, farming is the main economic activity. When this is the case, the prevalence of the absence of the child from school on Fridays is a normal phenomenon. This is due to the fact that the children are taken to the field to assist their parents on the farm or to help the parents in preparing for the market on a Saturday. The children would be used to carry the farm produce to a convenient place where the market truck would access them easily. In my own experience, this is a normal thing in the rural area that I worked for twenty years. It was common that parents do take their children from school to help them to work on a Friday. What I found disheartening though, the children's learning is greatly impacted especially if the home is one in which no provision for no extra lessons is made or supervision of school work is absent as the children need some school related activities in the home to augment the augment their learning. In fact, many children suffer from learning loss over a period of time.

Another cultural factor that could impact the findings of the study is that economic survival of some families in the rural areas is given preference over meeting the child's educational needs like buying a workbook for the child. In some homes where the child learns to model high educational achievement, he does so especially when there is someone

in the family who succeeds educationally. The reverse is true where there is no model, the child settles for very little in their achievements in school. If the community is one in which there are outstanding achievers, parents would be inclined to nudge their children to success in whatever they do educationally.

Not only is the researcher's observation related to some intervening factors that might impact the findings, but there are others such as the lack of parental supervision and parental assistance in home/school work. This is a serious problem relating to the father's participation in the life of their children. Mothers are the ones who visit the school to deal with matters pertaining to their children. They are the ones who attend the Parents Teachers' Association meetings or even to collect the children's reports on a report day. Speaking to colleagues from the schools under consideration, they have all confirmed that this is a common phenomenon as the fathers are the chief breadwinners and most times not available. They argued that if a child commits an offence and the father is sent for, an older male sibling or an uncle comes to represent the father for the child. This scenario in itself presents a gap in parenting since each parent has a fundamental and different role to play in the life of the child. The mother's role cannot be played by the father and vice versa.

It is, therefore, hypothesized that parents who have done academically well at school, this will be a good role model and mentor for their children's educational outcomes as they would be better able to offer cognitive and intellectual stimulation to their children. While the researcher has a fuzzy awareness of the different anecdotal ideas linked to the topic under consideration, the urge to undertake this study was intended to provide a clear knowledge of how parents' academic attainment links to their children's academic performance. To ensure gathering, synthesis, and evaluation of empirical evidence, the researcher adhered to the purpose, aims and objectives of the research topic as the guiding scope of the study.

From the foregoing, it may be suspected that there are challenges with the academic performance in Jamaica, and parents' capacity to support their children's cognitive development, and educational attainment could be part of this conundrum. This world view tends to find support from the recently launched report from Patterson-led commission on education in Jamaica of 2021. The report revealed that Jamaica has a severe learning crisis citing the case of the large number of students that remain illiterate at the end of primary school (The Jamaica Education Transformation Commission, 2021). The Commission describes the country's education sector as an institution in crisis.

Statement of the Problem

"The institution in crisis"! Despite the country's intervention with an investment of US$16 million to boost educational capacity in the country in 2015, among others, it is baffling that in 2022, which is 7 years after this intervention, the education sector is still described as one in a watershed. Yet, the intervention included building the capacity of the parents to enable them more able to contribute to the cognitive development of their children, and their ultimate performance demonstrated through grades attained by the children. It is in this breath that Davis (2004) and subsequently Patterson report of 2021 on education transformation call for parents to play a more supportive role in boosting education.

Since 2015, performance of the educational sector remains weak, and below par for the last one decade. Data for 2015 demonstrates that students' mean score in literacy was 56 percent, falling short of the target of 75 percent. Mean score for Universal Literacy Test was 77.7 percent falling short of the target of 85 percent. In 2019, data from the Ministry of Education Website on the Primary Exit Profile exams, indicates that for Mathematics 40 percent of the cohort of students attained proficiency (34.0 percent were proficient while 6.0 percent attained highly proficient) in the subject. In Science 49.0 percent attained proficiency

(42,0 percent were proficient while 7.0 percent were highly proficient). In Social Studies, 63.0 percent attained proficiency (50.0 percent were proficient and 13.0 percent received highly proficient). In Language Arts, 55.0 percent attained proficiency (46.0 percent attained proficient, while 9 .0 percent attained highly proficient) in the subject.

What this analysis means therefore that up to 50 percent of the 40,426 students who sat the examination were performing at   beginning and developing stage for the cohort. In 2020 39,689 students registered for the same examination, again only 50 percent of the students showed proficient and highly proficient level. The other 50 percent of the students was at the beginning and developing level. The situation had not changed significantly in 2021 and 2022 respectively. For instance, in 2021, 37,278 registered for the examination (18,800 males and 18478 females). Only 47 percent of the cohort of students were proficient and highly proficient in mathematics while 56 percent showed proficiency (42.3 percent proficient and 14.1 percent highly proficient) in Language Arts. In 2022, the final period of review, 36,078 students registered for the examination, there was some movement of changed in the data, though marginally.

Additionally, there was 50.8 percent of the cohort of students attaining proficiency (45.9 percent proficient and 4.9 percent highly proficient) in Mathematics. In science, there was 53.8 percent of the cohort attaining proficiency (33.8 percent proficient and 20.0 percent highly proficient).   In Social Studies, there was 53.3 percent proficiency (37.1 percent attained proficiency and 16.1 percent attained highly proficient). For Language Arts, 77.1 percent of the cohort of students showed proficient level (62.7 percent attained proficiency and 14.4 percent were highly proficient in the subject Moreover, only 42.5 percent of 32,617 students who sat the CSEC exams in 2019 passed five or more subjects, including either English or Mathematics. In all, just 28 percent passed five or more subjects including both

English, and Mathematics. This performance by any standard is considered to be below par for a sector that attracts sound funding from the government.

Earlier studies on education highlighted the significant effect that educated parents have on students' academic performance. Reardon (2011), Pérez Sánchez et al. (2013), Glance (2014), Harding (2014) Jackson (2014), Breen & Goldthorpe (2014), and Tárraga et al. (2017) share a similar view that parental education has a relationship with children's cognitive development. A recent study by Cole (2020) concluded that parental empowerment and efficacy beliefs determine the parents' level of involvement. However, the study did not focus on the parents' level of education against the background of the academic performance of their children at the primary level of education.

The aforementioned studies show knowledge gaps in articulating the contribution of parents' academic attainment in the educational performance of their children. Yet, without evidence, educational stakeholders may find it challenging to engage with parents in a meaningful way to uplift the performance of children in the primary education sector. Moreover, it may not be easy to leverage on the benefits of the 88.10 percent adult literacy rate in the country to guide parents on boosting numeracy and literacy performance of their children. This threatens meeting the SDGs specifically, SDG-4 by 2030, and the benefits associated with high literacy levels in the society as highlighted in the SGDs. This study, therefore, proceeded to ascertain the extent to which the "educational attainment of parents influences children's educational outcomes at the primary level in five public primary schools in rural Jamaica.

Local Problem

Over the past nineteen years as a principal at a rural school one of my most difficult task was to get parents involved with their children's education by helping them to complete

their homework at home. Most of the students, when given homework have them taken back to school the following day undone. When the issue of parental assistance with homework is brought up at the PTA meetings, parents expressed the view that homework was above their scope of education, even though many of them attended high school, they did not pass any subject which suggested underperformance of the parents.

All efforts to get the parents so involved in helping the children with homework proved futile and so as the principal, the researcher met with the teachers to deal with the issue of homework because the lack of it therefore was affecting the students' performance at a time when school are being pressured to improve student performance. An after-school homework centre was set up in the school library and students from all grades were encouraged to join and get the assistance to complete their homework. Parents were informed of the homework centre and how long each session was scheduled to last in the evening. Some parents were enthused about the idea and some parents volunteered to assist the assigned teachers in the evening even to stay with them, though they have challenges with the work of the students.

The homework centre operated four days per week, Monday to Thursday. Two teachers were mandated to sit in with the students to offer assistance in supervising them. Although the parents were not able to give academic support, they gave moral support to the teachers who managed the after-school homework centre. The homework centre was critical to facilitating the improvement of the children's performance since it provided the facilities they were lacking in the homes. It provided supervision of the work as well as a physical space where the children were able to sit and do their homework in a comfortable environment which was lacking in number of the homes. The inaccessibility of study area in the home was confirmed by 21.4 percent of the student respondents.

For the period the homework centre worked well. It was one way of getting the students to do their homework by the assistance that the school provided in the evening. The student grades improved by 25 percent and students who were not able to read could read at their grade level and a grade above. The work done in the homework centre was a follow-up to the work done in normal school since the homework centre was geared towards facilitating students who did not have the support at home to do the extra school work. Parents supported this venture and engaged in a number of ways. They provided all the instructional learning materials that they were called upon to provide for the students. Some parents assisted in maintaining the discipline, while other assisted the teacher to mark the books once the teacher gave them an answer sheet from which to mark. Some stayed for the full duration of time, in the evenings just to give moral support to the teachers once they are not working.

Research Purpose and Objectives

This study was conducted to meet the following purpose and objectives:

Research Purpose

The purpose of this study was to investigate the possible influence of parental educational attainment on academic performance of primary school children in five rural Jamaican public schools. The reasoning behind this study is that there continues to be meaningful discussions on what type of education reform that is needed to lift the academic performance of the schools. It is the researcher's view based on his experiences as a principal in a rural primary school that any reform of the system to improve school' performance level as a part of the mission for more educational accountability should be in part levelled at the parent's contribution in helping to raise the level of education of the nation's children. Jamaica is not the only one concerned about the performance of its children in school. Evaluation in several United States schools revealed that there is a drive to raise the level of

test scores, which are used in rating schools and in extension the children performance (Hall & Ryan, 2011).

Similarly, there is an increasing pressure on school principals to do all they can to raise the level and quality of education in all schools. Any increase in students' academic invariably means an increase in the parental academic attainment levels because these are the parents of tomorrow and it is hoped that the benefit that they derived from education will pass on to their children in a positive way. The National Education Inspectorate (NEI) continue to focus on students' academic performance and students' progress; students' social and personal development as three of the eight indicators of effective schools. This report composed by Dwyer (2013) showed that 56 percent of the school are rated as in effective and as it relates to students' attainment 75 percent of the school's performance rate are below the national average.

This investigation was intended to determine whether or not the parental educational attainment influences the academic performance of rural primary school children. This would either support or contradict the literature that suggests that the greater the educational level of parents, the greater will be the children's orientation towards education and so better achievement. If it supports the literature to a great extent, we know what strategies to put in place to build parents' capacities in helping to raise the level of academic performance of the nation's children to produce the profile of an educated Jamaican and to realize this objective by 2030.

Research Objectives

The study sought to:

i. Explore how the educational achievement of parents directly impacts the educational outcomes and academic success of their children attending selected primary schools in rural Jamaica.

ii. Examine the nature of the relationship between parental involvement in educational programmes and initiatives and the academic performance and educational outcomes of selected rural primary schools' children in Jamaica.

iii. Investigate the extent to which parents' educational achievements served as a reliable predictor of Jamaican rural primary school students' educational outcomes.

Nature, and Significance of Study

The nature and significance of the study is highlighted below.

Nature of the Study

The nature of this research fits into the explanatory sequential mixed methods approach. This mixed methods approach utilises an integration of one dataset such as the (qualitative) focused group discussion (FGD) to inform, and expand the quantitative data from the questionnaire survey (Creswell et al., 2011). The explanatory sequential design seeks to explain a phenomenon by sequencing the approaches and then using the qualitative aspect of the research to expand the quantitative results. Besides, it helps triangulate the research approaches so that weaknesses of approach can be compensated by the strengths of the other. It also helps to ascertain how or why a particular phenomenon is occurring as well as predict its future occurrences. There are two phases which complement each other.

The quantitative phase follows the designing of the second phase qualitative on the basis of the quantitative findings (Schoonenboom & Johnson, 2017; Shorten & Smith, 2017; Creswell & Plano-Clark, 2018). A mixed methods approach is a complementary combination of both quantitative and qualitative approaches (Creswell, 2003; Palinkas et al., 2015)

providing depth and breadth of understanding. The quantitative method used was a survey using the questionnaire as the research instrument; parents' questionnaire that was self-administered, and a children's questionnaire that was administered at the school by the researcher. Meanwhile, the qualitative method used a focus group discussion of 14 persons. A focus group protocol was used to guide the discussions, and explore parents' perspectives on the level of educational assistance provided by them. According to Denzin (2010), methodological triangulation involves multiple qualitative or quantitative methods of investigation while data triangulation involves different data from the same data source to examine the same phenomenon.

There is merit in selecting this mixed methods design since its use is being increased recently by a growing number of researchers (Creswell, 2003; Creswell & Plano Clark, 2007; Dunning, et al., 2008). The increased use of mixed methods justifies the question of determining the perceived value in its use over the single strand inquiry such as qualitative or the quantitative approach (McKim, 2017). Also, the use of this design according to O'Cathain et al. (2007) is driven by the apparent shortfall in quantitative methods. Molina-Azorin (2011) argued that mixed methods articles received more citations than studies not using mixed methods, which is an indication that mixed methods studies are being seen as more valuable than studies of a single method. Another value of selecting the mixed methods design is that it helps the researcher to prepare ideas for future research as well. As a whole, the mixed methods design was considered the most appropriate for the study since the approach collects both quantitative and qualitative data sequentially, and therefore gives more depth, and breadth to the phenomenon studied.

The mixed methods design looked at the effects of parental educational attainment (independent variable) on the students' academic performance (dependent variable). The main tools for data collection through the mixed methods approaches are the two

questionnaires, the parents and the children's questionnaires along with the open-ended questions in the guide to facilitate the focus group discussions. The qualitative method did not necessitate a large sample size to gain a sufficient in-depth understanding of the phenomenon as what is central is ensuring that there is saturation in data collection. However, the quantitative inquiry required a bigger sample to be more representative of the study population. Therefore, the target population of one thousand, two hundred (1200) was taken from five small rural primary schools. A purposive sample size of 144 parents was chosen out of the population of parents because the parents are guardians of the children. In relation to the children a purposive sample of 144 children was chosen out of the population of children attending these schools. The total sample involved in the quantitative inquiry was 288 respondents which was considered large enough for reliable data analysis using quantitative tools including SPSS, the preferred software package for data analysis.

A purposive sample is one in which the researcher had to rely on personal judgement in identifying and selecting the individual for the sample depending on their value to the research. The Researcher made sure that the individuals can provide the best information required to answer the research objectives. The children were selected from grades 4-6 and were between the ages ranged from 9-12 years. These age cohorts were considered mature enough and in better position to understand the research protocols when explained to them. Moreover, they could be relied upon to give accurate information regarding their situations. The parents were selected from a range from 21-50 years and were paired with each student selected at the school. Again, a purposive sampling strategy was used to select the parents as the researcher wanted to know that they were from the same homes. According to Plinks et al. (2015), the researcher looked for specific, and appropriate traits in the participants within the confines of the phenomenon studied. Two questionnaires were administered: a children's questionnaire and a parents' questionnaire. Both questionnaires are contained in Appendices

C and E which were analysed using SPSS 28.0 version. The FGD guide was used a tool to collect the qualitative data, and the data were transcribed using the discussion prompts in the protocol. The researcher took care to familiarise himself with the transcript by reading and re-reading it, reflecting on the impression, and insights in order to identify potential themes.

The Primary school level was targeted because its lays the foundation for literacy and numeracy development of the young child. The early foundational development of the child gives them a head start for easy transition into the secondary school phase. Besides, it is observed that students given a solid foundation at the primary level is able to do well moving on to other levels of the educational system. It is considered that a good primary education prepares the students for other levels in the education system. Rural schools were taken into consideration due to the lack of access to technologies and other amenities that facilitate educational development and growth and so in many instances, students in rural areas are at a disadvantage in their learning development. This invariably allows them to underperform compared to those students in the urban areas that have access to the technologies of the day.

The primary school, principally, is the first stage of the formal education in Jamaica. It furnishes the young child with the essential and basic knowledge, skills, and behaviours in education. Not only that, they also develop the child's numeracy and literacy skills, and prepare the child emotionally building their social skills as well to prepare them for their future relevance to society. In an age of technological advancement, many rural schools do not have the technology that urban schools have and therefore these schools are at a disadvantage to the extent that these children generally perform less favourably in relation to their counterparts in urban schools.

Another reason for researching in the rural primary schools is to get an understanding of the challenges rural school faced in light of low academic performance as against their urban counterparts who have higher levels of achievement. Parents' involvement has always

been a crucial element in children academic performance. Thus, finding the challenges and identifying suitable strategies to raise the level of students' performance in those schools would be a reasonable contribution to education. Moreover, this would mean helping to position the education system to achieving Jamaica's vision for 2030 Development Plan which speaks to realizing a profile of an educated Jamaican. It would also mean getting parents to rethink the ways they can assist their children to reach acceptable standards of education and to build a culture of accountability on the part of the parents. The current situation where parents are seen as "I do not care" would be a thing of the past and parents would not be placed in the deficit of being labelled "I do not care."

Continuing to see rural schools on the trajectory of deficit in the academic performance, would be an injustice to the young boys and girls, the future men and women who are expected to give meaningful contribution to the development of themselves and the country as a whole. It is imperative that evidence based knowledge is generated and used. Therefore, such a study would be instrumental in generating and analysing empirical evidence about how the academic attainment of parents influences the performance of the children.

Significance of the Study

The mixed methods study can be considered a significant initiative design to help stakeholders of education to get an in-depth understanding of the possible influence of parental educational attainment (PEA) on school performance. The uncovering of how parents can use their education to improve students' level of performance would be a great initiative of parents' engagement in the education process, thus leading to educational success, which is the goal of every stakeholder. Future parents can be benefitted by way of the sensitization of their roles and responsibilities to their children in the context of education.

Teachers could benefit from the information gleaned as to the specific area that they need parental involvement from their homes. Greater partnership could be forged between the schools and the parents in terms of the teachers knowing what kind of assistance their students can get from their parents and depend on them to help in their school work. Many of the schools have struggling readers, as many of the children, particularly the boys are not reading at their age level. Parents could assist the schools to get these students up to speed with the reading, as parents are said to be the first teacher of their children and the integral force that determines their children's educational outcomes (Bennett-Conroy, 2012). Parents' engagement with their children's education seldom gets highlighted in the media. At the publication of the results of the national examinations, the attention is drawn to the teachers of the schools along with the principals (CAPRI, 2009). When parents are highlighted in the media for their support, it becomes a motivating force for them and they would intensify their efforts in doing so.

In the above context, parental support can benefit educational stakeholders when the role as educated parents comes out clearly. Moreover, the efforts to involve educated parents and to train them in how best to do it could get funding to facilitate improvement and for further capacity building of the parents. Knowing the current skills and potential of the parents to assist in the education process of their children would help in upgrading their parental skills to get greater results as well as getting others on board.

In Jamaica, a number of initiatives were put in place to get parents more involved in their children' education so it would become easy for them to do school related activities including assisting with their homework or building their reading capacity of children by reading together with them. Initiatives in the school calendar were established including reading days where the schools would invite those who can read to come and read to the children, PTA meeting and conferences on parental involvement with specific focus, learning

communities among parents among others, less than one quarter of the parents would report to these initiatives. However, how this translated into better academic support to their children needs to be established and documented through such a rigorous study.

The knowledge generated and shared from this study could help in reshaping the Learning Communities which, for all intent and purpose, could revisit and conveniently be integrated into the Stakeholders Learning Committees (SLC) for promotion of shared learning. It should consist of teachers, parents, learners and other stakeholders from the community who take special interest in students' learning. They should be a committed group of people with a common cause for boosting education and should devote themselves and resources for the sole purpose of promoting students' learning. This group should operate under the ambits of sharing their common knowledge to boost students' learning and to operate with a specific code of conduct to engage in work of teaching and learning outside of the school community. The main aim of this group is to compliment school enrichment of the learning of its members to be more effective in their work with students.

The Stakeholders Learning Community must be initiated in concert with some basic structures to ensure continuity and sustainability as well as efficiency and effectiveness in serving its constituents of teachers, parents and students. Constituents should exhibit shared values, beliefs, and vision, particularly where the focus is on students' learning which should guide the community in its work. There should be emphasis on collective learning where the community determines its learning needs in relation to the student's school curriculum and what is learned as well as sharing of the best practices to get parents on board in promoting students' learning as well as promoting greater parental accountability of students' learning.

The Stakeholders Learning Community should meet regularly to review the children's problems in school, and work collaboratively with stakeholders to improve academic performance. Like all other organisations, sustainability is essential. There should

be a formal structure registered under the Company's Act of Jamaica and recognised by the Ministry of Education, having put in place the formal structure. The steering committee would have to institute a reward system to sustain interest as well as to garner contributions from private sector companies, government agencies and other civil societies. The meeting procedures and other ways to sustain the organisation could be worked out collectively and agreed upon by the group norm.

Policymakers within the government could benefit from the study with the information they gleaned to inform educational policy within the context of raising the standard, and performance levels of students in schools using parents as enablers of cognitive, and emotional growth to their children. The Ministry of Education could get a sense of where some of the weaknesses are within the education system and could influence strategies to deal with these weaknesses and be able to raise the level of students' performance at the school level. Students could be enlightened and become more aware on how PEA could influence their academic performance. This could encourage them to do well in school so that they could impact their own children's education when they become parents.

The data gleaned from the research could broaden parents' understanding that the higher the academic levels of achievement they possess, the greater will be the scope of their opportunity to influence the educational outcomes of their offspring. This view is supported in literature by Reardon (2011) as well as Perez Sanchez et al. (2013), Goldthorpe (2014), Jackson (2014), and Taraga et al. (2017) all of whom have contributed to the discussion that parental education has the strongest relationship with children's cognitive development.

Guidance Counsellors could use some of the information in their teaching moments to sensitize students of the need to make good use of their tenure in school, and to do their best throughout their school lives as low performance in school would impact their ability to influence their own children's educational outcome. The data could also be used by the

guidance counsellors to form parents' support groups and capacity building of literacy and numeracy, among others, so that they could provide greater assistance to their children in their school work. It could also be used to encourage students, and to change their orientation, and perspective on the need for education that will foster greater economic development for themselves, and the country as a whole.

Future researchers could benefit from the repertoire of material available to assist research of similar and related subject of interest. It also adds to the researcher's personal awareness as to the extent of the phenomenon that exists in our schools. Also, from the researcher's personal experience, he knows that in the rural school such as the one he led for more than fourteen years, a problem existed where parents were not assisting the children with homework despite the encouragement to the parents during face- to- face at P.T.A meetings. What he never knew was that parents were lacking the academic skills and the know how to assist the student due to the fact that a large number of them under achieved in schools. The researcher thought this was a problem peculiar to his school but was made aware that this phenomenon was a common problem in the rural schools as well. This was brought out in the qualitative report from the focus group discussion with the parents.

In general, grasping the full understanding of the phenomenon and the factors that contribute to the students' academic outcome can assist policymakers to formulate intervention strategies that precisely target particular areas of weakness with the view in mind to effect improvement.

Research Questions and Research Hypothesis

Taking into account the study under consideration, the researcher's project was therefore to explore, and investigate the following research questions, and to validate the hypothesis. The research questions are set out below with the matching hypotheses.

R.Q. 1: How does the educational achievement of parents directly impact the educational outcomes and academic success of the children attending primary schools in rural Jamaica? (Qualitative)

H1O.   There is no evidence that educational achievement of parents directly impacts the educational outcomes and academic success of their children attending primary school in rural Jamaica.

H1a.   There is evidence that educational achievement of parents directly impacts the educational outcomes and academic success of their children attending primary school in rural Jamaica.

R.Q. 2: What is the nature of the relationship between parental involvement in educational programmes and initiatives on the academic performance and educational outcomes of primary school children in rural Jamaica? (Quantitative)

H2O.   There is no significant relationship between parental involvement in educational programmes and initiatives and the academic performance and the educational outcomes of primary school children in Rural Jamaica.

H2a.   There is significant relationship between parental involvement in educational programmes and initiatives and academic performance and educational outcomes of primary school children in rural Jamaica.

R.Q. 3: To what extent do parents' educational achievements serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica? (Qualitative & Quantitative -Mixed)

H3O.   There is no evidence that the educational achievements of parents serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica.

H3a.   There is evidence that the educational achievements of parents serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica.

In answering the research questions, a number of variables were involved. Two main variables were the independent variable which was studied as an explanatory variable to ascertain its association with or influence on the dependent variable – response variable, which represents the educational outcomes of the children. A third variable was the confounding variable. A confounding variable is that other variable besides the independent and dependent variables that could be associated with the dependent variable. It has the effect of confounding or muddling the proper interpretation of the study. The true effect or relationship between the independent variable and the dependent variable is somewhat disguised because of the possible influence of the confounder. The researcher was mindful of the confounders that could influence the relationship between parental involvement and the academic performance of the students. Some of the confounders are parental supervision of homework, parental assistance in reading, the provision of learning materials, and parental motivation of the child. The concept of the study is illustrated in Figure 1.1 below.
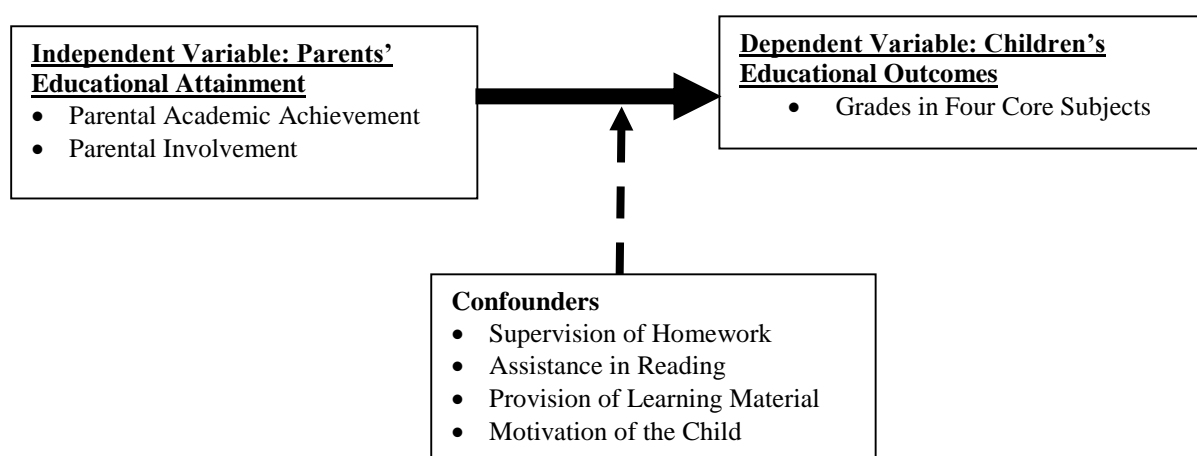
Figure 1.1 Conceptual illustration of the study variables

This illustration of the behaviours of the study variables based on the researcher's world view and the theoretical perspectives from the extant literature. It suggests that there is a relationship between parents' educational attainments and children's performance in the four core subjects. It also takes cognizance of the likelihood that supervision of children's homework, assistance with reading, provision of learning materials, and motivation of the child could have an influence on the above assumed relationship. These assumptions are further clarified and supported by the theoretical/conceptual framework in the next section.

Theoretical/Conceptual Framework Defined

The lens through which the study was designed, implemented, and findings and results interpreted, and understood was based on the work of Pierre Bourdieu's Social Capital Theory (1886) and Epstein Model (2001) on parental involvement. This theory is one in a group of concepts that includes human and cultural capital, grounded in Epstein model (2001) of parental involvement (PI) to anchor the study. Parental Involvement often referred to as home support and speaks to behaviour exhibited by parents in a home or school setting which is meant to support children's progress in school (El Nokali, 2010). Such behaviour includes activities such as school-based behaviours including attendance at school events or volunteering as a chaperone for a field trip, and home-based behaviour like helping children with home- work or reading to them (Walker et al., 2005). However, according to Epstein (2001), the involvement of parents should lay emphasis on how schools assist all families by helping them create home environments that allow parents to support children as learners. One example, cited on parental involvement was that it includes creating schools at the homes and classroom volunteer programmes, workshops for families on how to parent, nurture, and support their children, reading nights, and general involvement in school-related activities for the sake of children's learning.

The theoretical and conceptual framework along with the model provided a bigger picture and helped to facilitate an understanding of the phenomenon studied as to how PEA could lead to an increase in academic performance of primary school children. According to social capital theory, parental involvement in whatever form increases parental access to social network and information (Coleman et al., 1966). Parental contact paves the way for social capital formation and its application. As the network of relationships is created with teachers and other parents, information on school policies and practices is collected. Social capital is heightened through the extent of interaction between parents and the children. Cultural capital on the other hand was proposed by Bourdieu (1977) and speaks of the inequalities in the amount of cultural capital the parents can hold. According to Bourdieu, this capital is built up in time and tends to be higher in parents with additional resources, academic attainments, and other social advantages.

A number of educational thinkers have shared multiple perspectives on PI which led to postulation of similar but different classifications of parental involvement activities. The postulation of Epstein (2001) is the most relevant to the aims of the study given the emphasis on certain activities that are critical to the involvement process like parenting, communication, learning at home as well as volunteering to perform school- related activities. In these activities parent education is critical to helping the child to reap better academic performance at school.

This theoretical framework underpinned both the independent and dependent variables of the study, that is, parental achievement and academic performance of the children. It was instrumental in providing a structure through which parents could be of assistance to the academic achievement of their children. It is believed that integration of theories and models in this study enhanced the understanding of parental educational

attainments and children's educational attainments by providing a holistic framework. These theories and models balanced each other by proposing different viewpoints and insights, adding to a more comprehensive understanding of the topic under consideration.

Definitions of Terms

Academic performance: speaks to knowledge gained which is measured by marks/grades (of continuous assessment or examination results in a range of subjects) by a teacher and/or educational goals set by students and teachers to be achieved over a specific period of time (Narad & Abdulla ,2016).

*Academic achievement***:** This refers to the performance on a standardized test or examination that measure knowledge or competence in a specific subject area (UNESCO, 2008).

Cultural capital: This is an awareness and perpetuation of middle-class cultural codes of society that promote success.

*Educational attainment***:** The highest ISCED level of education an individual has successfully completed. This is usually measured with respect to the highest educational programme successfully completed which is typically certified by a recognized qualification (UNESCO, 2022).

*Educated person***:** This term is operationally defined as someone who is well read, knowledgeable, and may or may not possess post-secondary education, but having more than average knowledge.

Home support engagement: This is very often measured and defined in numerous Ways. Home support engagement is taken to mean the ways in which parents work together with the children in schools to foster school-like opportunities, events and programmes that reinforce, recognize and reward students for good progress, continuity, contributions, and excellence (Epstein, 2001). It is used synonymously to parental involvement, which

communicates parents' proactive role play in the education of their children. This incorporates home planned school related activities or school planned related activities that the parents engage themselves in at home in support of children's learning and academic success (Epstein, 2001).

Human development: This relates to a lasting change in the way in which a person perceives and deals with their environment.

Income: This speaks of any flow of earnings received whether from salaries, wages rents, pensions, interest, dividends and so on.

*Observational learning***:** This is a type of learning where the learner acquires the attitudes, emotions, expression, style of thinking, and value of the learning model.

*Parents' academic level***:** This the highest level of education that students' parents attained within the context of years of schooling (OECD, 2017).

*Parents' involvement (PI)***:** This is behaviours exhibited in home and school settings which are meant to support children's educational progress (El Nokali, 2010 p.989). Thus PI encompasses a whole plethora of activities according to Epstein, (2001) such as parenting (which includes all activities that parents do to grow happy, and healthy children), communicating (sharing information between families and schools), volunteering (parents supporting school programmes and students' activities and attending school programmes and performances). Learning at homes (assisting with homework and other curriculum-based activities). Decision-making (parents participating in school decision making and school governance processes such as membership on PTA and advisory council as well as other school organisations); and collaborating with the community (identifying and integrating community services and resources to support and strengthen schools, students, and their families).

Parents' educational attainment: This is operationally defined as the highest level achieved by parents on a range interval measure from 1 - 6 (1= no subject passed at grade 11, 2=less than 5 subjects passed at CSEC, 3= Greater than 5 subjects passed at CSEC, 4 = College Diploma, 5= Bachelor's Degree, 6= Master's Degree) with a higher score indicating PEA level.

Self -efficacy: This refers to an individual's beliefs in their ability to successfully perform a given task through arranging, and executing that task to attain a given goal.

Socio-economic status: This is the social and economic stay of persons within their society, defined by various components such as occupational status, educational attainment, income levels, as well as streams of wealth (Craig et al., 2021; Galobardes et al., 2006).

Social capital: Network of norms and trust of relationship created by people to achieve a common goal.

Student: This refers to an individual who is enrolled in an educational programme for the purpose of learning. The term pupil may be used for students under the age of 18-20 years who attend school (UNESCO, 2022).

CHAPTER 2: LITERATURE

Introduction

In an effort to communicate in-depth and insightful understanding of parental engagement against parent accountability for their children's education, the researcher explored numerous research theories and studies. With this insightful literature review, the researcher attempted to unearth and examine what research there is that exists that could shed a greater understanding of parental educational attainment (PEA) and its influence on students' academic performance within the context of PI in the schools. The literature collected for this mixed methods study was from scholarly peer reviewed journals, reports, government papers, and books, among others. While searching for the relevant literature, the following key words were uses: *parental educational attainment, parental involvement in education, students' academic achievements* and other closely related terms.

The researcher reviewed literature published in the last decade for currency, and some seminal studies from 1978 and 1995 to capture landmark studies that provide influential ideas about the study phenomenon. As a result of the appropriateness and applicability to realizing the objectives of the study, the seminal work of Epstein (2001) and the cultural and social capital theory were found to be very useful in anchoring the study. The following subsection will give the summary as well as the synthesis of the key points on parental involvement within the context of parental education attainment on the children academic performance.

Defining Parental Involvement (PI)

Parent educational attainment will have very little impact on children academic performance if parental education does not propel the parents to be involved in their

children's education. As a result of this, it is imperative to define the term "parental involvement." According to Epstein (2011), parental involvement emphases how schools help all families by assisting them to craft home environments that will allow them to be more supportive to children's learning as students. For example, parental involvement includes active commitment of parents in all school related activities such as assisting the child with homework, attending PTA activities, and supporting and volunteering at school in programmes. Others include, attending workshops for families on parenting, nurturing, and supporting children through reading for them books, participating in school board councils, and participating in a host other school related and curriculum-based activities for the sole purpose of supporting the child's education. In the same breadth, parental involvement can be understood to describe a situation in which the parents are perceived as active partners in the process of educating their children (Asiimwe & Magunda, 2017).

Relatedly, Makgopa and Mokhele (2013) define parental involvement as a combination of supporting activities in assistance of students' academic performance and participating in school-initiated functions". Furthermore, NCLB (2002) defines parental involvement as:

> *"Participation of parents in regular, two-way, and meaningful communication involving student academic learning and other school activities including: assisting their child's learning; being actively involved in their child's education at school; serving as full partners in their child's education and being included, as appropriate, in decision-making and on advisory committees to assist in the education of their child."*

The above definitions highlight the importance of parental involvement in the education of the children, regardless of what the involvement entails or what form it takes. What is central is the active engagement of parents in the activities with the child and at the same time, there must be ongoing communication with the school, and the building of the social capital and cultural network. Mncube (2010), p. 234) agrees that parental

involvement entails "an awareness of, and achievement in, schoolwork, an understanding of the interactions between the parenting skills and the schools. The learner achievement in schooling must be consistent and a commitment to coherent communication with the educator about the learners' progress." Meanwhile, Schorton (2019) augmenting the concept opines that there is a growing empirical evidence to highlight that caring parental behaviour correlates with students' achievement.

Theoretical and Conceptual Framework

This subsection provides the various theories and models that guided the study and provided an anchor on which the findings were pegged.

Theoretical Framework

Theoretical perspectives furnish the basis for delving into understanding of social research on parental educational attainment impact students' academic performance through parental involvement. This section outlines the theoretical foundation of two major theories such as (i) the ecological systems theory proposed by Bronfenbrenner (1979) and (ii) Cultural theory proposed by Bourdieu's (1986). These theories are underpinned by two parental involvement models (i) Epstein (2001) and (ii) Hoover-Dempsey and Sandler's Model.

These theories have great impact on social research as the theoretical framework is intended to enable the researcher, and the readers of the research findings to understand the analytical inclination, the assumptions, declarations, and predictions about the study phenomenon. In addition, they help to develop the lens through which to analyse the social reality that underlies the educational attainments of the parents' impact on the academic outcomes of their children. The study focused on examining the possible influence of parents' educational attainment on children's academic performance at the primary level, and in five

rural schools in the island of Jamaica. In examining the phenomenon, an integration approach utilizing human social and ecological system theory grounded in Epstein and Hoover-Dempsey and Sandler's models were used as a guide.

(i)   Ecological System Theory

The -ecological system theory promoted by Urie Bronfenbrenner postulated that the relationships children have with their parents or caregivers affect their development including cognitive development, and school work (Bronfenbrenner, 2005; Weiser, 2008). According to the theory, the child development is affected by many factors within and outside of the child such as the social, political, biological, and economic factors (Bronfenbrenner, 1979). The Ecology of Human Development described the ecology as the institutional setting that impacts human development. It is featured as a nested arrangement of concentric structures, with each structure contained within the next, all arranged as macro-, meso-, exo-, and macro-system (Bronfenbrenner, 1979). Theoretically, it focuses on the growing child and how the child interacts within the environment in what is called the "proximal processes" within the context of multiple settings of the environment (Prior & Gerard, 2007). The theory recognizes that human development takes place in an environment of interactions between the children, and their immediate environment. This immediate environment includes elements such as the child's family, and their community (Knopf & Swick, 2008).

The dynamics in these interactions shape the development of children as well as their family, and school life. This theory elucidates how human development is shaped by the complex system of interactions within which a person grows up, and develops in relation to his environment (Bronfenbrenner, 2005: Johnson, 2008). According to Bronfenbrenner (1979), home and school community are essential institutions that give direction of the growth of children's academic skills. Bronfenbrenner explains that the child's microsystem –

that comprises of the physical characteristics, models of activities, functions, and interpersonal relationships defines the environment in which the child lives and interacts. This is usually the child's home, school, and community. Like Bandura and Bourdieu, Bronfenbrenner focuses on the child's environment, and its interactions with these elements of the environment to shape their development and school performance. The theory provides a theoretical lens for understanding the home environment, and its dynamics as the main locale where foundational learning takes place, and is reinforced by the school. The parents act as the main gatekeepers who are aligned to the microsystem.

In illustrating the effect of the environment on the development of the child, and its eventual performance at school, Bronfenbrenner (1979) describes human development as the durable transformation in the way a person perceives, and deals with their environment. This theory seems to challenge the debate on the importance of nature over nurture in the development of individuals. It emphasizes the reality that human growth is not purely by genetics but also interaction with the environment (Moore, 2013). This model as developed by Bronfenbrenner (1979) recognizes the truth that human development is shaped by interaction with the complex multilevel dynamic socio-ecological system. The growing child is considered to be found at the innermost centre of the ecological system which shapes their stimuli while learning through provision of information that informs their understanding of their surroundings and how to deal with them. The theory is characterized by the existence of a multifaceted influence of the environmental structures. These are divided into several parts namely; the microsystem, the mesosystem, the exosystem, and the macrosystem (Bronfenbrenner, 1979; Lewtharte, 2011; Parke & Clarke -Stewart, 2011). In the next section, these parts are explored.

The microsystem in the ecological system theory (EST) as defined by Bronfenbrenner (1979) and Swick (2007) refers to the immediate setting of residence of a person. This is the

atmosphere in the home portrayed by interactions within the family system itself. Ametea (2009) describes a family system as "any whole whose elements hang together because they continually affect each other over time, and operate towards some common purpose" (p. 86). This description of a family emphasizes the fact that a family is a unit of members who work together to achieve a common goal. This system or unit shapes the developmental processes of the children in the home due to the constant interactions, and contact between them, and their parents. This family environment as postulated by Bronfenbrenner (1979) influences the children's knowledge, skills, and behaviour.

It may be noted that a family is significant to the child's well-being, and academic success, and accordingly, the child is affected by any event, positive or not, happening within the family. If a breadwinner loses his or her job, for instance, this will impact the entire family within the context of loss of earnings. This will have other ramifications on the wellbeing of the family. This occurrence will affect their ability to provide for the family including the necessities of learning that should be freely available at home. In this debate, Bronfenbrenner was of the opinion that parents should develop strong bonds with their children that foster active participation within the children's lives including their cognitive development. The author further argues that when this is done the children achieve better academic outcomes. It may be inferred that the parents' in a family system are the source of supportive family dynamics, and the parental roles that they have to play, will place them in a better position to influence their children's academic results.

As claimed by Bronfenbrenner (1979), the mesosystem is the second level in the ecological system. This level involves different interactions between the home, and the school or wider community. In the context of education, the home is expected to set the tone in the academic development of the children, and this is reinforced by the school. Bronfenbrenner argues that this type of interaction must be a direct collaboration between the

two features of the bio-ecological system – the family, and the school, which influence the cognitive development of the individual child.

It is noted by Hafizi and Papa (2012) that parents are the gatekeepers in children's life. They are responsible for ensuring that children grow as holistic beings in all spheres of life, and become responsible adults in future. Therefore, children's education depends on both the teachers who are responsible for curriculum instruction, and socialization at school, while the parents play their role at home. For this process to be effective, linkages between the two groups should remain active to ensure that academic development of the children is enhanced. This level of ecological system gets stronger when the parents, and teachers continue to share information concerning the progress of the children academically for better outcomes.

The exosystem is the third level and largest part of the ecological system which may not have a direct effect on the child, but could have an indirect stimulus on the development of a child (Bronfenbrenner, 1979). The child does not have a direct interaction with the factors within this level, but they may lead to changes that affect the child. Take an example where the child's parents have relocated to a community in which education is not embraced, this would influence the child's prospects of getting a good education. In addition, loss of job by the parent may make the parent less supportive of the child both at home, and school. Change in socioeconomic status of the child due to circumstances outside the family could affect the home environment making it unable to provide the type of model for the child to overpower this external influence.

In this regard, Bronfenbrenner (1979) argued that the school/family should partner with the community in order to meet the basic needs of the family. It usually takes the village to grow a child into what will be helpful in future. However, the community should be forthcoming in playing its role to grow the child to what it should be including its academic

growth. As noted by Gestwicki (2007), and Epstein (2011), a positive relationship exists between the family/school, and the community. This happens when the community caters for the basic needs of the family as well as empowers all relationships within the mesosystem, in order to promote children's development. This process in the end will have a relationship with the child's academic success. When the community factors in this system are more supportive, then the child will be successful academically.

The mesosystem is the fourth and outermost layer of the ecological model, which encompasses all other systems in the environment of the child. This level outlines the child's value system that impacts their development. According to Bronfenbrenner (1979), values, and beliefs, traditions, and socio-cultural characteristics are linked to culture, and are impacted by all the different levels of the ecological system. It is in this regard that Amatea (2009) demonstrated that the prevailing, and dominant culture, and beliefs are cemented in the child by what the parents' value, and prioritize. This goes to illustrate that cultural beliefs which feed into the cultural capital of the parents, and family, are later transmitted onto the children and do influence children's academic outcomes. They influence the child's identity, values, and perceptions about key aspects of life including education. These values, belief, and traditions are held by the parents who directly influence their children, and direct their academic outcomes.

From the above analysis, it may be inferred that Bronfenbrenner's (1979) ecological system theory (EST) demonstrates noticeably that the systems work in tandem in guiding, and supporting children's development, and learning processes. The four systems outlined in this study observably express the interconnectedness of each level, and other levels, and displays how an understanding of the parental dynamics, as well as their roles, and responsibilities, when exercised, exert a positive or negative effect on children's educational attainment levels. Therefore, it is imperative that these environmental dynamics are harnessed

by the parents for better academic outcomes of their children. This literature enhances the theoretical lens in two ways. In the first place, it highlights the logical connectedness of the two variables of the study. Secondly, it helps the researcher in focusing the study on articulating the influence of the parents' educational attainment on the academic success of their children.

In conclusion of Bronfenbrenner Ecological Theory, it is emphasized that the children experience is made up of different experiences of interactions. These are not only between children and their school community but most importantly the parents and persons within the immediate surroundings. Central to the child nurturing and growing up, is the parental involvement in the educational life of the children. This involvement is considered to be fundamental to the growth of the children holistically including the cognitive capabilities that are instrumental to academic achievement.

(ii) Bourdieu Cultural Theory

Bourdieu (1977, 1984, and 1986) developed, and refined the notion of cultural capital. Bourdieu asserts that cultural capital is a resource that is equivalent to other forms of recognized capital such as economic resources - referred to as economic capital, including entrepreneurship, funds, machinery, land, and labour; and social network or social capital – such as friends, business associates, circle of friends, and influencers. Bourdieu argues that this capital is transferable from one person to another, and as a result, it is possible that parents can pass it on to their children. This happens through interactions within the family. This form of capital may be passed on to children by their parents, or acquired outside the family circle of origin, from peers – peer influence, or social network. It also can be drawn from people living in a particular geographic location. In such location, people within that location will display a particular behaviour that depicts a particular social class. Persons who

reside within that geographical location will tend to display similar behaviour as dictated by culture of their community.

As noted by other scholars such as Balck (2017), and Hill and Tyson (2007), cultural capital is a non − monetary asset. It involves acquisition of an education, along with social, and intellectual knowledge transmitted to children by parents via investment, and academic socialization. The authors claim that academic socialization is the process through which parents talk to their children about the importance of education, and the sharing of the benefits of doing well in school in a way that promotes a positive attitude towards education. Sharing success stories associated with education is one of the ways through which learning about the importance of education takes place. Through such exchanges between the children and their parents, children understand which positive behaviour traits related to education are important such as attending school regularly, completing homework in time, revising their school notes, and other related matters. It should be noted that children from homes where this kind of socialization is missing may develop fuzzy ideas on education, and may easily lose track. In some instances, they may develop negative opinion of the school because they are not familiar with this kind of socialization, and end up experiencing school as an unfriendly environment.

Passeron (1990), and Hultqvist and Lidegran (2020) claim that Bourdieu's cultural theory postulates that cultural capital is gained mostly through an individual's initial learning. It is reflexively shaped by the person's environment, and contributes to the individual's educational success. Bourdieu (1977), and Passeron (1990) further claim that children inherit cultural capital from parents. This is either positively, via exposure to parents' cultural capital itself or actively, through the parents' deliberate attempts to influence their children's lives culturally. Supporting the same claim, Cheung and Anderson (2003) indicated that children may either pick beliefs, and values from seeing what parents do, or what they say. These

processes promote the same beliefs, and values among the children. Positive stories about education or parents demonstrating the importance of education to the children triggers the same behaviour among the children, and shapes their perspectives of education.

As claimed by Sullivan (2001), and Hultqvist and Lidegran (2020), it is noted that children with large quantities of cultural capital tend to do well in the educational programs. This depends on family practices, and attitudes towards education. Variations in these practices, and attitudes between families depending on the levels of cultural capital can cause changes in the educational outcomes of the children. Bourdieu (1986) posits that cultural capital is endorsed by the school and is further strengthened by the school principal and is passed on by the parents of higher SES to their children who will preserve to their social advantage. In other studies, Bourdieu and Passeron (1977), Laureau (2011), and Aarseth (2017) claim that the amount of cultural capital cultivated by the parents and is passed on to the children is very critical in determining the degree of support that parents provide their children with, and the ultimate success of children at school.

The above arguments are tandem with the views of Jaeger and Breen (2016) who claim that parents cultivate the children's beliefs, values, and attitudes about school. This may be reflected in the behaviour the parents demonstrate at home when dealing with the children. This builds perception of education, and determines how children seek it. Numerous studies show the effects of parents' cultural capital on children's academic outcome, which is either positive or negative. Considering the academic attainment in children as one goal that is influenced by cultural capital, the authors highlighted that cultural resources enhance educational resources (Kraaykamp & Van-Eijck 2010; Katz-Gerro, 2012; Jaeger & Breen, 2016). It is argued that acquiring more cultural capital correlates with more academic achievement or higher educational attainment levels. Therefore, children with positive values,

beliefs, and attitudes about education perform better than those that have less of those attributes.

From the synthesis of literature above, it may be claimed that the amount of cultural capital that the parents pass on to their children determines their academic success. Those with higher cultural resources are expected to perform better than those that have a lower quantity. Parents with more of the requisite resources may enhance the performance of their children through this positive influence of values, beliefs, and attitudes. In relation to this study, it may be hoped that parental academic achievement which is considered to determine the values, beliefs, and attitudes of parents towards education of their children across time, and space also influences the academic achievement of the children in Jamaica.

Parent Involvement Models

In the next subsections, Epstein and Hoover-Dempsey and Sandler's models of parental involvement are explored.

The Epstein Model

This mixed method study was grounded in Epstein Model of school- family - community partnership pattern advanced by Epstein (2001). According to Joyce Epstein theory of parental involvement in the educational enterprise, it takes the parents, educators and the community in a tripartite effort together to promote learning and development of children. Epstein (2001) argues that the family should act like a school setting and schools and the community should come together and foster learning. The model places the child at the intersection of the influences of the family, community, and school creating an overlapping sphere of influence on the child's education.

Epstein postulated a frame work of six types of involvement to fully integrate this overlap as well as to facilitate the understanding of the level of connectedness between the home and the school: *parenting, communicating, volunteering, learning at home, decision making, and collaborating*. According to Epstein (2001), parenting is a responsibility that creates a conducive home setting, referred to as type 1 home participation, which provides the requisite assistance for the children to satisfy their responsibilities as learners. This may include involvement in the school related activities, health practices, and providing the nutritional requirements necessary to raise healthy and happy children who can effectively learn at school. Communication, which is described as type 2 engagement happens between parents and teachers. To effective, this should as smooth as possible. In addition, it should be without barriers. Communicating should be a two -way flow of information and knowledge among the parents and teachers. There should be school-to- home and home -to- school interactions about school activities. Further, it should cover progress of students especially, learners' academic and behavioural performance (Epstein, 2001). It should also assist parents easily understand school policies and practices. According to Jensen and Minke (2017), there should be shared responsibility and information through a two-way information flow.

Another form is volunteering, commonly denoted as type 3 involvement (Epstein, 2001). It is a form of parental engagement where parents are encouraged to offer their time, talents, and resources to assist the teachers in meeting school goals. In the model, a volunteer refers to anyone who reinforces the actors in the learning process to realise school goals. This should contribute to better learning and development of the children at all time. The model also suggests learning at home or type 4 involvement as another form of engagement. It recognises the centrality of offering information to the parents on how they can engage the children at home. This includes helping the children with homework and other curriculum related activities. The essence is to get the children and families participate in the academic

and career goals of the children. It moreover promotes discussion of school subjects together. The process creates learning home for the children. For this, Jensen and Minke (2017) aver that this type parental engagement in school activities is important in enhancing children's academic success. Further, it is a form of school socialisation for both children and their parents.

Type 5 involvement or decision making underscores Epstein theory on participation and emphasises three actors namely, the family, school and the community in a cooperative engagement to support learning (Bilton, Jackson & Hymer, 2017, p.233). It is noted that participation by way of decision making enhances partnership between the actors. Similarly, Stefanki, Valli and Jackson (2016), assert that harmony in decision -making validates the views, apprehensions, and ideas that caregivers have relating to significant school policies and programmes. This boosts caregiver's interest in participating in both pedagogical and policy decisions of teaching institutions. Moreover, cooperating with community or type 6 involvement enjoins everyone in the community to participate in educational activities within the community regardless of whether or not they have children in such schools. This process has a positive impact on the quality of education provided in such communities.

Epstein model seems to implore educators and all educational sector stakeholders to find and allocate resources and services from the beneficiary communities to back school programmes, enhance supportive family practices, and promote students' learning and development (Epstein, 2001). During the study, the tripartite partnership model of school-family- community provided the researcher with the empirical evidence needed to support the key variables of interest in this mixed method study of parental involvement in terms of PEA and academic performance of children. The model presented a guide for the researcher to better understand the significance of parental involvement as well as the specific role of

parents and the school personnel in collaborating for the success of students. The theory also contributed as a guide in exploring the questions and hence the research instruments for data collection.

Hoover-Dempsey and Sandler's Model

Hoover- Dempsey and Sandler (1995, 1997) offered a complete model within the context of parents' involvement process grounded in psychological and educational research. They highlighted the reasons for parents wanting to be involved in their children's education and how this involvement facilitated academic performance in the children's education. The model presented originally gave five sequential levels that influence parental involvement process. Based on empirical evidence, the authors subsequently reorganized some of the constructs in the first two levels (Walker et al., 2005). In level 1, three parental beliefs were presented. These are (i) motivational beliefs, such as parents' role construction and their self-efficacy; (ii) perceptions of invitations to be involved from teachers, children, and schools; and (iii) their perceived life contexts, which include the perceptions of parents' time, energy, skills, and knowledge to be involved (Walker et al., 2005).

In Level 2, they highlighted the definite forms of involvement in which parents engage. These include school-based behaviour such as school events attendance or volunteering as a chaperone for a field trip, and home-based behaviour like helping children with home- work or reading to them (Walker et al., 2005). Level 2 also presents three constructs for parents' involvement. These are (1) parents' views of their own skills, interest and ability to be involved. This begs the question, do parents believe they have the knowledge and skills to be involved in children's education? (2) Parents' views of other demands on their time and energy as well as. This again begs the question, do the parents work schedules allow them to spend time engaging with school work? (3) Parents views of

specific invitation to be involved. For this construct, the question is, are the parents invited by the school to volunteer?

In Level 4, the model implies that parents' involvement impacts students' educational outcomes through the mechanisms of (1) modelling school related appropriate skills such as showing the child how to solve a mathematical problem; (2) reinforcement of learning such as praising the child for the work well done; and (3) instruction by way of assisting the child to do homework (Hoover-Dempsey et al., 2005). Level 4 of the model looks at how parents intervene on level 3 construct by using appropriate strategies such as supervision of the child's homework while level 5 model focuses on addressing the outcome of parent involvement such as the achievement, skills and knowledge as well as the satisfaction that the parent gained from this involvement (Hoover-Dempsey & Sandler, 1997).

Conceptual Framework

According to Imenda (2014), a conceptual framework helps a researcher in setting a logical inclination, which forms the thoughts, structure, plan, and practices of executing a research project. It is a structure of what was found out by the researcher to aid the explanation of the natural development of a research phenomenon that is being examined. A conceptual framework structures and identifies the researcher's worldview of their research topic and, therefore, helps them to define their research assumptions and notions of the object being studied. In research, a worldview as noted by Imenda (2014) comprises a set of opinions or explanations, which shape the way the researcher looks at the real world in terms of two aspects. (i) How it operates; and (ii) the justification for what happens in the observed world.

In this study, at the highest level of the researcher's view of the real world, parents influence education of their children in terms of academic outcomes. This influence is

thought to be as a result of the educational attainment the parent has that is seen as a driving factor of the direction of influence that arises from this kind of influence. This is based on the belief that parents with less educational attainments could have a less influence on the educational attainments of the children than those that have higher academic attainments. This does not hold true in all respects as there are parents who have not done well in school but their children performed excellently in schools even though the previous view is strongly supported by the literature.

The researcher's conceptual framework may be illustrated in the following figure which captures the main variables of the study as they are assumed to interact. On the explanatory side of the illustration, it is assumed that the parents' educational attainment (the level of education of a parent) influences what children realize from their studies. Therefore, at the response side is the educational outcomes of the children. The study did not intend and did not investigate factors outside the parents' educational attainments as an independent variable, and the children's educational outcomes as dependent variable. This illustration is provided in Figure 1.2.

Parents' Educational Attainments
- Parental Educational Attainment
- Parental Involvement

→

Children's Educational Outcomes
- Grades in Four Core Subjects
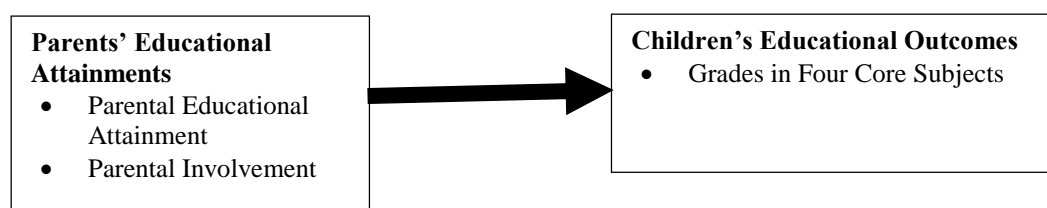
Figure 1.2: Conceptual Framework. Based on Literature Review and researcher's world view.

From the literature reviewed, it is argued that parents with more educational attainments tend to enable their children realise higher educational attainments. These attainments, among others, are manifested in form of academic grades obtained in school. It is also argued that parents with higher educational attainments tend to belong to higher

socioeconomic status characterised by high income, and the involvement of parents in school activities which have a positive effect on children's performance compared to children from parents with low levels of education who are usually associated with low income via low socioeconomic status, and do not participate very much in the school activities of their children. Consequently, this affects the educational attainments of such children who happen to come from such background.

Anfara and Mertz (2015) articulate the definition of a conceptual framework as "any empirical or quasi-empirical theory of social and/or psychological processes, at a variety of levels . . . that can be applied to the understanding of phenomena." It specifies the sense of direction of the study while at the same time assist the researcher and the reader to visualise clearly the contribution of the study to the body of knowledge on the topic. Further, it shows how the different components of the study align, how they meet the research standards. To put it briefly, a conceptual framework of a study is fundamentally an explanation of the relationship of the variables articulated in the theories to give greater insight unto the understanding of the study (Anfara & Mertz, 2015).

Reviewing of the Broader Problem

Parental involvement speaks to the behaviour exhibited by parents in the home or school settings which is meant to support children educational progress (El Nokali, 2010). With this definition, there is a confluence of literatures on parents' involvement of different forms done by different educational researchers (Bennett-Conroy, 2012; Epstein, 2011; Eccles, 2002). The home and school are considered to be two critical institutions of learning and, therefore, when these two institutions are in harmony with each other in terms of communication and collaboration, children's learning is at its maximum, as both institutions should share common interest and work to achieve common goals. The following

subsections give further synthesis and review of the broader issue involved. The review ends with a summary and the literature gaps.

- Parental Education, a Possible Predictor of Children's Academic Success

- PEA Impact on Children's Educational Outcomes

- PI and Children's Achievements

- Parents as Teachers and Model

- Parental Self-efficiency

- Parental Knowledge, Beliefs and Attitudes

- Parents' Academic levels and Children's Success

- Parental Aspirations and Expectations

- Home Environment and Supervision

- Measuring Home Support

- Factors Influencing Home Support Impact of Home support

- Parents' Socio-economic Status and Children's Education

Parental Education, a Possible Predictor of Children's Academic Success

Parental educational attainment (PEA) is perhaps a significant contributing factor to children's academic outcomes. Over the decades, research has demonstrated that it has both positive, and significant effect on the performance of the children in schools. Coleman et al. (1966) and Duncan and Magnuson (2003) demonstrated that parental educational attainment is an outcome of family socioeconomic status (SES), including the level of education of their children. Whilst this observation has merit, Duncan and Magnuson (2003) posited that parental education, and socioeconomic status are interrelated, and cannot be divorced from each other. Further, it is argued that SES is, in many cases, a component of parental education, which has a demonstrable effect on children's academic outcome.

It is claimed that educated parents through training pass on their cultural capital to their children. In this case, the children learn their behaviour through direct learning activities Bandura (1986) as cited in Dubow et al. (2009). As they claim, Kalil et al. (2012) indicate that parents learn about social mobility, and standard of success through their education. Consequently, the acquisition of this knowledge shapes their interactions, and behaviours with their children especially, regarding their educational activities. As further argued by Harding et al. (2015), this type of interaction serves to stimulate children cognitively. This influence on the child's cognitive development is a strong contributor to children's academic outcomes.

Kalil et al. (2012) supporting Senechal and LeFevre (2002) noted that educated parents facilitate the education of their children. It is argued that this facilitation takes place at different cognitive development stages in the academic lives of the children as propounded by Piaget. Educated parents stimulate children's sensorimotor intelligence, preoperational thinking, concrete operational thinking, and formal operational thinking. This support creates a more motivated and cognitively strong child to meet the challenging learning needs. It is further argued that when parents work closely with their children in areas like literacy, and numeracy, it allows the children to frequently attain higher literacy, and numeracy scores in early childhood. These benefits stretch to higher levels of education like primary and secondary education. Dubow et al. (2012) extending the argument on the influence of parents on cognitive development of their children contends that parents' educational levels have been shown to have a positive substantial effect on children's immediate educational results of educational, and vocational achievement after adulthood years.

Meanwhile, Dubow et al. (2014) observed that parental educational attainment (PEA) is a strong catalyst to academic success and attainment levels in children. This seems to support earlier assertions by DeCastro-Ambrosetti et al. (2005) who argued that PEA helps to

boost the academic success of children. The authors noted that parents, by virtue of being educated, they have already embraced the value system that they want to perpetuate in their children's lives. This includes stimulating the children to concentrate on their studies, and feeling encouraged to attain better grades. This ultimately enables children to progress well academically, and to realize high scores in literacy, and numeracy.

From another angle, Lareau (2011) has a concern for value as one of the attributes that educated parents pass on to their children through interactions. It is claimed that mothers with greater cultural capital, and more understanding of structures of schools are better able, and equipped to teach, and model social values in ways such as speaking politely in educational settings. Supporting the same line of argument, focusing on the parents' contribution to investment into children's development, Kalil et al. (2012) and Cabrera et al. (2018) demonstrate that parental time invested in children during school programmes is critical to children's development. Through their studies, they prove that parental level of education is one of the key predictors of children's success as adult learners, and in adulthood. Further, they reveal that educated parents spend more time providing their children with age - appropriate activities. These activities aid in the children's cognitive development, and their success in academic related accomplishments.

Another interesting revelation was by Guryan et al. (2008) which demonstrated that highly educated parents with four or more years of college education, and experience invest more time in the empowerment of their children educationally. It is disclosed that these parents use their knowledge, and experience gained through college and make it a part of their responsibility in using their time teaching their children, and sharing their own learning experiences which enhances learning. When compared with those with fewer years, and or less experience, findings suggested that on average, parents with lower academic attainments

had struggling children at school, and their parents were not investing much of their time in the learning of their children.

It was further revealed by Guryan et al. (2008) that on the one hand, educated parents view the time spent with their children as investment opportunity, where the human capital is nurtured and developed. On the other hand, it was found that less educated parents allow their children's skills to be developed with little or no guidance or stimulus. In the end, there were demonstrable differences in academic performance between children from parents with more years of education, and experience compared to those with fewer years of education, and experience.

Parents' education may assist them to better understand their parental obligations to their children's education (Jaiswal, 2018). This realisation is informed by the knowledge, and educational experience of the parents. As such, parents' involvement is significant to the children's holistic development. Less educated parents may not fully appreciate their different roles as teachers of their children, and how to facilitate learning. Jaiswal noted that due to their level of education, most parents in the low education category feel less useful, and motivated in carrying out their parental roles as educators of their children. Further, from the studies of Zan (2005), and Yamamoto and Holloway (2010), it was revealed that most of the parents feel less inclined to communicate with their children's teachers on school matters that affect their children. In agreement with Jaiswal (2018), Zan argues that educated parents are more likely to feel obliged, and capacitated to assist their children in many respects. This motivation seems to be driven by parents having very high expectations of their children in terms of better grade scores at school.

Azhar et al. (2014) from the Journal of Psychological Research posited that parents, by virtue of their education, are more knowledgeable of the educational needs of their

children, and what they can do to help them learn better. In their study, they claimed that parents can, from a very early stage, help their children in their education. This help includes cognitive development, support with scholastic materials, and positive energy, which determines their proficiency in areas of knowledge. It also claimed that educated parents hold jobs with better financial rewards hence they have enough resources to provide the latest learning technological devices for their children. Therefore, such parents are better able to facilitate the children in a way that can enhance their educational capabilities.

From the postulations of Azhar et al. (2014), and as claimed by Joan (2009), and Kainuwa and Yusuf (2013), parents' educational level, which determines their financial resources as another variable, are twin explanatory variables that go hand in hand as forecasters of the success of children's performance in schools. It may be gleaned from the arguments that parents with a fairly good education have a key function to perform in the education of their children. This role ranges from support to cognitive development, motivation of children to embrace education positively, materials support for the essential educational needs of the learners, as well as providing the time to interact with the children, which stimulates learning.

In a nutshell, a number of authors suggested that parents with a fairly good level of education and training are better placed in a more supportive socio-economic position to offer more support to their children, who will excel in school because of the support they will get to enhance their education. Education is seen as the means of enhancing the capabilities of the parents to better assist their children on their educational journey. Additionally, OECD (2020) highlighted that parents who are educated reap greater advantage due to their educational advantage as it places them in a better position to achieve greater opportunities as well as allowing them enjoy better quality of life. As presumed in the conceptualization of

this study, the education of parents predicts the educational success of the children across time and space. However, whether this is generalizable and applies to Jamaica, was a matter of this scholarly endeavour. Additionally, the components of the impact of parental attainment on children's educational outcome, contributing to the review of the literature is illuminated in the ensuing subsection of the research study.

PEA Impact on Children's Educational Outcomes

Education is the basic mechanism by which the quality of a person's life is enhanced. This begins with the academic performance at the primary level, which lays the foundation for future educational pursuits, and opportunities. Education is essential to the acquisition of knowledge and skills. This tool is significant for human existence and survival in a world that is fast becoming increasingly technological on the global platform. Parents are given the mandate to re-shape the child's character and frame of mind through the use of education. Owing to the nature of competition these days, education is necessary to give the most qualified competitor a competitive edge in a globalized world. As a result, education is considered the first step to all human endeavour and it plays a fundamental role in the development of human capital. It is claimed that the part the parents' educational achievement (PEA) plays in children's lives including schooling is critical to their academic outcomes (Grissmer et al., 1994; Jaiswal, 2018).

The educational level of parents has been shown to have a powerful effect on influencing children's academic success in a positive way. It is observed that most educated parents place greater emphasis on educational excellence of their children, and thus, support their learning endeavours. As claimed by Okantey (2008), educated parents are not only equipped with teaching and learning knowledge to help the children, but are also cognizant of the fact that their personal relationship with their children matters in their lives both at school and outside school. They are involved as conscious members of the school and community

with a clear position to promote educational success as well as academic achievements of the children. As a result, they make partnerships with their children, schools and communities, part of their priorities. These partnerships with the school administration enable learners to benefit academically through a supportive home, and school environment.

There are several explanations of the relationship between parents' education and their children academic performance rest on the notion that parents are recipient of an education that makes them wanting to share it with their children or them receiving an education that has significant impact on the way they interact with their children concerning school related activities and learning in the homes (Brody et al., 1995; Corwyn & Brady, 2002; Davis-Kean et al., 2020). Researchers who advanced this claim, argued that parent's education should influence parents' educational values as well as knowledge on how the education system operates. In addition, the parents' social and cultural capital is passed onto the child by the child adopting the parents' behaviour.

According to researchers, much of the evidence on parental education attainment on children academic performance is reflected and shown in the early language and reading interaction and development. Hoff (2003) argues that parents with more education tend to use more complex and varied language to their children and so from a tender age, the children use the language and build their vocabulary. Alexander et al. (1994) opine that with more education, the parents have a higher expectation for their children than their uneducated counterparts. In addition, this expectation facilitates greater educational attainment for children. Besides this, parents with much more education ensure that their children are exposed to educational opportunities such as attending music classes, science and computer programmes as well as sending the children each summer to relevant summer camps in addition to ensuring that their children attend the best private schools where additional help can be had if the children faced difficulty in school.

Another key set of arguments that links parents' educational attainment with students' academic performance is rested in a number of assumptions. Firstly, is the level of income that both parents receive. Secondly, the type of jobs that the parents are engaged in (Alexander et al., 1994). Thirdly, the type of educational achievement of the individual which is claimed to influence whom the individual marries as his/her partner. Fourthly, the career they have chosen which also influences the income they are likely to earn. These basic demographics consequently influence where the family resides. There is a confounding relationship between the family incomes and where the family resides on the type of schools the children will attend.

As noted by Alexander et al. (1994), there are exceptions to the above claims. Some parents who have not achieved much at school academic and are scarcely able to meaningfully participate in their children's education can have academically prosperous children. Instances of parents who are barely able to read and write and hardly can be considered literate have children who are star performers at school. This seems to suggest that there are other characteristics exhibited by the parents that contribute to their children's academic performance beyond literacy levels (Alexander et al., 1994). Such characteristics include parents' values and attitudes towards education, and their discipline at home. Moreover, the kind of home setting they create for the children could enhance learning and ability of the children to do their homework properly.

In a study by Rana (2015) notes a relationship between parents' support and the children's academic performance. It asserts that the higher the support, the better the academic performance of their children. In a related study, Abeya (2018) supports the notion that parental support enhanced children's academic performance. The key argument was that children with educated parents were more supported than those who did not have educated parents. Consequently, the children of uneducated parents were performing better than those

of less educated on the uneducated. As earlier noted, Gratz et al. (2006) it was revealed that parents have a huge role to play on their children's education since they are their children's first teachers.

Connectedly, Asiimwe and Nabitake (2022) in examining the relationship between parents' involvement and students' academic performance demonstrated that involvement of parents is a significant contributor to academic achievement. Educated parents understand the benefits of education and as such facilitate their children in their academic pursuits by participating in school activities. This assists the children in producing better academic performance. Parents that help children with homework enable them perform better. It is worth noting that a parent with limited education will not help the children with homework as they may not understand what is required, hence stifling the children's academic progress. Further, educated parents are effective supporters of school activities as they are confident visiting schools, collaborating with the teachers, and school administration, and providing all the support required.

As noted by Azhar et al. (2014), and in agreement with Asiimwe and Nabitake (2022), educated parents are capable of affording scholastic materials to support their children. Hence, the parents participating in their children's homework, having healthy relationships with both teachers, and school administration, and being able to meet school requirements enhance the academic outcomes of the children. This ultimately translates into a solid educational foundation for the children.

The amount of education that is possessed by the parents influenced the quality and amount of education that is usually given to the children. United Nation's Children Fund (UICEF, 1998) suggests that the education environment that the children are raised in can impact their interest in achieving a high level of education or it will in some way affect the

children's interest in education in an adverse way. It further suggested that in the Caribbean where the household head received only a primary level of education, where one in five children under the age of 15 years live, educational achievement of children was below standard. In a study conducted in Grenada in 1998 on Poverty Assessment, it endorsed the thesis that educational environment of children affects their educational achievement and ultimately their life chances. Statistical data in Jamaica show that large percentage of Jamaican students who have completed their CAPE, diplomas and degree are from households whose parents' educational attainment went beyond the primary and secondary education system. This result implied that the parents know what it is to achieve and so their children are brought up internalising the culture of achievement and so the cultural capital is passed on to the children who achieve some amount of education for themselves.

From the foregoing, it may be safe to claim that educated parents are of a higher socioeconomic background which may result in them displaying a more positive attitude towards children's education as well as having higher expectations of them in their achievements. Therefore, on the one hand, when the children of educated parents perform poorly, they appoint extra subject coaches to further enhance their cognitive abilities for better academic performance. While on the other hand, the uneducated parents facing this challenge may not have the resources for these interventions due to their socioeconomic background. Finally, the children in such a situation will not improve academically. However, how this situation plays out in Jamaica, from the theoretical and conceptual frames as adopted by this study could only be demonstrated by this study. Further to the aforesaid, parental involvement and children's achievement is added and is expounded in the body of knowledge of the literature review in the ensuing subsection.

PI and Children's Achievements

Involvement in children's education by the parents is a long-time supportive practice. It has been defined in several ways in the literature. Castro et al. (2015) described parental involvement in a general sense as the active input of parents in all academic aspects of their children's lives which are related to their social, emotional, and academic development. While, Barr and Saltmarsh (2014) defined parental involvement to encompass the shared responsibilities parents undertake with respect to children's education. Studies find parental involvement (PI) to be a robust determinant of learning in both elementary and secondary education (Asiimwe & Magunda, 2017; Asiimwe & Nabitake, 2022). Supporting the aforementioned, it is well-known that parental involvement is a significant requisite for better learning outcomes of children throughout their schooling (Clinton & Hattie, 2013; Mapp & Kutter, 2014; Garbacz et al., 2017). As they claim, Alameda, Lawson and Lawson (2018) seem to accentuate the arguments of Asiimwe and Magunda (2017) when they assert that parental involvement is a special way of intervening in the educational life of the child.

Clinton and Hattie (2013) suggested that there are numerous ways parents can participate in their children's education including frequent collaboration with their children's subject teachers to identify areas of weakness, and provide additional support. Asiimwe and Magunda (2017) seem to build on the claims of Clinton and Hattie (2013), among others, in their study of the involvement of parents on the impact of students' academic achievement of students in Ugandan secondary schools. Focusing on the input by parents in terms of provision of conducive home environment, being involved in academic and school events, the researchers demonstrated that parents were enablers of children's academic achievement. It was illustrated that when parents provide a supportive learning home environment that is free of physical, and emotional disruptions, it helps students do their homework, visit schools, and participate in school activities, help students regularly complete schoolwork in time,

participate in classwork, register better class grades, and display a continuous improvement in their academic achievement.

Relatedly, Suizzo et al., (2015) posited that families are significant to children's learning processes. The central argument is that parents pass on their educational philosophies, expectations, as well as their social, and cultural capital to them. Ultimately, through observation, and imitation, the children become more motivated to perform better. It is noted these expectations, and other traits are passed on during the interactions between the parents and their children. Children in the process pick the positive attributes that enhance learning leading to their improved overall performance. These claims seem to be in tandem with those of Wood and Bauman (2017) who demonstrated that family background, especially, the parents' knowledge, and their willingness to participate in the educational processes of their children lead to better academic performance of their children. It is noted that this influence from the parents extends to after school life among the children as adults.

Further, a number of studies has shown that parents who took part in all school events in support of their children in schools observed that their children were more likely to grow, and develop into well-informed, healthy, trustworthy, and courageous adults who achieve academic, and social success (Patrikakou, 2008; Thornton, 2015; Wood & Bauman, 2017). Parental input within the context of the home and school encompasses a plethora of activities. These range from inculcating optimism in the child's academic future, home supervision of school work, and involvement in both academic and non-academic work, and emotional involvement. In addition, parents helping with homework like supervising, and checking on how well homework is done, and frequent parent-child interactions about school related activities enhanced the academic and non-academic performance of children (El Nokali, 2010; Castro et al., 2015; Benner et al., 2016; Yotyodying & Wild, 2016).

Meanwhile, Zedan (2011) noted that parents are most impactful in the lives of their young children such as during early childhood education and primary school life. However, as noted by Asiimwe and Magunda (2017), this does not rule out the impact of parents even on those beyond elementary levels. What is central though, is the realization that what is significant in parental involvement is the parents' cultivation of optimism in the lives of their children. Parents encourage children to be more academically active when they receive positive feedback from their parents. When parents are able to make the children imagine a better future with good school grades. This type of stimulation enhances learners' motivation to be more focused on their studies and to realize better grades in their exams.

From another angle, Robinson and Harris (2014) demonstrated that having hope in the children's lives by their parents is a key component of educational attainment. However, this is a common feature among the middle-class values where education is considered as a means to recreating the same values in their children. Such parents encourage their children to be more focused on their studies to reap a brighter future. This encouragement cultivates positive energy among the children, and leads to competitive academic performance in school. This argument lends support to the postulations of Jaiswal and Choudhuri (2017) who noted that the foundational responsibility of parents is to take part in the academic programmes of their children while at school. Parents by demonstrating to their children the relationship between what they are as adults and their academic attainments, motivates them to aim higher in order to attain the same or brighter future as that of their parents.

Georgiou (2010) in a study of the responsibility of parents in the education of their children also found a robust relationship between a child's scholastic achievement, and parental involvement. The key argument seemed to be that the more parents participate in the academic work of the children through supporting them with homework, scholastic materials, and emotional involvement, the better such children performed at school. This position is

emphasized by other studies that have shown a robust association between parental involvement in education, and academic success of children (Perez Sanchez et al., 2013; Garbacz et al., 2017; Tarraga et al., 2017).

It also asserted that once the parents demonstrated their involvement in their children's education, overall success in school, and outside school is inevitable (Jeyes, 2012; Garbecz et al., 2017). This is premise is embedded in Epstein (2001) theoretical model of PI. The model recognized 6 types of parental involvement that have become popular and is known to contribute to academic success in children's education. The model shows the level of parental involvement between the home and the school thus giving the child a supportive learning environment.

Some studies have claimed that parents' involvement may differ in relation to gender, race, and socio-economic status. For example, Kim and Hill (2015) demonstrated the differences between how mothers, and fathers relate to their children. One of the key aspects was that of disciplining the children which fathers tend to focus on much, while mothers look at the entire academic life of the child. However, life is dynamic, and, therefore, both parents are now working together, even though the expectations of fathers have increased in keeping with the times. Within this context of life dynamism, there is limited research examining the differences that exist between these two parents. Though Kim and Hill (2015) alluded to the fact that both parents' involvement was equally strong in promoting children's academic performance, it was observed that the female parents are more closely involved with their children's education than the males, and were more interested in the child being developed as a wholesome person.

In another perspective, literature shows that parents' background limits parents' participation in the education of their children. It was revealed in the studies by Davis Kean (2005), and Carolan and Wasserman (2015) that parents who are of the low-income status,

with informal training are less likely to be a part of what is happening at school, while those formally trained parents, who are correspondingly found to be of a higher socioeconomic status participated more in school activities. In another study by Valleymalady (2015), it was demonstrated that the higher the levels of socioeconomic status of the parents are, the higher the levels of their involvement. The findings of this study correspond with those of Cheadle and Amato (2011), and Roksa and Potter (2011) that parents who achieved the basic level of education were less likely to be a part of the education of their children. Their limited knowledge, skills to help the children, and a lack of confidence affects their capability to contribute meaningfully in the educational affairs of the children.

Parenting is an umbrella term that covers all kinds of involvement with children and the interaction that goes on between the parent- child relationships (Mushtague et al. 2021). Carlo et al, (2017) posit that one of parents' responsibilities is to raise children to become contributing and responsible members of the society and therefore for them to do this, they have to employ various parenting approaches in their homes to get the desired results from their children. These approaches used in the homes are so done to establish the social environment (Davis, 2021) that often times facilitates good learning outcomes. Parenting style is therefore one consideration that establishes the social environment conducive for the children to harness the discipline that is necessary to achieve the parental expectations of the children.

For most people, parenting style is how parents control the lives of the children as they raise them into becoming the men and women of the future generation. Children are to be raised with firm parent-child connections in order to show consistency in behaviour, be self-sufficient, purposeful, as well as for the child's own independence. Some parenting styles are permissiveness, authoritative, authoritarian or even over-protection (Checa et al. 2019). Each of these styles has its strengths and weaknesses that can be used to the advantage

of the reinforcer to assist children to respond to education in a particular way as re-enforced by the parents.

Authoritative parents are very supportive in education and care for their children, but they set firm limits or boundaries for their children. The Authoritative parents' home environment facilitates self confidence in children (Dakers & Guse, 2020) as compared to children that are raised in democratic home environment who exhibit confidence, self - assurance and creativity in their disposition. Parents from authoritarian home environment are given very close attention to their failure and mistakes (Searcella et al, 2016). On the other hand, permissive parents have a disposition to exhibit warmth and care and do not always set extreme expectation for their children. They show love to their children by facilitating their children with what they want in all situations. These parents also allow the children to do what pleases them because of fear of upsetting the children.

A number of literatures establish that there is a relationship between parenting styles and students' academic out comes. For instance, Rahimpour (2015) suggests that parental influence in terms of parenting styles plays an important role in student educational outcome. As such, parental control of their children is associated negatively with academic self-efficacy as well as self- regulated learning. Work done by Mushtaque et al. (2021) suggests that parents who assist their children with homework facilitate their cognitive and psychosocial development. The ensuing subsection will expound the relevant component on parents as teacher and model to give more insight into the phenomenon being studied.

Parents as Teachers, and Models

It is always argued that the concept of parents as teachers, and models is grounded in the theoretical reflections of Urie Bronfenbrenner's (1979) under the general Ecological Theory. The parents are the ones who bring children in the world, and as the first points of reference in the environment and lives of the children, they have an immense impact on their

cognitive, and emotional development. Ceka and Murati (2016) demonstrate that what children learn in their formative years comes from their interaction with their parents. This influence continues through the development stages of the child, and may influence what they become in future. Parents can identify and nurture certain interests in the child at early age that may result in better academic performance.

Ceka and Murati (2016), and Urhahne (2019) have established that in various family households, children are exposed to a variety of activities from which they gain different experiences. This exposure to a range of influences from their parents as well as other persons within their home environment influence their aspirations, choices, and lifetime achievements including better grades at school. The scholars claim that in relation to educational empowerment, parents are responsible for ensuring that the children are not denied this right and that their physical, and intellectual development is taken into consideration. This is supposed to be a continuous process until the children have become adults who can face the challenges and resolve competing interests in their lives and environment by themselves. Further, it was noted that educated parents who have adequate pedagogical skills in education support their children to attain better results.

It is further claimed that parents, and teachers are the two main educators in the lives of the children (Urhahne, 2019). Parents are not only known to be the providers for the physical, and emotional needs of their children, but they are the first teachers of their children until they start formal schooling. When children start school, parents remain a key influencer of the children, and tend to shape the behaviour of the children. A study by Kasapi (2013) illustrates that parents are the most dominant role models in the lives of the children. This seems to support the views of Ceka and Murati (2016) who claimed that parents provide opportunities which expose children to various stimuli, and hence influence their learning. As

argued by de la Torre-Cruz et al. (2019), and Urhahne (2019), children in countless instances are likely to assume their parents' values and conduct. This may have either positive or negative ramifications on the lives of the children. For example, parents who display good parental characteristics are likely to become a positive influencer and good model to the children. On the other hand, those parents who display negative traits are likely to influence their children negatively, leading to low academic attainment.

Parents are the best teachers of their children, and can enhance their cognitive, and emotional development, and wellbeing (Ceka & Murati, 2016). So, in understanding the responsibility of parents in the learning process of children, as teachers of their own children's learning, their role as models to learning should be taken very seriously. Bandura (1977) in the classical synthesis of learning revealed that it is a direct function of observation. Hence, parents provide an observation reference to the children as they grow up, and pick a number of traits that may either enhance or undermine their learning. Modelling is one of the fundamental instructional modes of teaching. As an observational plan of action, the parent intentionally or inadvertently demonstrates to the child new concepts or approaches thus learning new behaviour. While the child observes what is being communicated by the parents, they learn from such interactions. For example, when the parent is demonstrating to the child how to solve a problem in homework, the child learns and develops the ability to handle such an activity on their own later. Children in homes where parents act as role models enhance the learning, and the children attain better grades in school. As noted by Salisu and Ransom (2014), parents are able to transmit the information, skills and behaviour through being observed by the children.

Parents acting as role models for their children is an imperative for developing appropriate behaviours among children. Parents to model the type of behaviour that they

desire their children to imitate must act that behaviour before the children. Drawing from Bandura's social learning theory, it is important that parents exhibit positive traits such as inculcating the value of education to the children including reading with them, providing success stories about education, visiting schools, participating in school activities, and other related programmes. Most educators reveal that in agreement with Bandura's (1986) theory, parents are an invaluable role model to their children (Salisu & Ransom, 2014). It is noted that modelling is one of the most useful approaches to teaching and learning any new knowledge, skills, and behaviours. Parental modelling has enabled societies to transmit the basic social, and cultural values, customs, and beliefs from one generation to the other sustainably. Parents, within this context, act as observational learning references, and provide a meaningful instructional strategy for learning at home.

As noted by Salisu and Ransom (2014), most of the skills that people learn, including the fine motor skills, interpersonal skills, cognitive, and meta-cognitive skills, or later professional skills, are all developed mainly during observational learning. In relation to the social cognitive model of learning, social interaction or observational learning enables children acquire meta-cognitive, and self-regulatory skills, as well as competence initially through social interaction (Schunk & Zimmerman, 1996; Ceka & Murati, 2016). Salisu and Ransom (2014) add that children to perfect these skills, their models – parents should provide them with relevant guidance, feedback, and social reinforcement – motivation during practice.

Salisu and Ransom (2014) drawing from Bandura (1977) demonstrate the existence of five (5) modalities of modelling techniques, which are contained within observational learning that aid in children's cognitive development, and education. These are: disposition modelling, task, and performance modelling, meta-cognitive modelling, modelling as a scaffolding technique, and student-centred modelling. Salisu and Ransom (2014) posit that

disposition modelling focuses on those attitudes, values, and beliefs demonstrated by models – teachers or parents including both verbal and non-verbal forms of behaviour as parents, and educators interact with children, families, colleagues, and communities. From these interactions, children pick positive behaviours that support learning, and development. Meanwhile, the task, and performance modelling operates in terms of the teacher demonstrating a task to the children that they will be expected to carry out on their own. To be effective, such type of modelling should come before an activity that a child is expected to perform like a science experiment, new words in a foreign language, and or solving a mathematical equation.

Regarding the metacognitive modelling, Salisu and Ransom (2014) note that the process includes children engaging in critical thinking lessons. These exercises include children interpreting information from data, analysing statements, and drawing conclusions about what has been learned. Metacognitive modelling is mostly applicable when teaching of subjects like mathematics. During the demonstration, a teacher goes through multiple steps to solve a mathematical problem. Then children are required to follow the steps on their own to solve a similar or related problem. As noted by Salisu and Ransom (2014), scaffolding modelling is one where the teacher/parent builds on where the child is in the learning process to demonstrate the knowledge or skills required. This process involves a teacher/parent demonstrating the task for students to take note, and after, the students begin, and work through the task at their own will, and speed. The most effective approach to modelling is the student-centred demonstration. This approach is based on students' involvement in the teaching process. The teacher's guide children to decide what they want to learn, and how to learn it. The learners' interest, therefore, guides the learning process. Teachers as models of learning ask students to follow the patterns in the teaching delivery in order to grasp the concept easily. Children in the process also become models themselves as the teacher

facilitates them to carry out specific tasks or learning outcomes for their peers. The children under this is approach are involved in interactive learning, and the modelling responsibility is shared between the teachers, and the children.

Parents as models make children benefit from observational learning at different points. There as those that will reap greater benefit, and those that will pick less depending on their learning styles. Children need a good demonstration of behaviour, and understandable explanation of such behaviour to benefit from modelling as an approach to learning. Salisu and Ransom (2014) argue that modelling in child education and development plays two roles: firstly, it delivers well-grounded, and useful depictions of knowledge; and secondly, it makes the process of appreciating a domain of cognition easier to the children as a result of its rich visual expressions.

From the above analysis, it may be noted that parents as first teachers of the children have a significant responsibility in the educational process of their children. In a family where parents act as teachers of their children, such children are more likely to demonstrate better academic achievements than those from families where parents do not play their modelling roles. Similarly, the next subsection on parental self-efficacy is intended to bring to the fore essential information on the contribution of this component to the study phenomenon.

Parental Self-efficacy

The term self-efficacy has been described variously by different scholars. It has been related to concepts such as parental "confidence", parental "competence", parental "self-esteem," and sometimes, parental "self-regulation" (Hess et al, 2004; Hamilton et al, 2014). Hence, the aforementioned terms are loosely used, and applied as synonyms of parental self-efficacy (MacPhee, et al., 1996; Swick & Broadway, 1997). Self –efficacy (SE) which

according to Bandura's Social Cognitive Theory is a reflection of how people perceive their capabilities to organise, and execute courses of action necessary to reach chosen types of performance (Bandura, 1986). From Honicke and Broadbent (2016), SE is related to academic outcomes across a number of educational levels. When parents perceive themselves as able to provide for the education of their children, they will play their role effectively. This will promote learning both at home and at school (Walton et al. 2014). Meanwhile, Hussain et al. (2020) remarked that SE can help parents to direct their actions for successful support of their children's education, and other aspects of life. It may be argued that when parental self-efficacy is directed toward children's education, it reaps great educational rewards like better academic grades.

Bandura (1977), and Klassen et al. (2008) assert that the construct "self-efficacy" describes an individual's beliefs in his/her ability to successfully perform a given task through arranging, and executing that task to attain a given goal. As noted by Bandura (1977), self-efficacy can determine the attitude of an individual in relation to how they carry out the tasks amidst the challenges. This informs what effort the person is to put into a task, and what outcome it will generate. In this study, PSE was defined as the parents' perceived ability or assurance about their own competences as parents to inspire their children to attain the desired developmental growth. It is explained in terms of the confidence parents have in their role as parents to contribute toward promoting the education of their children as first points of contact their cognitive development. Relatedly, Hess et al. (2004) argue that parental confidence includes a number of roles that parents have to perform. These roles include the ability of taking care of the child, being capable of recognizing the needs of the child, and taking care of those needs while feeling satisfied from parenthood when the needs of the children as satisfied.

Studies from various countries demonstrate that parents with high self-efficacy help children achieve better grades at school (Tazouti & Jarlegan, 2016; Bubic, Tosic & Misetic, 2021; Liu & Leighton, 2021). This asserts Bandura's general observation that people with self-efficacy in a particular area apply more energy in that area without being overwhelmed by the frequent challenges faced in the process (Bandura, 2002). Likewise, people with low self-efficacy including parents hinder persons from developing, and applying new skills, and could diminish the success of existing strategies. It may be stressed that parental self-efficacy as argued by Liu and Leighton (2021) has an impact on parental practices, and ultimately on intellectual development of the children. Where parents lack self-confidence, their ability to play their parental roles of promoting their children's education becomes subverted leading to weak academic performance of their children. Arising from the foregoing, it is imperative that parents have to harness self-efficacy in order to look after their children the way they should, and nurture their academic potential. Studies have advanced the opinion that parental self-efficacy promotes enjoyable motherhood, and the parental competence they execute in bringing children (Coleman & Karraker, 1998; Jones & Prinz, 2005; Tazouti & Jarlegan, 2016).

Advancing the basic principles of self-efficacy theory as propounded by Bandura (1989), and Liu and Leighton (2021) aver that parental self-efficacy beliefs combine a knowledge of the behaviour of child upbringing and the level of confidence in the parent's ability to perform their roles in the development of the children. In the context of the study under consideration, it is assumed that parents can influence their children in a positive way. However, it has to do with the amount of self-efficacy they feel along with what they expect for their children. This shapes what parents see in their children as unfolding from the skills they are passing onto them, and how it will be manifested in them in the long run. It may be

deduced that the amount of self-efficacy a parent has explains the motivation some parents feel in their quest to assist their children to do well in their academic pursuits.

Self-efficacy is an important ingredient in promoting achievement across board. In the educational arena, self-efficacy has an enabling effect on the cognitive development of children, and enhances academic performance (Shunk1991; Michaellides, 2008; Honicke & Broadbent, 2016; Bubic et al., 2021). Self-efficacy may be classified in two categories: the General Self-Efficacy (GSE) and Situation Specific Self-Efficacy (SSE). General self-efficacy as described by Mencl et al. (2012) consists of the general beliefs a person has about themselves in relation to possessing the knowledge and the techniques to handle diverse tasks effectively and being able to do them well enough. While situational specific self-efficacy is where a person has particular levels of self-efficacy which enable them manage an individual task or area of competency. It is argued that parents who have specific self-efficacy, and are good at specific tasks can easily pass on such particular self-efficacy to a number of other tasks (Mencl, 2012). Moreover, as noted by Weiser and Riggio (2012), both the GSE and the SSE are important to the growth of the overall self-efficacy of an individual.

Self-efficacy is an attribute that may be groomed to higher levels with focused attention to areas of deficit that an individual feels including parenting for educational growth of children. Practicing the competence is considered to be one of the ways through which self-efficacy may be cultivated into a well-honed attribute of a person. It is dependent on a person's capability to execute a task successfully, and may be improved with experience (Bandura, 1977; Weiser & Riggio, 2012). Bandura (1977) contends that self-efficacy comes with increase in one's experience over time. When an individual gets more exposed, challenged, and has to solve real world difficulties, such an exposure helps the person including parents to enhance their self-efficacy, and handle tasks more successfully.

Similarly, as noted by Bubic et al. (2021), parents may possess self-efficacy arising from a number of sources. For example, the parents' educational background is a source of skills to effectively empower the children academically. As earlier opined by Hoover-Dempsey and Sandler (1995), self-efficacy may be derived from one's accumulated personal experiences in executing a task successfully. The repetitive performance of the task develops the competences, and self-confidence of the one executing the task. Therefore, every successful task that is carried out re-affirms to the individual that they have the capability to carry out the task.

Self-efficacy enhances the parents' modelling role as they are more able to perform the role and transmit the desired behaviours to assist their children academically (Ceka & Murati, 2016). In addition, they can ably guide, and watch their children develop more confidence to perform a task successfully. As noted by Weiser and Riggio (2010), children naturally observe how their parents act, and copy their behaviour. When parents exercise their self-efficacy in their performance of tasks, they are inadvertently passing on the traits to the children, and building their self-efficacy as well. This process further reinforces the expectations of the parent about the academic success of their children. As argued by Bandura (1977) that socioeconomic status impacts parental educational attainment, and highlighted by Bubic et al. (2021) that one's background invariably affects parental self-efficacy levels, it can be averred that wealthy parents have a higher self-efficacy than those living in poverty. Therefore, one may claim that this affects the level of parental academic support accessible to the children who come from those parents affected by poverty.

Arising from the foregoing, parental self-efficacy describes parents' self-assurance in competences to raise their children successfully. This comes by way of providing the children with the necessities of life, and the stimulus to perform better in school. Therefore, it

follows that children from parents with higher levels of self-efficacy model behaviour from their parents. This strengthens the children in their task performance. From this view, parental self-efficacy is critical to the educational progression of children's educational outcomes at all stages of children's development. Parental knowledge, beliefs and attitudes were essential components of the literature that aided in the understanding of the phenomenon in the next subsection.

Parental Knowledge, Beliefs, Attitudes, and supportiveness

Studies indicate that the knowledge, beliefs, and attitudes of parents in relation to the educational outcomes of children rest directly with the educational levels of parents (Liu & Leighton, 2021). In this context, parenting knowledge speaks to information, and skills gained through education, and the understanding of the experiences relating to the children's cognitive development. Meanwhile, parenting beliefs relate to the importance parents place on the education of their children while parental attitudes are concerned with the views or opinions about parenting vis-à-vis the children's development. It is worth noting that positive parenting beliefs, and attitudes are key determinants of children's academic achievement.

Parental Knowledge

It is acknowledged that parents' knowledge is significant to children's educational outcomes (Ceka & Murati, 2016). Studies have demonstrated that children from parents with higher educational attainments attend school regularly, and spend longer years at school, and focus more on their studies than children from parents with less education (UNESCO, 2010). Both classical, and contemporary findings demonstrate that parents with superior skills in education tend to positively influence their children to attain at least their level of education (Breen & Goldthorpe, 1977; Bubic et al., 2021).

Parents' knowledge remains part of cultural capital in every society, and is more pronounced in families in relation to the education of the children (Bourdieu, 1984; Tazouti & Jarlegan, 2016). It may be claimed that children's educational outcomes can differ on the basis of the amount of cultural capital that is possessed by the parents. As averred by Lareau (2011), and Liu and Leighton (2021), students from homes with high social, and cultural capital tend to acquire this from their social upbringing. This process includes the many instances that children interact with their parents, the teachers of their schools, the social group to which they belong, and the socioeconomic status of their parents. Baudeau (1984) in a classical argument described cultural capital as ''informational capital'' that transforms children. In support of the same, Sullivan (2001) contends that cultural capital is related to academic attainment. Hultqvist and Lidegran (2020) assert that in line with Bourdeieu's theory of cultural reproduction, children from middle income class families have an advantage of gaining better educational qualifications because of their possession of cultural capital that is derived from their families.

Sullivan (2001) and Hultqvist and Lidegran (2020) posited that parents with higher educational backgrounds were more acquainted with the educational system, and were more supportive to their children. The knowledge possessed by parents helps children navigate through their studies, and earn better grades from school. It is observed that at family level, parents with more information about the complexities of educational institutions plan better, and guide the children in their educational courses. However, where parents lack knowledge of the educational systems, they are inhibited from demonstrating beneficial behaviour (Roger & Frey, 2015), which suppresses children's academic outcomes.

Parental Beliefs

Studies demonstrate a significant relationship between parenting beliefs on the value of schooling and their motivation to engage in the children's education (Hoover-Dempsey & Sandler, 1997; Kim & Hill, 2015; Jaiswal & Choudhuri, 2017). It is noted that parents' beliefs arise from their personal experiences, which are developed overtime. These beliefs, among others, are shaped by the socioeconomic backgrounds of the parents. The key argument is that parents from low-income status are likely to undervalue daily school attendance as compared to their counterparts from higher socioeconomic backgrounds (Hoover- Dempsey & Sandler, 1997; Liu & Leighton 2021). There exists a correlation between being parents from low economic groupings, and their children registering low attendance rates at school. However, both socioeconomic factors, and cultural capital were found to influence the attendance of children from such families. Nonetheless, parents with low socioeconomic status do not put much value on the children being at school regularly.

In a study by Hoover-Dempsey and Sandler (1997), it was established that parental beliefs were determined by three key aspects: (i) noting that parents have a responsibility, (ii) appreciating that parents can successfully help their children, and (iii) the belief that the child will welcome the parents' involvement. As claimed by Ellis and Ellis (2019) in a classical synthesis of parenting views, parenting beliefs can either be rational or irrational. In the development of rational emotive behavioural therapy, Ellis and Ellis argue that rational beliefs are those that are flexible, consistent with reality, and logical (Ellis & Ellis, 2019). Parenting beliefs are concerned with oneself, and one's child, and this leads to a healthy behaviour from both parent, and child. Meanwhile, irrational beliefs are the flipside of the rational beliefs. They are inflexible, inconsistent with reality, and more often illogical. These bring about unhealthy emotions, and create dissonance in appreciating one's reality.

In relation to academic performance, parents exhibiting irrational beliefs cause an unhealthy atmosphere, and behavioural problems in children (Hamamci & Bagci, 2017; Warren et al., 2018). Consequently, as argued by some scholars, it hinders academic achievements (Kufakunuesu, 2015; Warren, 2018). From another angle, Davis–Kean (2005) explained that parental beliefs, and expectations of their children vary with parents' educational attainment levels. Higher levels of educational attainments by the parents created higher expectations, thus motivating both parents, and children to strive for academic success. In support, Suizzo and Stapleton (2007) emphasized the centrality of higher education in harnessing higher expectations for children by the parents. Where children feel that their parents expect more from them, they also strive to ensure that they achieve academic success. Therefore, from the above analysis, one may claim that having higher education as a parent leads to having a higher expectation for the child which motivates the child to aim higher thus, leading to better academic performance.

Parental Attitudes

From the postulations of Ceka and Murati (2016), attitudes are more than a feeling one has towards something, such as a place or a person, which may be observed from that person's displayed behaviour. Attitudes are evaluative, and be positive or negative. They are based on personal perceptions as well as their perceptions of life. These attitudes shape people's philosophies of school, and education within the context of parenting. Parents' attitudes shape their approach to supporting their children in the academic work. Parents with a negative attitude towards education will be less supportive of their children during school compared to those that have a positive attitude. Studies indicate that many factors influence parental attitudes towards their children's education including socio-cultural or socioeconomic factors.

According to Jaiswal and Choudhuri (2017), parents' attitudes can be negative or positive. The effect of these attitudes depends on the nature of the behaviour displayed by the parent. In their study of parental involvement and students' performance, the authors established that parent's attitude uplifted or dampened students' motivation to study and progress academically. It was noted that parents' positive attitude towards homework was associated with high academic achievement of the pupils. The reverse was with negative attitudes. Accentuating this argument, Kalimuthu (2018) noted that negative attitudes of parents within the context of education, and schooling, prohibited children from higher academic performance as they received low attention from parents.

It was also revealed that parents' positive attitudes benefited children in many ways, like being able to concentrate at school, motivated to perform better and impress their parents, emotionally engaged, and exhibiting positive behaviour at school, among others. Further, the findings indicated that parents with a positive attitude provided a more stable home environment for the children to study well, and score good academic grades. De Boer et al. (2010), and Jaiswal and Choudhuri (2017) pointed out that highly literate parents with superior skills in education tended to have a more positive attitude towards education, and nurture children that succeeded at school.

An argument has been raging on regarding racial background, and parents' attitude to education. Findings by Okagaki and Frensch (1998) supported by Khan et al., (2016|) demonstrated that Asian-American parents had higher educational expectations of their children, and supported their children more with academic work. Consequently, children from parents of such backgrounds were high academic achievers at school. The parents from this group wanted their children to excel at higher education, which shaped the focus of the children on their studies leading to better academic grades. It also noted that such parents set

higher academic standards for their children in terms of grades, and levels of education completed. It may be claimed that parents' attitudes have an impact on children's educational achievements. This depends on whether the parents have high expectations, and have set targets of academic achievement for their children. The ensuing subsection of parent's academic level and children academic success will give further information to address the issues under consideration.

Parental Supportiveness

The support parents give to their children during their schooling is known to have produced positive influence on their educational success. A number of studies have highlighted that when the support of the family improves so too are the children grades and ultimate performance. (Brook, Bruno & Burns, 1997; Cotton &Wikelund, 2013). These studies concluded that the support parents give is significant to the children academic success. The merit of parental support is well documented. In the researcher's own experience as an educator, he observed that parents who offer support to their children whether financial or cognitive support tended to do better than students lacking these kinds of support. The progressing subsection will highlight further information on the characteristics of parents that produce academic success in children.

Parents' Academic levels, and Children's Academic Success

Educational research across Organization for Economic Cooperation and Development (OECD) countries claims that parents' academic level is defined in relation to parents' economic status (Thomson, 2018). Globally, and in OECD countries, socio-economic background is regarded as the highest level of education that students and parents attained, within the context of years of schooling (OECD, 2017). This definition highlights the reality that education is the foundation, and driving force of a nation's economy. In addition, it builds individual character of the citizens, and provides the nation's economy

with the desired labour force. It cannot be over emphasized that parental academic level is significant to the life of the children's education. It influences the parents' knowledge, value, beliefs and their goals as well and how they raise their children.

Emanating from the aforesaid, is a wide range of immutable variables: sociological and psychological that determine children's educational outcomes. It has been revealed that children whose parents achieve a higher level of education demonstrate a higher regard for learning, engender a more positive outlook on learning, and at the same time demonstrate a stronger commitment to the learning process than children whose parents achieved very little on the educational journey. Owing to the aforementioned, it is important to note the important function parents have in the learning process of their children. Therefore, parents' educational levels impact either positively or negatively the educational outcomes of their children, and their contribution to the future of the country's economy as a whole.

As they claim, Davis-Kean et al. (2019) maintain that family income is a credible indicator of parental educational attainment. This level of education and its linkage to the income of the parent are associated with the provision of material resources that enable parents to support their children, and have impact on their educational outcomes. The researchers argued that it is the view of some researchers that SES is an indicator of academic level. However, this should be dealt with separately rather than integrating it with parents' educational attainment (Duncan & Magnuson, 2003). Nonetheless, Davis-Kean et al. (2019) pointed out that studies continue to subscribe to this practice, and argue with evidence that parental educational attainment is a fundamental indicator of the intellectual development and academic outcomes of children

Evidence from Jamaica demonstrates that children of parents with higher levels of education are trained professionals while children of parents with lower levels of education in most instances are not trained professionals (Cole, 2020). While contextualizing parental

involvement at the elementary level in Jamaica, Cole demonstrates that parents' level of education determines the degree to which parents are involved in the education of the children, and hence, their eventual academic success. Cole (2020) seemed to have re-echoed the findings by Perry and McConney (2010) who established that students from a high socioeconomic status enjoy better educational outcomes compared to their counterparts from low socioeconomic backgrounds. In their study, the claim that the level of education was one of the major features of socioeconomic status, which influenced children's educational success seems to hold water given the arguments in the extant literature. In the data supplied by PISA, the OECD clarified that while there were instances of many disadvantaged students succeeding at school, the bottom line was that socioeconomic status positively, and significantly explained the differences in performance in most countries that participated in PISA. Students from advantaged socioeconomic statuses were inclined to outscore their disadvantaged peers by large margins (OECD, 2016).

From a different perspective, Harding et al (2015) claim that the influence of parental educational attainment on children's success emanates from human capital, bio ecological, and developmental niche theories. These theories help to explain the intricacy of the processes that shape family life. Harding et al., (2015) postulated that the number of years of schooling make parents gain increased exposure to human capital. This exposure along the way fashions their parenting practices, which consequently lead to children's academic success. The theoretical perspectives indicate that educational attainment of the parents in itself is a source of human capital in the educational process of their children. Therefore, parents with higher education have more cognitive resources to support their children, and enhance their academic performance.

Meanwhile, Davis-Kean et al. (2019) illustrate the effect of educational attainment of parents on children from the angle of the provision of empowerment activities outside the home environment itself. The authors' claim that parents prepare their children in the formative years adequately, and as children get older, they limit their control over them. They become less involved in formal, school-based activities such as attending Parent-Teachers' Association meetings. However, they continue engaging in informal activities that add value to children's learning such as providing them with stimulating advice to guide their studies, showing approval of their attainments, and sharing with them their dreams of the children as successful graduates, among others. These initiatives in turn keep the children motivated to learn and score better school grades.

As noted by Karrass et al. (2000), Young et al. (2001), Craig (2006), and Cole (2020), parents with higher academic levels or socioeconomic status tend to create a home environment that nurtures social, and human capital development. Through this, parents foster, and promote children's cognitive and language development by stimulating them intellectually. Crosnoe et al. (2010) also claims that socioeconomic status is synonymous with parental educational success, which translates into academic success of the children from such parents. Further, the literature has dependably shown that parental academic achievement as a dimension of socioeconomic status is a predictor of children's achievements (Hudson & Bentley, 2010; Reardon, 2011; Wang & Sheikh-Khalil, 2014).

However, there seems to be a challenge in this literature in a sense that the means for understanding this impact is not fully understood as a diversity of accounts have been advanced. These include inequitable distribution of resources, and low family interaction, among others. Nonetheless, other literature focuses on parental behaviour, linking parental

style, nurturing and parental child- interaction (Sullivan, 2001; Jaiswal & Choudhuri, 20017, Liu & Leighton 2021).

Marks (2017) observed existence of a moderate relationship between the parents' socioeconomic background, and educational achievement of the children especially, the contribution to cognitive development, and ability. However, regarding other support that is provided by parents, it was noted that children from less prosperous families are at a disadvantage in school. The main reasons advanced included: a lack of academic learning experience from their home environments, and limited provision of scholastic support materials like textbooks, which are the most influential factors in students' achievement (Thomson et al., 2015).

Marks (2015) and Thomson et al. (2015) concur that parents from well-off backgrounds were in a better position to provide their children with financial support and other learning resources to promote academic achievement. It is further observed that these parents were likely to be of higher educational levels, and interested in the academic excellence of their children. The central argument seems to be that these well-off parents were more likely to provide academically inspiring home environments that promote cognitive development, and psychological support, which foster the growth of knowledge, and skills that lead to educational success (Evans et al, 2010).

Correspondingly, Perry and McConney (2010) illustrated the reality that students from a high socioeconomic status happen to enjoy better educational outcomes when likened to their counterparts from low socioeconomic backgrounds. This position seems supported by Khalil et al. (2012) and Idris et al. (2020), who claimed that educated parents who usually have successful educational experiences, and high cognitive abilities are more inclined to assist their children through different stages of development. The authors noted that such

parents through a variety of activities stimulate their children cognitively thus allowing them to perform better at school. Hence, children's educational success or failure can reliably be traced back to their parents' education. Parents' education in this regard appears to be an important forecaster of children's educational success and academic outcome.

From the literature reviewed, evidence points to an existence of a strong link between parents' educational level and the academic achievement of the children. The level of parent's education correlates with the parent's socioeconomic status, the competences both materially, and cognitively to support the children, the time, and motivation to stimulate them to study better, and to provide all other necessary forms of stimulation to the children to learn. Consequently, all these efforts, and position of the parents seem to be rewarded in form of high academic achievement by the children. Therefore, parents positively contribute to the academic wellbeing of their children, and their educational outcomes. Additionally, the discussion of parental aspirations and expectations in the progressing subsections will give further insight into how the literature informed the study.

Parental Aspirations, and Expectations

Goldenberg, Gallimore, Reese and Garnier (2001), and Sullivan (2001) claimed that in relation to children's academic performance, parents have aspirations – their thoughts as to what they hope for their children to achieve, and expectations – their thinking of what their children will achieve out of school. These influence their perception of how far they would want their children to reach in school, and what career or educational path they would want them to follow in life. These claims are in line with Bandura (1991) who highlighted the relevance of aspirations of the parents on children's academic achievement. It is noted that in order to achieve academic excellence, aspirations should provide a route to educational goals for the individuals. As noted by Liu and Leighton (2021), some parents have high

expectations for their children, others have relatively low expectations. This depends on the particular parents' circumstances in life. High socioeconomic status for example predisposes parents to higher expectations from their children than low socioeconomic status.

Numerous findings have highlighted that parental aspirations have a positive impact on children's academic outcomes (Eccles & Wigfield, 2002; Sommerfeld, 2016; Bubic et al., 2021). Similarly, Porumbu & Necşoi, (2013), and Jung and Zhang, (2016) revealed that where there is a strong parental desire for children to succeed academically, there is a corresponding effort to support the children, which ultimately leads to the success of the children in their academic endeavours. Therefore, success is usually linked to existence of a very strong parental involvement, and support, which in turn help students to accomplish their academic goals.

In support of the arguments by Parumbu and Necşoi (2013), Hao and Yeung, (2015) argued that parents with higher aspirations tend to invest more in their children financially, and to support their children's education. The higher investment in the child's educational efforts leads to better academic performance. This is a form of modelling by the parents in the claims of Nguyen (2008). The effect from a role model is only effective in contributing to educational outcomes when the children are able to identify with the role model in terms of the SES. Therefore, it may be noted that investment in the children's education is driven by the aspirations, and expectations of the parents in their children. However, for this capital to bear returns, the children themselves should be willing to associate with these aspirations and expectations.

In a related argument, Mehta (2016) asserted that parental aspiration takes place within a social context. It is a culmination of the individual's reflective observation of the lives, and experiences of people around them. Studies allude to attraction effect of the

vicarious experience on those that discern it (Bandura, 1997; Bernard et al. 2014). Meanwhile, Ray (2006), and Mehta (2016) use the analogy of an individual's "aspiration's window" when conceptualizing the process of observation, and learning from others around them while at the same time, forming their aspirations. As demonstrated by Goodman and Gregg (2010), the level of parental expectations is linked to the degree to which parents are involved in the academic performance of the children. It is demonstrated that the greater aspiration/expectation parents have of their children in education, the more they will be involved in their education. The purpose of the parent is to promote desirable educational outcomes in their children that will reflect in better grade scores.

It may be noted that the aspiration of parents is central to shaping the direction, and intensity of the involvement of parents in the academic affairs of the children, and is a major indicator of children's academic success. It is a source of motivation to the parent to invest in the child while to the child, it stimulates positive energy to meet the aspirations the parents have of the children. As explained by Wentzel (1998), parental aspiration directs parents' behaviour in relation to their education. Supportive literature suggests that the aspirations of parents towards their children's educational attainment are positively, and significantly related to the setting of academic goals by the children, as well as their accomplishment of those goals (Wigfield, 1993; Cole, 2020). According to Davis-Kean (2005), Pearce (2006), and Vartanian et al. (2007), it was established that students whose parents have high hopes of them receive higher grades, achieve higher scores on standardized tests, and stay longer in school than their counterparts whose parents hold very low hope for their educational future.

Eccles and Wigfield (2002) drawing from the Expectancy- Value Theory reasoned that the individual's expectations for success, and the value expressed towards that success are important predictors of goal achievement. It is claimed that high expectancy leads to high

value attached to the outcome of the process, which in this case, is the education of a child (Eccles and Wigfield, 2002; Wigfield, Tonks & Klauda, 2009). Additionally, as Martin and Dowson (2009) affirmed, students are more likely to attain good academic outcomes when they are sure of their capability in achieving a goal, and on which they have placed a value. Moreover, students' achievement orientation predicts high educational outcomes. Students who are inclined to scoring high grades in school will always achieve better grades than those that do not. As noted by King and Ganotice (2014), there is a correlation between higher expectancy, and better motivation of students leading to academic excellence. Further, the levels of expectancy, and motivation are enabled by the students' social circles – the kind of friends that they keep, and or the family they come from, which provide the children with relevant primary social circles that help to keep them motivated along the path of education.

Parents' always have hope in the future of their children. This determines the amount of resources that such parents invest in their children. Spera et al. (2009) assert that parents' hope for children's educational success predicts children's academic achievement. This argument is in tandem with the theoretical reflections which underpin this study. It avers that a relationship exists between parental educational aspirations, and children's academic achievements. For example, the contribution of social cognitive theory (Bandura 1977, 1986) highlights how the educational aspirations of parents for their children influences one's motivation to achieve or succeed, which itself is shaped by a lifetime of reflective observations of others, and life experiences. Similarly, the cultural -ecological theory affirms that aspirations within the context of education are socially, and contextually developed dispositions that guide both parents, and children to navigate the path of education to success (Bronfenbrenner 1977). Therefore, when reviewing what makes some children successful at school, and others not, it is imperative that the aspirations of both the parents, and students are interrogated.

It should not be missed that the effect of parents' aspirations, and expectations on students' educational outcomes, could be positive or negative depending on a number of factors. Randall et al. (2015) delineated a number of negative effects of aspirations, and expectations on children. The author argued that the aspirations, and expectations can place great pressure on the students leading to under performance. This pressure mounts when the parents have extreme aspirations, and expectancy tendencies that are beyond the capabilities of the children. This as a result puts the children under great pressure and stress. As the students have to face the reality that they cannot attain their parents' aspirations, they get demotivated, and their performance declines. This excess aspiration as explained by Randal et al. (2015) has detrimental effects on students' academic outcome. The literature certainly leaves a gap as to what happens when parents' aspirations are higher than the students' aspirations of themselves. The ensuing subsection will highlight some of the factors that stimulate these aspirations and expectations of parents

Factors Influencing Parents' Aspirations, and Expectations

Conceptually, the terms parental "aspirations and expectations" are construed as two different terminologies, but they are used interchangeably within the context of the literature (Yamamoto & Holloway, 2010). Parents' expectation is taken to mean the beliefs that are held by parents that their children will achieve great performance in their school life in terms of achieving high grades or reaching the highest level of achievement in college. On the other hand, parental aspiration is construed as the hope, desire, or ambition of achieving a good education attainment outcome of the children that bring hope and encouragement to the parents.

As noted by Randall et al (2015), parents' expectations on children are either positive or negative. The literature in this section attempts to address what drives the parents' aspirations, and expectations. Parental aspirations and expectations of their children are

known to be impacted by the family's socio-economic status (SES) (Singh et al., 1995). Although in some cultural settings, research suggested that the Impact of SES on parents' expectation and aspiration is more dominant in household of males than in household of females (Trusty, 2002). Household income is not the only indicator of SES in some cases, but the assets of the family that form its economic worth and hence their SES position. According to Zhan (2006), family assets are shown to have a positive and significant relationship as an economic indicator of SES.

In a study by De Civita et al. (2004) on the SES of the family, four economic groupings were studied; Welfare- dependent, poor working, work and welfare- dependent, and never poor working. The results showed that families who had no experience of poverty and those seen as working poor held significant lower aspiration for their children educational aspiration than the other economic groupings. Bandura (1977), Hossler and Stage (1992), De Civita et al. (2004), and Mehta (2016) claim that the following factors influence parents' aspirations, and expectations of their children:

The resources at hand- parents with fewer financial resources were found to have lower aspirations, and expectations for their children. The parents' inability to raise resources to provide for the children's academic needs, and the struggle to raise the minimum resources required seem to lower the parents' motivation to develop appropriate aspirations for their children. Similarly, it is claimed that children from low socio- economic status are inclined to having lower aspirations than their counterparts in higher socioeconomic status (Mehta, 2016). It cannot be ignored that parents with greater resources at hand are at a greater advantage in the context of investing in their children. Usually, these parents are of a higher socio-economic status and can afford to invest in their children much more in providing the appropriate books, and instructional technology such as computers. They can afford to provide stimulating home environment that is more conducive to study. There is much

empirical evidence that these students achieve higher levels of academic achievements (Claro et.al, 2015).

Belief in one's own capabilities- aspiration development requires belief in one's own capabilities, whether it is a child or the parent. Parents with beliefs in their own capacities to raise academically successful children incline to have higher aspirations for their children's development. Therefore, the beginning point in aspiration development for the child is the parent's self-belief. Those parents who believe they can assist their children by providing for their academic growth, and being more involved in their educational development will have higher aspirations for their children, which will consequently create a strong desire for success in the children. The end result will be the child's academic success as the motivation to succeed has been triggered by the parents' belief that they can succeed, and their support that they succeed (Bandura, 1977).

Number of children in the family- The family size is one element that stifles or enables aspiration development (Clark, 2015). Its constricting effect comes from the burden of the family size on family resources. Large family size reduces family resources as it lowers per capita resource as well as parental attention when the family size increases. Reduction in both family resources, and parental attention usually translate into fewer educational opportunities for family members. Not only does the number of children within the family affect the available monetary resources of the family, it also affects the aspirations of the family as well especially, in situations where the family has a number of children of different age groups and the monetary resources were spent on the older children leaving very little to be spent on the younger ones. In this case, the family will find it very difficult to realize the aspirations and expectations for the younger ones with dwindling resources. The resources –

funds, and family time per child are over stretched to accommodate everyone's needs in the household. This ultimately affects what the family can do for everyone within the household.

Parent to parent relationship- The mother and father in a home should have shared aspirations, and expectations for their children. The relationship between both parents in regard to shaping their academic journey has to be clear (Mehta, 2016). When this happens, the children will be able to develop rich aspirations, and expectations of themselves that lead to better academic achievement. The parents must ensure that they place emphasis on achievement levels of the children within the family. This will foster greater parental attitudes towards their children, and their achievement. In the home, it is a good practice when both parents share information on what they want for the children and decide on it. When both parents work together for the common good of the children much can be achieved.

Parent's education- There is a strong correlation between mothers' educational attainment and expectations. The more educated mothers are the stronger are their expectations for their children. Mothers possessing at least a bachelor's degree have a higher level of expectation than their counterparts who have not had a college education (Zhan, 2006). Parental education has been shown to have significant influence on aspirations and expectations than other variables such as gender of children, or size of the family. Parents who have college education expect their children to surpass them in the level of education they received. Gill and Reynolds study (1999) showed that parental education predicts a stronger expectation than household income of the family.

Educated parents exude hope in their children. The children look forward to being like their parents in future, and are aware that their path was education. Children from such a background, therefore, have a model in the family that they would like to follow. This cultivates motivation in the children, and leads to better educational attainment. It may be

claimed from the above that children with more educated parents have greater aspirations for themselves, and as such, the children have a higher chance of developing and sustaining higher aspirations of themselves (Hossler & Stage, 1992; De Civita et al., 2004).

Drawing from the above debates, it is noted that parental aspirations, and expectations are critical to students' academic outcome. Where parents do not expect much from their children, there is high likelihood that they will not engage deeply in the preparatory activities with the children. The children could receive less guidance, assistance, and sound encouragement from the parents towards school work. This ultimately affects the academic path of the children's educational pursuits.

Whilst there is strong correlation between mothers' educational attainment and expectations for their children, there is another side of the same coin. Parents who are able to get a job straight out of high school with a few subjects passed at the Caribbean School Examination Certificate (CSEC) have no desire to further their education. They oftentimes argue that a college degree or further education was not worth the cost. They do not need further education to pursue their desired goal in life. These are the parents who demonstrate little or no expectation for their children. The researcher has heard a number of these statements from parents from time to time, who claim everything is going right with them and there is no need for them to further their education. This is what they preach to their children and after a while, the cycle of underachievement and cultural poverty continues within the family. The home environment is critical to the success of students' academic achievements.

Parental Self-Efficacy-This is as an element of parental expectation and aspiration as demonstrated in many studies in which parents who are of the opinion that they can impact their children's education in an encouraging way to do well. Parents who feel this way spend more time at school assisting teachers with teaching and learning activities for children

(Hover-Dumpsey, Bassler & Brissie, 1992). Typically, parental expectation and aspiration is one of the dimensions of parental involvement and support of children (Wentzel, 1998). As a result, parental expectation and aspiration is connected to parental self- efficacy. In relation to educational attainment, when children failed to measure up to parents' expectation, the effect of disappointment was shown in parents' behaviour and arguments (Kaplan, Liv & Kalpan, 2001). This is an indication of the parents who expect their children to do well. The expectation for the children to do well was expressed by the parents at a FGD of this study, so it naturally follows that if the expectation of the parents is not met, they would innately be disappointed whether or not they have great expectation of their children.

Parents have always expressed the desire for their children to do well in schools. This is particularly true for parents who have invested in their children's education and gave them all the support they could (Kaplan, Liv & Kalpan, 2001). There is a good reason for a feeling of euphoria when the child performs well in school. Some parents would want to celebrate with their child's achievement. It is quite likely that parents who have not done well in their schooling will have lower level of aspiration and expectation for their children. However, there is always an exceptional case, and some parents may not have done well, but are desirous of their children's performance to surpass their performance in school nonetheless. Parent's education set the pace for their children's achievement and the more education they achieved, the greater their expectation and aspiration for their children (De Civita et al., 2004; Zhan, 2006).

Home Environment, and Supervision

Asiimwe and Magunda (2017) demonstrated that home environment had a substantial effect on children's academic performance. One of the key ingredients was supervision of children's home work, and other school related activities by the parents. Supervision on the other hand speaks to the activities employed by the parents as well as the attitudes displayed

in support of the children's leaning in the home (Smith & Sheridan, 2019; Hardie, 2019). In agreement with the view propounded by Asiimwe and Magunda (2017), Anthonia (2019) expounded the influence of the home on learners by arguing that the home is a place where parents offer guidance to their children and socialize them into the norms and values of the society. This includes providing a conducive learning environment, and checking on children's school work. The author further claims that the environment refers to the immediate surroundings in which the students live.

The home environment is seen from two forms: its physical form, and the psychological form. The physical environment covers all the basic facilities in the home that fulfil the physical needs of the children (Muola, 2010; Asiimwe & Magunda, 2017). These include providing food, hygienic accommodation, and study space, among others. Meanwhile, the psychological environment is related to the emotional status of the home. For example, the supportive interactions between members of the household, the love for the children, sharing of the aspirations, and expectations with arousing testimonies encourage children to pursue their dreams (Mukama, 2010; Muola, 2010). Further, other important features of the home environment like the nature of the family – nucleus or extended, who wields family authority (head of the family-man, wife, or child headed), educational and economic status of the parents, and their attitudes towards the children matter a lot in empowering the children with education.

Numerous findings point to the ubiquitous impact of the home environment on students' academic success in school (Schmitt & Lipscomb, 2016; Häfner et al., 2018). The central argument is that gaps in educational outcomes of students are triggered by the home environment, and the cultural influences within the family structure (Clark, 2015; Harris & Robinson, 2018). As claimed by Asiimwe and Magunda (2017), the home environment

influences students' academic success. This assertion deflects the common claim that students' academic failures are often due to the school, and its teachers without noting that the external factors especially home environment also determine the success or failure of children. The influence of both physical, and psychological conditions should not be ignored in delineating what may lead to high or low academic achievement of children.

From another angle, Furstenberg, (2014) demonstrates that external factors such as living with both parents promotes positive educational outcomes for students, and the reverse is true. As earlier noted by Mehta (2016), the relationship between both parents influences the aspirations, and expectations about the children that also affects the aspirations, and expectations of the children themselves. These aspects of the home environment seem to complicate the home environment depending on whether the parents are staying together or not and the consequent influence on aspirations and expectations.

Parveen (2007) in her doctoral thesis on the subject of home environment of students explains that home environment may either hinder or support children's educational outcomes. The key argument is that a conducive home environment enhances the child's confidence which promotes educational performance in a number of ways. For example, students from homes with academically active environments that have reading materials, academically engaging conversations, with a presence of academic role models, and with promotion of knowledge sharing initiatives have better performing children educationally (Muola, 2010; Bailey, 2017; Vang, 2017). It may be averred that an academic home environment promotes better academic performance than one which is not.

Moreover, research shows that students living with less supportive home environments labour so much along their academic courses (Parveen, 2007; Bandhana & Sharma, 2012). It is demonstrated that children's educational activities are more facilitated,

and enhanced by the physical, and emotional home environment. The home accentuates the growth of knowledge, skills, and behaviours learnt at the school for the five or six hours that the students spend at the school each day. It may be inferred that good supervision within the home setting leads to better supervision, and monitoring of the educational environment.

The above claims are supported by the findings of Corno and Xu (2014) which demonstrated that children who do more homework practice are more successful in school work. In their study on 'modelling students' time management in math homework, the authors illustrated the importance of monitoring, motivation, and arranging the environment. These aspects enable students to manage their time, do their homework properly, and improve in their classwork. This appears to extend the arguments of Bandhana and Sharma (2012) on the centrality of the home environment in enabling learners improve their academic performance in academic activities which are undertaken within the learners' home environment. From the claims, children from enabling home environments are able to finish their school tasks both at home and in class within the stipulated time, and are more motivated to engage in independent activities with guidance from the parents in their home setting.

Solomon et al. (2010) established that supervision provided by the parents at home is largely related to completion of homework by the students. The study demonstrated that when children are provided with homework, and parents ensure that the children are monitored to complete it, children will be more motivated to do it. This practice promotes the children's rehearsal in the subjects, and enhances their class performance. It is noted that as later argued by Corno and Xu (2014), children who are in a supervised home environment spend time practice using their homework. These exercises help them not only to finish their work in time, but also to perfect their skills in those subjects. This builds children stronger

academically, and who are more able to complete their academic projects in time. The children in this context are assisted to construct their own meaning of the task, and to develop a deeper grasp of the concept(s) taught in class. Therefore, supervision of homework by the parents is extremely important to the academic development of the children. In addition, it aids the intellectual, and emotional growth of children, and serves as a link between the children, and the parents through the physical, and emotional contact between them (Solomon et al., 2010). The contact provides the children an opportunity to learn from good parental modelling stimulating the beneficial power of learning by imitation is a common feature.

Chemogosi (2012) in a study of the effect of homework supervision on academic achievement of primary school pupils in public schools established that adequate parental supervision of pupils was positively related to academic performance. Findings revealed that children who received more supervision performed better than those that did not. The revelation was instructive in a sense that parents who did not mind about the children's homework presented unsupportive environment that led to weak academic performance of their children. This seems to be conceptually in agreement with Corno and Xu (2014).

A conducive home environment for effective learning is one where parents supervise their children, motivate them to do their work, and complete in time. As observed by Chemogosi (2012), the performance levels of the children with effective supervision were higher than those that were not effectively supervised. In addition, it was noted that home-based supervision of homework had a positive effect on the effective implementation of the school curriculum. It was further revealed that children whose parents supervised their homework performed better in school, and were academically motivated, as such children had high interest, and demonstrated positive attitudes towards their studies. These findings provide a conceptual basis for the current study that was meant to determine the extent to

which parents' attainment levels influence the academic achievement of pupils in some public primary schools.

Castro et al. (2015) did a meta-analysis of data about the involvement of parents and students' school performance. The findings revealed that supervision of the students' learning was a part of the parents' routine of activities. Children's academic performance was enhanced and their academic grades improved significantly. This was found to be linked to the parents' known academic expectations of their children. Castro et al. (2015) claims are also supported by the findings of Book et al. (2018) who established that when parents engage in support of their children at home, their children are motivated to learn, and demonstrate higher academic outcomes. The findings lend further credence to what can be achieved when parents are involved in students' learning by enhancing the academic achievement of their children through setting a supportive home environment, which, among others, includes effective supervision of homework as a supportive activity for learning.

In related studies, Mayo and Siraj (2015), Vang (2017), and Hill et al. (2018) determined that parents influence the context of students' success. The studies revealed that parents are critical in establishing the stage for the success of their children. Making the home environment ideal for cognitive, and emotional development of the children was the beginning point in the academic journey of the children. When parents pick interest in the learning activities of their children, checking on them to establish whether they were given homework, whether it was done, and done correctly help children to learn better.

In addition, providing learning support in terms of demonstrating how the work could be done in families with parents that have higher academic attainments developed the knowledge, skills, and behaviours of the children. Their motivation to pick homework, do it properly, seek parental guidance where children needed more support were found to enhance

the academic achievement of the children. Moreover, parents who linked with the teachers to resolve any issues related with the children's homework promoted effective communication between the students and their teachers, and better academic grades.

The scholarly debates from the foregoing demonstrate the primacy of home environment, and supervision of homework in the academic success of the children. The findings support the concept of how parental involvement in the academic lives of the children can bring about real positive change in children's performance. Where parental involvement was high in terms of parents participating in helping children with their homework, and supervising what children were doing at home, academic performance of children from such home environments demonstrated better results. This literature provided conceptual guidance to this study as the importance of the home environment in the academic success of their children comes out. However, it is not clear whether the Jamaican home environment promotes academic achievement or does not.

The key to success in the supervision of children in the home environment by the parents is the ability of the parents to manage the children's behaviour while the children are learning. This observation was made by Bearss et al. (2015). It is believed that this is an area ignored by many parents and, particularly in the rural areas and among people of low socio-economic groups. It is felt that parents living in these areas do not take advantage of the available parental training that is offered by various agencies that will help them to harness the necessary skills to facilitate children's learning (Ingersoll et al, 2015).

Veas et al., (2019); Smahelova et al., (2017) and Eva, (2016) in explicating the value of parental supervision in the home environment added that supervising children in the use of technological devices support children's achievement as well as aids development of other areas of deficiency. They added that participation in the learning activities by the parents

strengthens the relationship between the parents and children as well as improves communication greatly between them. Children from families where parents supervised their homework posted better results than those that did not.

Flanagan et al., (2019), and Moreno-Ruiz et al., (2019) in their contribution to parental supervision in the home underscored that this type of activity is particularly useful and, therefore, acts as a stimulating factor especially in early childhood years to achieve the desired educational outcome in children. In the researcher's personal experience as an educator, he has witnessed that children who are supervised at home in their school work tend to be far ahead in their classes and consequently get better grades in school. In addition to this, their social skills are more advanced than their unsupervised counterparts. Another contributing component to the students' academic success is the parental socio-economic status on children's education. The continuing subsection of parental SES and its dimensions of education, income, occupation and wealth will highlight the extent to which it contributes to children's educational achievement in the study.

Parental Socio-economic Status, and Children's Education

A number of studies over the course of time have highlighted a robust link between parental socio-economic position and academic success of children. Reardon (2011), and OECD (2019) have discovered that students coming from higher SES roots incline to outperform their counter parts from lower SES roots within the context of achieving higher test results, higher grades received in schools as well as in their overall education (OECD, 2019). A number of factors cause parents' SES position to affect their children's education. Take for instance, how well the parents do in school. If the parents did poorly, this will limit the number of resources at their disposal. They would not be able to provide the necessary instructional materials for their children in order to facilitate good learning outcome.

Apart from their inability to provide the physical resources, they would be limited in terms of their intellectual resources that are critical to assist the children with their school work. It is a well-known fact that families at a higher SES position are able to provide better for their children because they have more money to expend on their children's education. They are in a better position to send them to better schools, provide the best teacher for them as well as providing the activities that will stimulate intellectual development in their children (Pong, 2009; Reardon 2011).

Another thing is that parents' attendance at school which is a determinant of SES, is said to have highly predicted students' performance in school since parents with more education are more likely to know the ins and outs of the school system, while at the same time possessing the skills to assist their children to grow educationally. They are likely to do academic activities at home that further stimulate the children to learn, besides demonstrating good attitudes for their children to model (OECD, 2019). Parental SES also affect the child's social and cultural capital since the parents' education is a determinant of their SES position. Low SES position would not facilitate the parents with much resources to offer much help to the child. It is important, though, to remember there are exceptions to all cases. This underscores the fact that there are persons from low SES position who lacked the resources and are able to beat the odds and rise to the top in terms of achievements and resources, and mediate the relationship between SES and academic achievement (Stephen et al., 2014).

Studies demonstrate that the intergenerational diffusion of human capital into children's schooling is related to the parent's investment in the education of their children (Sullivan, 2001). The key argument is that in developing the human capital, children's educational outcomes are important. These allow them to position themselves in society, and contribute to national development at some point in time. Numerous studies across the developed and developing countries reveal that education of children is positively, and

significantly associated with parental SES (Zhan et al (2020). As reiterated in earlier discussion, the SES of parents includes aspects such as the parents' education, parents' income, wealth and parents' occupation. There is a correlation between parental income as a SES indicator, and children's educational outcomes. This demonstrates that SES is an essential part of the educational process of the children in developing the human capital in children.

Determinant of Socioeconomic Status (SES)

Socioeconomic status (SES) denotes the person's overall social status, and prestige in hierarchal structure of the society. It drives many things that a person does. For example, as claimed by Thompson (2018), it characterizes an individual's or family's social, and economic positions in society which determines their worth in terms of their education, income, and occupation and the possession of wealth within the society. When examining parental educational attainment, and its influence on the educational outcomes of children, the impact of SES of parents becomes vital (Zhang et al, 2021). SES does not only influence parental educational attainments, but it explains to a great degree the educational attainment of the children. As claimed by Thompson (2018), a student who attends school from an average to high SES, enjoys a better educational outcome compared to their counterparts in schools with a lower to average SES levels. It was also demonstrated that children from homes with low SES greatly disadvantaged in school as they tend to lack a supportive academic home environment that gives them the needed backing to succeed in schools. Findings of Thompson also discovered that homes with low SES lack textbooks, and other reference materials to help children realize high grade scores.

As demonstrated by, Stephens, Markus, and Phillips (2014), people of different social class contexts create different patterns of feeling, thinking, and acting. These ultimately,

cause inequality in society through creation of similar patterns. In the parenting versus academic context, parents from higher SES groups are likely to be more educated and their feelings, thoughts and actions in the context of promoting the education of the children are more likely to be high. They tend to provide more academically inspiring home environments that promote cognitive development. In addition, SES triggers higher levels of psychological support for children, and their education. These two aspects have a knock-on effect on increasing the educational outcomes of the children through emotional mechanisms that support learning.

The aforesaid arguments mirror the assertions of authors like Kraus and Stephens (2012), and Diemer et al. (2013) on the effect of children's mind-sets as shaped by their parents on academic performance. The authors demonstrate that the parents' SES influences the feelings, and thoughts of the parents about their children's education. The more positive and significant the feelings, and thoughts are about the education of the children, the more supportive the parents will be of their children, leading to impressive academic results from the children. The reverse is true of children whose parents' have negative feelings, and thoughts about their children's education.

Sirin (2009), and Williams and Tramonte (2019), supported the measurement of SES of parents in reference to three main indicators. These are: parental education, parental income, and parental occupation. They are referred to as the big three factors that determine one's level of SES. Highly educated parents, with well-paying jobs have high disposable incomes. The level of these determinants of SES determines socioeconomic outlook of the parents in terms of their feelings, thoughts, and motivations. These are further explored in the next subsections

Education as a Measure of SES

Consequent to the design and implementation of the Sustainable Development Goals (SDGs), countries were enjoined to improve on the equitable accessibility to quality and relevant education. This is taken to mean formal education achieved by a person, such as completing the full tenure in primary, secondary or tertiary education. Education in Jamaica is provided for free to enhance literacy rates more especially, in developing countries. The system has both public, and private facilities which are open to all Jamaicans. Government institutions have universal free education, which is tuition-free education offered from the early childhood to the secondary level. Meanwhile, the private institutions operate at a fee, which varies from entity to entity. Public schools remain the main provider of education serving about 84.8 percent in 2018 (Jamaica Survey of Living Conditions, 2019). From the country's educational system, it is indicated that 88.10 percent of the adult population is literate. However, literacy rates may not mean high education that greatly influences the SES of the people.

As claimed by Zhang et al. (2020), the educational outcome is a critical indicator of SES. It does not only influence the earnings within a person's lifetime, it also impacts on the employment opportunities, status, and income. In societies that suffer significant levels of poverty, it is critical for breaking the intergenerational cycle of poverty (Planning Institute of Jamaica, 2012). The Jamaica Survey of Living Conditions data for 2012 showed that the heads of low socioeconomic households had lower levels of educational attainment compared to those with heads that had attained higher educational levels. The results demonstrated that 15.9 percent of higher SES household heads some tertiary education, 15.7 percent attained primary, 28.7 percent completed secondary, and 40.5 percent completed tertiary education (PIOJ, 2012). The findings of many studies continue to highlight that there is a direct relationship between education and SES of parents. In fact, they go as far as to say that

education cannot be tackled without looking at the socio-economic impact, which is said by expert as being a crucial determinant of academic achievements of students. It is yet to be revealed by this study the extent to which this crucial factor impacts education and predicts the achievement of students.

Shevers, (2007), and Azhar et al. (2014) posit that the level of parents' education is positively, and significantly associated with the level of income, and occupation. Education provides a sketch of an individual's socioeconomic condition. Education is a benchmark of a person's achievements in life, and is mostly exposed in the academic credentials achieved through schooling. The educational attainment predetermines a person's income as higher educational attainment tends to attract higher income. As noted by Annette (2003), higher levels of education are associated with better economic, and psychological outcomes for an individual. Academic knowledge, skills, and behaviour attained through higher education are correlated with higher socioeconomic of that individual. Annette further asserts that education puts parents in a higher income bracket which enables them to play their supportive roles much easily compared with those parents receiving lower incomes. For example, parents with lower incomes, who in most cases have low academic attainments do not play active roles in their offspring's cognitive, and emotional growth.

In the context of children from parents of low socioeconomic status, Morgan et al (2009) emphasizes the relationship between such background, and their academic performance. Children from low socioeconomic households, and communities develop academic skills at a slower pace than children from higher socioeconomic groups. The central argument is that low socioeconomic status in childhood correlates with following six aspects; weak cognitive development, language, memory, and socio-emotional processing. This results in low academic achievement at the end of the educational cycle, and translates into low income. Moreover, children raised in low socioeconomic status suffer poor health in

childhood development. From a related angle, Aikens and Barbarin (2008) established that schools in low SES communities more especially in developing world are persistently under-resourced which limits the academic progress, and outcomes of the children coming from those communities. Meanwhile, children from communities, and households with higher socioeconomic status were more likely to enter high school with literacy rate five times better than those entering from low socioeconomic status communities, and families as established by Reardon et al. (2013).

The debates about education seem to confirm that education determines the socioeconomic status of the community, household, and even children. Higher education leads to better job prospects, higher incomes, better living conditions, health in childhood for the children, more academic support for the children, and higher academic grades due to the support provided by the well-off parents. The opposite was found with those with lower levels of education at community, household, and child level. The academic outcomes of such children were also ostensibly affected by the socioeconomic status of the parents.

Income as a Measure of SES

Income may be defined as any flow of earnings received by individual or the members of the households whether from salaries, wages, rents, profits, pensions, interests, dividends and so on. Low-income families mainly focus on meeting their immediate needs (Zhang et al., 2020). The level of income as noted from the arguments is mainly influenced by one's level of education. Lower levels of education correlated with lower levels of income, and overall socioeconomic status. This suggests that parents with lower incomes happen to be those in lower socioeconomic status. These parents tend to provide less support to their children leading to lower academic attainment, and eventually lower income (Zhang et al. 2021). This condition appears to reproduce itself in households, and communities through academic attainments.

From a different perspective, Kierman (2010) had studied the gender differences in educational attainment, and the influence of the family environment. The findings revealed, that primary school children in England between 2005 and 2006 who came from families with low socioeconomic status had lower academic attainment. This started with cognitive, and emotional development, and spilled into the school grades. The study established that the children from lower socioeconomic status demonstrated lower development in communication, language, literacy, and numeracy skills. In addition, the findings noted that the educational disadvantages were skewed to the boys than girls highlighting the gender angle of the argument.

A review in Jamaica noted similar challenges as those observed by Kierman (2010). According to JSLC (2019), rural communities in Jamaica demonstrated lower academic attainment associated with the income status of their parents. The findings revealed that parents with lower income were less likely to support their children with scholastic needs. As a consequence, the children from such backgrounds had less developed cognitive, and emotional abilities. Their literacy, and numeracy skills were weaker compared to those from higher income groups. The lower income parents were less likely to provide the requisite textbooks, and other support for the children. In the end, children were performing poorly in class.

It may be claimed that income as a component of socioeconomic status is a significant determinant in the academic attainments of children. Though it is influenced by one's educational level, it enables or hinders children from optimizing their academic potential. Children from parents who are well off perform better than those who are not well off. It is a cause of inequality right from development of cognitive, and emotional abilities to school achievement. It is noted that the effect of income on academic performance of the children as a result of its effect on parental capabilities is something that needs more scholarly attention.

Occupation as a Measure of SES

According to Zhan et al. (2020), a parent's occupation which is described as to what one does to earn a living, had determined one's SES. It is related to educational attainment, and income. Occupation in many instances is categorised by the execution of skills within the context of an industry as well as the level of responsibility that is taken on by the person (Rehkof, 2008; Gottfredson, 2008). From the parents' perspective, it is determined by the level of education, and affects the level of income. Various occupations were noted in the study ranging from temporary worker to being senior manager. It was revealed that occupations like being a professional, or a senior manager were associated with higher SES than craftsmanship, clerical support staff, technicians, and temporary workers. The level of SES affected the involvement of parents in the children's attendance at school and their eventual performance. The findings tend support the conclusion drawn by Barg (2019) who argued that parents of middle- class status participated more in their children's academic activities than working class parents. The working-class parents were found to spend less time on the educational needs of their children than the middle class. This ultimately affected the academic attainment of the children.

Related findings had been revealed by the JSLC (2012) in Jamaica. The findings revealed that one's occupation was associated with attributes that affected the cognitive development of the children either, in a positive or negative way. It was noted that low income, unemployment, and higher dependency rates were key characteristics of people with low socioeconomic status. The Meta data showed that the labour force participation rate of persons from low socioeconomic status was 58.9 percent compared with 61.7 percent for persons from higher SES. In addition, it was found out that persons with low SES had a lower employment rate at 75.4 percent compared with the persons with a higher socioeconomic status who were found at 87.5 percent. The findings seemed to emphasize that one's

occupation, regardless of salary was a prime indicator of SES. It was noted that occupation conveys information regarding the person's power, income, and educational attainment.

In Jamaican context, it was noted that persons of low SES had occupations in industries receiving low income. These industries included agriculture, forestry, and fishing at 24.4 percent; wholesale, and retail, and repair of motor vehicle/equipment at 20.6 percent; construction at 11.3 percent; and private households with employed persons with 8.7 percent (JSLC, 2012). The ability of occupation to determine one's SES lies with what one does, where they work, and what level of responsibility they hold. The level of income adds to the perception of the status of an individual.

As noted from the above arguments, when the occupation places one in a given SES bracket, they tend to be associated with certain limitations in relation to the academic attainment of their children. Where the occupation places one in the lower income band, and hence a corresponding SES, the children from such a family will be affected by the effects of being from that family or community. Like education, and income, occupation may have a positive or negative effect on the academic achievements of the children.

The Determinants of Socioeconomic Status in Jamaica

Socio-economic status (SES) is largely defined as the social and economic standing of persons within their society as defined by various components such as occupational status, educational attainment, income levels as well as wealth (Craig et al, 2021: Galobordes et al, 2006. According to Craig et al. (2021), the first three components are the main ones that define the socioeconomic position of individuals in any society. These include: (i) occupational status; (ii) educational attainment and (iii) income level. Galobardes et al. (2006) added wealth as the fourth component. Occupational status looks at the nature of work that the individuals do for a livelihood. The educational attainment is the measure of

education the individuals attain whether the individual completes any or all of the stages of the educational system: primary, secondary or the tertiary.

Income on the other hand, looks at the amount of earnings for the individuals or the entire household. These earnings take into consideration the individual wages, the type of investment that individual are involved in as well as government transfers (Galobardes et al., 2006). Wealth on the other hand is the build-up of assets in the form of property, investment portfolio as well as savings that give a measure of financial strength. These four elements underpin the financial standing of people in their communities. Where elements are perceived to be low, the person will be regarded as of low status in that society. Typically, in Jamaica SES is broken down into three levels of income that indicates where on the spectrum the individual or family may fall. The individuals or family may be said to fall in one of three levels of income bracket. It may be high-, middle- or low-income bracket. These brackets are assessed in terms of the elements or dimensions of SES. The arguments in Section 2.13 have alluded to these elements at a global level with some pointers from Jamaica as noted from the JSLC study of 2012.

The impact of SES on educational achievement cannot be over emphasized as it is difficult to divorce one variable from the other. Studies in a number of literatures highlighted the robust relationship between the income of the family and academic performance of persons within the family household. These studies demonstrated that test scores and overall performance of students from higher SES heritages are in many instances higher than those of lower SES roots, thus leaving a huge achievement gaps between the educational achievements of the two groups of people. It is for this reason that the study looks at the gaps in the learning outcomes within the context of the part played by SES of persons within the educational enterprise.

From the Jamaican context, the determinants of low SES include low educational attainment levels, low occupation, low income earning capacity, and lack of economic opportunities. It is observed that high academic levels alone may not predict the level of SES where economic opportunities are harsh (PIOJ, 2009). Lack of economic opportunities may be precipitated by underemployment, unemployment, and poor rural development which characterise the livelihood of rural households in Jamaica. The studies by both PIOJ (2009), and JSLC (2012) indicate that in the country, SES may be perceived in terms of educational level, the type of occupation, and level of income. This seems to be in agreement with the findings of Craig et al. (2021) on the indicators of SES. Numerous studies have expounded that SES plays a significant part in shaping the academic achievement not only for the parents themselves, but for the children as well, as it is a documented fact that parents from higher SES background are likely to have better access to more appropriate educational resources to enhance their educational status. It follows, therefore, that they can expend more on their children in terms of meeting the educational needs of the children without much financial challenge.

The arguments above were intended to provide a theoretical, and conceptual basis for the study on how to examine SES as a component that influences the parents' involvement in the children's schooling, and how this involvement further influences the academic achievement. It delineates the aspect concept of educational attainment, which is the independent variable of the current study.

Measures of Home Support

Home support, as a form of parental involvement is constructed in numerous ways and includes school related activities that parents involved their children in at home. It also takes includes the positive attitudes that parents engendered towards their child's education,

teachers, and the school and learning itself as well (Kohl, Lengua & McMahon, 2000; Epstein, 2001; Topor, Keane, Shelton & Calkins, 2010). A number of educational thinkers have developed multiple postulations of definitions on parental involvement with different, but related characteristics. Hornby (2000) developed eight different types of parental involvement including communication, liaison, education, support, information, collaboration, resource, and policy.

Meanwhile, Epstein (2001) postulated six types of parental involvement which are popular among educators: parenting, communication, learning at home, volunteerism in carrying out school related activities, decision making, and community collaboration. While the Chinese have their own perspective of parental involvement that focuses four aspect. Firstly, parental academic supervision of their children's academic work including checking children's homework, preparing them for upcoming quizzes or tests. Secondly, managing their television time through restriction and supervision what they watch on television. Thirdly, communication of school related activities to their children including both curricula and co-curricular activities. Fourthly, providing the requisite resources to make children excel at school such as hiring of private tutors to enable the children cope with studies or paying for their after school programmes (Wang, 2015).

Due to the low performance in our schools and the increasing need to raise the level of school performance, eyes are now turned on the parents for their contribution in terms of parental involvement to achieving the educational mandate of an educated Jamaican, a vision for 2030. Consequently, schools are encouraged to involve parents more both in students' learning and school policy initiatives (Partnership for educational Revitalization in the Americas & CAPRI, 2012). Epstein (2001) works call for parental involvement in whatever form and change of attitudes on parents' part. Another contributor (Hoover-Dumsey et al.,

2005 looks at their involvement in homework initiatives, while LaRocque et al., (2011) looked at their beliefs about education as well as their expectations for their children.

Factors Influencing PI

Numerous studies have indicated that there is a plethora of factors that affect how parents are involved in their children's education such as the family economic background and social class (Luxuma, 2014; Velmally, 2012), cultural beliefs and attitudes held by the parents, and the educational achievements of the parents. Other factors include lack of knowledge (Asiimwe & Magunda, 2017), organizational structures of the school, and expectation of the parental involvements (Dove et al., 2015) as well as the inability to attend meetings due to the clashing of meeting time and work engagement activities at the work place. Most working parents according to Asiimwe and Magunda (2017) complain that they are incapable of making contribution to schools due to work related commitment. Asiimwe and Magunda (2017) further opine that a number of parents do not get involved in student's education because they do not have the knowhow while others believe that they do not have the cultural capital that allows them to effectively participate in school activities. Dove et al. (2015) have discovered that low-income levels of single parents coupled with differences in belief systems impacted the extent to which these parents involved themselves in their children's education.

A person's culture influences one's value system, the traditions embraced, as well the mind set and mannerisms (Johnson, 2012). Further, there is a lack of consensus between schools and homes as to what constitutes parental engagement. A variety of viewpoints has arisen, which results in very little or no support for home sustenance programmes instituted. An example of this is seen in some cultures where teachers are seen as family members and as a result of this, they are given the prospect of developing bonds with the family. Outside of

this, teachers who are unaware of the culture may not be able to create this personal contact and bond and as such, would not be able to be embraced by the culture regardless of the level of education or socioeconomic status.

Despite increasing educational awareness by different non-governmental organizations to increase parental engagement into children education in Jamaica, there are not many success stories particularly in rural areas. It is suggested that this arises due to the many factors that deter parents from being involved in their children's education. In Jamaica, parents focus more on their work than participation in school activities. This limits parents from sparing time for school activities (Malone, 2015). For example, in 2015, about 18 rural schools were closed due to lack of parental support and low school performance. This underscores the centrality of parental engagement in the academic achievement of the children.

It is an open secret in the 21st century Jamaica that despite the challenging socioeconomic conditions in the country, parents must spare time for academic affairs of their children. The current low performance in Jamaican schools would be cured when parents get more involved in their children's education. This involvement may take several forms including assisting children with homework and supervising them at home. In addition, parents can network with school authorities to achieve a common goal – better academic performance of their children. This could assist in raising the level of students' performance. Ultimately, it would enhance the country's chances of meeting the Vision 2030 on education and general development for the country.

Empirical studies on Parents Educational Attainments, and Educational Outcomes

Numerous studies have been done about parents and educational outcomes that could help shed more light on the study phenomenon. This review looks at both studies from the other

contexts for a generic perspective, and those from the Jamaican context to provide a local feel of the situation.

Studies from contexts outside Jamaica

Bakar, Mamat and Ibrahim (2017) examined the influence of parental education on academic performance with a focus on secondary education students in Malaysia. A descriptive survey research design was adopted. Data were collected from 200 students from a sample of 4 selected secondary schools. The influence of parental educational level on the academic attainments of the students was determined using a regression analysis. The study revealed an influence of educational qualifications of parents has on educational attainments of children. There was a correlation between high educational attainment of parents and academic achievement of children. The study however did not collect data from multiple sources using both quantitative and qualitative research approaches which would have provided a deeper description and explanation of the research phenomenon. This study provides both geographical and procedural departure from the current study.

Terfassa (2018) adopting a case study of a primary school established an existence of an association between parental education and academic performance of primary school students. Utilizing the Pearson's correlation coefficient, T-test, and one-way ANOVA, results from a sample of 202 students, revealed a positive, and significant relationship between a parent's education level, and the academic performance of the children. Study for example revealed that parents who supported their children with academic work were those with higher levels of education, and such children exhibited better academic grades at school. This study provides a conceptual logic to this study. It supports the main world view of the researcher that in Jamaica, the academic performance of children could be discerned from the academic attainments of their children. However, Terfassa's (2018) study was limited to a single school which may have missed out the variety of responses. In addition, it was drawn

from a different context which may differ from the Jamaican experience in terms of family culture.

Clearing House for Military Readiness (2020) from an analysis of peer reviewed journals established that educated parents exhibited behaviour with positive influence on the academic activities of the children leading to better school performance. The findings revealed that children learn from observing their parents. Therefore, the more time they spend with their parents the more they learn and improve their academic performance. It was also revealed that highly educated parents spend more time with their children compared with the less educated ones. This gives children of highly educated parents more opportunities to learn from their parents. It was also noted that the time the parents spend with their children when spent keenly to develop their children's talents, and skills yields better cognitive development of their children. Meanwhile, the study discerns that unlike the less educated parents, the children of less educated parents develop their talents and skills with little parental guidance and stimulus. This affects not only the growth rate of the talents, but also the quality of talent and skills developed.

Moreover, the Clearing House for Military Readiness (2020) further notes that highly educated parents are high income earners that are capable of investing adequate resources in their children's education such as providing them with textbooks to improve their learning. This study provided vital conceptual pegs on which this study hinged during the research. However, this study was limited in contextual, philosophical, and methodological aspects. Contextually, the study was carried out with a focus on the United States. In addition, it used literature review thus limiting itself to secondary data. Therefore, it may not provide credible answers to a study that seeks to understand a phenomenon from the lived experiences of those affected.

Davis-Kean, Tighe and Waters (2020) tested the assumption that the educational attainment of the parent, the parent's occupation, and family income predicted children's developmental outcomes including educational performance. The findings revealed that variations in the aforesaid resources determined the enormous academic outcome inequalities in children from diverse socioeconomic backgrounds. This influence was found to persist across the years of schooling. For example, children whose parents were of a higher socioeconomic status more especially, superior educational achievements performed better at school, joined schools with better academic standards, and were more developed cognitively compared to their counterparts from families with parents that had lower educational attainments.

Davis-Kean et al. (2020) further aver that educational attainment directly influenced family income. This effect determined the amount of resources the family resources at the disposal of the parents to support the education of their children. The study moreover revealed that the parents with higher education provided a more conducive home environment for the children to learn than those parents with lower levels of education were able to provide. This included, among others, parents' positive beliefs about and the expectations for their children. These were considered to provide cognitive stimulation to the children which encourages them to aim higher, and attain better academic grades in school. From these findings, the effect of educational attainment of the parents was found to have a knock-on effect on other factors within one's socioeconomic background that predicted academic growth of children, and their subsequent performance at school. These findings provide a conceptual justification for investigating the influence of parents' education on the academic achievements of children in Jamaica. It is not clear whether the variables would behave the same way in the socioeconomic setting of Jamaica.

Idris, Hussein, and Ahmad (2020) explored the correlation between parents' level of education and their children's academic achievements. The population comprised of Tenth class students from government high schools in Pakistan. The results of the study revealed that the level of parents' education positively and significantly contributed to their children's academic results. There was an association between the parents' level of education and the school grades of their children. The study was instructive regarding the researcher's world view. However, it was limited in context as it focused on Pakistan which is culturally different from Jamaica. It was pertinent to undertake the current study to appreciate whether in the Jamaican context, parental educational attainment also related to academic performance of children.

Ludeke et al. (2021) using full population cohorts from Danish administrative data examined the connection between parents' education and their children's educational performance. The findings demonstrated that the parents' education was a major predictor of the scholarly attainments of the children in elementary grades and this influence may persist through higher levels of education. The study noted that in the early years of their education, children whether adopted or biological benefited from parents modelling effect of transmitting knowledge and skills to the children. This study although was designed to test the genetic influence as well, it confirmed the fact that parents' education influences the education of their children. This study also provides instructive literature on the influence of parents' education on the children. The departure of the current study is that it focused on Jamaican experiences drawn from a developing country context which may differ from those of the Danish communities. Moreover, the current study adopted a mixed methods design to ensure that both lived experiences of the respondents, and other sources of data are interrogated to describe, and explain the relationships between the study variables, and the influence of the explanatory variable on the response variable.

Studies from Jamaica

Online review of sources of scholarly literature such as Google Scholar, Research Gate, Google Books, Microsoft Academic, Worldwide Science, Science.gov, Wolfram Alpha, Refseek, and Educational Resources Information Centre, among others, revealed a dearth of literature on the study phenomenon in Jamaica. While there are many studies on parents, and academic outcomes of children, most studies focused on parental involvement. They examined a variety of components that make up parental involvement, and its effect on academic outcomes of children in the country. One study appeared to have covered the two variables of interest to the researcher. The literature expositions from this study are provided in the next paragraph.

Handa (1996) examined the phenomenon of parental educational attainment and how it affects the children's academic achievement from the angle of the mother's education. Using a bargaining model of household decision-making, the author analysed variables that reflect the outside opportunities of household members and how they influenced household demand patterns. The findings revealed that the educational level of the mother predicted children's education outcomes. The conceptual claim of the analysis was that within a bargaining framework of a family, the mother's education had the potential of influencing the children's education. This would happen by way of altering the brokering power within the household itself. While studying teenagers in an empirical investigation, Handa (1996) used teenage grade attainment, and school enrolment in Jamaica to examine the behaviour of the variables.

The findings further claimed that mothers with higher levels of education influenced the academic performance of their children positively (Handa, 1996). They were able to justify provision of required time to the children's school work, and investment in their

educational programmes by the family. As a result, children were able to stay in school longer, obtain the necessary scholarly support to meet their academic requirements, attended school regularly, and scored better grades than those from families where mothers had lower levels of education. Conceptually, this study is relevant because it comes related aspects like the education of one of the parents in a home, and how this affects the educational outcomes of the children. However, the literature is dated and may not answer the question at hand that the current study sought to answer.

Summary of Literature, and Research Gaps

There is a plethora of consensus emanating from the different studies that have been reviewed, and which appears to endorse the current view that parental educational achievements influenced the academic outcomes of their children. The literature highlights the different dimensions of parents' educational attainments that may influence the children's academic life, and outcomes. It is well documented by numerous studies that SES of which parental educational level is a key ingredient, and is a determinant of parents' involvement in the educational activities of their children that ultimately leads to good grades (Harding et al., 2015). It is from this analysis that some researchers explained that parents' involvement levels may be limited, and displayed in various ways, and for various reasons (Clinton & Hattie, 2013).

Clinton and Hattie (2013) argued that parents' involvement may be intricately linked to their SES in two ways. One argument claimed that the higher the socioeconomic status of parents, the higher the level of their involvement experience in the educational matters. This is considered to be precipitated by the parents being more academically, and occupationally successful in the first place. The second assertion was that parents as beneficiaries of the education system tend to approve the education system that benefitted them and support it

when their children happen to go to those schools. Hence, they may be more involved in school activities in order to facilitate their children's success in the same system from which they benefitted. It is against this background that Dubow et al. (2014), and De Castro-Ambrosetti et al. (2005) seem to concur that parents' educational attainments impact children's academic achievement positively.

Parents as teachers and models is a concept in Urie Bronfenbrenner's ecological theory (1979). The parents are the first teachers of their children through modelling behaviours that guide the children, while the teachers of their children come in when the children have started developing their cognitive abilities. This is why it is imperative that parents set a good foundation on which their children's educational path can be built by offering them sound teaching, and positive modelling. In addition, as noted by Urhahne, (2019), parents, and teachers are the first educators of children. As such, they have a responsibility to assist the children in their early character formation. This argument had earlier been endorsed by Kasapi (2013), who asserted that whatever parents do, will form a lasting impression on the minds of their children. Hence, they are the greatest models, and influencers of their children through their academic trajectory. In support of these views de la Torre-Cruz et al (2019) also claimed that children observe, and mimic the values, and behaviours of their parents in forming their own.

Parental academic achievement which is a major driver of parental involvement (PI) in the education of the children is known to be a strong determining factor in the learning, development, as well as in the academic success of children throughout their educational journey (Clinton & Hattie, 2013; Mapp & Kutter, 2014; Garbacz et al., 2017). Literature strongly reveals that parents who took part in their children's education assisted their children to develop healthily, and courageously, and are higher academic achievers. Such children

reap great academic success arising from the positive relationship that subsists between them, and their parents (Garbecz et al, 2017).

Self-efficacy (SE) is another dimension of parents' involvement that influences children's education but which is also influenced by the educational attainments of the parents. This aspect of parental involvement emanates from Bandura's Social Cognitive Theory in which self-efficacy is constructed as the parents' discernment of their capabilities to organize, and perform certain courses of action necessary to realize selected types of outcomes (Bandura, 1986). According to Honicke and Broadbent (2016), self-efficacy is interrelated with academic outcome in a number of educational activities, and can direct a person's action for success in numerous academic domains (Idris et al, 2020).

Parents' academic level besides affecting parents' self-efficacy, parental involvement in the education of the children, socioeconomic background, and other factors, directly determines children's academic success. Its relationship with socioeconomic status within the context of educational research across OECD countries has confirmed that it is a key influencer of children's academic results (Thomson, 2018). Since socioeconomic status determines the academic level of children, it is alongside this context that Davis-Kean et al. (2019) claimed that family income which is an indicator of socioeconomic status is also a predictor of parents' educational attainment.

One of the gaps in the literature is that controversy still remains on whether parents' academic level is the main explanatory factor for the children's academic outcomes. Besides, literature provides conflicting results on how educational attainment of the parents influences academic outcomes of the children directly. For example, the assumption that the academic level of the parents is associated with their economic status may not necessarily hold. Cases of parents on the very lower economic rung of the socioeconomic ladder having excelled on

the educational scale without the possession of wealth or other components that determined socio-economic status exist. This suggests that this could very well be a result of the amount of positive cultural capital that these parents received. Where cases are observed, high socioeconomic status does not predetermine academic achievement.

Literature demonstrates that parents' disposition in terms of their knowledge, beliefs, and attitudes is another significant domain that influences children's academic outcomes. Whilst knowledge speaks to the information gained via education, beliefs communicate the value placed on education, and attitudes tell of the positive or negative feelings that are held towards education. Parents' positive attitudes are beneficial to children in many respects. These will result in higher educational achievements in children as parents will seek to motivate, encourage, and supervise the children as well as to provide a safe, and stable home environment for them to develop (Kalimuthu, 2018). However, whether this applies across time and space to be relevant to Jamaican parents, decision makers, and implementers was a question that could be answered by this study.

It is asserted that parental aspirations, and expectations are central to students' academic outcomes. In this regard, parents' aspirations are considered as having a positive influence on children's academic outcomes (Eccles & Wigfield, 2002; Sommerfeld, 2016). The literature claims that it is the aspirations, and expectations that parents have for their children that will propel them to be better academic outcomes. However, the extent to which this kind of cultural capital is reflected in the parents of Jamaica, and how it could be reflected in the perceptions of both parents, and children required to be explored. It is also claimed that without a proper home environment, and supervision of the children in their home environment, very little can be accomplished.

As Castro et al. (2015) assert that when parents supervise their children's learning activities within the home environment, children's academic performance rises to the optimum level. The claim indicates that parents with higher academic attainments provide better supervision, and support to the children, which leads to better academic performance. This has not been reflected in studies from the Jamaican perspective. Therefore, the generality of such an assertion remains limited in the Jamaican context.

A review of the empirical literature supported the conceptual direction of this study that parental academic attainment has predicted the academic achievement of children. It also suggested certain variables that it influences, which result in the overall academic performance of their children. Higher educational levels in a home were associated with higher academic performance of children. This was revealed from the literature across the globe. However, this literature was limited in a number of ways. In the first instance, the studies were not done in the Jamaican context to reveal the field experience about the study phenomenon. Secondly, the studies used various research designs, and approaches. But not one of them used a mixed methods design to collect data from a number of sources, and using various techniques for purposes of triangulation of findings. Philosophical, theoretical, and conceptual gaps also exist in the reviewed findings. These gaps justified the current study to proceed.

From the Jamaican experience, the author revealed an existence of the dearth of literature, relevant to parental academic attainment, and the academic achievement of the children. Most of the studies had focused on parental involvement, and academic achievement of the children. The studies therefore did not mainstream parental educational attainment in explaining the academic outcomes of their children as this study was designed to investigate. One study by Handa (1996) was acknowledged which provides helpful

highlights on the contextual matters of the study. However, the study data may not be used to explain the current status of a society.

Whether the contextual reality of Handa's study still obtain or not could be confirmed or disconfirmed by this study. Therefore, the current study was necessary to update the literature on influence of parental educational attainment on academic outcomes of the children. This would provide relevant, and current evidence-based policy suggestions that would help the academia, policy makers, policy implementers, parents, and children to appreciate the importance of parents' education on the academic success of the children in school. This would underscore programs on adult education, parents'-teachers' involvement initiatives, and development of other policy directives that would transform the parenting and cognitive development of the children for the future. The ensuing chapter of the study will feature the research methods and how the data were collected.

CHAPTER 3: RESEARCH METHOD

Introduction

In this chapter, the researcher describes the research methods that were chosen to conduct the study to reveal the possible influence of parental educational attainments on academic performance of primary school children in rural Jamaica. This chapter synthesises a description of the focus of the research. In addition, it describes the research methods and materials used. It further explains the researcher's worldview. The philosophical assumptions that guided the study are articulated. The rationale for application of the mixed methods are illustrated. It also addresses the study procedures and ethical assurances. Further, the chapter also provides full explanation of the quantitative and qualitative phases of the research, the sampling method adopted, and data collection and analysis procedures in the two phases of inquiry.

Research Focus

The intent of this study was to examine the possible influence of parental educational achievements (PEA) on students' academic performance of primary school children in selected schools in Jamaica. The sole purpose of this research focus was to collect the quantitative data first and then deepening the understanding of the quantitative results with an in-depth qualitative data collection and analysis. The research was guided by the following research questions: (1). *How does the educational achievement of parents directly impact the educational outcomes and academic success of their children attending primary schools in Jamaica? (2) What is the nature of the relationship between parental involvement in educational programmes and initiatives on the academic performance and educational outcomes of primary school children in rural Jamaica? (3) To what extent do parents'*

educational achievements serve as a reliable predictor of primary school students' academic

performance and educational outcomes in the context of rural Jamaica?

Methodology

The mixed method research involved an integration of both quantitative and qualitative data collection and analysis in a single study to yield answers to a specific research problem (Creswell & Plano-Clark, 2011). As a result of extensive study of mixed method paradigm, Creswell and Plano Clark synthesised several characteristics of the research design. The research methodology addresses potential limitations and biases in studying parental behaviour by providing a well-rounded and comprehensive approach. It was further hoped that it would contribute to the field of research on parental behaviour by allowing for a deeper understanding of the complexities involved in the phenomenon.

Under this methodological design, the researcher:

- Combined the procedures into specific research designs that direct the plan for conducting the study.
- Collected quantitative data in the first phase and qualitative data in the second phase following the research questions.
- Integrated the results from the quantitative inquiry and the findings from qualitative inquiry by merging them in a single logically flowing thesis.
- Framed these procedures within philosophical worldviews and theoretical lenses to answer the research questions.

The above characteristics postulated by Creswell and Plano-Clark (2011) were incorporated in the study accordingly.

Research Philosophical Stance

Saunders, Lewis and Thornhill (2009) argue that researchers must be conscious of their own philosophical assumptions. This realisation often times impacts the researcher's perception of information adopted. In addition, it influences the methodological approaches used, and how they deliver and convey the research findings. The philosophical stance of this study was the pragmatic approach. This philosophical orientation integrates both the interpretivist and the positivist worldviews. These are located in the qualitative and quantitative approaches respectively. As noted by Imenda (2014), the way a researcher sees the world is the way the person approaches studying it.

The philosophical, and paradigmatic postulations reveal how the researcher views the world, how the researcher should approach studying it, how value propositions would be made about the findings and their meaning to the researcher, and to the world. In studying social issues like the possible influence of parental educational attainments on the educational outcomes of their children, a single reality may not exist, but multiple realities may spring up thus limiting the applicability of the realists' ontology as a single view of the world that a researcher should use to study the reality (Imenda, 2014). In addition, the existence of both objectively and subjectively verifiable phenomena in the study limits reliance on the relativists approach requiring a convenient combination of both realist and relativist paradigms in a single paradigmatic philosophical perspective.

Research Philosophy

The main purpose of social science research is to appreciate social reality from a number of perspectives of different actors in the social interaction to explain how such standpoints shape the events in real lives of the actors (Saunders et al, 2009; Moon & Blackman 2014). In this study, on the one hand, two principal actors are involved in the social reality, that is, the parents, and their children. On the other hand, there is a belief that

the level of parents' educational attainments influences children's educational outcomes. An input-output or cause-effect kind of relationship seems to exist within the interactions between the two actors. With such anecdotes in place, it is imperative that the researcher plainly states what their research philosophy entails. This exposition guides the readers on where the researcher was coming from to make the assumptions made and to appreciate the research plan that was followed. In addition, it assists the researcher to explain the research results or findings. Moreover, it enables the researcher to make the value propositions out of the study. This includes the recommendations made to the various stakeholders for future action.

In an investigation like this one, pragmatism is the philosophical stance taken. This research paradigm has its philosophical foundation in the contribution of Maxcy (2003). Pragmatism as a research paradigm or worldview is philosophical in nature and, therefore, incorporates a number of philosophical jargons to aid greater understanding of the theoretical framework. These include: (i) axiology which provides assumptions on the beliefs of the role of values and morals in the research enterprise; (ii) ontology that focuses on the assumptions about the nature of reality; (iii) epistemology with the suppositions about how we know what is known about the world; (iv) methodology which is regarded as the common understanding of the best way of gaining knowledge about the world; and (v) the rhetoric or the common understanding of the research language used to explain a phenomenon (Creswell, 2009).

The term pragmatism originated from the Greek word "pragma," which means action, and in which, underpins the central idea of pragmatism (Creswell, 2009). Pragmatist philosophy embraces the assumption that: (i) human actions cannot be divorced from the person's past experiences; and (ii) the actions cannot also be alienated from the beliefs that have originated from those experiences. Hence, human thoughts are thus inherently linked to actions. As a result, people take actions based on the possible consequences of their action,

and they use the results of their action to predict future consequences. One of the central tenets in pragmatic inquiry is the held view that all research should proceed from a desire to produce useful and actionable knowledge, which ensures practicality and relevance. Thus, it believes that there is no single way to arrive at reality and there are different ways of interpreting or conducting studies. Therefore, it speaks to the view that there are multiple realities in every situation. Likewise, the uses to which information obtained from discovering the reality could have multiple applications.

As a research paradigm, pragmatism supports the suggestion that the researcher should employ philosophical or methodological approaches that are best suited for a particular research problem investigated (Tashakkori & Teddlie, 1998). As a result of this observation, the mixed methods approach was adopted as supported by Creswell and Plano-Clark (2011), Johnson and Onwnegbuzie (2004), Morgan (2014), and Tashakkori and Teddlie (1998). The central focus here is placed on the results of the research questions rather than the methods adopted. As a pragmatist, the notion that the engaging nature of social sciences can access the reality principally through different approaches holds ground (Maxcy, 2003).

A major contention of this pragmatism, though, is that human action and beliefs are resided in the consequences. The paradigm also holds the beliefs that reality is always in a state of flux. Firstly, action cannot be separated from its state and context. This presupposes that there are no common truths but defensible beliefs that regulate our actions. Our repeated experiences form the beliefs and are expected to predict outcomes. Secondly, human actions are linked to consequences. This suggests that the situation of the action changes. The situation is considered to be changing and, therefore, human actions rely on their worldview, which have become socially shared sets of beliefs overtime. It is plausible to infer that under pragmatism as a research philosophy, no two persons may have the same exact experience.

However, shared experiences exist among people exposed to the same realities over time. Pragmatism is underpinned by the belief that both knowledge and reality are determined by the socially construed beliefs and habits, and the claim that knowledge is always based on experiences which are shared. Pragmatism is considered to be more than just a philosophical position. It also discerned as a set of philosophical tools that may be used to address a problem in a practical way. Therefore, it is embraced by practically minded researchers as a method of inquiry (Creswell & Plano- Clark, 2011). Additionally, the research approach and design adopted are elucidated in the next subsections

Research Approach and Design

In this study, the researcher used the explanatory sequential mixed-methods (qualitative-quantitative) research design to achieve the research aims and objectives. Mixed-methods research is one in which the researcher integrates both the qualitative and quantitative strands in a single study to answer research questions that can only be addressed by the integration of both traditional approaches. This ensures comprehensive coverage in terms of breadth and depth of understanding and verification that a singular approach cannot exhaustively and conclusively undertake (Pinto, 2013). Mixed methods research strands, according to Creswell and Plano-Clark (2011) encompass the full process of both qualitative and quantitative data collection and analysis. This starts from what questions are posed for inquiry, to what data will be collected and the methods and instruments that will be used to analysis and interpretation of the results and findings. Besides this, the mixed methods approach is known to enhance knowledge and cross validate the findings of a study (Onwuegbuzie & Johnson 2006; Creswell & Creswell, 2017; Johnson & Christensen 2017).

The mixed-methods approach has become the design of choice in popularity in the last decade, particularly as it relates to educational research (Creswell, 2012). So far, there is

no unanimity on how the integration of the two approaches is to be done in any study. However, there are many ways of integration (Creswell & Plano-Clark, 2011). One scholarly reality about mixed methods study is one in which the design is done with philosophical assumptions in mind. The philosophical assumptions serve as a guide to how the data are collected and analysed using one approach to integrate the other. The central idea though, is that the researcher integrates both qualitative, and quantitative strands of inquiry into a single approach to answer research questions that could only be addressed by the integration of the two traditional approaches. This would provide the comprehensive approach to meet the research purpose that needs breadth, and depth of understanding and verification that multiple perspectives of social reality would require (Pinto, 2013).

Mixed-methods research strands, according to Creswell and Plano-Clark (2011) encompass the full processes of both quantitative and qualitative data collection and analysis, from posing inquiry questions to interpreting results. In addition, the mixed-methods approach is known to enhance knowledge, and cross validation - triangulation of the findings of a study (Onwuegbuzie & Johnson, 2006; Creswell & Creswell, 2017; Johnson & Christensen, 2017). Moreover, a mixed-methods design is critical to understanding the phenomena, and supporting the paradigm of the research by capturing the rich in-depth insights from the participants' perspectives (Weeks & Schaffert, 2019).

A qualitative research design is referred to as a "type of research design that speaks to the in-depth study using observation, face-to- face interviews or focus group discussions. For this study, the qualitative research design was the focus group discussions which involved the collection of data from people in their normal setting. On the other hand, quantitative research is a research design that uses correlations to determine the strength of an association

that exist between two or more variables. It was decided that the mixed methods approach was the best option for this study.

Rationale for the Mixed Method Approach.

In this research, the researcher explains the explanatory sequential mixed- methods approach adopted to achieve the research aims, objectives, and answer the research questions. The mixed-methods approach has become the method of choice in popularity in the last decade, particularly as it relates to educational research (Creswell, 2012). So far, there is no unanimity on how the integration of the two approaches can best be done in any study. However, there are many ways of integration (Creswell & Plano- Clark, 2011). Integration of the quantitative and qualitative approaches is done in one of four ways: (i) explaining quantitative results with a qualitative approach; (ii) building from qualitative results to a quantitative component; (iii) reconciling the quantitative and qualitative results; or (iv) weaving one approach within the other. In the case of the study under consideration, the method of explaining the quantitative results with the qualitative approach was employed.

One scholarly thing about mixed method study is that it is one which is designed with philosophical assumptions in mind as well. The philosophical assumptions serve as a guide as to how the data is collected and analysed using one approach to integrate the other. The central idea though, is that the researcher integrates both qualitative, and quantitative strands of inquiry into a single approach to answer research questions that could only be addressed by the integration of the two traditional approaches. This would provide the comprehensive approach to meet the research purpose that needs breadth, and depth of understanding and verification that multiple perspectives of social reality would require (Pinto, 2013).

The mixed-methods design was chosen over other designs because the mixed method approach design integrates the philosophical framework of both post positivism and

interpretivism (Pinto, 2013) linking qualitative and quantitative data in such a way that the research issues are correctly interpreted and explained. Besides, the mixed methods design presents a logical ground methodologically of smaller cases. Simply put, the mixed methods design allows the researcher to respond with sufficient depth and breadth. This method, and design would provide the rigour of the research process. The design was intended to provide a systematic process of cross-checking of information for possibility of multiple realities, and conclusions through the use of multiple methods, and or data sources (Johnson & Christensen, 2017). Furthermore, the researcher believes that the quantitative or the qualitative design, if taken singly, would not adequately respond to the research objectives due to the inherent weaknesses in each approach. Adoption of both methods complemented each other as well as served as triangulation of the two methods to ensure that the weaknesses of one approach are compensated by the strengths of the other.

In this study, the qualitative method; for example, was helpful in identifying certain characteristics such as attitudes, values and beliefs of respondents, which cannot be reduced into numbers or adequately understood without the referencing of the lived context. One weakness of this method is that it fails to provide the description of the experience of the affected population. Therefore, mixing these two methods into a single study will offer the opportunity as well as the potential for policy makers to understand, contextualize, and develop informed policy interventions.

In adoption of mixed-methods, on the other hand, there are weaknesses inherent in both quantitative, and the qualitative approaches. In the qualitative inquiry, there are three weaknesses that have been identified (Creswell & Plano-Clark, 2011). Firstly, the results in the data are not objectively verifiable. Secondly, the analysis process is labour intensive, and requires categorization, and recoding. Thirdly, it requires skilled interviewers to execute the

data collection process. Meanwhile, the quantitative methods are not good at capturing feelings, can be open to misrepresentation and misinterpretation, and may require high numeracy skills. As a result of the weaknesses inherent in both designs, an eclectic approach of a mixed-methods design provided the depth, and breadth required of the study undertaken.

In applying the mixed-methods design, a sequential explanatory approach was applied by first amassing the quantitative data, followed by qualitative data collection (Creswell et al, 2007). The researcher used the quantitative findings to identify areas that needed further explanation that the focus group discussions provided emphasis on in order to have an in-depth explanation of the research phenomenon. The approach was able to permit collection of adequate data to answer the research questions as sequencing the study permitted development of qualitative questions that precisely aimed at filling any gaps not adequately covered by the first strand of inquiry. This allowed the researcher to check for convergence in the findings as well as providing final inferences that were based on both results (Mertens, 2010). Use of the two approaches ensured that data were collected from a variety of sources applying numerous data collection methods, and instruments. This enhanced in-depth coverage of the research to ensure that the research phenomenon was adequately covered.

Quantitative Method

The researcher collected the quantitative data in phase 1 of the study from a sample of 288 respondents divided into two sets of questionnaires: parents' and children's questionnaires. The parents' questionnaires were self-administered (see Appendix C) while the children's questionnaires were administered by the researcher to the children of the parents who participated in the study (See Appendix E). The rationale behind the researcher administering the children's questionnaires was that within grades there are some students who are slow readers and the researcher wanted to make sure that once the selection of the

sample was drawn all the students within the sample were given a fair chance to answer all the questions on the questionnaire.

Besides, the researcher wanted to get each student's verbal assent for participating in the study, even though the parents of the students had signed the consent forms on their behalf giving full consent for them to participate in the study. The parent's questionnaires consisted of twenty-five questions in three sections: A, B and C. Section A was purely demographics in nature. Section B had a 4- point Likert scale questions scored on the basis 4= Often, 3= Sometimes, 2= Seldom and 1= Never. Section C, consisted of 16 questions on a 5-point Likert scale scored on the basis of 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) and 5 (strongly agree). The children's questionnaire had two sections: A and B. Section A consisted of five demographic questions while section B had nine questions scored on a 5-point Likert scale scored on the basis of strongly disagree to Strongly agree (see Appendix E). The children's questionnaires were done as a support to the parent's questionnaires.

During the administration of the questionnaires, permissions from the gate-keepers (principals) of the five schools were sought to allow the instruments to be administered in their schools (see Appendix A). The research complied with the protocols of the Ethics Committee. Attached to each questionnaire instrument as an introduction of the researcher and a copy of the parents' consent form (see Appendix B) which each parent signed to indicate his/her willingness to participate in the study along with his/her child from the participating schools. The consent forms were mandatory for the parents to sign since each child participant was a minor and could not give permission to participate in the study unless this was obtained from his/her parent(s).

A purposive sample of two hundred twenty eight (288) comprising of students and their parents in equal proportions was selected from the five schools designated for the study. The students' sample was drawn from each school's cohorts of students from the ages of 10 years to 12 years old.

Procedure

The children's questionnaire survey was administered to each child selected by the researcher himself at the school. The researcher guided the respondents during the filling in of the questionnaires by each participating child. The researcher provided each child with a parents' questionnaire in a sealed envelope to take home for his/her parent to complete. Questionnaires had appropriate guidelines to enable them appropriately fill in the questionnaires. The parents were requested to read the instructions on filling the questionnaires carefully before completing them. They were guided on what should be done to ensure that the questionnaires are filled as required. The parents, having duly filled the questionnaires, sent them back with their children to school after a week, in the same envelope, and dropped them at school for the researcher to collect.

Qualitative Method

The qualitative aspect of the study took phase 2 of the data collection process. According to Creswell (2012), and Miles, Huberman and Saldana (2014), the qualitative research inclines to focus on understanding naturally occurring setting and on events that may help to develop an in-depth understanding of the issue studied under the theme: *how does the education achievement of parents directly impact the educational outcome and academic success of their children attending primary school in rural Jamaica.*

The focus group was purposively selected from the sample of 144 parents who were previously selected for the quantitative aspect of the study. Care was taken to ensure all the participants had children attending the school and that they were free from mental challenges and that they had all signed the parents' consent form for themselves. The researcher's aim of the focus group was to get a first-hand information from the parents themselves as to how well they did in school and how that knowledge assisted them to give academic support to their children in school-related activities given as homework.

A focus group discussion protocol was first crafted which gave the title and the intent of the study and to assure the participants that the information garnered from the discussion would be held in the strictest confidence and that the true identity of the respondents would not be revealed. A pseudonym would be used in instances where a name would be required for a statement. The participants were reminded that if they felt uncomfortable with any questions that facilitated the discussion, they were not bound to respond as all responses were voluntary. To facilitate the discussion of the focus groups, the researcher crafted the discussion protocol with eleven (11) questions that sought to get the responses that mirrored the research question that dealt with the qualitative aspect of the study. Each focus group was allowed approximately 70 minutes for the facilitated discussion which was conducted by the researcher. The reason for using the online platform was to reduce the face-to-face contact of the participants due to the COVID-19 pandemic restrictions on gathering of groups. This modality has become one of the common features of teaching and learning in many schools due to the COVID-19 pandemic restrictions on face -to face contact in our schools.

Focus groups are used in qualitative research to gather respondents' perspectives in an interactive group setting. By creating a permissive forum, the researcher encouraged participants to share different perceptions. The goal of the FGD was to secure diversity of responses from the participants in their own words. Besides, it obtained a rich and detailed

data about individual experiences (Braun & Clarke, 2013). Finally, both quantitative and qualitative data were integrated into common themes to determine if they converged on a common interpretation of the case under consideration (Fraenkel & Wallen, 2010).

Participants

The focus group discussion consisted of fourteen (14) respondents grouped in 2 groups of 4 respondents each and one group of 6 respondents with discussion held at different times for each group. The fourteen (14) respondents were selected from the 144 parents who were purposively selected for the questionnaire survey. Participants' contact numbers were collected from the school to facilitate communication through the online platform.

Procedures

There were fourteen (14) persons selected for the focus group discussions (FGD) and were placed in three groups: 2 groups of 4 each group and 1 group of 6 respondents. A WhatsApp group was installed on the researcher's cell phone, and the contact number for the WhatsApp group was conveyed to each of the fourteen persons after they were placed in one of the 3 groups. The discussion for each group lasted about 70 minutes. The discussion was moderated by the researcher's nominee, an experienced classroom teacher, with the aid of a discussion protocol developed by the researcher (see Appendix D). The researcher was the one who took notes of the discussion as it proceeded. Each focus group discussion included both male, and female participants to ensure perspectives across gender types were given prominence, and captured in the process. Further discussions on the study, the population, and sampling methods employed are expounded in the ensuing subsections.

Population and Sampling Method

The ensuing subsections provide information on the population and the sampling of the study. The population or the target group is defined as that group which will answer the

study questionnaires from which conclusion can be delineated from the study (Creswell & Plano -Clerk, 2011). The subsection also defines the population by establishing boundaries or conditions that specify who was included or excluded from the population. In the case of the sampling, the section gives information on the sample that was selected from the population that was selected.

Population

The population of a research is said to be a well-defined collection of individual or objects possessing a similar characteristics (Creswell & Plano-Clark, 2011) Persons or objects belonging to a population usually have something in common or common traits or characteristics that bind them together. The population 1200 students and their parents was drawn from selected public primary schools such as the Point Hill Primary, Chapel Hill Primary, Bay Point Primary, Rock Hall Primary and Negril Point Primary school (pseudonym). The 5 named primary schools were selected on the basis of possessing similar characteristics. They are all public schools and located in the rural areas within the same parish in Jamaica. These students comprised of boys and girls who are taught using the National Standard Curriculum which is a common curriculum used in the all-primary schools.

Sampling Method

According to Creswell and Plano-Clark (2018), for quantitative studies, a sample is referred to as "the group of subjects or participants from whom the data are collected." The researcher used a sample size of 144 students and 144 parents making a total of 288 respondents which constituted the entire sample size of the study. The sample size was purposively selected from students from one of the grades 4-6 from the rural schools, depending on the number of students in those classes. A purposive sample is a non-probability sampling technique in which the researcher depends on his or her own judgement

in selecting participants of the study population to participate in the study. In this case, the researcher believed that he was capable of obtaining a representative sample by using his better judgement in making a selection. This type of sampling technique saves time and money. It is based on homogeneity of participants in terms of them possessing similar characteristics or belonging to the same group.

The schools from which the sample was drawn were classified as small rural schools with an average of 240 students on roll and so to get good representation of the population, the sample was drawn from each of the five schools, considering that the wider the spread of students, the better representation of the sample from the schools. The purposive sampling method was to ensure that the students could read and would not have problems in reading through the questionnaires even though the questionnaire survey was administered by the researcher personally. Besides, they were from the same class and lived in the same area. It is common to find many rural schools having reading problems especially among the male cohorts in all grades. Since the students were taken from one of the grades 4-6, the age of the students could be taken to be between 9 − 12 years of age which is indicative of the class bands.

Special care was taken to ensure that the children were not mentally challenged and had reached the stage where they could read for themselves. The children were briefed about the study and verbal assent was sought from each child and was granted. Special care was also taken to ensure that parents were mentally sound and had no noticeable mental challenge. Parents who were deemed to have mental challenges were excluded from the sampling. This was ascertained when the researcher went through the names of the students and their parents along with the class teachers from the five participating schools to ensure that the sample was purposively selected. According to Ravitch and Carl (2016), purposeful sampling is one where the participants are selected based on certain experiences or

knowledge of a specific phenomenon. The purposive sampling procedure was used in this study because the individuals selected were in the opinion of the researcher well informed about the research phenomenon, and would therefore be expected to provide the information needed to understand the research problem (Creswell & Poth, 2018). Parents who did not have a child attending the classes of interest were not selected to participate in the study since each child was paired with their parent.

The focus was on rural public schools because that is where challenges of low academic outcomes of primary school children are thought to be more pronounced than in urban areas. In addition, many persons living in rural areas tend not to send their children to school for the full duration of the school week due to economic reasons, hence most of the students exhibited poor reading skills. This was one of the main reasons that attracted the researcher for wanting to conduct the study. It was assumed by the researcher that perhaps parents in those communities seemed not to focus primarily on their children's educational achievements as observation revealed that in many instances, children report to school without the required textbooks or learning tools. Moreover, irregular attendance was noticeable, and children are tasked with adult duties, and responsibilities most of the time when they are absent from schools. On the other hand, the few children who achieved seemed to have been parented by achievers. These observations and more prompted the researcher to undertake the study.

A representative sample size of both students and parents was needed to corroborate and to understand the challenges, and issues that fully exist between the two sets of participants, parents and children in relation to the academic outcomes of children. As noted by Creswell and Poth (2018), a representative sample should be at least 10 percent of the population for small populations. The sample selected was considered to be enough to provide the researcher with adequate responses to answer the research questions meeting the

quantitative, and qualitative standards of research. This helped the researcher to fully understand the degree to which the phenomena existed in specific rural public schools particularly at the primary levels of the educational system. Based on one of the disadvantages of using a purposive sampling method, it does not allow the researcher to generalize the findings on the general population studied.

In qualitative research, small sample sizes help to produce the in-depth responses necessary to answer the research questions. The focus in qualitative research is not the population size but obtaining the necessary and sufficient data to back the research purpose and answer the research questions (Hamersley, 2015; Burkholder et al., 2016). In so doing, the researcher was careful to ensure that the concept of data saturation was upheld in selecting the focus group since sufficient information was needed to replicate the study. Failure to reach this target, would compromise the research quality as well as the content validity of the study (Bowen, 2008). Hennink et al. (2017) described saturation during qualitative research in two forms: code and meaning saturation. Saturation refers to the stage where no additional codes are emerging from data obtained, while the latter refers to the situation where no further views are arising from data collection. It is at this point the researcher stopped recruiting for the focus group and allowed the 14 participants to remain without selecting additional participants to take part in the qualitative inquiry of the study. It was noted the views from the 14 participants were adequate, since additional persons to the group were not contributing any new information to the discussion but were only repeating what was already said by the other members of the group.

For both quantitative and qualitative methods, all participation was voluntarily granted with no assurance of compensation. Participants were informed that they had the option to withdraw from the research at any time without any obligation to the researcher or other consequences. The inclusion and exclusion protocol were strictly adhered to. Only

students greater than 10 years old in grades 4 - 6 of the attending schools along with their parents were recruited for participation. The emphasis was placed on those students and parents living within the specific geographical location of the school. For the exclusion protocol, parents who were suffering from mental challenges or contagious diseases as well as those who did not have children attending those schools under consideration were not allowed to take part in the study.

The gatekeepers, that is the principal of each school assisted in the recruitment process. The gatekeepers were asked to assist in the recruitment exercise to which they consented. Because the children were minors, they needed consent from their parents or their guardians. The principal from each school selected twenty-nine (29) students (along with their parents) from across grades 4-6 and briefed them of the study. The parents were then contacted by telephone to invite them to participate in the study and to ascertain their willingness to do so. For every parent who accepted the invitation to participate, their child was recruited as well. A sealed envelope containing a consent form for the parent to sign, giving full permission for their child to participate in the study, along with a questionnaire for the parent to be self-administered were sent to the parents by way of the children.

Duly signed consent forms permitting children to participate were to be returned to school two days after receipt. Having received the signed consent forms from the parents giving permission for their child to participate in the study, the researcher administered questionnaires to the children at the school. The parents' questionnaires were to be sent back to the school after the parents had completed them along with the completed consent forms. This was done within 7 days. The children returned with both the signed consent forms, and the completed questionnaires to the schools on or before the appointed date. The next

subsection will illuminate the study materials/instrumentation and research tools employed in the study.

Materials/Instrumentation of Research Tools

Research instrumentation speaks to the tools used for the collection, measurement and analysis of research data. The researcher took special care to employ the appropriate research instruments for data collection. In the study under consideration, the researcher used the questionnaires for collecting quantitative data, and focus group discussion guide to collect qualitative data from the parents. One advantage of using the questionnaire as a data collection tool was that it was easy to test its validity, and the reliability of the data derived there from. The questionnaire also can easily preserve the anonymity, and confidentiality of the respondents. Moreover, questionnaires are easy to administer, can collect data from many respondents quickly, are cheap to use, and non-obtrusive as the researcher does not need to be physically present when the respondent is filling in the responses.

In both qualitative and quantitative studies, the research instruments were the tools needed to collect the research data (Ravitch & Carl, 2016). According to Burkholder et al. (2016), within the context of qualitative research, the role of the researchers can be likened to an instrument and, it was for this reason that the researcher crafted the prompts for the focus group discussions to ensure guided data collection. The focus group discussion prompts (see Appendix D) were used to guide the participants as to the kind of responses required from their lived experiences. The focus group discussion was administered through an online platform on WhatsApp group. The discussion prompt (see Appendix D) was used as a qualitative tool, and was crafted to elicit the in-depth information to explain the quantitative findings gained from the questionnaires. It served to triangulate the quantitative aspects of the study with depth and breadth of explanation of the research phenomenon. In continuance of

the study, the research data analysis techniques employed are illuminated in the proceeding subsections.

Data Analysis Techniques

As mentioned earlier, the study used a mixed-methods design combining the qualitative and quantitative research methodologies to collect, and analyse the data. Data analysis techniques refer to the procedures that are involved in the analysis of the data. The techniques employed are dependent on the type of data to be analysed. However, the mixed-methods approach required a variety of techniques. The techniques appropriate for the mixed-methods approaches are dealt with separately in accordance with the research questions, and hypotheses. The two main quantitative data analysis techniques used in research are the descriptive statistics – mean, median, mode, percentage, frequency, and range, and standard deviation for measure of dispersion for single variable analysis; and inferential statistics – correlation, regression, and variance.

The descriptive statistics are ideal for analysing data to enable the researcher describe the status or level of occurrence of a certain statistical aspect in the population like the level of educational attainment of parents or the academic outcomes of the children in a school or number of schools like it was for this study. Descriptive statistics help the researcher to summarize individual variables, and find patterns in the data. Meanwhile, inferential statistics are intended to analyse multiple variables to generalize, and make predictions about their behaviour in the general population. The correlation enables the researcher to establish relationships/associations between two variables, while a regression predicts causal relationships between two variables. Meanwhile, analysis of variance tests the extent to which two or more variables differ.

This study adopted use of both descriptive statistics – mean and standard deviations to summarize individual variables, and demonstrate the patterns within the data, and inferential statistics – correlation, and regression analysis to depict associations, and predict the relationships between the variables studied. For example, the correlation depicted the association between parents' educational attainment and children's academic performance, while the regression analysis predicted the influence of parental educational attainment on children's academic outcomes. It was also used to measure the direction, magnitude, and significance of the influence of the explanatory variable on the response variable during testing of the research hypotheses.

Quantitative Data Analysis

Within the framework of the quantitative analysis approach used, the independent variable was the parents' educational attainment with three sub-sections of dependent variables from the three questions. These were: (i) impact on educational outcomes and academic success. (ii) Parental involvement in educational programmes and initiatives on academic performance and educational outcomes. (iii) Parental educational achievement being a reliable predictor of primary school students' performance and educational outcomes. To address the aforesaid, this research addressed the following research questions and hypotheses:

RQ 1. How does the educational achievement of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica? This was tested by the following research hypotheses:

H1o. There will be no evidence that the educational achievement of parents directly impacts the educational outcomes and academic success of their children attending primary school in rural Jamaica.

 H1a. There will be evidence that the educational achievement of parents directly impacts the educational outcomes and academic success of their children attending primary school in rural Jamaica.

The independent variable in RQ1 was the educational achievement of parents –and the dependent variable was the students' average score in 4 core subjects for four years. A regression analysis was used to predict the influence of the independent variable on the dependent variable. A coefficient of determination was run to provide the level or extent the independent variable measured influenced the dependent variable in order to answer the question.

RQ2. What is the nature of the relationship between parental involvement in educational programmes and initiative and the academic performance and educational outcomes of primary school children in rural Jamaica? This was answered by testing the following hypotheses:

H2o. There will be no evidence of relationship between parental involvement in educational programs and initiative and the academic   performance and educational outcomes of primary school children in rural Jamaica?

H2a. There will be evidence of relationship between parental involvement in educational programs and initiative and the academic performance and educational outcomes of primary school children in rural Jamaica?

In answering RQ2, a Pearson's correlation coefficient was used to test the hypotheses under this question, and therefore, answer it. Pearson correlation coefficient was used to measure the strength and direction of the relationship between the two variables (parents' educational attainment and students' average score in core subjects for four-year period). The

coefficient of determination, and a regression model summary were also used to ascertain the results of the measurement.

RQ3.   To what extent do parents' educational achievements serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica? This question was determined by testing the following hypotheses;

H3o. There will be no evidence that parents' educational achievements serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica.

H3a. There will be evidence that parents' educational achievements serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica.

To measure RQ 3, Kendall's tau b analysis, descriptive and support statistics were used for measurements. The Kendall's tau b correlation was used to measure the strength and directional association between two variables (parental involvement and students' average score in core subjects such as English Language, Mathematics, Social Studies, and Science). In addition to the Kendall's tau b correlation coefficient, a descriptive analysis for support statistics from the children's questionnaire were used to assist in the measurement of the question. These analyses were made possible using computer-based Statistical Package for Social Science (SPSS version 28.0 for Microsoft Windows).

Qualitative Data Analysis

The data derived from the qualitative method of inquiry which used a focus group discussion were analysed through the techniques of:

i.   Narrative analysis

ii. Thematic analysis

These two approaches are simple to employ during qualitative data analysis, and reporting. They may be manually applied when the researcher is knowledgeable, and skilled in analysing text data or audios drawn from the field during data collection. The process of analysing the qualitative data using narrative, and thematic analysis are provided in the next subsections.

Narrative Analysis

Narrative analysis technique is one which serves as a means for understanding the pattern of human life. The technique is used to analyse content from various sources of qualitative data. Narrative inquiry permits researchers to present experiences holistically in all their complexities and richness. In addition, it offers researchers a rich framework through which they can explore the ways humans experience the world portrayed through their stories (Webster & Mertova, 2007). Through stories, and experiences shared by the respondents, the researcher was able to obtain insights that helped to explain further the research questions.

Mixed-methods researchers consider that the quantitative methods alone are inadequate to capture the complexities of human issues, which are considered significant by the participants in the research due to a lack of scope that was embedded in the methods to deal with the complex human centred subjects. Therefore, it is believed that narrative data analysis techniques have a particular value to contribute to addressing the question of complexity, and cultural human centeredness within the context of research (Webster & Mertova, 2007). In addition, they explain a subject on how the parents' educational attainment influences a child's academic outcomes, stories of the parents on how they use the educational knowledge and techniques to help children with their school work can be imperative. Similarly, sharing with the children their academic success stories from being helped by their parents would be instrumental and enriching to quantitative findings about the

influence of parental educational attainments on children's academic outcomes. It is to this effect that this technique was adopted to enrich the study.

Thematic Analysis

This is a technique of data analysis that involves the researcher reading through the qualitative data set in searching for patterns in the meaning of the data to find themes – patterned responses or meaning (Braun & Clarke, 2006). The meanings, patterns, and later themes are derived from the data and are used to inform the research question(s). Nowell et al. (2017) argue that themes are theoretical perspectives that demand a greater interpretation, and integration of data, and hence a theme can arise irrespective of the number of times an idea or item related to the theme appears in the data set. It involves reflexivity, and the researcher's subjective experience helps in making sense of the data.

Therefore, thematic analysis involved sorting out the data set thematically to identify, and analyse patterns that kept repeating over, and over again (Braun & Clarke, 2006). It is a method for describing data, but it also involves interpretation in the processes of selecting codes, and constructing themes. One distinguishing feature of thematic analysis is its flexibility to be used within a wide range of theoretical, and epistemological frameworks, and to be applied to a wide range of study questions, designs, and sample sizes. As a result, Braun and Clarke (2006) argue that thematic analysis can stand alone as an analytic technique, and be integrated in other qualitative research methods.

During the qualitative analysis, the researcher first had a familiarization exercise which included reading through, and examining the data for broader themes. Codes were made at this stage to see what the data reflected. This was followed by looking for themes in the codes. During this exercise, the researcher made entries in the reflexivity journal indicating how codes were understood, and integrated to produce themes. The third activity

was reviewing themes to establish that everything that was classified as a theme matched the data explaining how the themes were comprehended, and they are backed by evidence in the data, and how they were connected with the codes.

The fourth activity was finalising themes from the data. This included labelling and finishing the themes, explaining them in depth, ensuring the themes matched the research questions, and in the reflexivity journal, explaining how the topics were chosen. At this point, the research was able to identify which findings will be added to the quantitative results to deepen the explanations, and those that were to be reported as verbatim statements because of their strengths in elaborating certain issues about the specific themes of the research. These were finally integrated into the report in a logically flowing thesis. The research validity and reliability of the research findings of the study is fully articulated in the ensuing subsections

Validity, and Reliability of Findings

Every scientific study to be of utility to any academic or practitioner audience must provide findings that are accurate, reliable, and credible. These features in this study were ensured as explained in the subsections that follow.

Validity and Reliability of Quantitative Findings

The researcher checked the data collection instruments for accuracy of the statements in the questionnaires. This included a review by the research supervisor to ensure that the statements were correct, relevant, simple to follow, logical, and would elicit the required data to answer the research questions and meet the research purpose. In addition, the questionnaires were also subjected to a scrutiny by three other researchers with knowledge, and skills in mixed methods to obtain their opinions. From their comments, the researcher calculated the Content Validity Index. For the parents' questionnaire, 30 constructs were checked. The researcher calculated the Content Validity Index (CVI) using the formula;

CVI= number of items considered valid by the reviewers divided by the total number of items reviewed.

From the parent's questionnaire, CVI = 27 out of the 30 items of the questionnaire were regarded as valid for the research questions resulting into a CVI of 0.90. The researcher made appropriate adjustments to improve on the clarity, relevance and comprehensiveness of the three constructs considered by the reviewers as not accurate from the assessment and they were validated again by the supervisor who approved them for inclusion on the questionnaire. Regarding the children's questionnaire, 13 constructs were reviewed for validity. The review recommended that 11 of the 13 constructs were accurate for the study while 2 needed revision. This gave a validity index of 11/13 = 0.846 or 0.85. The two questions were also revised to enhance their accuracy by making them more clear, relevant, and comprehensive for inclusion on the research instrument. According to Creswell and Plano-Clark (2011), the validity of a research instrument may be considered applicable when its CVI is greater than 0.60. In the two instances, the CVI before revision by the experts was higher than .060. Therefore, the research instruments were considered valid for the investigation.

In scientific research, reliability signifies the degree of consistency or accuracy, which a research instrument exhibits (Creswell & Plano-Clark, 2011). To ascertain the reliability of the study instrument, after the CVI and the necessary corrections being done, the researcher carried out a pilot study in a public rural school which in the opinion of the researcher, was homogenous with the targeted study population. The data were collected from 10 students, and 10 parents following the same data collection procedure that was recommended for the study. This included recruiting the children with the consent of the school administration.

The parents of the selected children were then contacted to elicit their willingness to participate in the pilot. Only those parents that agreed to participate had their children provide

their responses when filling in the children's questionnaires. Thereafter, a copy of the questionnaire was placed in an envelope addressed to their parents for filling in their opinions. After filling them, the parents gave them back to their children to drop at school for the researcher to pick up. The responses analysed using the Statistical Package for Social Scientists (SPSS) version 28.0 for Microsoft Windows. The reliability analysis was done section by section. The parents' questionnaire had two sections to assess for this test, which were sections B and C, while the children's questionnaire had one section, which was Section B that needed assessment. The reliability results are shown in tables 3.1 and 3.2.

Table 3.1. Reliability Assessment Parents Questionnaire

Section	Number of Items	Cronbach Alpha Value
Section B	4	0.78
Section C	16	0.77
Average	20	0.775

Source: Pilot Data

Table 3.2. Reliability Assessment Children's Questionnaire

Section	Number of Items	Cronbach Alpha Value
Section B	9	0.79
Average	9	0.79

Source: Pilot Data

From tables 3.1 and 3.2 above, each of the sections assessed obtained a Cronbach's Alpha above 0.70. This suggests that in each case, the Cronbach Alpha for the section was greater than the minimum recommended Cronbach Alpha of 0.70, for acceptable reliability level (Creswell & Plano-Clark, 2011). From the foregoing, the researcher regarded the instruments reliable. During the presentation, analysis, and discussion, of findings, the researcher further enhanced the reliability by making sure that the descriptions, explanations, interpretations, and conclusions obtained therefrom were clearly, and logically done. In

addition, through the adoption of mixed-methods strategy, triangulation of methods, and data sources was ensured to increase the validity, and reliability of the research findings. This process included use of different research methods, and techniques of data collection such as survey questionnaires, and focus group discussions, and collecting data from various sources of data including both parents, and children.

Validity and Reliability of Qualitative Findings

It may be noted that ensuring validity, and credibility in mixed-methods explanatory studies intends to generate findings that are credible, dependable, conformable, transferable, and authentic (Creswell & Plano-Clark, 2011). In the qualitative strand of the study, validity, and credibility of research instrument was ensured by subjecting the focus group discussion tool to expert review. This was done by the supervisor and other three persons considered knowledgeable in the realm of qualitative research. After providing their opinions on the clarity, relevance, and correctness of the statements, the researcher considered the tool valid, and reliable for collection of data from the focus group participants.

Further, the validity, and reliability of qualitative findings primarily rely on the correctness of the descriptions, explanations, interpretations, and conclusions produced from and inquiry. Therefore, during this investigation, the validity, and credibility of the research findings were promoted through the following means:

a) Ensuring credibility included the researcher adopting the triangulation of data both data collection methods and data sources. In addition, fact cross-checking during focus group discussions, extracting responses, and participation from both parents, and children, as well as promoting objectivity during the data collection and analysis process were done.

b) Dependability was promoted by way of triangulation of methods, and accurate and thorough description of the data collection and analysis processes. During the focus group discussions, ensuring that right participants took part in the discussions, and triangulation of data collection methods, techniques, and sources were done.

c) Conformability was enhanced through obtaining the succinct experiences of the participants

d) Transferability was improved through explaining the background of the inquiry to ensure that the future users of the knowledge generated from this study get a clear understanding of any similarity or dissimilarity of their individual experiences and context in relation to this research.

e) Authenticity was stressed to ensure that the study findings contained the salient views of the parents, and children in their own words (verbatim quotations), where applicable, and a wide range of opinions whether concurring or dissenting in perception.

These measures were considered to supplement and complement the reliability, and validity measures adopted for enhancing the quality of the research outputs from the quantitative strand of inquiry. The researcher contends that this comprehensive approach to promoting the dependability, and authenticity of the research product enhanced its utility to the readers.

Study Procedures, and Ethical Assurances

The study procedures and ethical assurances included the following aspects:

Study Procedures

In research project, consideration of the ethical issues is extremely imperative. As a result, the process must ensure that all ethical protocols are observed. The researcher must be mindful of the potential harm to participants as well as the respect of the participants' privacy the investigation could cause (Ravitch & Carl, 2016). Prior to data collection, approval from

the UREC was obtained. Once UREC approval was obtained, the researcher sought permission from the gatekeepers (See Appendix A) of each of the five schools from which the data were collected.

Ethical Assurances

The study draws on the ethical guidelines that govern research studies from two authorities: the British Educational Research Association (BERA, 2018) and the American Educational Research Association (AREA). The AREA enjoins educational researchers to respect the rights, privacy, dignity, and sensitivities of their research populations. In addition, it also requires them to respect the integrity of the institutions within which the investigation is carried out. Besides, the researcher notes that it is vital to follow the ethical protocols for scientific inquiries throughout the implementation of the research. Therefore, the researcher relied on the primary research protocols pronounced by Stutchbury and Fox (2009). This specifies four ethical positions for academic researchers as follows: (i) the Ecological ethics – that research must be carried out responsibly; (ii) Consequential ethics, which requires research to be worthwhile; (iii) Relational ethics which emphasises that research should be carried out respectfully; and (iv) De-ontological ethics, which says that research should be carried out correctly.

There are specific ethical issues in research that involve human subjects which must be addressed as a matter of research ethics. The UREC is mandated to ensure that these protocols are strictly adhered to. In the case of the research under consideration, the informed consent protocol for all recruits was strictly followed. The information of the research on which the informed consent is taken was freely given to each recruit, so that the recruit could take a voluntary, and independent decision based on their understanding of the research requirements, rights, and obligations during the research process. Voluntary consent was sought from all the parents and was received by the parents and guardians signing the consent

form for themselves and for their children's involvement. In addition to this, verbal consent was sought from the children and received. The voluntariness of consent shows respect for human dignity. It demonstrated to the recruits the value that is placed on the respect for human dignity.

Privacy and confidentiality of all recruits were upheld. The researcher protected, and safeguarded all information that was entrusted to him, and in all circumstances, collected the minimum identifiable information that was necessary to answer the research questions. One strategy that was employed by the researcher for safeguarding the entrusted information was that of the anonymity of data sources. This means that data collected was stripped of direct identifiers to protect the identity of those who provided.

During the study, professionalism was enhanced by making sure that during the entire research process, the researcher never fabricated or falsified research procedures, field data, procedures of data analysis, or the findings therefrom. In addition, the researcher ensured that the discussions of findings were backed by both evidence, and facts either from the field or existing body of knowledge extracted through critical literature review. Moreover, the researcher noted the constraints inherent in the existing literature sources, the research design adopted, and the methodological approaches preferred. The researcher also ensured that the data sources for both secondary and primary data were duly acknowledged. Literature sources were both acknowledged in the body of this thesis and by way of a reference list that adheres to the University's preferred referencing APA 7th Edition style. For promotion of scientific knowledge, the researcher permits the publication of this thesis by the University, and will make efforts to publish the results and findings of the study in accredited journals for public utility.

To ensure safety, and integrity of information, the researcher ensured that all the data, and information were stored in a secure place. The electronic information stored on computers or in any electronic media was encrypted, and password protected by the researcher. It is only the researcher who has access to all the information generated from this research apart from that one that has been officially disseminated by the way of presentations to the University's team of reviewers or sharing this thesis with the supervisors. The raw data will be trashed when it is no longer required for any scholarly use. The records that contain relevant information will be destroyed by the researcher after five years from the date of completion of this doctoral qualification.

The Role of the Researcher

This was a sole researcher conducted study. The role of the researcher included designing the study, collecting the data, administering the children's questionnaire, conducting the focus group discussions, transcribing the focus group discussions' responses, as well as analysing, and gathering the data. The researcher is currently an educator, and a principal of a small rural primary school. Prior to his appointment as a school principal, the researcher taught at the secondary, and tertiary levels of the education system. As an educator and teacher, the researcher was cognizant of the challenges experienced in small rural public primary schools in achieving high performance in literacy and numeracy in national examinations.

In conversing with teaching colleagues, the researcher understood that the challenges were not typical of his school, but were microcosms of the wider communities in which the schools are located. The researcher did not have a personal relationship with the teachers at the schools from which the data were generated. In addition, the researcher had no prior working experience at any of the five schools involved in the study. The schools were only selected because they are rural, and public schools, and in the opinion of the researcher, they

would provide a good case of what happens in that setting for effective study of the influence of the parents' educational attainments on the children's academic outcomes.

The study took the methodological path of the mixed-methods design. The primary role of the study was to explore and establish the extent to which parental educational attainment influences their children's educational outcomes. Researcher's bias is possible within the realm of the qualitative aspect of the study. While conducting the focus group discussions, for example, the strategy to mitigate against social desirability bias was to get the participants to be as comfortable as possible so they were in a position to speak freely without being intimidated. Other measures have been covered in the section dealing with the validity, and reliability of findings for both quantitative, and qualitative inquiry strands of the study.

Data Collection

The research that was undertaken employed the mixed-methods design to execute the inquiry. This approach mixes the quantitative as well as the qualitative approaches into a single study. A mixed-methods design can mix, and synergize multiple data sources which can assist in studying complex social problems like the influence of parents' educational attainments on the educational outcomes of children in natural setting (Poth & Munce, 2020). The paper sought to describe a basic tool to undertake the qualitative aspect of the research, the focus group discussion guide. The quantitative approach employed data collection tools such as survey questionnaires. These data collection tools were used to measure the variables by collecting the information needed to answer the research question. The approaches used (quantitative and qualitative) are dealt with separately. It is important to note that the quantitative approach was administered in phase one followed by the qualitative approach in phase two of the study. These approaches dictated the data collection tools used in each instance.

Questionnaire Surveys as Data Collection Tools

The questionnaire surveys (see Appendices C and E) were the main data collection tools for gathering data from a targeted audience, consisting of a series of questions and/or prompts for the purpose of gathering information from the respondents. There were two questionnaires used as data gathering tools from the two types of respondents to this study – parents and children. The parent's questionnaire consisted of 30 items using a 5-point scale with responses of 5-Strongly Agree (SA), 4- Agree (A), 3-Undecide (U), 2-Disagree (D), and 1-Strongly Disagree (SD), written in three sections: A, B and C. Section A consists of 10 questions which are demographical in nature. This section looks at the age of the parent, the gender, the number of children the parent has, the family income, and who is the income earner of the family. It also looks at the other available income stream(s) of the family as well as the educational attainment of the parents. In order to get sense of the parent's time at hand for helping the child at home, a question is asked as to how many hours per week is worked.

Section B, responses were given as often, sometimes, seldom and never. This section has four questions and looks at different activities that define parental involvement as well as it looks at questions such as 'I assist my child with his/her homework, I check my child's homework, I attend PTA meeting for my child and ask the question to how often does the child attend school.' Section C consists of 8 questions that look at other activities that define parental involvement such as providing learning materials, participating in school related activities like sports, reading, discussing the child's school report with him or her, setting learning goals with the child, providing additional help for the child and so on while the remaining 8 questions look at parental financial status and level of educational achievements (see Appendix C). The questionnaire items were appropriately crafted to address adequately the research questions under consideration.

The child's questionnaire (see Appendix E) was crafted to gather information from the children. It comprised of thirteen questions, scored on a Likert scale. It consisted of two sections: A and B. Section A carries questions that are demographical in nature, while section B carries the remaining nine questions. Section A carries questions on age, number of other siblings, gender and with whom the child was living. The section was crafted specially to seek corroboration with the parents' questionnaires in terms of cross validation of the responses given and delves into questions on access to study area, instructional materials, internet, parental assistance, parental hours worked and parents' general assistance with homework at home. Both questionnaires, that is, the children's questionnaire with a Cronbach's Alpha score of 0.79 and the parents' questionnaire with a Cronbach's Alpha score of 0.77 were deemed reliable for the study under consideration.

The Likert scale is a type of rating scale that is used in a survey that measures the intensity of a behaviour or opinions of the respondents or how people feel about a particular topic. It was discovered by an American social psychologist, Rensis Likert. In support of the Likert scale in gathering information, Clark and Watson (2019) assert that the scale serves a useful purpose in gathering information in social research, and is a commonly used instrument for measuring the perceptions, and opinions of the respondents.

The survey questionnaire is mostly designed for statistical analysis of the responses. It was used as the main data collection tool to elicit the opinions of both parents and children. Creswell and Plano-Clark (2011) claim that the survey questionnaire offers many advantages within the context of the quantitative approach. It can generate standardised, quantifiable, and empirical data. It offers confidentiality and anonymity, and it can represents a larger population as well since it can reach a large number of respondents fast and efficiently. Although there are merits for selecting the questionnaire as a data collection tool, there are indeed some demerits as well. The drawbacks of the survey questionnaire include, among

others, interpretations and accessibility issues, interference with the respondents' way of life during the administration of the instrument, and not being able to provide onsite responses to the researcher. Nonetheless, it remains the best option when it comes to collection of data during surveys, and it is its versatility that the researcher found it plausible to use.

Focus Group Guide as a Data Collection Tool

An online focus group discussion (FGD) was used as a qualitative data collection method using the FGD guide a tool. It is argued that the focus group discussions are an extended version of the interview method, but with a more specific in-depth group interview with discussion (Krueger & Casey, 2014). It is an excellent way to gather people together from similar backgrounds or experiences to discuss a specific topic of interest. In the study, focus group discussion participants were selected based on the eligibility criteria which incorporated the inclusion and exclusion criteria outlined in the Research Ethics Application Form and which guided the questionnaire tools as well. To be included in the study, the child must be greater than ten years of age and the parent should be less than 50 years of age. The student must be attending one of the named schools and should be living with the parents. Persons excluded from the study were persons without a child attending the school, persons suffering from a contagious disease as well as those suffering from mental disorders.

The focus group discussions were moderated by an experienced teacher, who served as group moderator. She moderated the discussions, and helped the groups to participate in an amicable, and natural way among themselves. As mentioned earlier, the focus group discussions were done online, with the assistance of a moderator, who guided the discussions.

The focus group discussions were used to explore the meanings of survey findings that could not be explained statistically. The range of opinions/views on a topic of interest was to have an incisive interrogation of those results in the quantitative data that needed a more detailed account. Therefore, the focus group discussions were useful in providing an

insight into different opinions among different parties involved in the research process, thus enabling the process to be managed more smoothly.

The focus group discussions consisted of 14 participants randomly sampled from the study population of parents conducted online via the WhatsApp platform. Three small groups two of 4 participants each and one of 6 participants were engaged at a time. The WhatsApp small group was selected since face-to-face interaction was prohibited due to COVID-19 restrictions and besides, it was the preferred way of communicating with parents at the time. The small groups were easier to manage and to prevent manipulation of any one person and also to make the group more informal so that the participants could speak more freely on their experience.

The moderator facilitated the process while the researcher took notes of the discussion as it proceeded. The session lasted for a duration of 70 minutes. Participants in each group met at one location with the use of their own devices for the group discussions. The vivo and descriptive coding tool were employed with the purpose of bringing out the essence and meaning of the data from the respondents. The descriptive coding was necessary to summarize in a word or noun the basic themes of a topic of a passage of qualitative data while the vivo/verbatim coding was used to emphasize the actual spoken words of the participants. With this, the researcher was able to attain an in-depth understanding of the direct stories and their meaning communicated by the participants.

A focus group discussion protocol/guide was developed with eleven questions that served as discussion prompts. The discussion protocol was peer reviewed with the final draft validated by the researcher's supervisor and three other persons experienced in the field of qualitative research for clarity, relevance, and correctness of statements. As a result, the researcher considered the tool to be valid for its intended use. The questions listed below were used:

1. Each of you, tell us something you love to do in your free time. (5 minutes)

2. What do you value most of all for your child/children?   (6 minutes.)

3. What are your expectations for your child/children as you prepare him/her for school every day? (6. minutes)

4. How often do you tell your child/children of your expectations of them?   (6 minutes)

5. What kind of support do you provide at home/school to assist your child with his/her homework? (8 minutes)

6. When you go to P.T.A meeting, what generally is your concern and why? (8 minutes)

7. In the home, what do you do to demonstrate that education is an important value to you and by extension the home? (9 minutes)

8. Do you provide a special study area in your home for your child/children to study? (5 minutes)

9. Suppose you were to live your life all over again, what would you do differently for your child/children in terms of their educational involvement? (8 minutes)

10. If you were given the opportunity to attend school again, what would you do differently to learn and why? (9 minutes)

11. Of all the things we have talked about, what is the most important to you and why?

During the process, the researcher was able to pose questions to clarify some point and obtain instant feedback from the group members. The discussion protocol used looked at the type of involvement and support that were giving to their children, the challenges parents were experiencing, whether or not parents were comfortable with their involvement as well as the importance that they place on education and how this was communicated to the children

Summary

In this chapter, the researcher addressed the research methods and the data collection approaches of the study. The study was executed by utilising the mixed-methods design.

Under this design, the researcher integrated both the quantitative and qualitative approaches into a single research study. The qualitative method was used for triangulation of the study findings obtained from the quantitative inquiry. A purposive sample of 288 participants was recruited, and divided in two groups. One group comprised of 144 parents while the other group comprised of 144 children. The children group was used as a support source for the parents' group. One hundred and forty-four (144) parents and one hundred and forty four (144) students made up the sample, and were drawn from the five rural public primary schools within the parish of St. Thomas which was the geographical location of the study. For the quantitative aspect of the study, the sample was split in two surveys, one for the parents and the other for the children. The children's questionnaire was administered to the children by the researcher himself while the parents' questionnaires were self-administered by the parents of the children. The children's survey questionnaire was used to support the parents' questionnaire.

The researcher took appropriate steps to ensure that ethical protocols relevant to this study were adhered to. The essence was to ensure that the research findings are valid, reliable, accurate, and of utility to the scholarly, and practitioner audiences. This included following the ethical guidelines issued by the university, and the best practices recommended by other scholars to promote professionalism in research, as well ensuring that research participants were not harmed by the study. The next chapter features the findings of the study.

CHAPTER 4: FINDINGS

Introduction

This mixed-methods sequential explanatory research design sought to discover the extent to which the educational attainment of parents influences their children's educational outcomes. The study covered five rural public primary schools on the island of Jamaica. It is hoped that the results presented could provide a highlight on the phenomenon in other small rural public schools located on the island so that policies implemented for the schools that are considered weak will become model schools as parents give their full support to schools, and children alike. As a result, the long-standing problems of low performance impacting education at the primary level in Jamaica could be an issue of the past. Moreover, the findings could ensure that the parents' educational standards, and parent-child involvements in the educational enterprise are improved. Ultimately, better parenting, and positive value systems are expected to lead to a better educational system for the country as a whole.

This chapter presents, analyses, interprets, and discusses the findings of the study. The findings are presented and discussed thematically according to the research questions. Before delving into the findings of the study, the researcher attempts to reassure the readers about ensuring trustworthiness of the data collected, and analysed, and the findings' reliability and validity. The essence of this section is to reemphasise what has already been reported in the section that dealt with validity, and reliability of instruments, and findings.

Trustworthiness of Data

The trustworthiness of research data is hinged on good data management process. One aspect of data management system is cleaning of the data. Data cleaning is an important aspect of data management which involved getting rid of all unwanted information with respect to the data and making sure only useful data is left for data analysis. The researcher

took measures to ensure data accuracy and reliability of the data by removing all outliers, figures outside the options that could have come in during data entry, unfilled spaces, and misspelt words. Data cleaning allows for the consistency and good management which improve data accuracy and data consistency resulting in a reliable and more accurate data set.

In the context of qualitative research, trustworthine**ss** focused on ensuring methodical consistency of the research design, the accuracy of the research process, the credibility of the findings, and the applicability of the research recommendations. The researcher notes that increasing the trustworthiness of a qualitative inquiry involves multiple scientific aspects. These include the epistemological understanding; the depth, synthesis, and evaluation of literature used to back up the findings; the appropriateness of theoretical and conceptual frameworks applied, and discourses. In addition, it considers the data collection procedures, and how these mechanisms are connected into the logical whole to produce quality research outputs.

Other elements of trustworthiness consider how the reliability, and validity of the research are addressed through research knowledge. In a mixed-methods research, the quality of the quantitative findings is equally paramount. Quantitative validity included the researcher checking for the accuracy of the findings by using certain procedures that ensure authenticity and credibility, while qualitative reliability ensured exhibiting consistency in the researcher's approach during the research process.

This is the first criterion for the trustworthiness of a research project**.** It speaks to the believability of the research. It builds on trust in the research. Credibility also speaks of the researcher himself and asks the question; can the researcher and his work be trusted? To ensure credibility, the researcher followed the research protocols.

- Ensured that the study sample was real and could be validated.

- Ensured that the data were accurate and measured what purported to be measured in the context of the research questions, and objectives.

- Used more than one data collection strategy, including parent and child questionnaires, and a series of focus group discussions.

- Made use of triangulation, which is, using multiple data collection tools, and sources, to make sure that the research findings are robust, rich, comprehensive, logically organised, and well-developed.

- Established the rationale and the context in which the study was conducted.

- Adopted appropriate, and well-organized research methods.

- Provided a rich description of the phenomenon being studied.

Reliability and validity of Data

Reliability procedures ensured the trustworthiness, and soundness of the research. In particular, it focused on ensuring the appropriateness of the methods used, and, more so, in the ways in which those methods were executed within the context of the research. It examined the consistency of the research methods applied (Miles et al., 2014). The researcher provided justification for the methods implemented for such a study. In addition, the researcher provided clarity on the analytical procedures used giving a sense of the dependability of the study findings.

Further, reliability ensured consistency, dependability, and replicability of the results from the study. Replicability focused on the study being capable of bringing consistent results if it were to be scientifically repeated. It also ensured enhancement of the consistency and clarity connected with the actual conduct of the research, thereby increasing the likelihood that other researchers could not only recognise but also undertake many of the research methods described (Creswell, 2013). The issues of reliability were addressed by asking

questions like: could a reasonable researcher conduct a similar research project based on the information provided? To what extent is this research project replicable? If the research project were to be conducted again, would it yield similar results?

Validity procedures ensured that the results and findings were dependable (sometimes understood as being accurate) from the standpoint of the researcher, the participants, and/or the consumers of the research outputs (Lincoln et al., 2013; Creswell & Miller, 2000). During an analysis, tests were used to determine if the collected data were able to meet the requirements for it to be termed as valid, and the variable constructs met the assumptions of the t-test in the following ways:

The T-test assumes that data has either of a continuous or ordinal data type. The variables were measured as ordinal data, which supported the test assumption. In addition, the test assumed that the sample was a simple random sample. This is true because the data were collected from a random population but purposively selected. When the data were plotted, it satisfied the assumption of a normal distribution. These claims are supported by the measures of ensuring validity, reliability, trustworthiness, credibility, replicability, and authenticity exhaustively discussed in Section 3.7 under the methodology chapter.

Weaknesses of the Data Collection Method

The study did not do so well on homogeneity because the standard deviations of the samples were, in some cases, not approximately equal. Furthermore, in some statements, it was identified that the extremes were chosen, that is to say, a number of respondents largely chose the extremes in the study, for example, part of the sample chose strongly agree and another strongly disagree on the same statement. This caused certain views to be far from the mean. However, the researcher took measures to ensure that variations in the views were

explained through the focus group discussions. These discussions enhanced the credibility of the findings as they were able to provide in-depth perspective of the respondent's views.

Phase One of the Study: Quantitative Results

In this section, the results from the study are organised and presented.

Demographic Characteristics

Table 4.1 below provides the demographic characteristics of the sample studied. The demographics of the sample that were studied included; age of parents, gender, number of children, level of education, family income, hours worked per week, and the ranking of education among the priorities of the family. These characteristics were analysed using descriptive statistics adopting the frequency, and percentages.
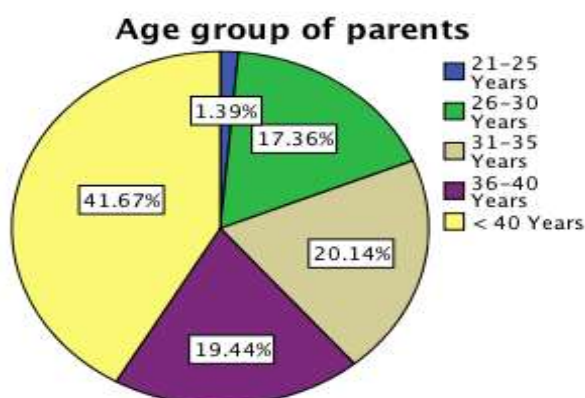
Figure 4.1: Age Group of Parents

From the demographic information in Figure 4.1 and Table 4.1, majority of the parents were over 30 years, 80 percent (117), with 20 percent (27) being less than 30 years old. This could imply that most of the parents have experience dealing with children, and could have the required knowledge to inform the study. Furthermore, the majority of the respondents were female: 81 percent (117), while 18.8 percent (27) were male as illustrated in Figure 4.2 and Table 4.1. Implicit in this finding is that the majority of women were available and willing to provide their responses about the research. It could also presuppose

that most men are not available to participate in some activities about the education of their children.
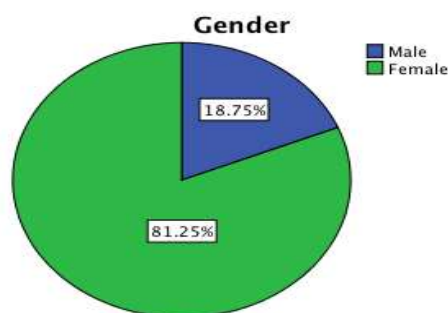
Figure 4.2: Gender of the Respondents

This aspect was clarified by the parents who during the focus group discussions indicated that most men do not participate in matters concerning the education of their children. They delegate these aspects to their wives to deal with. The focus group participants intimated that fathers rarely attend to providing information from the school. They further noted that do not usually participate in the Parents, Teachers Association activities like meetings, perhaps, as a cultural phenomenon. It was also noted in Table 4.1 that a simple majority of the parents which is 39 percent had 2 children; 27 percent (39) had 2 children, followed by 25 percent (36) with 3 children, 14 percent (20) with 4 children, and 17 percent (24) had 5 or more children. It may be noted that majority of the parent's 69.4 percent had between 1-3 children. This indicates that data sources represented all family sizes in the country.

Regarding the level of education, the findings in Table 4.1 revealed that majority of the respondents had a secondary education level accounting for 70.8 percent (102) of the parents. About 16.6 percent (24) had either a college degree or a university degree. This indicates that all parents had basic education as there were no cases that had not completed at least primary level of education. This seems to be consistent with the literacy levels of Jamaica, which are reported to be above 88 percent.

Table 4.1

Demographic Characteristics of Parents

Profile	Details	Frequency	Percent	Cumulative Percent
Age group of parents	21-25 Years	2	1.4	1.4
	26-30 Years	25	17.4	18.8
	31-35 Years	29	20.1	38.9
	36-40 Years	28	19.4	58.3
	< 40 Years	60	41.7	100.0
	Total	**144**	**100.0**	
Gender	Male	27	18.8	18.8
	Female	117	81.3	100.0
	Total	**144**	**100.0**	
Number of children	1 child	25	17.4	17.4
	2 children	39	27.0	44.4
	3 children	36	25.0	69.4
	4 children	20	13.9	83.3
	5 or more	24	16.7	100.0
	Total	**144**	**100.0**	
Level of education	Primary Education	18	12.5	12.5
	Secondary Education	102	70.8	83.3
	College Education	12	8.3	91.7
	University Education	12	8.3	100.0
	Total	**144**	**100.0**	
Family Income (Jamaican Dollars/JMD) US$1=150JMD	<JMD9,000.00	30	20.8	20.8
	JMD9,000.00 - 20,000.00	38	26.4	47.2
	JMD20,000.00 - 40,000.00	32	22.2	69.4
	JMD50,000.00 - 99,000.00	29	20.1	89.6
	>JMD150,000.00	15	10.4	100.0
	Total	**144**	**100.0**	
Income earner	Mother	43	29.9	29.9
	Father	44	30.6	60.4
	Both parents	57	39.6	100.0
	Total	**144**	**100.0**	
Hours worked per week	<10	34	23.6	23.6
	11 – 15	12	8.3	31.9
	16 – 30	30	20.8	52.8
	31 – 40	50	34.7	87.5
	>45	18	12.5	100.0
	Total	**144**	**100.0**	
Education on priority list	First	139	96.5	96.5
	Second	4	2.8	99.3
	Fourth	1	0.7	100.0
	Total	**144**	**100.0**	

It was also revealed in Figure 4.3 and Table 4.1 that more parents, that is, 26.4 percent (38) earn within the range of JMD9,000–20,000 as the family income per month, whereas the nominal mean income for rural areas in Jamaica is JMD26,366.00 per month or JMD313,394.00 annually (JSLC, 2019). Implicit in this information, most of the respondents

are earning below the minimum wage, which could make them unable to take care of their family's needs sufficiently. This also implies that the parents may not have a good financial standing to support the children in terms of their education as they would lack resources to sufficiently provide for the school requirements.
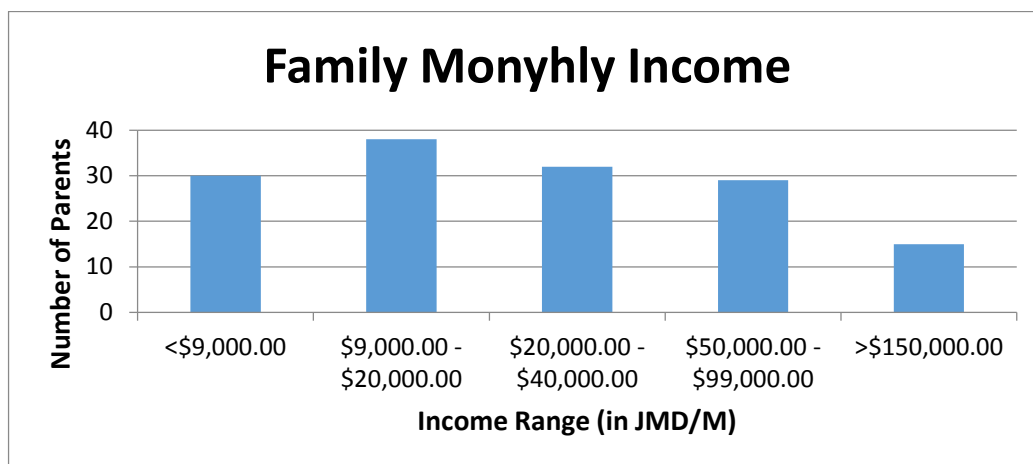
Figure 4.3: Family Monthly Income

It was further revealed by the results as demonstrated in Figure 4.4 and Table 4.1 that the highest number of respondent 39.6 percent (57) reported that the family income was earned by both parents compared to 30 percent (43) who revealed that the family income was earned by the mother perhaps suggesting that they were from female-led households, and 31 percent (44) reported that income earners were male may be because the families were male-led households, or the fathers were the sole income earners.

Figure 4.4: Income Earner

It was further observed that the majority of the respondent's 34.7 percent (50) worked between 31 – 40 hours per week. This implied that the parents, though expected to be busy all through the week, may have enough time to support the children at home. It was further revealed that 96.5 percent (139) of the respondents had education as their top priority. Coupled with the other socioeconomic status indicators, one can infer that they have the interest to support the education of their children. However, the income indicators post a low-income status, which aspect could imply that they lack the necessary financial resources to support their children or the education capabilities including the textbooks, and other scholastic materials to support their children at home.

The demographic characteristics revealed that the respondents selected were ideal to provide valid and credible data for the study. The results revealed that the respondents represented the critical aspects that needed to be known about the population studied and were deemed to have the requisite knowledge to answer the research questions. The key indicators sought by the study such as the level of education, family income, family size, and priorities of the family were adequately provided to guide the rest of the processes of this study including ascertaining at a later stage, whether the education levels of the parents as reported in the results influenced the educational outcomes of the children. This would be revealed by further analysis of the demographic and other data obtained from the other parts of the research instrument.

In the following subsection, the findings on the first research question which was to determine the extent educational achievements of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica are provided.

Research Question One

How does the educational achievement of parents directly impact the educational outcomes and academic success of their Children attending primary school in rural Jamaica?

This subsection attempts to answer the first question of the research which sought to establish the extent to which parental educational achievements of parents directly impacted the educational outcomes and academic success of their children attending primary school in rural Jamaica. The variables in this study show a positive relationship (association) in the first place. Later, a coefficient of determination was run (Table 4.2), a Coefficient of Determination r^2 (Table 4.3) and descriptive statistics of parental educational levels to support and authenticate the results from the children were also used. First, the correlations of the variables are presented in Pearson's correlation coefficient in Table 4.2. The researcher analysed the Likert scale data using the Pearson's correlation to demonstrate the relationships/associations between the independent and dependent variables. The Pearson's correlation was selected as an appropriate inferential analytical tool due to its appropriateness to be adapted to the Likert scale data.

As they claim, Sullivan and Artino (2013) show that the Likert Scale data can appropriately, and accurately be analysed as interval data. Therefore, on this basis, Questions One was analysed using inferential statistics of Person's correlation. This choice also is supported by Boone and Boone (2012) who exhibited that Pearson's correlation analysis is scientifically applicable for testing associations between variables in a study was proved that this tool provided valid, reliable, and trustworthy findings. This arising from the aforementioned used the Pearson's correlation coefficient to examine the extent to which educational achievements of parents positively or negative impacted on the educational outcomes of the children as independent and dependent variables respectively.

Table 4.2

Pearson's Correlation Coefficient

		Parents' Educational Attainment Levels	Students' Averages in 4 core Subjects for four years
Parent's Educational Achievements	Pearson Correlation	1	.515**
	Sig. (2-tailed)		.000
	N	144	144
Students' Averages in 4 core Subjects (Edu. Outcomes/Aca. Success)	Pearson Correlation	.515**	1
	Sig. (2-tailed)	.000	
	N	144	144

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 shows the Pearson's correlation coefficient r= .515** (Sig = .000, P=0.0) between Parents' Educational Attainment (PEA) levels and students' averages in 4 core subjects of English Language, Mathematics, Social Studies and Science for the 4-year period as being positively and significantly correlated. The relationship shows a tendency that where educational attainments of parents are high, the academic performance of the children will also be better. Therefore, this positive relationship between the variables confirms that parental educational attainments positively associates with students' academic success. A further analysis using the Pearson's correlation as demonstrated in Table 4.3, reveals that parental educational achievements as an independent variable has a positive influence on students' academic success in 4 core subjects for four years, r^2= .260 (Sig=.000). This implies that parental educational achievements can explain up to 26 percent of the variation in the students' average scores in the four core subjects. It may be averred that a unit increase in the parental educational attainments would increase the average subject scores by 26 percent.

Table 4.3

Coefficient of Determination[a]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515[a]	.265	.260	17.60870

a. Predictors: (Constant), Parent's Educational Attainment Levels

Research Question One was answered by testing the following two hypotheses:

H1o. There will be no evidence that the educational achievement of parents directly impacts the educational outcomes and success of their children attending primary school in rural Jamaica

H1a. There will be evidence that the educational achievement of parents directly impacts the educational outcomes and success of their children attending primary school in rural Jamaica

The evidence from the findings as demonstrated in Table 4.3 reveals that the alternate hypothesis (H1a) "there is evidence that the educational achievement of parents directly impacts the educational outcomes and success of their children attending primary school in rural Jamaica" was adopted. Therefore, based on the findings, parents' educational attainments positively impact on the educational outcomes of their children. The results demonstrate that parental educational attainments have low positive but significant impact on the academic attainments of the children. As noted by Hughes et al. (2018), the extent of impact to be high, the r^2 results should be closer to 1 on a scale of 0 (no impact) to 1 (highest impact). Therefore, at adjusted r^2 at 0.260 as demonstrated in Table 4.3, one would argue that to a lesser extent, parental educational attainments as an explanatory variable has a low positive impact on the educational outcomes of the children in the subjects studied.

Parents' educational achievement is measured by passing at least 5 subjects at the general proficiency level at CSEC examinations. In other countries like Canada and the United States of America, a high school Diploma is an indication that the student has reached an acceptable level of literacy and as such is able to prepare for post-secondary education. World Education Services evaluated the Caribbean Secondary Education Certificate and equated it to the secondary school Diplomas issued in the United States of America or Canada. Issuance of these diplomas is an indication that the students are ready for post-secondary education training. In Jamaica, things are a little different. In order to move on to

post-secondary education, the student must pass at least 5 subjects at the CSEC including English and sometimes mathematics depending on the area of study.

Nowadays, mathematics is a compulsory subject and must be included in the five subjects passed. This educational attainment will make the student eligible to enter post-secondary education. It is for this reason that the emphasis is placed on students passing the minimum of five subjects at the general proficiency level of the CSEC which is the standard measurement for students exiting secondary education for post-secondary or job placement, which indicate the level of minimum attainment. This attainment level is also an indication that parents are sufficiently equipped to assist their children with school work at the grades 4-6 level. However, there are parents who have not attained this level but have done well in their secondary schools and are able to assist their children sufficiently at home. Looking at the results presented on parents' educational level in Table 4.4, the findings revealed that 62 percent of the parents (89) sat no subject at the CSEC examination level which implies that the students had not mastered the grade 11 curriculum or have not passed the qualifying school examination for the CSEC if and when they got to grade 11. It also implies that although they may have had secondary level education, they might not be sufficiently literate to assist their children adequately at the grade four level.

The above is corroborated by the FGD with parents that some of them are not in position to help their children with homework. It was further noted that 13(9%) of the parents passed at least 5 subjects at the CSEC examination, while 26(18.1%) indicated that they had passed less than five subjects at one sitting of the examination. Very few parents had tertiary level educational qualifications or post-secondary qualification such as diploma, bachelor's degree or master's degree. One could note that majority of the parents had low academic

attainments, which could explain the low extent of their educational attainments having an impact on the educational outcomes of their children.

Table 4.4

Parents' Educational Levels

Details	Frequency	Percent	Cumulative Percent
Did no subject at Grade 11	89	61.8	61.8
<5 Subjects passed at CSEC	13	9.0	70.8
>5 Subjects passed at CSEC	26	18.1	88.9
College Diploma	12	8.3	97.2
Bachelor's Degree	3	2.1	99.3
Master's Degree	1	.7	100.0
Total	**144**	**100.0**	

The findings support both conceptual and theoretical presumptions of parents in this study. Theoretically, in the first place, the findings support Epstein type 1 and 4 involvement where type 1 involvement that speaks to parenting where the parents should provide the environment that fosters the kind of support for the children's learning, where children can be treated as students in the learning process. The parents on the other hand, based on where they are in terms of their educational achievement could not provide the amount of cultural capital- the skills, norms, or values which can be used to get ahead in education. Hence, this accounts for the low impact of their educational achievement on the children's academic performance.

Another weakness in the parents' involvement was seen in Epstein type 4 involvement where maximum success can be reaped where the families are fully engaged in the education of the children where they constantly be assisted at home with homework and other curriculum related activities to help them to improve their academic performance. The parents' beliefs, values, and attitudes have an influence on the children's education. Talking positive about education, taking the children to various places to appreciate the effect of education was demonstrated by some of the parents as an aspect that has improved the educational outcomes of the children in line with the Epstein type one involvement in

education. The home-family has a key role it plays in shaping the academic lives of the children as demonstrated in both the quantitative results and the focus group discussion findings.

Further, literature in support of the findings demonstrates that parents have a positive contribution to the academic performance of their children. Asiimwe and Magunda (2017), and Asiimwe and Nabitake (2021) provided supportive claims to these findings when they asserted that parents can influence the performance of their children by making the home environment academically suitable. This is further supplemented by Cole (2020) who demonstrated that educated parents provide a more conducive home environment that improves the educational success of the children. From another angle, Acharya and Joshi (2009) while looking at the education levels of parents made a complementary claim by asserting that the higher the levels of parental education, the greater the impact they have on children's educational outcomes. This presupposes a positive contribution of parents' education on the educational attainments of their children which is in line with this study's findings.

Various other scholars have provided empirical evidence across time and space which has demonstrated that parents' education positively influences the academic performance of the children. Bakar et al. (2017), Tarfassa (2018), Clearing House for Military Readiness (2020), Davis-Kean et al. (2020), and Ludeke et al. (2021) explain that educated parents provide the right academic stimuli for success. They participate effectively in school activities, communicate with their children's teachers, follow up the children's academic work, and provide the necessary material support to education and the right mentorship. It may be asserted that this study confirmed what has been studied in other contexts that parents' education influences children's education. Epstein (2001) explains the theory by further describing how authentic school-like family involvement is forged where the parents

create more school-like families by recognising that each child is also a student. The families reinforce the importance of school, homework, and activities that build student skills and feelings of success."

In the next section, the researcher presents and discusses the second question/objective of the study which sought to investigate the nature and magnitude of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

Research Question 2

What is the nature of the relationship between parental involvement in the education programs and initiatives on academic performance an educational outcomes of primary school children in rural Jamaica? The above question helped to meet the second objective, the research which was to "examine the nature of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica." This question was tested by the following hypothesis:

H2o. There will be no evidence that the nature and magnitude of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

H2a. There will be evidence of the nature of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

The nature of the parental involvement took many forms such as:

- The parents supplied their children with learning materials,
- Participation in school related activities,
- The parents discussed educational goal setting with the children,

- Discussion homework,

- Discussion of the children's report with them, and

- Discussion of the reports with the class teachers, among others.

The researcher measured the magnitude of parental involvement using descriptive statistics of the characteristics of parental involvement to ascertain what it was like. This was done by finding the mean and the standard deviation of the mean for the various characteristics of parental involvement (PI) in the first place, and later a Kendall's tau-b correlation to examine the relationship between parental involvement in educational programmes and initiatives (students' average scores in core subjects for four years). This was supported by additional descriptive statistics obtained from the students' questionnaires. From the analysis, the results are interpreted as follows: from a range score of 1-5, a statement with mean score ranging from 1.00-1.80 is a very low level of parental involvement, 1.81-2.60 as a low level of parental involvement, 2.61-3.40 as a moderate level of parental involvement, 3.41-4.20 as a high level of parental involvement, while 4.21-5.00 as a very high level of parental involvement. The overall mean average of the status of parental involvement as demonstrated in Table 4.5 is 4.02 and a standard deviation of 1.105.

The results in Table 4.5 demonstrate a high level of parental involvement as it falls in the mean range score of 3.41-4.20. It would be noted that the standard deviation which is a measure of the spread of the respondents' views from the mean is 1.105 that would be considered a wide dispersion from the common views as a low standard deviation is taken as ≤ 0.5. Perhaps respondents had their divergent considerations about the level of their respective involvement in the real world which gave rise to different expressions during the scoring of the measured aspects of parental involvement. As indicated in Table 4.5, it is suggested that parental desire for child fulfilling goals is considered to be the highest aspect mean score (4.52) of parental involvement among the sample of parents studied.

The findings also indicate that the parental aspects of involvement like school attendance, parental supply of learning materials, and parental discussion of goal setting with child were considered to be of very high magnitude with mean scores ranging between 4.22 for discussion of goal setting with the children to 4.48 for school attendance. In addition, aspects of discussing school/home work with child mean score 4.20, participation in school activities 4.16, discussing children's report with them 4.15, discussing children's report with class teacher 4.12, minding the children's performance 4.07, providing additional support for the children 3.98, reading with children 3.9), setting learning targets for the child 3.87, parents having attended college 3.86, and being satisfied with the educational achievement of the children mean score of 3.70 were high.

Table 4.5

Descriptive Statistics of Parental Involvement

Details	N	Mean	Std. Deviation
Parental desire for child fulfilling goals	144	4.52	0.836
School attendance	144	4.48	0.819
Parental supply of learning materials	144	4.26	0.968
Parental discussion of goal setting with child	144	4.22	0.969
I discuss school/home work with my child	144	4.20	0.979
Parental participation in school activities	144	4.16	1.049
I discuss my child's report with him/her	144	4.15	1.066
I discuss my child's report with class teacher	144	4.12	0.93
My child's performance matters to me	144	4.07	1.169
I provide additional support for my child	144	3.98	1.061
Parent(s) reading with child/children	144	3.97	1.064
Setting learning target for my child	144	3.87	1.098
My family member(s) went to college	144	3.86	1.244
Satisfied with my educational achievement	144	3.70	1.374
My family experience financial challenges	144	3.53	1.379
My child/children is/are on PATH	144	3.28	1.674
Average	**144**	**4.02**	**1.105**

These findings are expected in families where the levels of education of the parents are considered to be high. It also reflects a high participation in school related activities by the parents with the magnitude of an average mean of score of 4.02 and a standard deviation of 1.105. It is also noticed that the magnitude of standard deviation of all the individual construct was moderate. The findings indicate that parents are highly involved in school

relate activities by the high mean scores. Parental supply of learning material mean score of 4.26, parents reading with child mean score of 4.22, parents discussing school report with class teacher mean score of 4.12, parents discussing homework with child mean score of 4.2, parents discussing homework with child mean score of 4.15.

Some behaviour or activities of parents may produce greater impact on the learning enterprise, particularly those activities or behaviour that are having to do with students learning directly like helping students with homework, participation in school activities, and discussing with students' school reports. These activities have indicated high mean score which further suggests their greater impact on academic performance of the students. The findings also confirm the postulations of the Cultural Capital Theory (Bourdieu, 1990). They have one common denominator in their theorization that parents influence the learning environment in the home and thus result in the better performance of their children.

On the learning home environment, as theorised, educated parents are considered to be better role models for their children, have higher cultural capital in terms of positive beliefs, values, and attitudes, and provide a home/family – microenvironment that shapes the children in a manner that leads to better schooling. The presence of these features in a study sample that is considered educated as indicated Table 4.1 where it is revealed that most of the participants had secondary level education and above (87.4%) was expected. It is consistent with the aforementioned theories. Therefore, one can claim that the findings about the status of parental involvement therefore, supports the theoretical claims of the aforesaid.

The findings also are in line with the arguments of Handa (1996), Asiimwe and Magunda (2017), Bakar et al (2017), Thomson (2018), and Cole (2020), among others. They demonstrate that the measured aspects are some of the most common forms of parental involvement, which are present in children from families with educated parents. The scholars

assert that parents who are educated usually ensure that they provide a home environment that promotes learning, and that this environment, among others, are related to promotion of learning among the children.

In further analysis of the data to answer the question, the researcher used the Kendall's tau_b Correlations on parental involvement as an independent variable and students average scores in 4 core subjects (academic performance) as the dependent variable. These results are as provided in Table 4.6. **Research Question Two** was answered by testing the following hypothesis:

H2o. There will be no evidence of the nature of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

H2a. There will be evidence of the nature of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

Table 4.6

Kendall's tau_b Correlations of Parental Involvement (PI)

			Parental Involvement	Student's Average in 4 core Subjects (Students' Performance)
Kendall's tau_b	Parental Involvement	Correlation Coefficient	1.000	.112
		Sig. (2-tailed)	.	.052
		N	144	144
	Student's Average score in 4 core Subjects Students' Performance)	Correlation Coefficient	.112	1.000
		Sig. (2-tailed)	.052	.
		N	144	144

Table 4.6 shows the Kendall's tau_b correlations coefficient r = 0.112 between parental involvement (PI) and students' average scores in 4 core subjects for four years. The Kendall's tau-b correlations coefficient determines whether two variables are dependent or associated. In Kendall's Correlation Coefficient, the values of correlation are between $^{+}1$ and

⁻1. Correlation coefficient values that are >0.5 are considered stronger while those <0.5 are deemed weaker. In Table 4.6, the relationship between the variables shows a weak positive correlation (.112) which is also not significant (sig=0.52, p=0.05). This demonstrates that the association between parental involvement and students' performance in the four core subjects is positive but weak in the studied sample population. While the status of parental involvement was considered to be high as evidenced in Table 4.5, the correlation analysis depicts a weak and non-significant relationship between the two variables.

Regarding the question being answered, it required to establish the relationship between parental involvement in educational programmes and the children's educational achievements. From Table 4.6, the relationship between parental involvement in educational programmes and children's educational achievements was 11.2 percent. Testing the study hypotheses for this objective, the researcher rejected the null hypothesis H3o which assumed that there will be no evidence that there is a likely relationship between parental involvement in the educational programmes and the children's educational achievement. The findings in Table 4.6 show that the relationship is there and that 11.2 percent of the times, children's educational attainments would be related to parental involvement. The evidence from the findings from Table 4.6 reveals that the alternate hypothesis above (H2a) is adopted.

The existence of the association between parental involvement and children's educational achievements in these findings is consistent with the theoretical explanations of Bourdieu (1990) in the Cultural Capital Theory, and Epstein (2001) types of parental involvement. The theorists appear to assert that parents act as role models; the providers of cultural capital to the children through their beliefs, values and attitudes; and are heads of the family who provide a home environment that enhances learning. As noted by other scholars like Asiimwe and Magunda (2017), Bakar et al (2017), Thomson (2018), Tarfassa (2018), and Cole (2020), Davis-Kean and Waters (2020), Idris et al (2020), and Ludeke et al (2021),

among others, what parents do that has a connection with the academic life of the children will always be related to the progress children make in their educational lives.

However, these findings seem to contradict the claims by Topor et al. (2010), Durisic and Bunijevac (2017), and Boonk et al. (2018) that parental involvement in children's education had a strong positive association with academic performance. It is the researcher's view that perhaps, the strength of the association is dependent on the definition and form of parental involvement, which could warrant further investigation. To satisfy this urge, the researcher further probed the aspect through the children to ascertain their perception and perhaps what could be the issues behind the observations from the above analysis.

In Table 4.7, the researcher analyses data from the children of the parents who participated in the study to establish their views which could further inform the understanding of the above results. Data were obtained from 144 students in the studied primary schools of age group ranging from 9-12 years which had been targeted. The sample composition included 91(63.20%) female students, and 53(36.80) male students. The students involved were majorly staying with non-parents 90(58.4%) compared to 64(41.6%) who were staying with their parents. These statistics prove that the study included the targeted students in the schools, and would be in position to tap into a variety of responses about their experiences with parental involvement in their school activities.

From the findings, it is not clear whether use of the word 'parent' affected the responses of those who were living with other people other than their parents. The salient findings illustrated in Table 4.7 were; majority of the children 79(51.3%) and 28(18.1%) agreed and strongly agreed respectively that they had access to a study area. In addition, 77 percent indicated that they had learning materials (39% and 38.3%) who strongly agreed and agreed respectively that they had the materials. It was also indicated that children were

motivated by their parents to do school work 80(51.9%) strongly agreed while 63(40.9) agreed to the statement on being motivated by the parents. Majority of the children confirmed that they had access to internet 50(34.7%) strongly agreed and 50(34.7%) agreed to the statement that they had access to internet. Meanwhile, more children 50.7 percent agreed that their parents encourage school performance with 50(34.7%) agreeing and 37(25.7%) strongly agreeing.

Considering the findings from Table 4.7 and those of Table 4.6, the findings appear to confirm the claims by numerous researchers such as Asiimwe and Magunda (2017), Cole (2020), and Ludeke et al. (2021) who demonstrated that provision of a conducive home environment for learning with adequate learning space, learning facilities which may include access to the internet, availability of learning materials like text books would enhance educational outcomes of the children.

On the contrary, a number of children 66(46%) were of the view that the parent's financial challenges hinder their ability to help them with educational needs. In addition, 86(60%) indicated that their parents worked long hours which could limit their availability to help the children. These findings support the claims that educated parents though are expected to be of a higher socioeconomic status, and enjoy high incomes, some of them may not in reality be able to afford some of the educational requirements due to financial constraints. This view by the students agrees with the conclusions of JSLC (2019) which indicated that most of the people in rural Jamaica earn below the national average wage.

Table 4.7

Students' Support Statistics

Profile	Details	Frequency	Percent	Cumulative Percent
Age of child	9 years old	23	16.0	16.0
	10 years old	43	27.7	43.7
	11 years old	54	37.6	81.3
	12 years plus	24	18.7	100
Number of siblings in the home	1 - 2 Siblings	88	61.0	61.0
	3 - 4 Siblings	42	29.2	90.2
	5 - 6 Siblings	9	6.3	96.5
	6 and over Siblings	5	3.5	100
Child living with parent(s)	No	80	55.6	55.6
	Yes	64	44.4	100
Gender	Male	53	36.8	36.8
	Female	91	63.2	100
Access to study area in the home	Strongly Disagree	10	**6.9**	6.9
	Disagree	23	16.0	22.9
	Neutral	14	9.7	32.6
	Agree	69	47.9	80.5
	Strongly Agree	28	19.5	100
Have learning materials (books, dictionary, laptop etc.)	Strongly Disagree	3	2.0	2.0
	Disagree	11	7.6	9.6
	Neutral	11	7.6	17.2
	Agree	59	41.0	58.2
	Strongly Agree	60	41.6	100
Parents' motivation to do school work	Disagree	4	2.8	2.8
	Neutral	7	4.9	7.7
	Agree	63	43.7	51.4
	strongly Agree	70	48.6	100
Access to internet service	Strongly Disagree	13	9.0	9.0
	Disagree	27	18.8	27.8
	Neutral	4	2.8	30.6
	Agree	50	34.7	65.3
	Strongly Agree	50	34.7	100
Parent(s) encourage(s) school performance	Strongly Disagree	10	6.9	6.9
	Disagree	22	15.3	22.2
	Neutral	25	17.4	39.6
	Agree	50	34.7	74.3
	Strongly Agree	37	25.7	100
Recipient of PATH lunch	Strongly Disagree	35	24.3	24.3
	Disagree	37	25.7	50.0
	Neutral	4	2.8	52.8
	Agree	35	24.3	77.1
	Strongly Agree	33	22.9	100
Parents' Financial challenges hinder ability to help	Strongly Disagree	31	21.5	21.5
	Disagree	33	22.9	44.4
	Neutral	14	9.7	54.1
	Agree	42	29.2	83.3
	Strongly Agree	24	16.7	100
My parent(s) work(s) long hours	Strongly Disagree	15	10.4	10.4
	Disagree	23	15.9	26.3
	Neutral	20	13.9	40.2
	Agree	54	37.5	77.7
	Strongly Agree	32	22.3	100
My parent(s) read(s) to me regularly	Strongly Disagree	17	11.7	11.7
	Disagree	44	30.6	42.3
	Neutral	27	18.8	61.1
	Agree	34	23.6	84.7
	Strongly Agree	22	15.3	100

As noted in Table 4.1 earlier, some parents were earnings as little as an equivalent of US$720 per annum. This income predisposes the family to poverty as the family's per capita expenditure a day would be around US$1.97. This proves that though some families have educated parents, their incomes may inhibit their ability to meet the educational requirements of the children, hence negatively affecting their academic performance. Further, parents who have limited time for their children also affect the children's academic performance. These results could enhance the explanation of those in Table 4.2 which established that the association between parental involvement and students' academic attainments was low. When the parents do not invest time in their education as theorized by Bourdieu (1990) Cultural Capital Theory, the effectiveness of the parents acting as learning models, transmitting their beliefs, values, and attitudes, and supporting their children educationally will be hampered. The findings support the arguments by Bakar et al (2017) who explained that some parents due to heavy work schedule afford little time to their children. In the next section, the researcher provides the findings about the third research question. Each research question was aligned with a research objective, which guided the study.

Research Question Three

Question Three was "to what extent do parents' educational achievement serve as reliable predictor of primary school students' educational performance and educational outcomes in the context of rural Jamaica?" This section attempted to answer the third question of the study, and hence meet the third objective. The third objective was "to investigate the extent to which parents' educational achievements served as a reliable predictor of primary school students' academic performance and educational outcomes in the context of rural Jamaica. To achieve this objective, the researcher compared data on parents' educational achievements and the academic performance and educational outcomes of their children in primary schools in rural Jamaica.

By analysing these data, the study aimed at determining whether there was a significant influence of parents' educational achievements on their children's academic success in this specific context. Furthermore, the finding suggests a strong positive correlation between parental educational achievement and students' academic performance. It implies that parents with higher educational achievements are more likely to have children who excel academically in the core subjects studied. This objective was met by running a regression analysis as indicated in Table 4.8 to determine the degree to which the independent – explanatory variable predicts the dependent – response variable, that is, how parents' educational achievement levels as the independent variable predicts children' academic performance as a dependent variable.
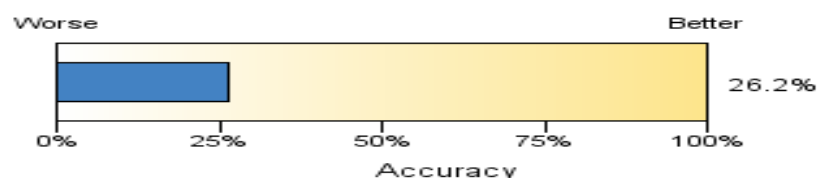
Table 4.8

Model Summary

Table 4.8 below shows a regression analysis, which measures parental educational achievement (PEA) over students' educational outcomes. The regression model highlights the influence that one variable has over another by showing that a unit increase in students'

performance in 4 core subjects studied will result in a 26.2 percent improvement in the students' performance. These movements imply that a unit change in the parents' educational achievement levels would increase the students' academic performance by 26.2 percent. However, this is considered low and falls in the worse region for accuracy of expression.

The results in Table 4.9 show that parental educational attainments lead to 39.7 percent increase in student average score in core subjects (Students' Performance). It also shows that parental educational achievement has a significant but moderate influence on children's performance in the four-core subject β = .515 (Sig = .000, P = .01). The results appear to show that changes in parental involvement are likely to cause changes in children's academic performance in primary schools in the studied sample.

Table 4.9

Parental Educational Achievement Levels, and Student Average Score in 4 Core Subjects for 4 Years (Students' Performance)

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	39.713	2.693		14.747	.000
Parents' Educational Achievement Levels	8.887	1.241	.515	7.160	.000
a. Dependent Variable: Student's Average in 4 core Subjects for four years					

y = Student's Average Score in 4 core Subjects for four years

x = Parent's Educational Achievement Levels

y = 39.713 + 8.887x

The equation above aided the researcher in predicting the influence of parental educational outcomes on the primary students' academic performance. It used the Parents' Educational Attainment levels as the predictors.

The findings in Table 4.2 earlier suggested that the independent variable has a 26 percent influence on the variation in students' academic performance. This suggests that a unit increase in parental educational achievement will result in a 26 percent improvement in the students' performance in the four core subjects. These findings highlighted the importance of parental involvement and support in their children's education. Additionally, it implied that interventions aimed at improving parental educational attainment could have a positive impact though low as demonstrated by the results on students' academic performance in core subjects.

Research Question Three was answered by testing the following hypothesis:

H3o. There will be no evidence that the educational achievements of parents serve as a reliable predictor of primary school children's academic performance and educational outcome in the context of rural Jamaica

H3a. There will be evidence that the educational achievements of parents serve as a reliable predictor of primary school children's academic performance and educational outcome in the context of rural Jamaica

The evidence from the findings from Table 4.3 reveal that the alternate hypothesis above (H3a) has been adopted. The findings in Table 4.3 suggest that the independent variable has 26 percent ($r^2 = .260$) degree of influence on the variation of academic performance of the students in the four core subjects. This further suggests a unit increase in parental educational attainments predicts up to a 26 percent change in the student's academic performance in the four core subjects. It, therefore, follows that 74 percent of the children's performance in the four core subjects is left to other factors other than parental educational attainment (PEA). Therefore, in answering the research question "to what extent are the parents' educational achievements serve as a reliable predictor of primary school students' educational outcomes", one would need to look at the predictive level of the independent

variable on the dependent variable in the regression model as depicted by the coefficient of determination. For ordinary least-squares regression model, the coefficient of determination R^2 describes the percentage of variance of the dependent –response variable explained by the model. This, according to Hughes, Choudhury, and McRoberts (2018), is a widely acceptable summary model of the predictive power of the explanatory variable on the response variable. For the predictive power of the variable to be considered accurate, it should be high enough to explain more of the variations in the response variable. The rule of thumb is that the r^2 $\geq .750$ for the independent variable to be considered a reliable predictor of the dependent variable.

Therefore, from Table 4.3, it may be demonstrated that the predictive power of parents' educational attainments as a reliable predictor of students' academic achievement is ($r^2 = .260$). The findings were also used to test the two research hypotheses for Question Three. Hypothesis one was a null which stated that: H3o. "There will be no evidence that parents' educational achievements serve as reliable predictor of primary school students' academic performance and educational outcomes in the context of rural Jamaica", while the alternate hypothesis stated that: H3a. "There will be evidence that that parents' educational achievements serve as reliable predictor of primary school students' academic performance and educational outcomes in the context of rural Jamaica."

The findings supported the null hypothesis which assumed that there is no evidence that parents' educational achievements are likely to serve as reliable predictors of their children's academic performance and educational outcomes. This confirmation of the null hypothesis was based on the research findings where $r^2 = 0.260$ as the rule of thumb suggests that the closer the r^2 is to 1, the more accurate the predictive power of the explanatory variable. In the case of this study, parental educational achievement only predicts 26 percent of the variations in the students' academic performance in the studied schools hence would be

deemed as an inaccurate predictor. Therefore, the alternate hypothesis which sought to confirm that this study provided evidence of the parental educational achievements as a reliable predictor of the educational outcomes of their children was rejected.

Consistent with the theoretical claims by Bourdieu (1990) – Cultural Capital Theory, the findings demonstrate that parental educational attainments influence the children's educational outcomes. The study depicts that a unit change in parental educational attainments could explain up to 26 percent change in the school children's educations outcomes. This has been supported by the literature from numerous studies. Baker et al. (2017), Tarfassa (2018), Clearing House for Military Readiness (2020), Idris et al (2020), Davis-Kean and Water (2020), and Ludeke et al. (2021) demonstrate that educational attainments influence the academic outcomes of their children. Whether this is through supporting them with school fees, scholastic materials, doing homework, involvement in school activities, or demonstrating positive beliefs, attitudes, and values, it is demonstrated that these enhance the education of the children. The parents act as models of their children, which improves the academic performance of their children. Perhaps, this explains why to a lesser extent (26%), the educational outcomes of the children from the schools studied is influenced by parental educational attainments.

The findings though seem to confirm the claims by Nelson (2009) demonstrated that that parents' level of education alone cannot accurately predict the academic performance of students. Therefore, in agreement with Nelson (2009), the findings have revealed that educational achievement can only predict 26 percent of the variations in the school children's academic outcomes. It may be asserted that as claimed by the aforesaid scholars, other factors predict a larger percentage of the performance of the children. These claims notwithstanding, Eccles and Wigfield (2002) demonstrated with evidence that parents' education predicts children's educational outcomes to a greater extent and more accurately. Eccles and Wigfield

study, like this one, focused on the parents' contribution to the academic success of their children, among others. It was concluded that parents are a great contributor to better grades of the children.

Phase Two: Qualitative Findings

In keeping with the research design, the qualitative findings were used to pinpoint individuals who would give a deeper understanding of the phenomenon studied. The researcher used a group of 14 participants for the focus group discussions to elicit more ideas from the participants in order to provide deeper explanations of the observations from the quantitative phase.

In this section, the seven key findings, obtained from the 14 participants from the second phase of the study, are listed below. The major findings that emerged from the qualitative phase of the study are highlighted. Following these findings are explanations and quotes provided to support the findings as well as to give authenticity to them.

- Finding 1: Participants spoke of the value they place on education and, as such, wanted their children to follow suit, learn their lessons, and pursue higher education, even to the first-degree level. But some of the educational outcomes are influenced by either factors at school or within the children themselves.

- Finding 2: Participants reminisce of not accomplishing much at school and therefore would like to see their children do much better than they did in their times.

- Finding 3: Participants were eager to share with their children their expectations of them. Some participants were quick to say they "sing it like a song every day" before the child goes out to school.

- Finding 4: Although some participants have experienced challenges in assisting their children with home/schoolwork, others indicated that they get assistance from friends

and neighbours living close to them, while others said they engage persons to do that for them at a small cost.

- Finding 5: All participants suggested that when they attend Parents and Teachers Association (P.T.A) meetings, they want to hear how well their children are performing at school, not only in the context of academics but also in terms of behaviour.

- Finding 6: Although some participants agreed that they tried to convey to their children the importance of getting a good education, they wished they had the skills to do much more.

- Finding 7: Some parents indicated that there was no special study place provided for children to study in their homes. The proceeding section provides a detailed description of the respondents' contribution to the discussion and gives direct quotes from the respondents to support the findings.

Finding 1: Participants spoke of the value they place on education and, as such, wanted their children to follow suit, learn their lessons, and pursue higher education, even to the first-degree level. But some of the educational outcomes are influenced by either factor at school or within the children themselves.

When discussing the value they place on education, some participants talked about the fact that they consider education as one of the key vehicles that can "lift persons like themselves out of poverty to enjoying a better quality of life." Some participants expressed regret that they did not have someone to sensitize them on the value of education and how it could have helped them further on in life. Others said that their parents were "barely able to read and write," and so they "dealt with them the best way they knew." They were not blaming their parents for where they are in terms of not having a good education but they were concerned that they did not go very far in education to reap better benefits out of

education. All agreed that they would like to know that their children get a good education, and achieve at least a first degree in academic studies and become successful in whatever field they choose. Children sometimes do not put in enough time to read on their own even where they are helped at home. They get distracted by other things like extra curricula activities, among others.

Finding 2: Participants reminisce of not accomplishing much in school and therefore would like to see their children do much better than they did in their times.

When talking about their performance in school, some of the participants lamented attending high school and exiting school without having the minimum of four subjects passed at the CSEC level examinations, which is the entry level for some colleges. A number of parents reasoned that they would like to go back to school, but would not be able to do so due to the fact that they have their children to support in school, and other family responsibilities to which they must attend. They all agreed that they want their children to do much better than they did while attending school. One of the participants, who is a single parent, "said that she could not think of going back to school at this time because she had not received a very good foundation on which to start. However, she wants to make sure that her child gets a good, solid education that she did not have the privilege to get in her time.

Finding 3: Participants were eager to share with their children their expectations of them. Some participants were quick to say they "sing it like a song every day" before the child goes out to school.

When participants were asked how often they conveyed their expectations of their children to them, one participant, a single mother, said she did so "every day." Another indicated that she sings it like a chorus of a song, practically every day her child goes to school." She said, "I do not know any other way to do this, because I want the child to

remember this at all times. I believe this will encourage the child to do very well in whatever the child chooses to study".

Another parent who is a janitor at one of the schools said, "I keep reminding my child that I did not do well because I did not get this type of opportunity that the children are now getting in their education." Yet, another said that although she was not spoken to nicely by her parents in the way parents now communicate with their children, she has always encouraged her child to do well in school. She said she did not want to live her child's life in telling her what to do but would like to see him settled down to serious work because only those who are fully literate can navigate this world.

Finding 4: Although some participants have experienced challenges in assisting their children with home/schoolwork, others indicated that they get assistance from friends and neighbours living close to them, while others said they engaged persons to do that for them at a small cost.

When participants were asked about assisting their children with their home/school work, more than half of the respondents said that the children's work was very challenging and "beyond their heads." Some conceded that they had not done well at school, and so most of what the children do now in school is completely "foreign" to them, and is difficult to understand. One of the participants, a holder of a Bachelor's degree in Human Resource, said that her child's work posed no problem to her, but she had no time to assist her child because her job was time consuming and "gave her little time to help her child." She said that by the time she got in most of the times, the child had retired to bed. Others said that, "they had the same problem with their jobs, but what they do was to ensure that the children are enrolled in taking extra lessons at school." Some participants said that they were not employed, therefore, could not afford to pay for extra lessons for their children. One parent said that her child receives help from the neighbours and sometimes-older family members who are

attending high school. One parent said that her only concern with this arrangement was that of supervision of the children, since in many instances, the children are not properly supervised, and in most instances are unsupervised.

Finding 5: All participants argued that when they attend parent-teachers association meetings they wanted to hear how well their children are performing at school not only in the context of academics but also in terms of behaviour.

When looking at parental support for the parents' teachers' association activities, all the participants agreed that as partners in education, they supported the parents' teachers' association activities for many reasons. Firstly, they want to hear how their children are performing at school, not only in terms of the academics, but also in terms of how well they are behaving at school. Others argued that they want to be in the know about what was happening at school and to be able to give their support to the school, and its activities. One of the participants said, "I have never missed a single meeting. I like to know that I am there to give my support because when the schools move forward our children will benefit as well. We are supporting our children indirectly."

Finding 6: Although some participants agreed that they tried to get across to their children the importance of getting a good education, they wished they had the skills to do much more. Some of them have low motivation for school related academic activities.

When asked how they demonstrated that education was an important value to them, and by extension their families, participants conceded that although they were limited to a greater extent, they try to demonstrate in their homes that education is the 'way forward' by trying to send the children regularly to school. One of the participants said that the only time her children were absent from school was when the child was sick or school was on holiday. Participants were very vocal at this point, and said their children had never missed a class, unless it was due to some circumstances beyond their control.

Finding 7: No special study place is provided for children to study in the homes.

Participants were asked about the accessibility of special study area in the homes for the children. There was consensus among the parents that this was out of their reach of provision, given the reality of their situations, against the background that many of them are unemployed, and, therefore, faced great financial challenges. One of the participants made it clear that she was more concerned with "bread and butter issues" for her child than to be thinking of special study area at home that would come with an extra cost to the family and reduce their disposable income that would be spent on more basic needs. She was very vocal in saying that she wants the very best for her child but her reality was that she could not afford this at the moment, as there were other areas in her household that needed first attention.

It should be noted that there were personal experiences that were captured, analysed and quoted verbatim under the specific questions where they were considered to augment the quantitative findings. This depended on how the researcher considered the experiences shared in terms of being comprehensive in supplementing, complementing, or clarifying the quantitative results. Several examples are noted in the next section.

Connecting the Mixed Method Results

The researcher after presenting, analysing, and discussing the quantitative results in the first phase, presented, and analysed, the findings from the qualitative results in phase two, the results and findings of the mixed methods design are converged question by question in the next sections. The key findings of the quantitative study are extracted in the section and explained further from the findings contained in the Phase Two of the study, which was a qualitative inquiry.

Responding to the Research Questions

The study was guided by three research questions that were aligned to the study objectives and were discussed in preceding sections of this chapter. The questions were:

R.Q. 1: How does the educational achievement of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica?

R.Q. 2: What is the nature of the relationship between parental involvement in educational programmes and initiatives on the academic performance and educational outcomes of primary school children in rural Jamaica?

R.Q. 3: To what extent do parents' educational achievements serve as a reliable predictor of primary school students' academic performance and educational outcomes in the context of rural Jamaica?

The merit of the qualitative phase was three folded. Firstly, the sequential mixed methods design gave the opportunity to the researcher to elicit participants' stories and explanations through the focus group discussions and used to expand the quantitative findings. It also provides more depth and rigor to the understanding of the phenomenon studied. Secondly, the follow-up approach taken, allowed the researcher to see the possibility of inconsistencies in connecting the responses and to be able to highlight them, and obtain more explanation from the participants. Thirdly, the participants were allowed to discuss areas of concern that could not be covered adequately in the guiding questions, but which were found complementary to the findings already obtained.

Connecting, and Expanding the Quantitative Results

The main way to make sense of the findings from phases one and two of the study was through the connection of the findings. Therefore, that way, the qualitative findings were used to enhance, and expand on the quantitative findings. These are connected in this research report question by question. In the next section, connection between the quantitative, and qualitative findings is done.

Research Question One was:

"**How does the educational achievement of parents directly impact the educational outcome and academic success of their children attending primary school in rural Jamaica?"**

The quantitative findings on Question one in Table 4.3 revealed that parental educational attainments as an independent variable has a positive and significant influence on students' averages in 4 core subjects for four years, $r^2= .260$ (Sig=.000). This demonstrates that parental educational attainments can explain up to 26 percent of the variation in the students' average scores in the four core subjects. During focus group discussions, as noted in the findings in qualitative findings 1-7, parents suggested different ways through which their educational attainments could be impacting on their children's academic performance. Key activities that lead parents' actions to have an impact on children's educational attainments include: in Finding 1, parents value education of their children which motivates them to perform. Finding 4 suggests that parents support their children with their home/school work which is deemed to enhance the children's academic outcomes. This therefore, represents a positive impact on the performance of the children at school. In Finding 5, some parents mentioned that they influence the behaviour of their children positively when they check on how they behave at school, which is likely to have a positive impact on the school performance of the children.

Further, some parents indicated that due to their level of education, they were able to help children with their homework more especially those who are in lower levels of the primary school. In addition, the parents claimed that they share with their children their interests in education, and explain to them how education will benefit them in future. The parents indicated that when they follow up their children's work, and what they do at school including their behaviour, it keeps them focused on studies, and perhaps helps their academic

performance. The findings also revealed that some parents find time for the academic development of their children. In an attempt to find out more about how the parents help their children grow academically besides paying school fees and supporting them while doing their homework, some parents indicated that they buy them some reading materials, read with them sometimes at home, ask them to read for other kids, and encourage them to participate in activities that involve reading.

One of the participating parents in the focus group discussions shared the following life story about how he has come to help his children grow academically, and how this is manifesting in the academic lives:

> *I attended a parenting workshop where the facilitators took us through the role of a parent in the educational life of children. Several ways were mentioned through which parents play their role as facilitators of their children's education. Among these, the usual payment of school fees and provision of scholastic materials, doing homework, and attending school activities were mentioned. However, it was emphasized that as parents, we were supposed to go beyond these activities and help in various ways. We were informed that we are role models of our children and should promote a good image of education among the children like telling them about the importance of education, taking them to art galleries to expose them to things that would enhance their cognitive processes, and move with them to offices where educated people can be appreciated, among others. I started practicing some of these activities with my children. This has enabled them to start developing their academic paths, telling us what they need to be in future, sharing with us their role models in society, and how they think education helped them to be what they are, and explain what they think they*

need to do at school to realise their future dreams. This has increased their motivation to do their classwork, revise their notes without being reminded, and participating in academic clubs. The feedback I get from school since I started to consciously do these things with my children is positive. Teachers inform me that they are more active in class and extra curricula activities. In addition, their termly academic scores are improving. This experience demonstrates that as parents, we have an influence on the academic outcomes of our children. When we play our roles effectively, our children benefit academically.

Both quantitative and qualitative findings were linked to the existing literature which provided areas that supported this study in terms of theorization, conceptualization, and how the reality has been demonstrated across contexts and time. This is contained in fresh ideas generated from FGD.

Research Question Two was:

"What is the nature of the relationship between parental involvement in educational programme and initiatives on the academic performance and educational outcomes of primary school children in rural Jamaica?"

This was first investigated by looking at how the parents were involved in their children's educational programs. Using activities related to forms of parental involvement in educational activities as established by scholars such as Asiimwe and Magunda (2017), and Tarfassa (2018), the researcher was able to determine how parents were involved. From the findings in Table 4.5, the overall mean average of the status of parental involvement as demonstrated is 4.02. Therefore, the findings depict a high level of parental involvement in children's educational programs as measured by a variety of activities related to such. This was followed up with a correlation analysis to determine the dependency between the two

variables. From Table 4.6, it is demonstrated that the relationship between parental involvement in educational programs and children's educational achievements was 11.2 percent. This confirmed that there was a relationship between the two variables which weak but positive.

From the focus group discussions, it was noted that parents involved themselves in the educational activities of their children in a number of ways. These included the following: placing value on education and encouraging children to read hard at school for better grade. This provides the children with the necessary motivation to study. Parents also suggested that they often conveyed their expectations to the children so that they know what parents expect of them and work towards it, which is another source of motivation to the learners. In addition, parents assisted the children with home/schoolwork or got them neighbours or coaches to help them so that their performance improves. It was also revealed that parents attend Parents' Teachers' Association meetings with interest to know about their children's academic performance, and behaviour at school. However, consistent with the findings from the quantitative inquiry, there were cases where parents' involvement was found to be a challenge. This included parents reporting that they did not provide adequate learning space, not having skills and knowledge to help the children, and not having time to discuss with the children or read with them were perceived to negatively affect the children's educational outcomes.

Detailed discussion of the quantitative findings that also relates to the qualitative findings as the supplement, and expand on the quantitative results are contained in the ensuing section. The findings are also integrated into a flowing thesis. The section explains what research question three found out from the investigation.

Research Question Three was:

'To what extent do parents' educational achievement serve as reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica?"

The quantitative findings demonstrated that the extent to which the predictive power and accuracy of the explanatory variable – parental educational attainments, of the primary school students, educational outcomes was low. As the parental educational attainments could only explain 26 percent of the students' educational outcomes, it was not considered as an accurate predictor. This was informed by the realisation that other factors not studied during this research were considered to explain up to 74 percent of the variations in school children's educational attainments. Therefore, to this extent, the researcher avers that parental educational attainments is not an accurate predictor of school student's educational outcomes.

During focus group discussions, several views were generated about parental education predicting the educational outcomes of their children. The focus group discussion participants noted that performance of children in schools is affected by a number of factors. These can be noted in the findings 1 through 7 of the focus group discussions in phase two, which have been rephrased to flow logically with the rest of the work. During the discussion, the researcher noted that some factors that were seen as outside the educational attainments of the parents but which nonetheless affected the educational outcomes of the children were: (i) the time available to the children to do their school work. Some of the parents noted that they did not have enough time to help their children do their homework. One of the parents shared the following life story about helping the children with school work:

> *I am an educated parent, and my husband is also educated. We both work*
>
> *far away from home. Despite our education, which would enable us support*
>
> *our children with their school work like helping them out with their*

homework, or reading with them some books at home to enrich their literacy skills. We are at work very early in the morning, and come back home late, and tired. We do not find enough time, therefore, to relate with our children on academic matters. Sometimes, a term ends when we have not inspected their school work, which our children do without our guidance, let alone, knowing whether they do this homework correctly or not before they take it back to school. Visiting their school during school activities is also a challenge. We miss many school events every year, and we are not in touch with the teachers, and school administration. While we know that these actions affect our children's education, we are always caught between a hard surface and a rock. We have to fend for the family, and in supporting the education of our children, we find paying school fees our key priority, which would be affected if we were not committed to our jobs. At the end of the day, the education of our children is affected due to our limited participation in their school activities though, all their school dues are paid in time.

In relation to Research Question One, the points generated from the focus group discussions speak to the multiple factors that affect the effectiveness of the parents as role models, and first teachers of their children that would improve their academic outcomes. In addition, the views attempt to explain and complement the findings of the quantitative study. As noted from Table 4.1, most of the parents who participated 126(87.5%) have either completed secondary school education or higher. Ordinarily, these parents would be expected to have reasonable grasp of the primary school academic work, and would perhaps be in position to take steps that help their children to succeed academically. This reality has an impact on the ability of the parents' educational attainment to predict the educational

outcomes of a child. Academic outcome gaps therefore remain in spite of the parents having the requisite education to cause better academic performance of the children. The findings also note cases of parents who are not able to help their children and opting to use neighbours or hired academic helpers.

As noted in Finding 1, regarding the child-based factors – factors within the child, during the focus group discussions, the parents noted that much as they put in their efforts toward helping their children, and in spite of the limitations in the home environment, the children's performance could also be affected by children-based factors. The parents on the children-based factors claimed that children sometimes do not put in enough time on their own to revise the work they are given at school including reading the class notes privately to improve their knowledge of the subjects taught at school. This keeps their literacy, and numeracy levels very low on many occasions.

During the discussions, it emerged that children are distracted by other non-academic events within their environment that eat into their academic time. Being a rural setting, the children spend time playing games after school, and come back home tired and ready to sleep. When the term ends and children sit their termly exams, in most cases, they are not ready. Perhaps this is brought about by the low motivation of the children to perform well in their academic work or their strong desire to participate in extra curricula activities. One of the discussants who claimed to be a father of three primary school going kids in the selected schools shared their lived experience about the children and their academic performance.

> *My wife and I give time to our children to complete their school work accurately. We have adequate pedagogical skills to guide them through primary school work. We encourage them to perform better in their school work. We remind them regularly about the need to perform better for their*

future. However, after having academic discussions with them from the relevant text books on the primary school syllabus, they do not rehearse their work regularly to enhance their grip on the subjects taught both at home and at school. Immediately after doing the work, they run out of the home to meet other children in the community, and play their games. We pull ropes with them every day to refocus them on their academic work. However, they are not heeding to our calls. Their grades in the core subjects are low, and do not seem to be improving with time. Yet, we have relevant textbooks at home, we gave them a separate study room that is free of distraction, and they do not participate in household chores that would ideally distract them by keeping them away from revising their work. Every day, they find themselves busy playing with other kids and fail to read their school notes. Their numeracy and literacy skills are lower for the children in their respective grades. It is a big challenge to us. Our children do not seem to be motivated by our example as educated parents to excel at school may be! Perhaps they do not share our beliefs and attitudes towards education as a valuable asset for their future.

The focus group discussion results reveal that though parents' educational attainments can influence the children's educational outcomes, it is not a major factor that can reveal much regarding the likelihood of the children achieving goods grades at school. Other factors come into play that lower the influence of the parents' educational attainments on children's academic success. Therefore, it seems apparent that parents are aware that their educational attainments may not provide an accurate prediction of the educational outcomes of their children as many other factors beyond their control seem to dilute their efforts. This may be reflected in the quantitative findings which show a lower predictive power of the extent to which parental educational attainments influence the children's educational

outcomes. In addition, these findings as already discussed in the section dealing with research question one, providing existing knowledge that supports the reality that parental educational attainment is not an accurate predictor of students' academic outcomes.

Fresh ideas Generated from Focus Group Discussions

From the focus group discussions, the fresh ideas were shared in relation to why the respondents continued to face challenges in assisting their children with homework. Some participants pointed out that although they attended high schools, they had difficulty assisting their children with homework because the work was quite challenging to them. When asked about their performance in school some participants lamented that they exited school without the minimum of five subject passed at the CSEC level of examination which would take them to college. It was also revealed that some parents consider attending the Parents' Teachers' Association Meetings as their responsibility as parents in support of their children at school.

Some respondents said that they attend these P.T.A meetings for more than one reason. Firstly, to support their children, and secondly, to know what was happening at the school. It was also noted that parents see themselves as partners of the school in the education of their children, and, therefore, wanted to give their support in all activities such as sports day, reading day, and Parents' Day, among others. Thirdly, some parents said that they wanted to know how their children were performing at school in terms of the academic progress, and their behaviour. This view was widely supported as parents discussed that the behaviour of the children affects learning, and that there was need for parents to monitor their children's behaviour in school. Some parents highlighted that when they support the school programmes, they are both directly, and indirectly supporting their children in their pursuit of education. It was believed that this involvement would later improve the academic performance of their children. This kind of awareness could lead to more parental involvement in school activities later.

Differences between Quantitative and Qualitative Findings

Integrating the results and findings from both phases of the study revealed some inconsistencies between the two phases. For example, Item 6 of the parents' questionnaire asked about the income earner of the family to which mother made of 30% and father made up 31% and for both parents 39%, but results from the qualitative phase indicated that many of the respondents were unemployed. This information is contrary to the empirical information gathered from quantitative phase of the study. Connecting Item 12 from the students' questionnaire, with the qualitative phase, there was another inconsistency where Item 12 indicated that 61% of the respondents polled that their parents worked long hours. Whereas, as this aspect came out in the focus group discussions, it did not represent most of the views of the parents who participated in the focus group discussions.

Evaluating the Research Findings

In order to judge the quality, value and significance of the research findings, it is important to look at the appropriateness of methodology used, and the appropriateness of the statistical tools within the context of the three research questions generated. The current research utilised the explanatory sequential mixed-methods design which adopted the quantitative and qualitative research paradigms against the background of the positivist and interpretivists philosophies which justified the method embraced. Mixing of both positivists, and interpretivist philosophies was in line with the ontological, epistemological, and axiological considerations of the study. The methods embraced were appropriate as they were determined by the research philosophy and paradigms that guided the research.

The adoption of the sequenced explanatory approach was to promote richness of findings by having the quantitative results deeply and extensively explained by the qualitative findings. The survey questionnaire was appropriate in generating the quantitative data through ordered scale from which respondents chose the best options they considered to align

with their held views about the research phenomenon. The findings generated from the questionnaire were analysed suing the SPSS 28.0. This tool was found ideal in generating the descriptive statistics – frequencies, percentages, mean, and standard deviation, and inferential statistics – correlational and regression tests like the Kendall's_tau b test for associations, and Pearson's regression for influence of one variable on the other, that were needed to answer the research questions.

How does the educational achievement of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica? This subsection attempts to answer the first question:

Research Question One

How does the educational achievement of parents directly impact the educational outcomes and academic successes of their children attending primary school in rural Jamaica?

This subsection attempts to answer the first question of the research which sought to establish the extent to which parental educational achievements of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica. The variables in this study show a positive relationship (association) in the first place. Later, a coefficient of determination was run (Table 4.3), a Coefficient of Determinant r^2 (Table 4.3) and descriptive statistics of parental educational levels to support (Table 4.3) to authenticate the findings from the children were also used. First, the correlations of the variables are presented in Pearson's correlation coefficient in Table 4.3. The researcher analysed the Likert scale data to using the Pearson's correlation to demonstrate the relationships/associations between the independent and dependent variables. The Pearson's correlation was selected as an appropriate inferential analytical tool due to its appropriateness to be adapted to the Likert scale data. As they claim, Sullivan and Artino (2013) demonstrate that the Likert Scale data can appropriately, and accurately be analysed as interval data.

Therefore, on this basis, Question One was analysed using inferential statistics of Person's correlation. This choice also is supported by Boone and Boone (2012) who exhibited that Pearson's correlation analysis is scientifically applicable for testing associations between variables in a study. This proved that this tool provided valid, reliable, and trustworthy findings. Thus, arising from the aforementioned, the researcher used the Pearson's correlation coefficient to examine the extent to which educational achievements of parents positively or negative impacted on the educational outcomes of the children as independent and dependent variables respectively. The recasting of tables 4.2, 4.3, and 4.4 is intended to emphasise the relevance of the tools used and the findings therein.

Table 4.2

Pearson's Correlation Coefficient

		Parents' Educational Attainment Levels	Students' Averages in 4 core Subjects for four years
Parent's Educational Achievements	Pearson Correlation	1	.515**
	Sig. (2-tailed)		.000
	N	144	144
Students' Averages in 4 core Subjects (Edu. Outcomes/Aca. Success)	Pearson Correlation	.515**	1
	Sig. (2-tailed)	.000	
	N	144	144
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.2 shows the Pearson's correlation coefficient r= .515** between Parents' Educational Attainment (PEA) levels and students' averages in 4 core subjects for the 4-year period as being positively correlated. The Pearson's correlation r .515** (Sig=.000, P=.01) demonstrates an existence of a moderate positive, and significant relationship between parental educational achievements and students' academic performance (in 4 core subjects (English Language, Mathematics, Social Studies and Science) for a 4-year period. The relationship shows that a positive change in parental educational attainments would be associated with a positive change in the children's educational outcomes. Therefore, this positive relationship between the variables confirms that parental educational attainments positively associates with students' academic success. A further analysis using the Pearson's correlation as demonstrated in Table

4.3, reveals that parental educational achievements as an independent variable has a positive influence on students' academic success (in 4 core subjects for four years, r^2= .260 (Sig=.000). This explains that parental educational achievements can explain up to 26 percent of the variation in the students' average scores in the four core subjects. It may be averred that a unit increase in the parental educational attainments would increase the average subject scores by 26 percent.

Table 4.3

Coefficient of Determinant

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515[a]	.265	.260	17.60870
a. Predictors: (Constant), Parent's Educational Attainment Levels				

Question one was answered by testing the following two hypotheses: Hypothesis H1o. There will be no evidence that PEA likely to impact their children's educational outcomes positively. H1a. There will be evidence that PEA likely to impact children's academic outcomes positively. The evidence from the findings as demonstrated in Table 4.3 reveals that the alternate hypothesis "there is evidence that PEA is likely to impact their children's academic outcomes positively was adopted. Therefore, based on the findings, parents' educational attainments positively impact on the educational outcomes of their children. In discussing this question further, a comparison is drawn with the findings for question one in Table 4.8 which revealed the same positive influence that educational attainments of parents as an independent variable has on the educational outcomes of children as a dependent variable.

The results in Table 4.2 are consistent with those in Table 4.8 and demonstrate that parental educational attainments have low positive but significant impact on the academic attainments of the children. As noted by Hughes et al. (2018), the extent of impact to be high, the r^2 results should be closer to 1 on a scale of 0 (no impact) to 1 (highest impact).

Therefore, r^2 at .260, one would argue that to a lesser extent, parental educational attainments as an explanatory variable has a positive impact on the educational outcomes of the children in the subjects studied.

More investigation was done to explain the findings as revealed in Table 4.4. The findings revealed that 62 percent of the parents (89) sat no subject at the CSEC examination level which implies that although they may have had secondary level education, they might not be sufficiently literate to assist their children adequately at the grade four level. It was further noted that 13(9%) of the parents passed at least 5 subjects at the CSEC examination, while 26(18.1%) indicated that they had passed less than five subjects at one sitting of the examination. Very few parents had tertiary level educational qualifications such as diploma, bachelor's degree or master's degree. One could note that majority of the parents had low academic attainments, which could explain the low extent of their educational attainments having an impact on the educational outcomes of their children.

Table 4.4

Parents' Educational Levels

Parents' Educational Attainment Levels			
Details	Frequency	Percent	Cumulative Percent
Did no subject	89	61.8	61.8
<5 Subjects passed at CSEC	13	9.0	70.8
>5 Subjects passed at CSEC	26	18.1	88.9
College Diploma	12	8.3	97.2
Bachelor's Degree	3	2.1	99.3
Master's Degree	1	.7	100.0
Total	144	100.0	

The findings support both conceptual and theoretical presumptions of parents in this study. Theoretically, in the first place, the findings support Bandura (1986) Social learning theory as the home provides a learning environment where children can learn from their parents. The parents and other members of society can act as role models for the children and such children can be motivated to study better in order to be like them. Secondly, the findings agree with Bourdieu (1990) Cultural Capital Theory. The study confirms Cultural Capital

Theoretical postulations that the parents' beliefs, values, and attitudes have an influence on the children's education. Talking positive about education, taking the children to various places to appreciate the effect of education was demonstrated by one of the parents as an aspect that has improved the educational outcomes of the children in line with the postulations of Bourdieu. Thirdly, the results demonstrated the efficacy of Bronfenbrenner (1977) Bio Ecological Theory, more especially, the microsystem effect on the children. The home-family has a key role it plays in shaping the academic lives of the children as demonstrated in both the quantitative results and the focus group discussion findings.

Further, literature in support of the findings demonstrates that parents have a positive contribution to the academic performance of their children. Asiimwe and Magunda (2017), and Asiimwe and Nabitake (2021) provided supportive claims to these findings when they asserted that parents can influence the academic grades of their children by making the home environment conducive to learning. This is further supplemented by Cole (2020) who demonstrated that educated parents provide a more supportive home environment that improves the educational success of the children. In addition, parents with higher levels of education encourage their children to succeed academically. This presupposes a positive contribution of parents' education to better academic achievements of their children, which is in line with this study's findings.

Various other scholars have provided empirical evidence across time and space which has demonstrated that parents' education positively influences the academic performance of the children. Bakar et al. (2017), Tarfassa (2018), Clearing House for Military Readiness (2020), Davis-Kean and Waters (2020), and Ludeke et al. (2021) find parent's educational level a positive and significant explanatory factor of the children's academic success. Parents with higher academic attainments participate effectively in school activities, communicate with their children's teachers, follow up the children's academic work, and

provide the necessary material support to education and the right mentorship. It may be asserted that this study confirmed what has been studied in other contexts that parents' education influences children's education.

In the next section, the researcher presents and discusses the second question/objective of the study which sought to investigate the nature and magnitude of the relationship between parental involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica.

Research Question Two

What is the nature of the relationship between parental involvement in educational programs and initiatives on the academic performance and, educational outcomes of primary school children in rural Jamaica?

Research Question Two was to measure the nature of parents' involvement in educational programmes and initiatives on academic performance and educational outcomes of primary school children in rural Jamaica. The variables were parental involvement as an independent variable, and students' performance in core subjects as the dependent variable. The data were collected using survey questionnaires from both parents and children, and were supplemented by focus group discussions with the parents.

Both descriptive and correlational analyses were done to examine the relationship between parental involvement, and children's educational outcomes. Descriptive statistics were used to describe parental involvement in educational activities, frequencies and mean to order the children's views on parental involvement, and the Kendall tau_b correlation coefficient to measure the relationship. These analytical tools were considered appropriate and effective for this measurement since the question involved ascertainment of dependence between the explanatory and response variables. The analysis demonstrated that there was a positive but weak relationship between parental involvement in educational programmes and

educational outcomes of children r=0.112 (Sig=0.1). As a result of the findings of question two, the study adopted the alternate hypothesis (H2a) that there is a significant relationship between parental involvement in educational programmes and initiatives on academic performance and the educational outcomes of primary school children in rural Jamaica.

The study adopting salient activities that have been postulated by theorists such as , Bourdieu (1990) in the Cultural Capital Theory, and Brenfenbrenner (1977) in the Ecological System Theory, and debates from authors such as Castro et al (2015), Asiimwe and Magunda (2017), Jaiswal and Choudhri (2017), Wood and Bauman (2017), and Aalemda et al (2018). These theories, and debates had highlighted the various ways through which parents engage in the educational activities of their children.

In agreement with the findings of Castro et al. (2015), Asiimwe and Magunda (2017), Jaiswal and Choudhri (2017), Wood and Bauman (2017), and Aalemda et al (2018), the researcher demonstrated that parental involvement in educational activities had a positive and significant relationship with educational outcomes of students. However, in terms of strength of the relationship, the findings seem to contradict the claims by Boonk et al. (2018) whose findings demonstrated a strong relationship between parental involvement in children's education and the children's academic performance. It is the researcher's view that the strength of the association is dependent on the definition of parental involvement, which could warrant further investigation. It may be claimed that the approaches and methods used to investigate Question Three provided credible results that find an anchor in the existing body of knowledge about the study phenomenon.

In a nutshell, the methodology adopted for this research enabled the researcher to meet all the research objectives as the questions set were answered. Answering of the study questions which were aligned to the research objectives confirmed the meeting of the study objectives. Results from Question one illustrate that parental educational attainments as an

explanatory variable has a positive impact on children's educational attainments, while Question Two findings illuminate the relationship between parental involvement, and children's educational outcomes in the studied sample population. The statistical tools selected were deemed appropriate and measured what the researcher intended to be measured. In addition, the findings were linked back to the relevant theorization of the phenomenon and the salient debates in the existing body of knowledge. The methodology selected was in accordance with the research philosophy and adequately guided the study. It would be prudent to suggest that the study updated the existing body of knowledge by incorporating in the experiences from Jamaica which was a big research gaps in extant literature.

Research Question Three
To what extent do parental educational attainments serve as a reliable predictor of children's academic performance and educational outcome in the context of rural Jamaica?

Research question three was to measure the extent to which parental educational attainment served as a reliable predictor of children's educational outcomes using parental educational attainment level as one variable and students' average scores in 4 core subjects as the other variable. Parental educational attainments as a variable that was measured in terms of the level of education the parents attained at school. This was categorized into: not having passed a subject at CSEC, <5 Subjects passed at CSEC, >5 Subjects passed at CSEC, College Diploma, Bachelor's Degree, and Master's Degree. Meanwhile, the children's educational outcomes were denoted by the average grades scored in the four core subjects of English Language, Mathematics, Social Studies, and Science for a 4-year period. Data were collected from the parents using a survey questionnaire, and supplemented by a qualitative inquiry through the focus group discussions which were conducted after the quantitative investigation.

A regression analysis was carried out which revealed the extent parental educational attainments were an accurate predictor of the children's educational outcomes. This type of statistical tool was appropriate given the situation and the results the researcher generated. An influence of 26 percent was generated which meant that the explanatory variable – parents' educational attainments only predicted 26 percent of the variations in the response variable – children's academic performance as depicted by the regression model. This illustrated that 74 percent of the variation in the response variable was not predicted by the explanatory variable, but by other factors which were not a part of this study as these factors are likely to be school and home related factors as well as personal factors.

Other factors that were considered potential influencers on academic performance as noted by Albarico et al. (2023) in their work published in IRTMETS journals as revealed in their findings grouped in three strands of factors as school -related aspects, home-related aspects, and personal factors. The school-related factors speak to factors which include text books availability and accessibility, library availability and access, teacher's knowledge of the subject content and other learning facilities or infrastructures that are provided by the school. The home-related factors that influence student's academic performance are family education and family income as they relate to the socio-economic status of the family as well as family problems. Personal condition, on the other hand, relates conditions that the students have complete control over such as the way they spend their time, the level of motivation and school attendance, and their participation in academic growth. One example is truancy.

Albarico et al. (2023) expounded on school factors by looking at the physical layout of the school and its conditions, the resources, and technology available and accessible to the students as well as the availability of a study s centre. He expounded that the educational level of the parents can have a significant bearing on the student's way of thinking, viewpoint

and belief system. Argon and Klyici (2012) contributed that family attitudes towards school plays an influential and significant role in developing student's emotion and behaviour towards school that ultimately affect their academic performance. Siachifuwe, (2017) looked at teachers related factors such as teacher motivation and teacher preparation and readiness as significant contributing factors to poor academic performance of students. Moreover, habits and academic performance are significantly linked. This highlights that the better the study habits of students, the higher their academic achievement and ultimately their academic performance.

In relation to the study question, the researcher noted that parents' educational attainments as an independent variable was not an accurate predictor of the academic performance of the children. This was based on the fact that the $r^2=0.260$ was closer to 0 which depicts a weak prediction. The quantitative findings were accentuated by the focus group discussions which highlighted the influence parental education has on the children's educational attainments, and what was considered to influence the degree of predictive power of the explanatory variable over the response variable. In relation to the study hypothesis, the null hypothesis (H30) was adopted that is, there is no evidence that the educational achievements of parents serve as a reliable predictor of primary school students' academic performance and educational outcome in the context of rural Jamaica.

This finding was supported by the available literature such as Bakar et al (2017), Tarfassa (2018), Clearing House for Military Readiness (2020), Davis-Kean and Waters (2020), Idris et al. (2020), and Ludeke et al (2021), amongst others, that the parents' level of education alone cannot accurately predict academic performance of students. These studies demonstrate that there could be other factors that affect the influence parental educational attainments has on the children's educational outcomes. However, an earlier study done by

Eccles and Wigfield (2002) contradicts these findings and explained that there is consistent evidence that parents' education is a higher predictor of children educational outcomes.

While there is support in literature that PEA serves as a reliable predictor of students' academic performance, there are real situations where the parents have little or no schooling, yet their children perform excellently in school due to a number of intervening variables that are involved in the students' educational trajectory. However, some researchers argue that children academic achievement in most cases is not necessarily dependent on parents' educational level. Example in Hawkes (1995) study of parental educational attainments concluded that it does not have an impact on students' academic performance. Also, a study in Kahartonjo done by Chepehieng (1995) found a negative correlation between parental educational attainment and student academic performance.

There were no unexpected or surprising findings that could challenge existing assumptions on the relationship between parental involvement and academic outcomes found in the study. The findings either supported or contradicted the extant literature. Consequently, the findings reflected what was found in the literature reviewed.

Summary

The present chapter presented the results of phases 1 and 2 of the research study. It pointed out the points of convergence of the two phases thus, providing greater depth and breadth of the findings. The chapter demonstrated how the mixed-methods design pursued was able to provide the necessary results to answer the research questions.

In chapter 4, discussing the research findings, trustworthiness of the findings was established. This included ensuring consistency of research design, accuracy of the research process, and credibility of the findings. It also included demonstrating epistemological understanding of the research, depth of inquiry, synthesis, and evaluation of literature to back up the findings. In addition, adherence to the theoretical, conceptual, and the explanatory

frameworks applied was demonstrated. The researcher followed the research protocols that promote trust worthiness of the research findings.

Reliability of the findings was further promoted as indicated in the section dealing with reliability and validity of the data. This included ensuring that the methods applied in data collection, analysis, and presentation were appropriate. The survey questionnaire was used to elicit the quantitative data while the focus group discussions provided the qualitative findings. The data from the two strands of inquiry were analysed separately, and at one point were integrated to provide a logically flowing thesis. The qualitative findings, therefore, provided additional explanations of some of the themes explored during the quantitative phase of the study. The findings are presented thematically according to the research questions. The research methods, and tools were consistently applied. This provides opportunities for replicability of the study as the constructs used had been used before by other researchers to investigate similar or same research phenomena. The findings were integrated with the existing theories, and debates about the reality investigated.

Phase one of the results was provided. It related to the quantitative strand of inquiry. It provided the demographic characteristics of the respondents as outlined in the demographic section. The demographic profiles of the respondents demonstrated coverage of a cross section of the researcher's interest. The characteristics included the respondent's age, gender, family size, level of education, family income, working hours, and beliefs, and values about education. The researcher considered these aspects to be representative of the sample that would provide the needed information about the research problem.

Question One examined and explored the extent to which parental educational achievement of parents directly impacted the educational outcome and academic success of their children attending primary school in rural Jamaica. The study established that parental educational attainment had a positive impact on the educational outcomes of their children in

terms of their academic performance, grades they scored in the four core subjects of mathematics, English language, Social Studies, and Science. The findings were consistent with the relevant theories, and debates about the impact of parents' education on the academic performance of the children.

Question Two was dealt with by allowing the researcher to examine the nature and magnitude of the relationship between parental involvement in educational programmes, and initiatives on the academic achievements of the children. The results established that a relationship exists between the two, and that 11.2 percent of the times, the academic outcomes of the children in the named schools depended on the parents' involvement in the educational programmes. These results were also supported by the adopted theories, and the scholarly debates on parental involvement and its linkage with educational outcomes of children.

Following question two, the findings on Question Three are provided. The question sought to investigate the extent to which parental educational attainments accurately predicted children's educational outcomes. The findings revealed that in the sample studied, the parental educational attainments did not accurately predict children's educational outcomes. The variations in children's educational outcomes attributed to parental educational attainments was 26 percent which was considered too low to provide an accurate prediction. This implies that 74% of the variations in the students' academic performance could be explained by other factors besides parental educational attainment levels. These factors that are likely to impact student academic performance as determined by Albarico et al (2023) as school, child, and home related factors. The school related factors such as teachers' knowledge and competence in teaching, library access and infra-structure provided by the school as well as the overall school environment limited academic success of pupils. Home-related factors included the parents' socio-economic situations, students' attendance at

school, the provision of learning technology, nutrition of the child to name a few. Though the findings were in line with the dominant theorization on the research phenomenon, and a large body of literature, it was contradicted by some studies.

Phase two results were provided in this chapter. Several aspects were noted during this phase which were analysed thematically, and presented in phase two. The responses that warranted to be mainstreamed were reported directly in vivo/verbatim under the respective questions they were considered to support. Seven key findings were summarised that were used in the explanation of the quantitative results. These included parents sharing with their children value of education; parent's desire to see their children through education; sharing with the children their expectations of the children; challenges experienced with assisting children with their homework; different reasons for parent's participation in their children's education activities such as the parents', and teachers' association; challenges with skills to help the children; and limitation of space at home for learning purposes. These together with other suggestions were integrated in the study providing further explanation to the quantitative results.

In the section that deals with linking the results, the researcher connected mixed-methods results to give a comprehensive view. The researcher highlighted the key results in the quantitative phase that are explained by the qualitative findings. This is followed by an evaluation of the results in that particular section of the study.

In the final analysis, the chapter, presents, analyses, interprets, and discusses the findings from the study. The two phases of inquiry depict both the quantitative, and the qualitative strands of inquiry which assisted the researcher in answering the research questions posed in Chapter One, and to meet the related research objectives. These findings provide an overview of the views of the respondents from their lived experiences in relation to the pragmatist philosophy of research. In addition, they are related to the existing theories,

and scholarly debates about the research phenomenon. Gleaning from the findings discussed, there were no surprises of any serendipitous findings that could challenge the existing assumptions of the study or beliefs about the role of PI in rural Jamaica. What is obtained is that the findings are reflections of what is known from the extant literature that informed the study. The ensuing chapter presents the implications, recommendations, limitations and the final conclusion of the entire study.

CHAPTER 5: IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

This chapter provides the key propositions, and inferences drawn from the study. They are presented thematically to logically flow with the rest of the thesis. It starts with the implications, proceeds with conclusions, and ends with the recommendations for both application, and future research. The main aim of the study was to examine the possible influence of parents' educational attainment on academic performance of primary children in rural public schools in Jamaica. Three research objectives were framed for the study including to:

i. Explore the extent to which parents' educational achievements directly impacts the educational outcomes and academic success of their children attending selected primary schools in rural Jamaica.

ii. Examine the nature and magnitude of the relationship between parents' involvement in educational programmes and initiatives and the academic performance and educational outcomes of selected school in rural Jamaica.

iii. Investigate the extent to which parents' educational achievements served as a reliable predictor of selected rural primary school students in Jamaica.

From the findings, the researcher would suggest at least 10 things that parents could implement to provide greater support for their children to enhance their academic performance.

These were met by answering the following three research questions;

i. R.Q. 1: How does the educational achievement of parents directly impact the educational outcomes and academic success of their children attending primary school in rural Jamaica?

ii.   R.Q. 2: What is the nature of the relationship between parental involvement in educational programmes and initiatives on the academic performance and educational outcomes of primary school children in rural Jamaica?

iii.   R.Q. 3: To what extent do parents' educational achievements serve as a reliable predictor of primary students' academic performance and educational outcomes in the context of rural Jamaica?

In next section, the researcher attempts to review some of the study implications derived from the investigation.

Implications of the Study

The major findings of this study have contributed to the understanding of the impact of parental educational attainments on students' academic performance updating the literature especially, about the Jamaican context. This study has generated three key findings in relation to the study questions answered. (i) Parental educational achievement has a positive impact on the educational outcomes and academic success of the children, (ii) The findings also indicated that parental involvement in the educational programmes and initiatives are associated with educational outcomes of their children 11.2 percent of the time in the sample population studied. Though, the nature of the impact was found to be moderate. (iii) The findings demonstrated that although parental educational achievement influences children's academic performance as indicated to be at 26 percent, it is not a reliable predictor of children's academic performance in the schools studied. The findings were confirmed by Asiimwe and Magunda (2017), Bakar et al. (2017), Tarfassa (2018), Indris et al (2020), and Ludeke et al. (2021), amongst others, that parents' level of education alone cannot predict academic performance of students. The findings seemed to contradict the claims of Eccles and Wigfield (2002) whose findings, and conclusions indicated that there is consistent

evidence that parents' education is an accurate predictor of the children educational outcomes. However, the current findings are not without implications. Therefore, the researcher looks at philosophical, methodological, theoretical, and practical implications of the study that are set out below.

Philosophical Implication

The philosophical implication of the study is encapsulated in the philosophy of pragmatism that grounds the study and the contribution and conclusion that can be drawn from its philosophical underpinnings. One major philosophical underpinning of pragmatism stems from the arguments that knowledge is based on experience and that a person's perception of the world is a result of his social interaction with his environment. It argues that a person's knowledge is unique and different from others based on one's personal experience and that the primary focus of enquiry is to create knowledge that will result in practical change and in a practical way. The study is grounded in the pragmatism philosophy, which believes that there are multiple realities that are open and can be scrutinised by empirical inquiry and that research should not only present reality, but rather present things in the way they exist and observed. This type of philosophy speaks to different ways of interpreting the world and conducting research studies. It believes that there is no single point of view at arriving at reality and that investigations should involve different modalities of approaches that provide the breadth and depth of understanding of the phenomenon being studied.

Consequently, it is in this breadth that the mixed methods design was adopted by integrating at least two of the approaches to arrive at a comprehensive understanding of the phenomenon. To this end, this philosophical perspective informed the study in the Phase One approach where the quantitative method of enquiry was adopted in the first instance. In this quantitative phase the survey questionnaires were used. This philosophical perspective

informed the researchers' epistemological choice of methods and materials enabled the collection of data from a statistically determined sample to ascertain the opinions of the parents and children, in keeping with one of the tenets of pragmatism that there are multiple ways of arriving at the truth. Take for example, question three, from the survey questionnaires, a regression model summary and a coefficient of determination model summary were done. The regression model summary was able to reveal in statistical terms that the predictive power of parental educational attainments was 26 percent.

The coefficient of determination was able to give the same revelation. Both methods highlighted that parents' educational achievement level explains 26% of the variation on the students' academic performance which implies that a unit change in the parental educational achievement level would increase students' academic performance by 26%. In this scenario, there were two ways in which the truth was highlighted to the fore in responding to the extent parents' educational achievement serve as a reliable predictor of students' academic performance. This cements the point that the pragmatist philosophy generates the truth from multiple sources. From what has been generated by both methods, the pragmatist philosophy was able to provide one truth of the situation, that educational attainment of parents was not an accurate predictor of children's educational outcomes in the studied sample population.

The same philosophical perspective was applied to Phase Two of the study through focus group discussion findings. Pragmatists think that reality is not objectively but socially constructed against the assumption that by placing people in social context, there is greater opportunity to understand them in terms of their own perceptions and experience. The researcher's ontology under this phase was subjective; considering that there are several truths about a social reality based on your own experiences. This phase applied the subjective epistemology under the interpretivist philosophy (Hussey & Hussey, 1997). The interpretivists' paradigm promotes the value of qualitative data derived from discussions, and

interviews in pursuit of knowledge. Although this paradigm is acknowledged for its value in providing contextual depth, the findings from this phase were able to point out the multiple truths about the social reality investigated. For example, it was revealed that while educated parents ideally are assumed to enhance the academic attainments of their children, this was limited by factors such as lack of time, limited skills of parents, and low motivation to study by the children, among others. These results complemented the Phase One findings, to provide an in-depth explanation of the truths observed and to illustrate the other truth beyond the one exposed by the quantitative findings. However, the pragmatist philosophy is often criticized for its low validity, reliability, and its lack of legitimisation, and generalisability across contexts (Hussey & Hussey, 1977). Both paradigms of positivism and interpretivism are linked together to produce a pragmatic perspective of the explanatory sequential mixed method study undertaken by the researcher.

The implications therefore are derived from the four philosophical assumptions. The first assumption is the ontological question on the nature of reality, the multiplicity of truths – relativism. From relativism, the researcher finds different truths – perspectives as themes that are developed from the findings. In terms of the epistemological understanding of the study, the assumption asks the question as to what is knowledge and how do we know what is known. From this aspect, both objective and the subjective evidence is obtained from the participants. The implication is that the researcher relies on both the empirical evidence obtained from the quantitative study in Phase One, and the qualitative inquiry in Phase Two.

To explain the findings in the first phase, the multiple views are applied. Succinct and elaborate views are used to explain the findings. The elaborate views were captured as verbatim quotes to demonstrate the participants' specific lived experiences. Thirdly, the axiological assumption speaks to the roles and values. Research is not without values and therefore laden with values and biases. Here the researcher discusses these values that shape

the narratives, and then poses his or her own interpretation along with those of his participants. In regard to the study, the research suggests that it is not true that parental educational achievement is an accurate predictor of children's educational outcomes, but it can predict up to 26 percent of the outcomes of their children. It is also considered true that parental educational achievement has a positive impact on children's educational outcomes.

Moreover, it was established that it is true that there is a relationship between parental involvement in educational programmes, and children's educational outcomes. It was similarly revealed that besides parental educational achievements, some other factors could influence largely the educational outcome of their children. The fourth philosophical assumption is the methodological assumption that determines the research process where the researcher uses inductive and deductive reasoning to work with a particular information before he generalizes the findings. This included use of the theories, conceptual models, and scholarly debates to draw conclusions about the findings, and use of the findings to generate some new ideas that originated from this study to enhance the existing knowledge about the research phenomenon.

Methodological Implication

Judging from the analysis, findings from the study generated several implications for the methodology. There is a dearth of research in this area employing an explanatory sequential mixed-methods design. Not many studies have been done in Jamaica using this method to study the key actors in the educational field more especially, the parents who are considered to have a key role in the education of their children. Most studies have consistently used the traditional methods of either qualitative or qualitative approaches, focusing on parental involvement and its impact on education. Therefore, the execution of a sequential mixed-methods design could mean the beginning of a new innovation to explore parental behaviour in one phase and to have these explained by both the parents and their

children. This mixing of approaches into a single study gets the actors to further explain themselves within their social context to give clarity to the other phase. The present study makes an attempt to capture the actors of interest within their social context, and to give more insight from both paradigms in an integrated and comprehensive way.

Using the mixed methods, the study was able to prove in Phase One that in the context of the study, parental educational attainment was not an accuracy predictor of children's educational outcomes. In Phase Two, the approach was able to provide data from the lived experiences through focus group discussions an in-depth explanation of other factors that parents considered responsible for rendering parental educational attainments not an accurate predictor of their children's educational outcomes. This experience provided the data and results required to answer the other two questions. Utilising both methods provided a comprehensive picture of the study phenomenon. This enabled the researcher to draw evidence-based conclusions, and make recommendations that could be of help to other stakeholders in promoting educational outcomes in the country.

The research findings are deemed valid because the researcher believes it has accurately assessed the phenomenal concepts that the research was trying to assess. It was successful in measuring what the research was intended to measure in terms of its objectives and theoretical perspectives that informed the study. In terms its generalizability, it is not absolute. The findings cannot produce a broad generalizability, but to some extent produce a limited generalizability due to its context in which the findings were generated for the study. The results can only be applied to a specific situation similar to that of the research based on the characteristics of the sample. The study sample was small and as such rendered it less generalizable

Theoretical Implication

Numerous studies have demonstrated that parents have a key role in enabling the academic performance of their children. The claim that parents are the first teachers, and role models of the children from which behaviour, and cognitive development benefit immensely more especially, during the early years of a child's development seems to hold water. From a theoretical perspective, the current study merges two theories together to get a full understanding of the phenomenon studied. Extant studies Bakar et al. (2017), Tarfassa (2018), Deam-Kean and Waters (2020), and Ludeke et al (2021), among others, have applied different theories such as human capital theory, cultural capital theory, and social capital theory to explore family background, parental involvement, family beliefs, and values, home environment, and children academic achievement.

Several conclusions have been drawn from these studies some of which have extended, clarified, corresponded, or contradicted the theoretical perspectives from the Cultural Capital Theory (Bourdieu, 1990), and Bio Ecological Theory (Bronfenbrenner, 1977). Therefore, the present study adopted the two theories to augment each other, and provide a more comprehensive explanation of both study variables of parental educational attainments, and children's educational outcomes. The two theories are cognizant of the close social space between the parents and their children in a family setting, and how the existence of the duo in this space could translate into causal effect between what parents are, and do, and how this translates into their children's performance at school. Specifically, the following theoretical implications are drawn:

a) The study has shown that values (educational values) subscribed or embraced by parents can be passed on to their children through interactions, observation, and modelling. This revelation is underpinned by Bourdieu Cultural Capital Theory (1977) as well Bandura (1977) Social Learning Theory. These values emerged

through interactions between the child and their parents and were noted as some of the value propositions that parents pass on to their children.

b) Similarly, parents who espouse positive values, beliefs, and attitudes about the importance of education readily pass on this cultural capital to their children, and the reverse is true. This perspective is buttressed by Bourdieu's Cultural Capital Theory, (1977). Bourdieu postulates that cultural capital is gained mainly through the individual's initial learning, and is unconsciously influenced by the individual's surrounding that determines the individual's educational success. The parents being a key part of the children's home environment have a lot of influence on what children believe in, value, and act out in their behaviour including motivation to learn, and the interest in high academic achievement.

c) The study establishes that human development takes place in an environment of interaction between the child and his/her community (Knoft & Swick, 2008). The Ecological System Theory postulated by Bronfenbrenner (1979) contributed to the understanding of how human development is shaped by a complex system in which the person grows, and develops in relation to his environment (Bronfenbrenner, 2005; Johnson, 2008). Bronfenbrenner (1979) posited that the home, and the school are institutions for the development of the child's academic skills. At home, the child learns from the parents.

The level of their education which influences their socioeconomic status either enables of limits the parents' ability to provide an environment that promotes learning. This includes existence of learning materials in the home, space for learning, and sharing information with the parents that is critical to cognitive development, among others. The prescriptive importance of the Bio Ecological System Theory during this study was the

realization that parents have a role to play in their children's educational growth including academic performance.

These theories, therefore, provided a theoretical lens, and analytical framework through which the researcher was able to see, organise, synthesise, and evaluate the findings. The theories also accentuated the philosophical perspectives of the researcher by providing standards of proof to determine the truth of the social reality investigated in its multiplicity – relativist ontology, subjectivist epistemology, and interpretivist philosophy as expected from the mixed-methods research procedures.

The findings also confirmed that the two theories applied, that is, the Cultural Capital Theory, and the Bio Ecological System Theory were relevant in explaining the role of parents in the educational progress of the children more especially, at the elementary level of education, where parents still have a high degree of influence of the social environment within which the child grows up, develops value, and attitudes, and advances its cognitive abilities. Therefore, current and future researchers, parents, and policy makers can use these theoretical perspectives to shape relationships between parents and their children in the home setting.

Practical Implication

Practical implications of research relate to the fact that the findings arising therefrom may be important for the formulation of policy, practice, and furthering the theory or for future research study. The findings have the potential to bring about a cultural, and social change that can be done by influencing the policy processes to include deliberate steps to enhance the role of parents in developing the academic abilities of their children, and ensuring that their educational attainments meet their expectations. Therefore, arising from the foregoing, the following specific practical implications are drawn:

a) The government through the ministry responsible for education, and that of culture could draft a national policy on parenting skills and use that policy to sensitise parents on their responsibilities. The drafted policy in terms of the parenting responsibilities, and skills should form a part of the Family Life Education curriculum to be taught in the primary, and secondary schools. It may also be taught during the adult education sessions, and could form part of the counselling sessions of parents by the professional counsellors when handling parents that face parenting challenges. Parents may put up resistance to this new endeavour and so I propose that this new initiative be tied to one of the social programmes such as the Programme of Advancement Through Health and Education (PATH) so that it becomes a part of a collective benefit to the people who need support. It should be voluntarily done by parents. Before the start of the new endeavour, there should be a sensitization campaign on social media to sensitise all parents, giving the benefit to be derived and how it can be accessed.

b) The government could enact policies to improve, and transform primary education so that a good foundation is laid through to secondary education as the study data shows that 61.8 percent of parents who attended high school, and graduated have not achieved the minimum standard (passed at least 5 subjects at the CSEC examinations) for college entry. Implicit in the above data is that the foundation for quality education is not sufficiently laid at the pre-primary, and primary levels of the education system. This denies the graduates of such an education process the necessary skills for effective parenting. To enable develop such skills, more resources should be allocated to this section of the education sector. This may involve reforming the primary education policy to prepare children for future parenting roles right from

childhood. This would engrain the necessary values, beliefs, and attitudes in children, and be provided with the right skills to pass on these cultural aspects to their children.

Recommendations for Application

This section suggests ways through which parents could be facilitated to provide greater support for their children. The recommendations are derived from the findings of the study. The suggestions are highlighted in the following paragraphs.

To prepare parents to engage their children in the educational enterprise as models and mentors, the parents themselves must embrace the right beliefs, values, and attitudes about education. Parents should develop a body of knowledge, and skills, along with values, and disposition to become active, and responsible stakeholders of education. For growth, and development, children need mentors, and role models who are continuously involvement in the education of their children through good home environment that sets minimum standards for learning. Skills are not picked along the way but are honed systematically in the children at an early stage in their lives. This arises from what is seen, believed, and lived and is, therefore, passed on to the next generation.

Finally, parents need to devote sufficient time, and effort to mentor their children to adopt the mainstream values of society that will help them to become contributing citizens, benefitting themselves, and their country. Building the right culture, a conscious citizenry about positive parenting, and skilling of the actors to play their roles effectively should be the foci of the principles, and practices that arise from the implementation of these recommendations. The following recommendations for application are crafted based on the findings, and conclusions of this study to reflect what needs to be done for improvement of current practices.

Firstly, in relation to the parents, it is of utmost importance that parents seek to have solid value systems within the context of education. The value systems affect beliefs

and the beliefs affect the attitudes. The attitudes of the parents ultimately impact parental behaviour not withstanding that there are socio-cultural, and socioeconomic factors that affect behaviour as well. There is evidence that parents' attitudes fuelled by their socioeconomic status have a tremendous impact on children's educational achievement. Therefore, it is imperative that parents develop positive beliefs, values, and attitudes in order to enhance the educational achievements of the children. Achieving this may include parents seeking training opportunities in positive parenting so that they act as effective role models to their children, and create the right cultural capital at home.

Secondly, parents should build and sustain a culture of involvement that encourages their children to do well in school at all times. This is true for many reasons. Children of today will become the parents of tomorrow. It follows, therefore, that if the children do not do well in terms of achieving much in school, they will become parents who will not have achieved much, and the culture of parent-child involvement would not be passed on to the next generation. In this way, the cycle continues. This will inevitably affect their socioeconomic status in life. Recreation of academic failures in society through defective parenting is possible. However, when parents consciously model the positive cultural traits and pass them on to their children, the children will also become effective parents and continue the cycle of success in society. This is in line with Patnaik et al. (2013) who posited that people living in low socioeconomic status are likely to have less favourable attitudes towards children's educational endeavours. There is no doubt that expanding educational achievement through involvement, appears to be a clear route to expanding educational, and socioeconomic opportunities for the children in future.

Thirdly, parents should build and sustain a culture of involvement that encourages their children to do well in school at all times. Antonia (2019) explained that the home environment is a place where parents offer guidance to children and socialize them in

societal norms, and values. Parents must always seek to facilitate, engage and stimulate their children through role modelling, sharing beliefs, values, and attitudes that promote educational performance, particularly in early formation of the children's lives. This is not only essential for habit formation, but also for cognitive development, and ultimately, better academic performance of the children. Schmitt and Lipcomb (2016), and Hafner et al. (2018) emphasized that the home environment is significant to students' academic success, and development. Extending this claim, Harris and Robinson (2018) demonstrated that most of the gaps in the children's education usually, at elementary levels are a result of the children's home environment. Within the context of the home environment, there are many gaps in children's lives that can only be filled when the parents offer the right home environment that can facilitate holistic growth, and development of the children.

Fourthly, educators, educational policymakers, and parents should ensure that children graduating from all high schools have attained the minimum pass of the four core subjects along with an additional subject at the CSEC level of examination before exiting schools. This is to reduce the number of students leaving high schools who have not attained the minimum standard of education. In addition, the graduates should have some pedagogical skills required for effective, and responsible home tutoring to help the children to get greater benefit from their parents while at home. Incorporating early childhood education skills in the curriculum for CSEC level could help a great deal in producing graduates that will become effective parents as first teachers, and role models of their children at home.

Fifthly, one significant innovation of this study is an appeal to the government to expand all public libraries to include homework centres. The fact that the libraries have already been established would limit the amount of funding for that project and it would be a

matter of incorporating the library with another function of a homework centre where students could come and get the needed assistance from the resources available in that space. These could be established in each parish capital, and in areas where there is a need. The homework centres could be manned by library assistants with special training pedagogical skills, assisted by high school volunteers who excelled in various subjects in the Caribbean Advanced Proficiency Examination, who are not ready for college, and wish to pursue a teaching career. They should be recruited on a stipend for a two-year period. At the end of this period, if they wish to go to college, they should be given a subsidized tuition for their period of service.

The aforementioned centres should not only cater for primary, and high school students in homework facilitation, but to assist parents as well. This could be for those who want to enrich themselves in various subject areas to be able to assist their children. This initiative would afford the parents an opportunity to learn alongside their children, and to be able to assist the younger siblings with their homework. In the long run, a culture of parental involvement would be established, and sustained between the parent, and the child. The parents would be more knowledgeable about the subjects that children are doing in school, and they would be better able to assist them with homework.

Sixthly, parents and guardians who are less educated are encouraged to integrate relatives who are more educated in the raising of the children. This approach can easily assist children access help from them in doing the homework as well as school work. This would facilitate extra support to the children in their academics.

Seventhly, parents and guardians who have children attending schools are encouraged to come together along with those parents and guardians living in the community with similar interests to form a homework club where students can get the extra support in completing their home after school. Many children's educational progress is stifled due to the lack of home

supervision of homework in their homes. When the child arrives home in the evening, there is no one present in their home to supervise them into doing the work. Besides, many homes lack the convenient study place for the child to sit and do the work. As a result, the child ends up not doing any work to improve themselves, when this continues over time, the child suffers a learning loss due to lack of revision.

Eighthly, the government should collaborate with the schools and implement interventions with support programmes targeting students and parents alike. Students who are deemed to be having weak performance should be monitored at an early stage in their schooling, to identify their challenges and effect corrective measures to keep academic performance on track. The school could assist with training of parents on how to assist their children and a special reward system should be devised for parents who exhibit certain behavioural changes not only in themselves but also in their children.

Finally, educators, and educational policy makers should ensure that parenting skills and responsibilities are crafted in the curriculum of Health and Family Life Education (HFLE), and should be taught in schools at the upper grades. The HFLE Curriculum is already established but could incorporate topics like parenting and patenting responsibilities to be scaffolded and taught to age-appropriate students in the upper grades, preparing children for real life. This initiative would enrich the HFLE curriculum and make parenting abilities all-pervasive among adults, and would create a positive culture for effective, and responsible parenting.

By implementing the various recommendations, it is hoped that an improvement in the education system will be evident right from the home. This would impact students' performance in a positive way, as real partnership between parents and their children is forged from an early stage in their educational development where their performance is monitored and kept on track. Ultimately, taking steps to address the issue of students' academic performance in schools is critical to the realization of the

SDGs of the country by 2030. Fast tracking these suggestions by the stakeholders could save the educational system in Jamaica from complete collapse.

Recommendations for Future Research

A number of specific areas is recommended for future consideration by scholars in the realm of education. These are intended to guide researchers cover areas that this study has not been able to capture or the findings have indicated that they should be given more attention. It is hoped that undertaking studies in these areas will add a lot of value to the Jamaican educational ecosystem.

Firstly, individuals thinking of future research may find it useful to consider conducting similar studies in different geographical areas (parishes) due to differences in situational, cultural, and socioeconomic norms. The scope can be changed to be applied to larger primary schools within both rural and urban areas and public and private schools to ensure comparison of experiences between the rural and urban parents, and the academic achievements of their children. This would bring into the study a variety of experiences that could enrich the knowledge about parenting across contexts in Jamaica. This approach would generate representative findings, conclusions, and recommendations for an inclusive parenting policy for better educational performance in primary schools of Jamaica.

Secondly, researchers could expand to other rural parishes and do comparative analyses of the results to determine the differences in the result in terms of parents' educational achievement and students' educational outcomes. The researcher, therefore, believes that if the study were to be conducted in different rural parishes, the study would perhaps yield a different result given the differences in life experiences in different parts of the country in the context of culture of the parish which would involve the orientation towards education as well as the level of literacy of the people within the parish. In this

context, the results would be more generalizable because of socio-economic, and social-cultural differences that exist in different parishes of the country. For example, in the current study, it was revealed that the majority of the respondents were females who have graduated from high schools without achieving the minimum qualification that is, passing at least five subjects in the CSEC examinations. This scenario might not be present in another parish, but is typical to the parish of St. Thomas where it is said that it is one of the parishes with the lowest literacy rates in Jamaica.

Thirdly, further studies are required to give authority to other factors that promote students' academic achievements within the Jamaican context. The current study variable on the factors that affect academic outcomes only could predict 26 percent. Another study with more variables needs to be conducted, and applying multiple regression analysis, reveal the other factors that predict children's academic outcomes in the country for better academic programming. This should broaden parental knowledge, and awareness of the factors that they need to take keen interest in for them to make informed contribution to their children's academic achievements, thereby improving the academic standard.

Fourthly, in carrying out further studies, there must be specific targets where the scope of these studies is done to include evaluation of current policy interventions on the academic performance of students. There should be data- driven perspectives to inform decision making. Therefore, steps should be taken to revisit and improve these strategies to ensure the greatest effectiveness during implementation.

Study Limitations

As determined by Creswell (2008), the limitations of a study refer to those "potential weaknesses or problems with the study identified by the researcher." The study notes some aspects that could limit the utility of the study findings. In this section, these limitations are

highlighted together with their mitigating measures to ensure that the utility of the study is maintained. For greater appreciation of the study, the following limitations were considered.

Firstly, the context of the study was limited to five rural public primary schools only from the parish of St. Thomas. These five schools were selected because they share similar characteristics, and each carries an average enrolment of two hundred and forty (240) children. To ensure generalizability of the findings across contexts, literature from similar studies was used to confirm, disconfirm, and, or enrich the findings of this study. Both the adoption of theoretical perspectives that were not developed in the area of study, and the literature debates from numerous studies across the globe was intended to mitigate this challenge. The reality that most of these secondary sources supported the findings adds credibility of the findings and enhances their utility.

Secondly, some parents selected two responses for the same question on the instrument. This posed a problem for the researcher to determine which of the respondent's intended response for that question was. The researcher, therefore, during the sorting of the responses considered these questionnaires as incomplete cases, and therefore other parents who had children attending the same schools and grade were given the opportunity to make up for the short fall in the number of questionnaires sought. This could be avoided if the questions were administered by the researcher or the nominee rather than allowing the parents to administer the instrument to themselves. Based on some of the responses selected, the researchers realized that a number of parents were not able to read the document for themselves, but rather had the document read to them and they acted thereon.

Thirdly, it was discovered that there were heavy survey biases. These could have been mitigated against by having in person interviewer. Simply having a person administering the survey might have changed the respondents' answer. Owing to this realisation, the researcher sought more clarifications from the parents during the focus group

discussions to ensure that explanations from the qualitative study could smoothen out some of these biases.

Fourthly, conducting a mixed-methods study is both time consuming and requires specific skills in both quantitative and qualitative inquiries. To ensure that this exercise was successful, the researcher planned in time to ensure that the time limitation did not affect the study. Regarding the skill gap, the researcher used the research skills developed during the theoretical classes on research methodology to administer the questionnaires, and conduct the focus group discussions. This enhanced the process and ensured that the required data were obtained as planned.

Fifthly, COVID- 19 pandemic had limited face-to -face contact and access to face-to-face meeting. As a result of this, a WhatsApp was used to capture discussions from three different groups. More information could have been garnered from face-to- face meeting instead of a virtual approach. It was difficult to pick up cues from respondents whom you could not see in terms of their non-verbal communication such as their body language that was not implied in spoken words. Nonetheless, the researcher was able to capture salient explanatory opinions from the participants which enriched the research.

Sixthly, the sample size allows for limited generalizability. Due to the small sample size, it was difficult to widen the scope of the study. The study was confined to five rural public primary schools which would not allow for a wider scope. A larger sample size would cover more schools and different communities and would also allow the study to be generalized within the confines of the parish. This is so because different parishes are likely to have different cultures with respect to education. Parents may make themselves more accountable to the children's education by placing a different value on education due to their educational achievement in schools. Furthermore, the study's focus would be difficult to apply to students of urban setting since urban areas may possess different cultural dynamics.

Lastly, the researcher applied purposive sampling which is criticised for failure to adequately disclose their selection criteria of research respondents and participants. This is said to undermine transparency of the research process and affects the credibility of the findings. However, the researcher cognizant of this limitation provided a clear disclosure of the selection criteria that are replicable should another researcher wish to undertake the same study in the same study population. This enhanced the credibility of the research findings as readers would be in position to appreciate why certain sections of the population were included in the study and others were not.

Conclusion of the Research Study

This section provides a conclusion of the study. It starts with an overview of the entire research process in order to provide readers with a recap of the entire study in a synoptic form. This would be followed by specific conclusions objective by objective.

Overview

The present chapter explicates the entire results of the study with the intent of fulfilling all the objectives outlined in the first chapter. A summary of the structure as well as how the study was conducted is reviewed in this section by looking at the previous chapters on a chapter-by-chapter basis for the whole study. It starts with Chapter One of the study in the next paragraph.

Chapter One establishes the tone for the study by introducing the study's broader scope. It describes the background to the study and highlights issues related to parental educational attainments, and children's educational outcomes at both global, and national level. The chapter explicates the current problem that the researcher set out to address in the statement of the problem, and sets out the research objectives that the study attempted to meet. The chapter further looks at the nature of the study by describing the type of research to

be conducted, the process that would be used to collect the data, and the significance of the study. Following this, a brief contribution of the study was advocated, as well as the crafting of the research questions to guide the study. The study was guided by three research questions that attempted to meet the research objectives.

Chapter Two begins with a review of previous work that provided essential knowledge on parental engagement and children's educational pursuits, and argued that few really examined parental educational attainment, and its impact on children's educational outcomes. By review, Chapter Two presented thirteen areas of parental characteristics that impact children's educational outcomes, and are supported by the literature. Further to this, the chapter describes the factors that influence parents' aspirations, and expectations, and then defines socioeconomic status, and its determinants, as well as how it is measured in Jamaica. After this, the chapter introduces the theoretical and conceptual frameworks, which encapsulated an eclectic approach of theories and models that formed the blueprint for a greater interpretation, explanation, and understanding of the phenomenon.

Theories that underpinned this study were: (i) Bourdieu's Cultural Capital Theory (1990), which facilitated an understanding of how parents transfer their cultural capital to children in form of beliefs, values and attitudes that influence the cognitive, and behavioural development of children. (ii) Bronfenbrenner's Bio Ecological Theory (1997) which highlighted how children reflect the values, and behaviours of a system within the context of the existing culture, in keeping with the values and behaviours of their parents. From the literature reflections, and the theoretical perspectives, the research proposed a conceptual framework premised on the assumption that parental educational attainments (explanatory variable) in terms of educational level, and involvement influenced the educational outcomes

(response variable) of their children. Chapter Two ended with a summary of the literature, and the literature gaps that this study sought to close.

Chapter Three opens with the research philosophical position applied. The researcher explains the ontological, epistemological, and axiological propositions of the study, and the philosophical reflections that later guided the choice of research design, approaches, and methods for data collection, and analysis adopted. The author describes the research methods used, and following this, looks at the research approach and design and indicates the sequential mixed-methods design, which involved the integration of both the quantitative, and qualitative strands of inquiry by weaving together phases one and two respectively. The chapter then moves on to highlight the reasons for the selection of the mixed-methods design as one that could provide the rigor of the research process. It also explains how the research methods were used to respond to the research objectives. It emphasises the triangulation of the research methods where the strengths in one compensate for the inherent weaknesses in the other approach. The chapter moves on to look at the research philosophy of pragmatism, where the author clarifies the research paradigms to determine their suitability to the field of education.

Pragmatism as a research paradigm (Maxcy, 2003) embraces the plurality of methods to arrive at the practical answers to research questions. That is, it embraces the best combination of approaches that is most suited to give the response to the research question. It is associated with using more than one method to research (Maxcy, 2003; Biesta, 2010; Creswell & Plano-Clark, 2011). The main argument in favour of pragmatism epistemology emanates from the assertion that knowledge is based on experience. This experience is an individual's perception of the world. This perception comes as a result of that individual's interaction with the environment in which they live. It contends that individual experiences are varied and peculiar based on one's own personal experience though such experiences may

be shared. In addition, the primary focus of an enquiry is to create knowledge that will result in a change and is used in a practical way. One overriding issue for the pragmatist is that the philosophical assumption should be useful in producing a desired result. The study population, sampling methods, and research tools such as the survey questionnaire, and focus group discussion (FGD) guides that were aligned to the research design were explicated in detail. The author described how the research process ensured validity, reliability, and trustworthiness of the findings. The data analysis techniques were identified, and discussed with respect to the quantitative, and qualitative approaches.

The research objectives were aligned to each research question. Within the framework of the quantitative analysis for objective one, correlation, and regression analyses were used to answer RQ1 by showing the degree of influence the explanatory variable over the response variable. Following this, a regression was used to determine how the dependent variable impacts the dependent variable. In objective two, the Pearson's correlation coefficient and coefficient of determination were used to answer the RQ2 by showing the statistical influence of one variable over the other in a cause-effect relationship between the two variables of interest. For objective three, descriptive statistics of the mean and standard deviation of the mean were used to answer it and to establish the status of parental involvement in educational programmes. Answering RQ3 was done using the Kendall's tau_b correlation coefficient to demonstrate the dependence between the two variables. Within the framework of the qualitative analytical approach, data derived from this approach was analysed through the techniques of narrative and thematic analysis. This chapter discusses in detail the steps involved in carrying out the quantitative analysis, beginning with the acquisition of an ethical approval for the study from UREC.

Chapter Four opens with an introduction that highlights the trustworthiness of data, reliability, and validity, and then presents an in-depth discussion of the research findings for

both phases of the study. The researcher then presents an evaluation, and integration of the quantitative, and qualitative findings into a coherent thesis. The salient findings of the study were that: i) Parental educational achievement has a positive impact on the educational outcomes and academic success of the children, (ii) Parental involvement in the educational programmes and initiatives is associated with educational outcomes of their children, though, the nature of the impact was found to be moderate. (iii) The findings demonstrated that parental involvement is not a reliable predictor of children's academic performance in the schools studied. The results from Phase One were accentuated by those from Phase Two of the study. The findings were discussed in relation to the existing theoretical perspectives, and the literature. The chapter closes with a summary of the chapter.

This current chapter looks at the implications of the study in terms of its philosophical, methodological, theoretical, and practical propositions. It then moves on to the recommendations, conclusion, overview of the study, and final thoughts.

Conclusion of Findings

Regarding Objective One, the study explored how the educational achievement of parents directly impacts the educational outcomes and academic success of their children attending selected primary schools in rural Jamaica. The study established that parental educational attainments had a low positive impact $r^2=0.26$ on students' educational outcomes in the four core subjects (Language Arts, Math, Science, and Social Studies) for a four-year period. It also noted that the findings were statistically significant at (Sig 0.000, P =.01) level for the level of impact demonstrated during the study. The findings were in agreement with the claims of Bakar et al. (2017) and Ludeke et al. (2021) that educational attainments of parents influenced the performance of their children. They further confirm the theoretical reflections on parents acting as role models and first teachers of their children from which the children can benefit immensely from their cultural capital.

While Objective Two examined the nature of the relationship between parental involvement in educational programmes and initiatives and the academic performance and educational outcomes of selected rural primary schools' children in Jamaica. The study confirmed that parents' involvement in educational programmes was associated with students' academic achievement. This objective was analysed using descriptive statistics for the status of parental involvement first, then with Kendall's tau_b coefficient correlation for dependence between the two variables. From the researcher's construction, and interpretation of the standing of the data, the calculated data means were as follows: 1.0-1.79 (very low), 1.80-2.59 (low), 2.60-3.39 (moderate), 3.40–4.19 (high), and 4.20–50 (very high) Also, std. $\leq$ 0.5 which was interpreted to mean a low spread of the view of the respondents from the common view: ≥ 0.51 indicated a slightly higher spread while a std. of ≤ 1 suggested a high spread. On the status, the findings show, therefore, that parents were highly involved in educational programs as indicated by the high mean of 4.023. The Kendall's tau b correlation coefficient test of the association between the two variables revealed that there is a relationship between parents' involvement, and students' performance. However, the two variables demonstrate a weak positive, and significant relationship, $r = 0.112$ ($p = 0.1$). This explains that 11.2 percent of the time, student's educational performance is dependent on parental involvement in educational programs.

The findings from the study are set out in relation to the objectives. Objective one was to investigate whether parents' educational achievements (PEA) served as an accurate predictor of primary school students' educational outcomes. From the investigation, the study shows that parental educational attainment is not an accurate predictor of the children's educational outcomes. It accounts for only 26 percent of the influence on students' educational outcomes while 74 percent of the other variations in the student's academic outcomes can be explained by other factors other than parental educational attainment.

Therefore, parental educational attainments alone are not an accurate predictor of students' educational outcomes. This finding is in line with academic debates in the literature, which suggests that parental educational attainments as an independent variable is one of the contributing factors, as indicated by Coleman et al. (1966); Duncan and Magnuson (2003) cited in Harding et al. (2015), Asiimwe and Magunda (2017), Bakar et al. (2017), Davis-Kean and Waters, and Ludeke et al. (2021). This is further confirmed that the parents' levels of education alone cannot strongly predict the academic performance of students. However, a study done by Eccles and Wigfield (2002) contradicts these findings and concludes that there is consistent evidence that parents' education strongly predicts children's educational outcomes.

Concluding Remarks

As an educator for the past 20 years, the researcher believes this study will serve as a catalyst for the beginning of many such studies within the Jamaican context. It will also serve as an incentive to bring about socio-cultural changes in parishes where future studies are encouraged to sensitize parents on their responsibilities, and propel them to act in the interest of their children. The researcher believes it will also open the eyes of interested groups within the education sector to the fact that a large number of the nation's children who attend high schools are exiting school without attaining the minimum passes in the Caribbean examination, which is a cause for national concern. Highlighting this gap in the state's educational system will ignite a new zeal to abate this problem, and improve the system by closing the gap. On the whole, the writer believes that this study makes a modest contribution to the relatively limited literature in Jamaica on understanding the key influences of educational attainment of parents on the academic performance of their children within the Jamaican context.

It is hoped that the authorities would again re-visit the Jamaica Education Transformation Commission's report and have a second look at the performance of the schools with the view to effecting immediate action to improve the performance of the schools. It is also anticipated that the oversight committee emanating from the recommendation of the Jamaican Education Transformation Commission report will in earnest begin its oversight on the critical areas of education such as Early Childhood Education, teaching and learning as well as Curriculum Assessment, among other areas. If this is not done with an immediate action, then our education system will suffer a further setback in its bid to move forward. It has already suffered from the onslaught of COVID 19 when education was almost at a standstill and children at the primary level suffered great learning loss which is taking them sometime to recover. Schools are now in the process of recovering from COVID 19 and all hands must be on board to ensure that the education system does not slip further into the watershed mode, but instead, thrust forward into realizing vision 2030. The vision cannot be fixed to give a correct focus overnight, but the foundation to achieving good clarity must be first put in place and the time is now. Any intervention to improve education and children educational outcomes must not be delayed but a concerted effort must be made to tackle this mammoth task with haste in all of the schools.

The current situation where a large number of children are exiting secondary schools without attaining the minimum subjects passed at the CSEC level cannot continue to exist in Jamaican schools. This is a serious indictment on the country's education system and point to the fact that the education is not meeting the needs of the students and is therefore failing them along the way. This is one aspect of education that the researcher believes the oversight committee arising out of the Jamaican Education Transformation report has to address with immediate effect and urgency. In view of the aforesaid situation, the researcher is submitting the following strategies that can be implemented with immediate effect to stem the learning

crisis cited in the study where majority of students exiting primary school remain less literate and numerate. This learning crisis necessitates strong intervention strategies that must be employed with immediate effect. These strategies could include:

1. Moving students to higher grade level based on the competencies and skills achieved at lower levels that necessitate the movement rather than their chronological age. Moving students by virtue of age has compounded the learning crisis since the students in many instances had not developed competences for the grades, they were in. Therefore, placing them at a higher grade level put them at greater risk due to the spiral nature of the curriculum where the students would have to build on what is known. The big problem is the students cannot build on a foundation that is not present in the first place.

2. School administrators must ensure that the majority of students are functioning at the grades level in which they are placed. Special effort must be made to pull out students functioning below their grade to build their capacity in numeracy and literacy skills.

3. There must be strict monitoring and follow-up of students to ensure readiness for each of the transitioning examinations to enhance mastery of those examinations against a benchmark of 90 percent pass rate.

4. Greater emphasis should be placed on literacy and numeracy aspects of the curriculum for all grade levels. This is to ensure that students perform competently in these areas since in most instances a failure in these areas results in low performance in other areas as well. This is not necessarily true in all case but in a general sense.

5. There should be the moving away from the generalist mode of lesson delivery to a specialist model of teaching in all primary schools where there is a specialist teacher for all subjects taught in the schools and teachers' training should be in tandem with this demand producing teachers not as a generalist but a specialist trained personnel in

at least two areas of the school curriculum. There should be a monitoring of the number of teachers entered and trained in each area through the Ministry of Education collaborating with the training institutions.

6. There must be government policy to hold parents accountable for their children's education by enacting and enforcing certain laws where sanctions are applied to parents refusing to send their children to school and supporting them as required. Where students are absent from school for three or more days without parents notifying the schools, there must be a mandatory visit of school personnel to the child's home to ascertain the reason and or to give support where this is required.

In addition to the corrective measures that can be immediately employed, the researcher presents some strategies for parents adopt and take on as part of their responsibility as parent to improve the children's education. These strategies will improve teaching and learning in areas of literacy and numeracy based on the insight gained from the study. The strategies outlined below are not tailored for a particular age group, but aim to give the parents insight on how to foster literacy and numeracy awareness in children as they move through primary schools.

Literacy strategies that can be employed:

1. Since reading is a critical area to students' academic achievement on which the progress in all other areas is dependent on, it follows that parental seminars and workshops should be held regularly to build parents' capacity to teach reading and comprehension skills at home to their child.

2. Read the same story along with your child and talk to them about the story read, question them about the story and encourage them to retell the story in their own words to foster greater understanding of the text as well as building comprehension skills.

3. Parents should encourage their child to choose books and activities that matched their own interest. This will foster in the child's love for reading, talking, and writing.

4. Parents must talk positively to their children about reading to encourage the child to value it. Read to and long with him/her every day at home so that he/she can develop the confidence to read alone. Parents who have challenges in this area must seek assistance so they can master reading and are able to model reading skills for their child.

5. More parents need to be actively involved with teaching and learning aspects in the schools. This should be done by encouraging volunteers in academic areas that they feel most competent and comfortable. Parents' volunteerism could improve the child's interest, behaviour, and development of right attitude towards their education.

6. Get parents, business people, teachers and other stakeholders to form small learning communities facilitated by educators and special interest groups living in the school district to work with parents for them to better understand school activities in reference to the school curriculum so that when the child comes home with the school work, they already know what is required of the child thus placing the parents in a better position to assist the child at home.

7. Read to their children more, use word games to broaden their vocabulary, and familiarity with new words, and their meaning. This will help many parents to develop a closer relationship with their children at school as well as to deepening their awareness of what is happening at school.

8. Encourage literate parents to start a book club especially in areas where the library is absent, where both parents and children are encouraged to read. In these clubs, reading competitions could be one of the activities involves to heighten interest in reading.

9. Teachers and should use prompts when teaching to inspire the children to expand upon responses, such as, "What makes you say that? What happened after that? What did you think about that?" Explain what you mean?

10. Parents should show their sincere interest in their children's reading, writing and view of all types of texts with them. They should talk about texts with them and create meaningful discussions and help the children see them as important.

11. Parents should use "Book chat" as an important literacy strategy to help their children to reflect more deeply on the content and meaning of their favourite books.

Numeracy strategies that can be employed by parents.

1. As the child moves through primary schools, parents should begin to connect the importance of mathematics with the child's everyday activities, such as traversing public transport, comparing and choosing the best item to buy in stores, making a budget in building numeracy awareness using real concrete situations.

2. As a parent, if you had challenges in mathematics when you were at school, never mention challenges and utter words "I was never good at mathematics." This type of comment could discourage the child and gives an impression that mathematics is a very difficult subject.

3. Parents should encourage the children to talk about how they might work out mathematical problems. This will help boost their confidence and deepen their understanding of mathematics.

4. For computation, parents should have their child make a number book which contains a page for each numeral from one to ten. For each page, have your child glue clippings from newspapers or magazines illustrating that number concept (two cats, three dogs, or four chicken, five horses and so on). As your child progresses with

number recognition, they can add to the book and add numerical figures used in various ways.

5. Parents should practice with children and give them verbal math problems such as "take the number four; add six; multiply by three; subtract two; divide by four. What's your answer?" Speak slowly at first until your child gets better at solving these problems mentally to enhance their mental competences.

6. Encourage your child to read nutrition labels on food cans. Help them calculate the percent of a specific nutrient in each item. Explain to them what one needs for healthy life so that they can compute their nutritional needs while mastering numeracy skills.

7. Parents could arrange various objects in the homes (e.g., boxes, books, and cans) by various size and measurement such as length, weight, and volume attributes. Talk about them with your child about how they are arranged using comparison words like "taller," "shorter," "narrower," "wider," "heaviest," "lightest," "more," "less," "about," and "same" until the concepts are understood.

8. Check your child assignment on a daily basis and facilitate them to do the work, do not do the work for them.

9. Encourage your child to figure out answers to real-life situations: "We have one can of mackerel and we need six cans. How many more do we need to purchase?

10. Ask your child questions that involve equal sharing. For example, "Eight children share 64 baseballs. How many balls does each child get?"

Parents may choose at least three concepts from the literacy and or numeracy strategies and use them throughout the year. They are intended to help increase the child's understanding of literacy and numeracy skills and to help them to develop confidence in learning that will ultimately boost their academic performance in school. If each parent does this, this will make the teacher's job of teaching and learning in the school much easier.

The study in a nutshell had the following salient aspects as illustrated in the schematic diagram 5.1 below.
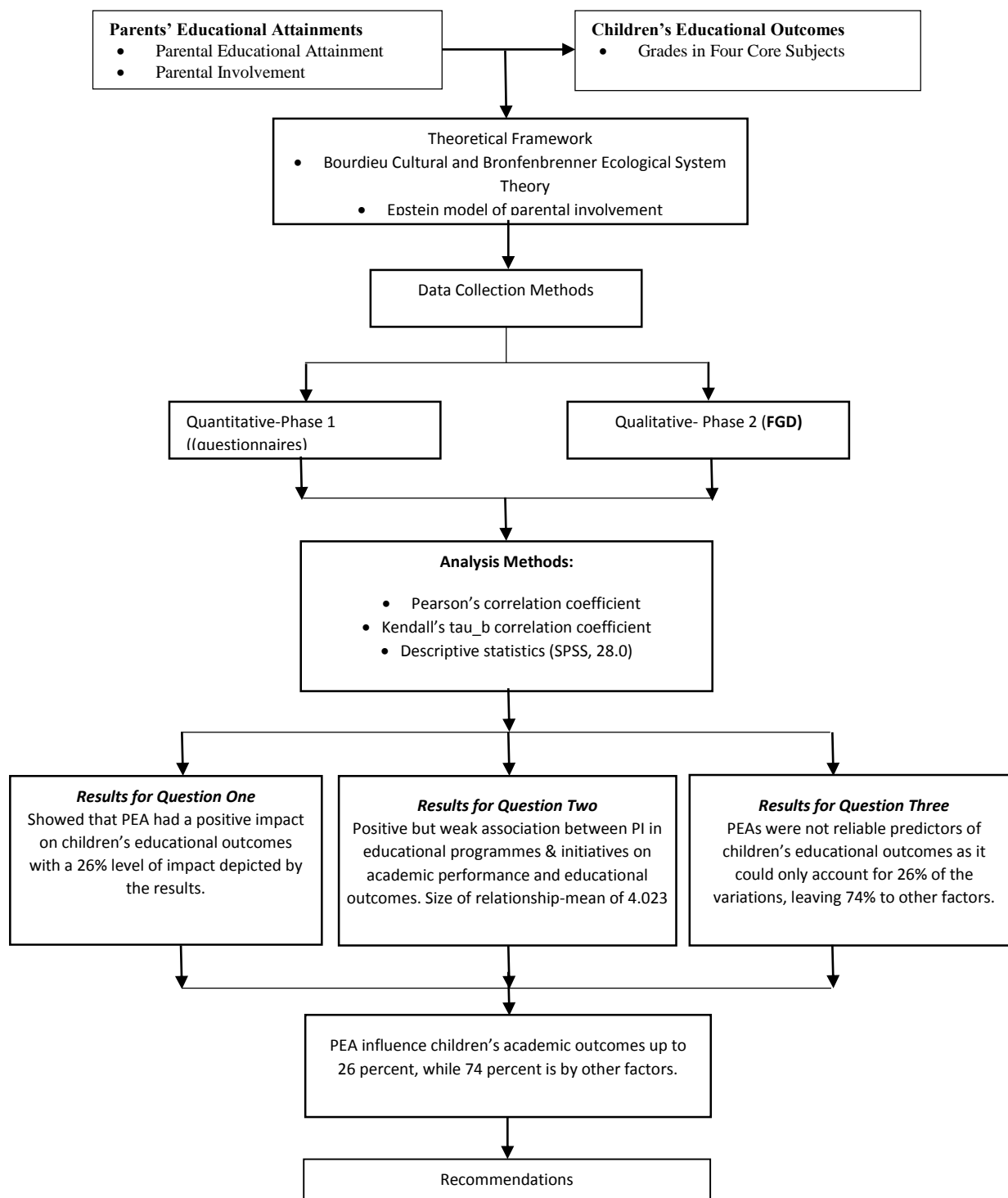

Figure 5.1: Schematic Diagram for the Study

References

Ahmad, K., & Naejema, B. (2013). Influence of socioeconomic and educational background of parents on their children' education in Nigeria, *International journal of scientific and research publications,* 3(10), 1-8.

Albarico, A. G., Blas, R. P., Cruz, A. P., & Enriquez, G. M. (2023). Factors affecting seniors' high school students' poor academic performance, *IRJMET Journal*, 5(6), 5565-5573 Doi: https://www.doi.org/10.56726/IRJMETS37089.

Amatea, E., S. (2009). *Building culturally responsive family-school relationship*. Boston. MA: Pearson.

Anfara, V. A., &, Martz, N., T. (2015). *Theoretical framework in qualitative research*. Sage Publication Inc.

Annette, L. (2003). *Unequal childhoods: Race, class and family life*. University of California Press.

Anthonia, U. (2019). Influence of home environment on the academic performance of the students in some selected schools in Dekina Local Government Area in Kogi State, Nigeria, *International Journal of Contemporary Research and Review*, 10(3), 21430-21444.

Argon, T., & Kiyici, C. (2012). Teacher views in primary schools about parental participation in Education. Dicle University, *Journal of Ziya Gokalp Education Faculty*, 19, 80-95.

Asiimwe, S., & Magunda, H. (2017). Parents as enablers of academic achievement in secondary schools in Uganda: A Learners' View Point, *The International Journal of Humanities & Social Studies*, 5(2), 215-225.

Asiimwe, S., & Nabitake, R. (2022). The relationship between parents' involvement and student academic performance in Uganda, Lyantonde District, *IJARIIE-ISSN (O)-2395-4396,* 8(6), 1531-1540.

Azhar, M., Nadeem, S., Naz, F., Perveen, F., & Samaan, A. (2014) Impact of parental education and Socio-economic status on academic achievement of university students, *European Journal of Psychological Research*, 1(1), 1-9.

Bailey, T. (2017). *The impact of parental involvement on student success: School and family partnership from the perspective of students* (Unpublished Doctoral Dissertation). Kennesaw State University, Kennesaw, GA.

Bakar, N. A., Mamat, I., & Ibrahim, M. (2017). Influence of parental education on academic performance of secondary school students in Kuala Terengganu, *International Journal of Academic Research in Business and Social Sciences,* 7(8), 296- 304.

Bandhana, B., & Sharma, D. P. (2012). Home environment, mental health and academic achievement among higher secondary school students, *International Journal of Scientific and Research Publications,* 2(5), 1-4.

Bandura, A, (1977). Self-efficacy: Toward a unifying theory of behavioural change, *Psychological Review*, 84(2) 191-225.

Bandura, A. (1977). *Self –efficacy: The exercise of control*. New York, NY: W.H. Freeman and Company.

Bandura, A. (1986). *Social Foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy, *Developmental Psychology,* 25,729-735.

Bandura, A. (2002). Social Cognitive theory in cultural context, *Applied Psychology. International Review,* 31(2) 269 – 290.

Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood-   Cliffs, NJ: Prentice-Hall.

Barbados, UNICEF, New York.

Barr, S., & Saltmarsh, S. (2014). It all comes down to the leadership: The role of the school principal in fostering parent-school involvement, *Educational Management Administration & Leadership*, 42(4), 491–505.

Basin, A. & Verdier, T. (2011). The economics of cultural transmission and socialization, Jess Benhabib, Alberto Basin, Matthew O. Jackson Eds.). *Handbook of Social Economics*, 340 – 416.

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The role of prior achievement and socioeconomic status, *Journal of Youth and   adolescence,* 45, 1053-1064. .

Boonk, L., Gijselaers, H. J., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement, *Educational Research Review*, 24, 10-30.

Bourdieu, P. (1977). *Reproduction in education, society, culture*. Beverley Hills, CA: Sage.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, MA: Harvard University Press.

Bourdieu, P. (1986). The form of capital, in John G. Richardson (Ed.), *Handbook of Theory and Research in the Sociology of Education*, Greenwood Press, New York, 241-258

Bourdieu, P., & Passeron, J. (1990). *Reproduction in education, society and culture*. London: Sage.

Bourdieu, P., (1990). *The logic of practice*. Cambridge: Polity Press.

Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: A research note, *Qualitative Research*, 8(1), 137-152.

Braun V., & Clarke, V. (2013). *Successful qualitative research. A practical guide for beginners.* Thousand Oaks: Sage Publications Inc.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology, *Qualitative Research Psychology,* 3(2); 77-101.

Breen, R., & Goldthorpe, J. H. (1997). Explaining educational differentials: Towards a formal rational action theory, *Rationality and Society*, 9(3), 275-305.

Breen, R., & Goldthorpe, J. H. (2014). Explaining educational differentials. In Grusky, D. B., Weisshaar, K. R. (Eds.), *Social stratification: Class, race, and gender in sociological perspective* (4th ed., pp. 524– 535). Westview Press.

British Educational Research Association. (2018). *Ethical guidelines for educational research*. 4th Edition. London.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiment by nature and design. Cambridge,* MA: Harvard University Press.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development, *American Psychologist,* 32(7), 513–531.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development.* Sage Publications.

Burkholder, G., Cox, K., & Crawford, L. (2016). *The scholar-practitioner's guide to research design*. Laureate Publishing.

Cabrera, A. F., Peralta, A. M., & Kurban, E. R. (2018). The invisible 1%: A comparison of attaining stepping stones toward college between military and civilian children, *Journal of Higher Education,* 89(2), 208–235.

Carlo, G., White, R. M. B., Streit, C., Knight, G. P., & Zeiders, K. H. (2018). Longitudinal relations among parenting styles, prosocial behaviours, and academic outcomes in U.S. Mexican Adolescents, *Child Dev*, 89(2), 577-592.

Carolan, B. V., & Wasserman, S. J. (2015). Does parenting style matter? Concerted cultivation, educational expectations and the transmission of educational advantage, *Sociological Perspectives,* 58(2), 168-186.

Castro, M., Exposito-Casas, E., Lopez-Martin, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L (2015). Parental involvement on student academic achievement: A meta-analysis, *Educational Research Review*, 14, 33-46.

Ceka, A., & Murati, R. (2016). The role of parents in the education of children, *Journal of Education and Practice,* 7(5), 61-64.

Cheadle, J. E., & Amato, P. R. (2011). A Quantitative assessment of Lareau's qualitative conclusion about class, race and parenting. *Journal of Family Issues,* 32(5), 679 – 706.

Checa, P., Abundis-Gutierrez, A., Pérez-Dueñas, C., & Fernández-Parra, A. (2019). Influence of maternal and paternal parenting style and behaviour problems on academic outcomes in primary school, *Front. Psychol,* 10, 1-5.

Cheung, S, Y., & Anderson, R. (2003). Time to read: Resources and educational outcomes in Britain, *Journal of Comparative Family Studies*, 34, 413-433.
Chilean students' economic, social and cultural status on digital versus reading and mathematics performance, *Computers & Education*, 82, 1-10.

Clark, L. A., & Watson, D. (2019). Constructing validity: New developments in creating objective measuring instruments, *Psychol. Assess,* 31(12), 1412-1427.

Clark, R. M. (2015). *Family life and school achievement: Why poor black children succeed or fail*. Chicago, IL: University of Chicago Press.

Claro, M., Cabello, T., Martín, E. S., & Nussbaum, M. (2015). Comparing marginal effects of

Clearing House for Military family Readiness. (2020). Parents' educational levels influence on child educational outcomes: Rapid literature review, *American Sociological Review*, 67(5), 747–776.

Clinton, J., & Hattie, J. (2013). New Zealand students' perception of parental involvement in learning and schooling, *Asia Pacific Journal of Education*, 33(3), 324-337.

Cohen, J. (1987). Parents as Educational Model and definers, *Journal of Marriage and Family,* 49(2), 339-351.

Cole, S. M. (2020). Contextualizing parental involvement at the elementary level in Jamaica, *International Journal of Early Years Education*, 29(2): 139-153,

Coleman, J. S., Campbell, E. Q., & Hobson, C. J. (1966). *Equality of educational opportunity*, Washington: National Center for Educational Statistics

Coleman, P. K., & Karraker, K. L. (1998). Self-efficacy and parenting quality: Findings and future applications, *Developmental review,* 18(1), 47-85.

Corno, L., & Xu, J. (2014). Homework as the job of childhood, *Theory into Practice,* 43(3), 227-233.

Craig, L. (2006). Parental education, time in paid work and time with children: an Australian time-diary analysis, *The British Journal Sociology,* 57(4)553-575.

Craig, L. S. Cunningham-Myrie, C. A. Hotchkiss, D. R. Hernandez, J. H. Gustat, J., & Theall, K. P. (2021). Social determinants of multimorbidity in Jamaica: application of latent class analysis in a cross-sectional study, *BMC Public Health*, 21(1197), 1-15.

Creswell J. W., Hanson W. E., Plano-Clark V. L., & Morales, A. (2007). Qualitative research designs: selection and implementation, *Counsel Psychol,* 35(2), 236–264.

Creswell, J. (2013). *Qualitative inquiry and research design: Choosing among five approac*hes (3rd ed.). Los Angeles, CA: SAGE.

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Los Angeles, CA: SAGE.

Creswell, J. W. (2015). *A concise introduction to mixed methods research*. Sage Publications Ltd.

Creswell, J. W. (2021). *A concise introduction to mixed methods research*. Sage publications.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage, Publications.

Creswell, J. W., & Plano-Clark, V. L. (2011). *Designing and conducting mixed methods research*. Sage Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Los Angeles, CA: Sage Publication.

Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry, *Theory into Practice*, 39(3), 124–130.

Creswell, J.W., & Creswell, J.D. (2017). *Research Design: Qualitative, quantitative and mixed method approaches* (5th ed.) Sage Publication.

Crosnoe, R., Leventhal, T., Wirth, R. J., Pierce, K. M., & Pianta, R. C. (2010). Family socioeconomic status and consistent environment stimulation in early childhood, *Child Development,* 81(3), 972-982.

Dakers, J., & Guse, T. (2020). Can dimensions of parenting stryle contribute to self-compassion among South African adolescents? *J. Fam. Stud,* 28(2), 1-14.

Davis, R. (2004). *Task force on educational reform Jamaica. A transformed education,* Final Report. Retrieved from https://www.psoj.org/wp-content/uploads/2017/05/RS-2004-09-

Dr.-Rae-Davis-Chairman-Task-Force-on-Educational-Reform-Jamaica-A-Transform-Education-System-updated.pdf (Accessed on 20/02/2022).

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectation and the home environment, *Journal of family Psychology, 19(2), 294-304.*

Davis-Kean, P. E., Tang, S., & Walters, N. E. (2019). Parent education attainment and parenting. In M. H. Bornstein (Ed.). *Handbook of parenting: Biology and ecology of parenting,* Routledge 2(3), 400–420.

Davis-Kean, P. E., Tighe, L., & Waters, N. E. (2020). The role of parent educational attainment in parenting and children's development, *Current Direction in Psychological Science,* 1-19.

De Boer, A., Pijl, S. P., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature, *European Journal of Special Needs Education,* 25(2), 165-181.

De Civita, M., Pagani, L., Vitaro, F., & Tremblay, R. E. (2004). The role of maternal educational aspirations in mediating the risk of income source on academic failure in children from persistently poor families, *Children and Youth Services Review*, 26, 749-769.

Diemer, M. A., Mistry, R. S., Wadsworth, M. E., López, I., & Reimers, F. (2013). Best practices in conceptualizing and measuring social class in psychological research: Social class measurement, *Analyses of Social Issues and Public Policy*, 13(1), 77–113.

Dodman, J. (2021). The best Glass? Equitable access to quality education in inner city Kingston, Jamaica, *Environment and Urbanisation*, 33 (1), 83-98.

Dubow, E. F., Boxer, P., & Huesmann, L. R. (2009). Long-term effects of parents' education on children's educational and occupational success, *Merrils- Palmer Quarterly,* 55(3), 224-249.

Dubow, E. F., Huesmann, L. R, Boxer, P., & Smith, C. (2014). Childhood predictors and age 48 outcomes of self-reports and official records of offending Crim, *Behav Health*, 24, 291-304.

Duncan, G. J., & Magnuson, K. A. (2003). Off with Hollingshead: Socioeconomic resources, parenting and child development. In H. Bornstein & R. H. Bradley (Ed.), *socioeconomic status, parenting and child development, Erlbaum,* 83 – 106.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals, *Annual Review of Psychology,* 53(1), 109–132.

El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school, *Child Development*, 81(3): 988–1005.

Ellis, A., & Joffe Ellis, D. (2019). *Rational emotive behaviour therapy*, (2nd). American Psychological Association.

Epstein, J. L. (2001). *School, family, and community partnerships*. Boulder, CO: Westview Press.

Epstein, J. L. (2011). School family and community partnership: preparing educators and improving schools (2nd ed), Boulder, CO: Westview Press Outcomes in Britain, *Journal of Comparative Family Studies*, 34, 413-433.

Evans, M. D. R., Kelley, J., Sikora, J., & Treiman, D. J. (2010). Family scholarly culture and educational success: Books and Schooling in 27 nations, *Research in Social Stratification and Mobility.* 28(2):171-197.

Fraenkel, J.R., & Wallen, N.E. (2010). *How to design and evaluate research in Education* (7ed.) Boston, MA; McGraw Hall.

Furstenberg, F. F. (2014). Fifty years of family change: From consensus to complexity, *The Annals of the American Academy of Political and Social Science,* 654: 12–30.

Galobardes, B. (2006). Indicators of Socio-economic position, *Journal of Epidemiology & Community Health*, 60(1), 7-12.

Garbacz, S. A., Herman, K. C., Thompson, A. M., & Reinke, W. M. (2017). Family involvement in education and intervention: implementation and evaluation to maximize family, school and student outcomes, *Journal of School Psychology*, 62, 1-10.

Gestwicki, C. (2007). *Home, school and community relations* (6th ed.) Clifton Park, NY: Delmar Cengage Learning.

Gill, S., & Reynolds, A. J. (1999). Educational expectations and school achievement of urban African American children, *Journal of School Psychology,* 37, 403-424.

Goldenberg, C., Gallimore, R., Reese, L., & Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance, *American Educational Research Journal, 38*(3), 547–582.

Guryan, J., Hurst, E., & Kearney, M. (2008). Parental education and parental time with children, *Journal of Economic Perspectives*, 22(3), 23-46.

Hafizi, A., & Papa, M. (2012). Improving the quality of education by strengthening the cooperation between schools and families, *Problems of Education in the 21ˢᵗ Century*, 42, 38-49.

Häfner, I., Flunger, B., Dicke, A. L., Gaspard, H., Brisson, B. M., Nagengast, B., & Trautwein, U. (2018). The role of family characteristics for students' academic outcomes: A person-centered approach, *Child Development,* 89(4), 1405-1422.

Hamilton, V.E., Matthews, J. M., & Crawford, S. B. (2014). Development and preliminary validation of a parenting self-regulation scale: "me as a parent, *"Journal of Child and Family Studies,* 24(10).1–12.

Handa, S. (1996). Maternal education and child attainment in Jamaica: testing the bargaining power hypothesis, *Oxford Bulletin of Economics and Statistics*, 58(1), 119– 137.

Harding, J. F., Morris, P. A., & Hughes, D. (2015). The relationship between maternal education and children's academic outcomes: A theoretical framework, *Journal of Marriage and Family,* 77(1), 60–76.

Harris, A. L., & Robinson, K. (2016). A new framework for understanding parental involvement: Setting the stage for academic success, *RSF: The Russell Sage Foundation Journal of the Social Sciences, 2(5),* 186-201.

Hawkes, N, (1995). Some correlates of success in second language learning in some Ghanaian schools, *African Journal of Education,* 1, 125-140.

Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608.

Hess, C. R., Teti, D. M., & Hussey-Gardner, B. (2004). Self- efficacy and parenting of high – risk infants: The moderating role of parent knowledge of infant development. *Journal of Applied Development Psychology,* 25(4), 423 – 437.

Hill, N E., & Tyson, D. F. (2009). Parental involvement in idle school: A meta- analytic assessment of strategies that promote achievement, *Developmental Psychology*, 45(3), 740 – 763.

Hill, N. E., Witherspoon, D. P.., & Bartz, D. (2018). Parent involvement in education during middle school: Perspectives of ethnically diverse parents, teachers and students, *The Journal of Educational research*, 111(1), 12-27.

Ho, E. S. C. (2010). Family influences on science learning among Hong Kong adolescents: What we learned from PISA, *International Journal of Science* and *Mathematics Education,* 8 (3), 409–428.

Honicke, T., & Broadbent, J. (2016). The influence of academic self –efficacy on academic performance: A systematic review, *Educational Research Review,* 17, 63-84.

Hoover-Dempsey, K. V., Bassler, O. C., & Brissie, J. S. (1992). Explorations in parent Relations, *Journal of Educational Research,* 85, 287-294.

Hoover-Dempsey, K., & Sandler, H. (1995). Parental involvement in children's education. Why does it make a difference? *Teachers College Record,* 97(2), 310- 331.

Huang, H., & Liang, G. (2016). Parental cultural capital and student school performance in mathematics and science across nations, *The Journal of Educational Research,* 109(3), 286-295.

Hudson, A. C., & Bentley, A. C. (2010). Human development in societal context, *Annual Review Psychology*, 61, 411- 437.

Hughes, P. (2010). Paradigms, methods and knowledge in G. MacNaughton, S. Rolfe and I. Blatchford (Eds.), *Doing Early Childhood Research*, (2nd ed.,) Maidenhead: Open University Press.

Hultqvist, E., & Lidegran, I. (2020). The use of 'cultural capital' in sociology of education in Sweden, *International Studies in Sociology of Education,* 30(5), 1-8.

Hussain, I., Sultan, S., Kanwal, F., & Rahmani, S. H. (2020). Intrinsic motivation and academic self- efficacy as mediation between parental involvement and academic achievement of elementary students, *Journal of Elementary Education,* 30(1) 39-60.

Idris, M., Hussain, S., & Nasir, A., (2020). Relationship between Parents' education and their children's Academic Achievement, *Journal of Arts and Social Science,* (2) 82-92.

Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences*, 38(2), 185-195.

Jackson, M. (2014). Determined to succeed. In Grusky, D. B., & Weisshaar, K. R. (Eds.), *Social stratification: Class, race, and gender in sociological perspective* (4th ed). 562–569). Westview Press.

Jaeger, M. M., & Breen, R. (2016). A dynamic model of cultural reproduction, *Am. J. Sociology*, 121(4), 1079-1115.

Jaiswal, S. K., (2018). Influence of parent's education on parental academic involvement, *Journal of Advances and Scholarly Researches in Allied Education (JASRAE),* 15(5), 114-119.

Jeyes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programmes for urban students, *Urban Education*, 47, 706 – 742.

Johnson, R. B., & Christensen, L. B. (2017). *Educational research: Quantitative, qualitative, and mixed approaches*. 6th Los Angeles: Sage.

Jones, T. L., & Prinz, R. J. (2005). Parental roles of parental self-efficacy in parent and child adjustment: A review, *Clinical psychology review.* 25(3) 314-363.

Kalil, A.,Rayan, R,. & Corey, M. (2012). Diverging destinies: Maternal education and the Development gradient in time with children. *Demography,* 49 (4), 1361-1383.

Kalimuthu, S. (2018). An analysis of parents' attitude towards the learning orientation of higher secondary students, *international Journal of Scientific Research,* 7(1):663-664.

Kaplan, D. S., Liu, X., & Kaplan, H. B. (2001). Influence of parents' self-feelings and expectations on children's academic performance, *The Journal of Educational Research,* 94, 360-370.

Kasapi, G. (2013). Pedagogjia familjare, *Shkup*, 82.

Khan, N., Afaqi. M. S., & Shah, K. (2016). A study of the parents' attitudes about their school going   daughter at secondary level, *Language in India,* 16(4), 22-36.

Kim, S. W., & Hill, N. (2015). Including father in the picture: A meta-analysis of parental involvement and students' academic achievement, *Journal of Educational Psychology,* 17(4), 919 – 934.

Klassen, R. M., Krawchuk, L. L., & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination, *Contemporary Educational Psychology,* 33(4), 915-931.

Knopf, H. T., & Swick, K. L. (2008). Using our understanding of family to strengthen family involvement. *Early Childhood Education,* 35(5), 419-427.

Kraaykamp, G., & Eijck, K. (2010). The intergenerational reproduction of culture capital: a threefold perspective, *Soc. Forces*, 89 (1) 209- 231.

Kraus, M. W., & Stephens, N. M. (2012). A road map for an emerging psychology of social class, *Social and Personality Psychology Compass*, 6(9), 642–656.

Krueger, R. A., & Casey, M. A. (2014) *Focus groups: A Practical guide for applied research*. SAGE Publications, Thousand Oaks.

Laureau, A. (2011). *Unequal Childhood: Class Race, and family Life.* Berkeley, Los Angeles, London: University of California Press.

Lincoln, Y., Lynham, S., & Guba, E. (2013). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research* (4th ed., pp. 199–266). Thousand Oaks, CA: SAGE Ltd.

Liu, Y., & Leighton, J. P. (2021). Parental self-efficacy in helping children succeed in school favours math achievement, *Frontiers in Education*, l (6), 1-15.

Ludeke, S. G. Gensowski, M. Junge, S. Y. Kirkpatrick, R. M. John, V. O. P., & Andersen, B. S. C. (2021). Does parental education influence child educational outcomes? A developmental analysis in a full-population sample and adoptee design, *Journal of Personality and Social Psychology: Personality Processes and Individual Differences,* 120(4), 1074–1090.

Mapp, K. L., & Kutter, P. J. (2014). *Partners in education: A dual capacity-building framework for family-school partnerships*. A publication of SEDL in collaboration with the U.S. Department of Education. Retrieved from http://www.sedl.org/pubs/framework/ (Accessed on 10/02/2022).

Martella, R., Nelson, J. R., Morgan, R., & Marchand-Martella, N. E. (2013). *Understanding and interpreting educational research*. New York, NY: The Guilford Press.

Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism. In *Handbook of Mixed Methods in Social and Behavioural Research*. Edited by Abbas Tashakkori and Charles Teddlie (pp. 51-89). Thousand Oaks: Sage.

Mayo, A., & Siraj, I (2015). Parenting practices and children's academic success in low- SES families, *Oxford Review of Education,* 41(1), 47-63.

Mencl, J., Tray, L., Schwoerer, C., & Drasgow, F. (2012). Evaluating quantitative and types of change: An analysis of the malleability of general and specific self-efficacy constructs and measures, *Journal of Leadership and Organizational Studies*, 19(3), 378-339.

Mertens, D. M. (2010). *Research and evaluation in education and psychology. Integrating diversity with quantitative, qualitative and mixed methods.* Thousand Oaks: Sage Publications.

Miles, M., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd Ed.). Los Angeles, CA: SAGE Publications, Inc.

Moon, K., & Blackman, B. (2014). A Guide to Understanding Social Science Research for Natural Scientists, *Conservation Biology*, 28, 1–11.

Moore, D. S. (2013). Current thinking about nature and Nurture. (K. Kampourakis, ed). The Philosophy of Biology: A Companion for Educator, History, Philosophy and Theory of Life sciences, *Pitzer College: Springer Science*, 30(40), 629-652.

Mukama, E. (2010). *Peer group influence, alcohol consumption and secondary school students' attitude towards school*. Unpublished Thesis, Makerere University Kampala.

Muola, J. (2010). A Study of the relationship between academic achievement motivations and home environment among standard eight pupils, *Journal of educational Research and Reviews*, 5(5); 213-217.

Mushtaque, I., Rizwan, M., Abbas, M., Khan, A. A., Fatima, S. M., Jaffri, Q. A., & Muneer, K. (2024). Inter-parental conflict's persistent effects on adolescent psychological distress, adjustment issues, and suicidal ideation during the COVID-19 lockdown, *OMEGA-Journal of death and dying*, 88(3), 919-935.

Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment, *Rupkatha Journal on Interdisciplinary Studies in Humanities Special Issue*, 3(2), 12-19.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: striving to meet the trustworthiness criteria, *Int. J Qual. Methods,* 16(1), 1-13.

OECD. (2014). *Education at a Glance, to what extent does parents' education influence participation in tertiary education?* OECD Indicator, OECD Publishing, Paris.

OECD. (2017). *Scaling procedures and construct validation of context questionnaire data.* PISA 2015 Technical Report. OECD Publishing, Paris.

Onwuegbuzie, A. J., & Johnson, R. B. (2006). The "validity" issue in mixed research, *Research in the Schools,* 13, 48–63.

Parveen, A. (2007). *Effects of home environment on personality and academic achievements of students of Grade 12 in Rawalpindi Division.* Unpublished Research Thesis, National University of Modern Languages, Islamabad, 32-41.

Patnaik, B., Samal, R., & Panigrahi, A. (2013). Parent's attitudes towards schooling and education of children*, Indian Journal of Health and Wellbeing; Hisar* 4(5), 1061-1066.

Patrikakou, E. N. (2008). The power of parent involvement: Evidence, ideas, and tools for success. Lincoln, IL. *The centre on Innovation and improvement*, 174, 2253-2258.

Perez Sanchez, C. N., Betancort, M. M., & Cabrera, R. L., (2013). Family influences in academic achievement: a study of. The Canary Islands, *Rev. Intro. Sociol*, 71, 169 - 187.

Perry, L. B., & McConney, A. (2010). Does the SES of school's matter? An examination of socioeconomic status and student achievement using PISA 2003, *Teachers College Record,* 112(4), 1137- 1162.

Pinto, R. M. (2013) *Encyclopedia of research design: mixed method design.* SAGE Publications, Inc.

Planning Institute of Jamaica. (2019*). Jamaica survey of living conditions*. Kingston: PIOJ.

Poth, C., & Munce, S. E. P. (2020). Commentary—preparing today's researchers for a yet unknown tomorrow: Promising practices for a synergistic and sustainable mentoring

approach to mixed methods research learning, *International Journal of Multiple Research Approaches,* 12(1), 56-64.

Rahimpour, P., Direkvand-Moghadam, A., Direkvand-Moghadam, A., & Hashemian, A. (2015). Relationship between the parenting styles and students' educational performance among Iranian girl high school students: A cross- sectional study, *J Clin Diagn Res,* 9(12), 5-7.

Ravitch, S., & Carl, N. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Sage Publications.

Reardon, S. F., Valentio, R. A., Kalogrides, D., Shores, K. A., & Greenberg, E. H. (2013). *Patterns and Trends in racial academic achievements gaps among states*, 1999-2011.

Reardon, S.F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In R. Murnane & G. Duncan (Eds.), *Whither opportunity? Rising inequality and the uncertain life chances of low-income children*. New York: Russell Sage Foundation Press.

Ren, L. & Hu, G. (2014). An ethnographic multiple-case study of mother-child interaction strategies in Singapore-based Chinese families, *Journal of Asian pacific Communication*, 24, 274 – 300.

Robinson, K., & Harris, A. L. (2014). The Broken Compass: *Parental involvement with children' education.* Cambridge, MA: Harvard University Press.

Roger, T., & Frey, E. (2015). Changing behaviour beyond the here and now. In G. Keren & G. Wu (Eds.) *The Wiley Blackwell handbook of judgment and decision making,* (pp. 723- 748), London, Wiley- Blackwell.

Roksa, J., & Potter, D. (2011). Parenting and academic achievement: Intergenerational transmission of educational advantage, *Sociology of Education,* 84(4):299 – 321.

Salisu, A., & Ransom, E. N., (2014). The role of modelling towards impacting quality education, *International Letters of Social and Humanistic Sciences* , 32, 54 -61.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed., Vol. 2nd). Essex: Pearson Education Ltd.

Schmitt, S. A., & Lipscomb, S. T. (2016). Longitudinal associations between residential mobility and early academic skills among low-income children, *Early Childhood Research Quarterly,* 36, 190-200. *doi:10.1016/j.ecresq.2016.01.002.*

Schunk D. H., & Zimmerman B. J. (1996). Self-regulation and learning. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology (pp. 59-78). New York:* Macmillan.

Siachifuwe, M. (2017). Teacher based factors influencing academic performance among learners in open learning classes at Twin Palm Secondary School, Lusaka, Zambia, *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 4(12), 96-101.

Singh, K., Bickley, P. G., Trivette, P., Keith, P. B., & Anderson, E. (1995). The effects of four components of parental involvement on eighth-grade student achievement: Structural analysis of NELS-88 data, *School Psychology Review,* 24, 299-317.

Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research, *Review of Educational Research,* 75(3), 417 – 453.

Sommerfeld, A. K. (2016). Education as a collective accomplishment: how personal, peer, and parent expectations interact to promote degree attainment, *Social Psychology of Education,* 19(2), 345–365. *https://doi.org/10.1007/s11218-015- 9325-7*

Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: How three gateway contexts shape selves and fuel inequality, *Annual Review of Psychology*, 65, 611–634.

Stutchbury, K., & Fox, A. (2009). Ethics in educational research: introducing a methodological tool for effective ethical analysis, *Cambridge Journal of Education*, 39(4), 489–504.

Suizzo, M.-A., Jackson, K., Pahlke, E., McClain, S., Marroquin, Y., Blondeau, L., & Hong, K. (2016). Parents' school satisfaction and academic socialization predict adolescents' autonomous motivation: A mixed-method study of low-income ethnic minority families, *Journal of Adolescent Research,* 31(3), 343-374.

Sullivan, A. (2001). Cultural capital and educational attainment. *Sociology, 35*(4), 893–912.

Tan, C. Y. (2017). Examining cultural capital and student achievement: Results of a meta-analytic review, *Alberta Journal of Educational Research,* 63(2), 139-159.

Tárraga, V., García, B., & Reyes, J. (2017). Home-based family involvement and academic achievement: a case study in primary education*, Educ. Stud.* 44, 361–375. *doi:10.1080/03055698.2017.1373636*

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Sage Publications, Inc.

Tazouti . Y., & Jarlegan .A (2016). The mediating effects of parental self-efficacy and parental involvement on the link between family socioeconomic status and children's academic achievement, *Journal of Family Studies,* 25(3), 250-266.

Terfassa, A. D. (2018). The Relationship between parental education and children's academic performance: The case of Genda Tesfa Primary School, Dire Dawa. *Research on Humanities and Social Sciences,* 8(5), 10-16.

The Jamaican Education Transformation Commission. (2021). *The Reform of Education in Jamaica, 2021 Report*. Ministry of Education and Youth, Kingston.

The Planning Institute of Jamaica (PIOJ), & the Statistical Institute of Jamaica (STATIN). (2019). *Jamaica survey of living conditions*. The Planning Institute of Jamaica (PIOJ), and the Statistical Institute of Jamaica (STATIN).

Thompson, M., Alexander, K., & Entwisle, D. (1988). Household composition, parental expectations and school achievement, *Social forces,* 67, 424-451.

Thomson, S. (2018). Achievement at school and socioeconomic background—an educational perspective. *npj Science Learn,* 3 (5), 1-2. https://doi.org/10.1038/s41539-018-0022-0

Thomson, S., DeBartolo, L., & Underwood, C. (2017). *PISA 2015, Reporting Australia's results*. Australian Council for Educational Research, Victoria.

Thornton, R. (2015). *Parental involvement and academic achievement Governor State University* UNESCO (2010). Education for all Global Monitoring, Report 2010: Reaching the   Marginalized. Paris, UNESCO.

Trusty, J. (2002). African Americans' educational expectations: Longitudinal causal models for women and men, *Journal of Counselling and Development,* 80, 332 345.

UNICEF Caribbean Area Office. (1999). *The state of the world's children 1999*. Bridgetown,

Urhahne, D. (2019). Teacher influences and parental involvement, *Educational Psychology,* 39(7), 859-861.

Vang, S. (2017). *Hmong Students' parent support and motivation in higher education,* Unpublished   Masters's Thesis, Califormia State University, Sacramento, CA.

Walton, W., Yahiya, A., & Gamal, A. N. Z. (2014). The impact of parental involvement on academic achievement among Aboriginal schoolchildren, *Australian Journal of basic and Applied Science,* 8(10), 151-157.

Wang, M. T., & Sheikh-Khalil, S. (2014). Does parent involvement matters for student achievement   and mental health in high school? *Child Development*, 85, 610-625. https://doi..org.10.1111/cdev.12153.

Warren, J. M. (2018*). School consultation for student success: A cognitive- behavioural approach.* Springer.

Warren, J. M., Locklear, L A., & Watson, N. A. (2018). The role of parenting in predicting student achievement: consideration for school counselling practice and research, *The Professional Counsellor*, 8(4), 328-340. https://doi.org/10.15241/jmw.8.4.328.

Waters, N. E.,Ahmed, S. F., Tang, S., Morrison, F. J., & Davis –Kean, P. E. (2021). Pathways from socioeconomic status to early academic achievement: The role of specific executive functions, *Early Childhood Research Quarterly,* 1st Quarter, 54, 321-331 https://doi.org/10.1016/j.ecresq2020.09.008.

Webster, L., & Mertova, P. (2007). *Using narrative inquiry as a research method: An introduction to using critical event narrative analysis in research on learning and teaching* (1st Ed). Routledge-London.

Weeks, K. P., & Schaffert, C. (2019). Generational differences of meaningful work: A mixed method study, *Journal of Business Ethics*, 156(4), 1045-106.

Weiser, D., & Riggio, H. (2010) family background and academic achievement: Does self-efficacy mediate returns? *Social Psychological Education, 13, 367-38.*

Wentzel, K. R. (1998). Parents' aspirations for children's educational attainments: Relations to parental beliefs and social address variables, *Merrill-Palmer Quarterly,* 44, 20-37.

Wood, L., & Bauman, E. (2017). *How family, school, and community engagement can improve student achievement and influence school reform: Literature review.* Nellie May Education Foundation.

World Bank.

World Bank. (2015). *Implementation completion and results report (IBRD 7815-Jm) on a loan in the amount of Us$16.0 million to Jamaica for an education transformation capacity building project*. Education Global Practice. Latin

America and the Caribbean Region. September 30, 2015 Report No: Icr00003352. The World Bank, Washington DC.

Wu, K. B. (1995). *Trinidad and Tobago: The financing of education*. Washington, DC: Wor

Yamamoto, Y., & Holloway, S. D. (2010). Parental expectations and children's academic Performance in Sociocultural Context, *Educational Psychology Review,* 22(3), 189-214.

Yotyodying, S., & wild, E. (2014) Antecedents of different qualities of home-based parental involvement: findings from a cross-cultural study in Germany and Thailand, *Learning, Culture and Social Interaction*, 3, 98-110.

Zhan, M. (2006). Assets, parental expectations and involvement, and children's educational performance, *Children and Youth Services Review,* 28, 961- 975.

Zhang F., Jiang Y., Ming H., Ren Y., Wang L., Huang S. (2020). Family socio-economic status and children's academic achievement: The different roles of parental academic involvement and subjective social mobility, *British Journal of Educational Psychology*, 90(3), 561-579.

Zhang, F., Jiang, Y., Huang, S., Ming, H., Ren, Y., & Wang, L. (2021). Family socioeconomic status, parental involvement, and academic achievement: The moderating role of adolescents' subjective social mobility, *The Journal of Early Adolescence*, 41(9), 1425–1454.

Appendices

APPENDIX A

UNICAF

REAF_DS - Version 3.1

UNICAF UNIVERSITY RESEARCH ETHICS APPLICATION FORM DOCTORAL STUDIES	UREC USE ONLY: Application No: Date Received:

Student's Name:

Student's E-mail Address:

Student's ID #:

Supervisor's Name:

University Campus: Choose from the list   ▾

Program of Study: Choose from the list   ▾

Research Project Title:

1. **Please state the timelines involved in the proposed research project.**

Estimated Start Date: Estimated End Date:

2. **External Research Funding (if applicable):**

   2.a. **Do you have any external funding for your research?**

   ☐ YES   ☐ NO

   If YES, please answer questions **2b** and **2c**.

   2.b. List any external (third party) sources of funding you plan to utilise for your project. You need to include full details on the source of funds (e.g. state, private or individual sponsor), any prior / existing or future relationships between the funding body / sponsor and any of the principal investigator(s) or co-investigator(s) or student researcher(s), status and timeline of the application and any conditions attached.
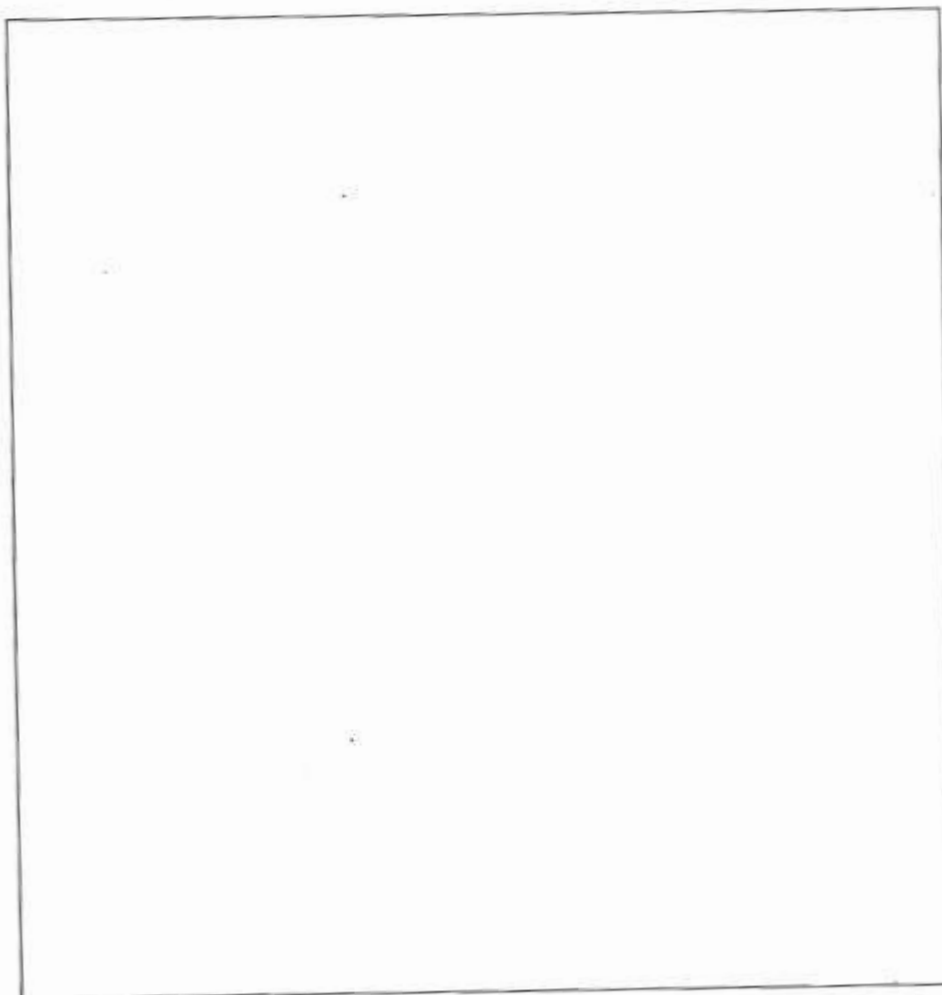
   2.c. If there are any perceived ethical issues or potential conflicts of interest arising from applying or and receiving external funding for the proposed research then these need to be fully disclosed below and also further elaborated on, in the relevant sections on ethical considerations later on in this form.

UNICAF

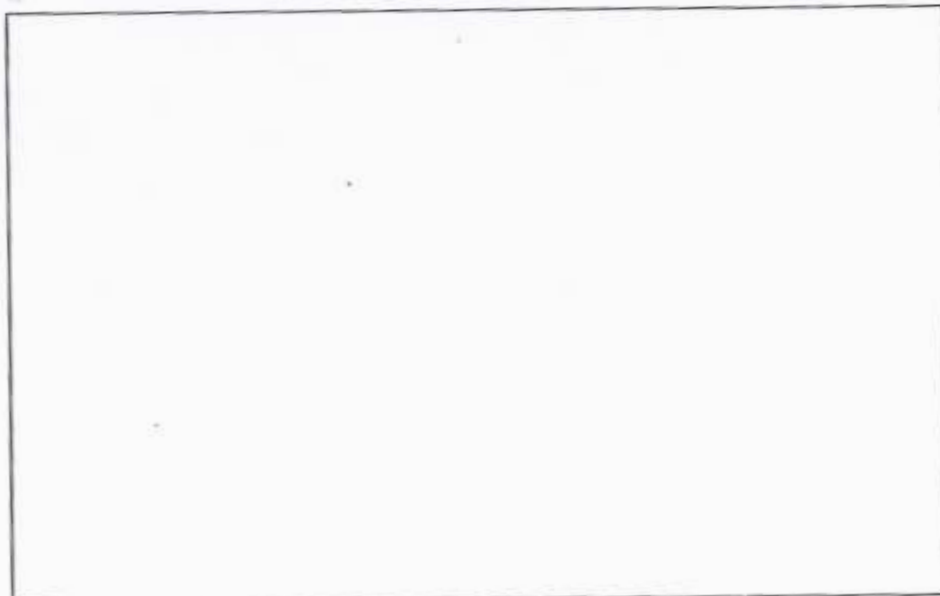## 3. The research project

3.a. Project Summary:

In this section fully describe the purpose and underlying rationale for the proposed research project. Ensure that you pose the research questions to be examined, state the hypotheses, and discuss the expected results of your research and their potential.

It is important in your description to use plain language so it can be understood by all members of the UREC, especially those who are not necessarily experts in the particular discipline. To that effect ensure that you fully explain / define any technical terms or discipline-specific terminology (use the space provided in the box).

3.b. Significance of the Proposed Research Study and Potential Benefits:

Outline the potential significance and/or benefits of the research (use the space provided in the box).

4. **Project execution:**

4.a. The following study is an:

- [ ] experimental study (primary research)
- [ ] desktop study (secondary research)
- [ ] desktop study using existing databases involving information of human/animal subjects
- [ ] Other

If you have chosen 'Other' please Explain:

3

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4.b. Methods. The following study will involve the use of:

Method	Materials / Tools
Qualitative:	☐ Face to Face Interviews
	☐ Phone Interviews
	☐ Face to Face Focus Groups
	☐ Online Focus Groups
	☐ Other *
Quantitative:	☐ Face to Face Questionnaires
	☐ Online Questionnaires
	☐ Experiments
	☐ Tests
	☐ Other *

*If you have chosen 'Other' please Explain:

5. Participants:

5 a. Does the Project involve the recruitment and participation of additional persons other than the researcher(s) themselves?

☐ YES   If YES, please complete all following sections.

☐ NO   If NO, please directly proceed to Question 7.

4

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5 b. Relevant Details of the Participants of the Proposed Research

State the number of participants you plan to recruit, and explain in the box below how the total number was calculated.

Number of participants

Describe important characteristics such as: demographics (e.g. age, gender, location, affiliation, level of fitness, intellectual ability etc). It is also important that you specify any inclusion and exclusion criteria that will be applied (e.g. eligibility criteria for participants).

Age range   From [   ]   To [   ]

Gender   [ ] Female
         [ ] Male

Eligibility Criteria:

- Inclusion criteria

- Exclusion criteria

Disabilities

Other relevant information (use the space provided in the box):

5

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5 c. Participation & Research setting:

Clearly describe which group of participants is completing/participating in the material(s)/ tool(s) described in 5b above (use the space provided in the box).

5 d. Recruitment Process for Human Research Participants:

Clearly describe how the potential participants will be identified, approached and recruited (use the space provided in the box).

5 e. Research Participants Informed Consent.

Select below which categories of participants will participate in the study. Complete the relevant Informed Consent form and submit it along with the REAF form.

Yes	No	Categories of participants	Form to be completed
☐	☐	Typically Developing population(s) above the maturity age *	Informed Consent Form
☐	☐	Typically Developing population(s) under the maturity age *	Guardian Informed Consent Form

* Maturity age is defined by national regulations in laws of the country in which the research is being conducted.

6

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5 f.   **Relationship between the principal investigator and participants.**

Is there any relationship between the principal investigator (student), co-investigators(s), (supervisor) and participant(s)? For example, if you are conducting research in a school environment on students in your classroom (e.g. instructor-student).

☐ YES   ☐ NO

If YES, specify (use the space provided in the box).

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6.   Potential Risks of the Proposed Research Study.

6 a. i.   **Are there any potential risks, psychological harm and/or ethical issues associated with the proposed research study, other than risks pertaining to everyday life events (such as the risk of an accident when travelling to a remote location for data collection)?**

☐ YES   ☐ NO

If YES, specify below and answer the question 6 a.ii.

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6 a.ii   **Provide information on what measures will be taken in order to exclude or minimise risks described in 6.a.i.**

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6 b. Choose the appropriate option

	Yes	No
i. Will you obtain written informed consent form from all participants?	☐	☐
ii. Does the research involve as participants, people whose ability to give free and informed consent is in question?	☐	☐
iii. Does this research involve participants who are children under maturity age?	☐	☐

**If you answered YES to question iii, complete all following questions.
If you answered NO to question iii, do not answer Questions iv, v, vi and proceed to Questions vii, viii, ix and x.**

	Yes	No
iv. Will the research tools be implemented in a professional educational setting in the presence of other adults (i.e. classroom in the presence of a teacher)?	☐	☐
v. Will informed consent be obtained from the legal guardians (i.e. parents) of children?	☐	☐
vi. Will verbal assent be obtained from children?	☐	☐
vii. Will all data be treated as confidential?	☐	☐

If NO, explain why confidentiality of the collected data is not appropriate for this proposed research project, providing details of how all participants will be informed of the fact that any data which they will provide will not be confidential.

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	Yes	No
viii. Will all participants /data collected be anonymous?	☐	☐

If NO, explain why and describe the procedures to be used to ensure the anonymity of participants and/or confidentiality of the collected data both during the conduct of the research and in the subsequent release of its findings.

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	Yes	No

ix. Have you ensured that personal data and research data collected from participants will be securely stored for five years? ☐ ☐

x. Does this research involve the deception of participants? ☐ ☐

If YES, describe the nature and extent of the deception involved. Explain how and when the deception will be revealed, and who will administer this debrief to the participants:

☐

6 c. i. Are there any other ethical issues associated with the proposed research study that are not already adequately covered in the preceding sections?

☐ Yes   ☐ No

If YES, specify (maximum 150 words).

6.c.ii Provide information on what measures will be taken in order to exclude or minimise ethical issues described in 6.c.i.

☐

6 d. Indicate the Risk Rating.

☐ High   ☐ Low

9

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7. Further Approvals

Are there any other approvals required (in addition to ethics clearance from UREC) in order to carry out the proposed research study?

☐ YES ☐ NO

If YES, specify (maximum 100 words).

8. Application Checklist

Mark √ if the study involves any of the following:

☐ Children and young people under 18 years of age, vulnerable population such as children with special educational needs (SEN), racial or ethnic minorities, socioeconomically disadvantaged, pregnant women, elderly, malnourished people, and ill people.

☐ Research that foresees risks and disadvantages that would affect any participant of the study such as anxiety, stress, pain or physical discomfort, harm risk (which is more than is expected from everyday life) or any other act that participants might believe is detrimental to their wellbeing and / or has the potential to / will infringe on their human rights / fundamental rights.

☐ Risk to the well-being and personal safety of the researcher.

☐ Administration of any substance (food / drink / chemicals / pharmaceuticals / supplements / chemical agent or vaccines or other substances (including vitamins or food substances) to human participants.

☐ Results that may have an adverse impact on the natural or built environment.

9. Further documents

Check that the following documents are attached to your application:

		ATTACHED	NOT APPLICABLE
1	Recruitment advertisement (if any)	☐	☐
2	Informed Consent Form / Guardian Informed Consent Form	☐	☐
3	Research Tool(s)	☐	☐
4	Gatekeeper Letter	☐	☐
5	Any other approvals required in order to carry out the proposed research study, e.g., institutional permission (e.g. school principal or company director) or approval from a local ethics or professional regulatory body.	☐	☐

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10. Final Declaration by Applicants:

(a) I declare that this application is submitted on the basis that the information it contains is confidential and will only be used by Unicaf University for the explicit purpose of ethical review and monitoring of the conduct of the research proposed project as described in the preceding pages.

(b) I understand that this information will not be used for any other purpose without my prior consent, excluding use intended to satisfy reporting requirements to relevant regulatory bodies.

(c) The information in this form, together with any accompanying information, is complete and correct to the best of my knowledge and belief and I take full responsibility for it.

(d) I undertake to abide by the highest possible international ethical standards governing the Code of Practice for Research Involving Human Participants, as published by the UN WHO Research Ethics Review Committee (ERC) on http://www.who.int/ethics/research/en/ and to which Unicaf University aspires to.

(e) In addition to respect any and all relevant professional bodies' codes of conduct and/or ethical guidelines, where applicable, while in pursuit of this research project.

> [ ] **I agree with all points listed under Question 10**

Student's Name:

Supervisor's Name:

Date of Application:

Important Note:
Save your completed form (we suggest you also print a copy for your records) and then submit it to your UU Dissertation/project supervisor (tutor). **In the case of student projects, the responsibility lies with the Faculty Dissertation/Project Supervisor.** If this is a student application, then it should be submitted via the relevant link in the VLE. Please submit only electronically filled in copies; **do not** hand fill and submit scanned paper copies of this application.

Appendix B1

UNIC AF UNIVERSITY UU_IC - Version 2.1

APPENDIX B1 Informed Consent Form
Part 1: Debriefing of Participants

Student's Name:
Student's E-mail Address:
Student ID #:
Supervisor's Name: University Campus:
Program of Study:
Research Project Title:

Date:

Provide a short description (purpose, aim and significance) of the research project, and

explain why and how you have chosen this person to participate in this research

(maximum 150 words).

The above-named Student is committed in ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I,   ensure that all information stated above is true and that all conditions have been

met.

Student's Signature:

_____

UNIC AF UNIVERSITY UU_IC – Version 2.1

APPENDIX B2-Informed Consent Form
Part 2: Certificate of Consent

This section is mandatory and should to be signed by the participant(s)

Student's Name:
Student's E-mail Address:
Student ID #:
Supervisor's Name:
University Campus:
Program of Study:
Research Project Title:

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Participant's Print name:

Participant's Signature: ………………………………………..

Date:

If the Participant is illiterate:

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the aforementioned individual has given consent freely.

Witness's Print name:
Witness's Signature:

_____

Date:

APPENDIX C: PARENTS' QUESTIONNAIRE

My name is Steadley Isaac McPherson, a doctoral student of UNICAF University where I am reading for the Doctoral of Education degree.

My research title is: Relating Parents' Educational Attainment to Students' Academic Performance in Selected Primary Schools in Rural Jamaica.

Your contribution to this data collection is solicited and all information given is solely for research process and as such, will be held in strictest confidence.

SECTION A – Demographic Information

Instruction: Put a tick (✓) in the appropriate box.

1. What is your age? _____

2. Gender ❑ Male ❑ Female

3. How many children do you have?

   ❑ 1 child ❑ 2 children ❑ 3 children ❑ 4 children ❑ 5 and over

4. What is the highest level of education you have completed?

   ❑ Primary School only ❑ High School ❑ College Education ❑ University Education

5.. **What is your family income per month?**

   ❑ less than $9,000 ❑ $9,000 - $20,000 ❑ $20,000 - $40,000 ❑ $50,000 - $99,000

   ❑ More than $150,000

5. Who is the income earner of your family? ❑ father ❑ mother ❑ both parents

6. How many hours each week do(es) the above person(s) work? _____

7. Do you have other resources to support your family?

   ❑ Yes ❑ No

8. If you answered "Yes" to the above question; what resources do you use?
   ❑ Food stamps ❑ child support ❑ sponsorship support

9. What is your level of academic achievement?

   ❑ I did not do any subject ❑ fewer than five subjects at CSEC Examinations

   ❑ Five or more subjects at CSEC Examinations ❑ College Diploma ❑ Batchelor's degree

   ❑ Master's Degree ❑ Doctoral degree

10. Where education does come on your list of priorities?

❑ 1ˢᵗ.　　　❑ 2ⁿᵈ　　　❑ 3ʳᵈ　　　❑ 4ᵗʰ　　　❑ 5ᵗʰ

Section B

Place a Tick (✓) the box in order 1 = Never, 2= Seldom, 3 = Sometimes, 4 = Often

.	Statements	1	2	3	4
11.	I assist my child with his/her homework.				
12.	I check my child's homework				
13	I attend P.T.A meeting for my child				
14	How often does your child attend school?				

Section C

Circle the number to select your response
SD = strongly disagree, D = disagree, U = Undecided, A = agree, SA=strongly agree

	Statements	SD	D	U	A	SA
15.	I send my child regularly to school	1	2	3	4	5
16.	My child/children get(s) learning materials (Books,laptop,dictionary)	1	2	3	4	5
17	I participate in school learning activities (Sports, reading day,P.T.A)	1	2	3	4	5
18.	I want my child to attain his/her educational goal(s)	1	2	3	4	5
19	I discuss goal setting with my child/children	1	2	3	4	5
20	I read together with my child/children	1	2	3	4	5
21	I set new learning targets for my child/ children	1	2	3	4	5
22.	I discuss my child's report with his/her class teacher	1	2	3	4	5
23.	I am satisfied with my educational achievements	1	2	3	4	5
24.	My child/children performance matter to me	1	2	3	4	5
25.	A number of my family received higher education (College Education)	1	2	3	4	5
26.	I provide additional help for my child/children in school	1	2	3	4	5
27.	I discuss school work with my child/children.	1	2	3	4	5
28.	I discuss my child academic report with him/her each term	1	2	3	4	5
29	My family experience financial problems	1	2	3	4	5
30.	I have children on the PATH programme	1	2	3	4	5

APPENDIX D: FOCUS GROUP DISCUSSION TOOL

_____

Welcome and thank you for joining us today. Your signing of the consent form is an indication of your willingness to participate in the study.

The purpose of this gathering is to get your feedback on: How does the educational achievement of parents directly impacts the educational outcomes and academic success of the children attending primary schools in rural Jamaica? Specifically, your contribution will inform policy decision within education sector thereby lifting the levels of the sector.

Let me introduce myself. I am _____ and I will be the moderator in today's discussion. The format we are using is a focus group. A focus group is a conversation that focuses on specific questions in a safe and confidential environment. I will guide the conversation by asking questions to which each of you can respond. There are no right or wrong answers to these questions. Just be honest. If you wish, you can also respond to each other's comments, like you would in an ordinary conversation.

It is my task to make sure that everyone online gets to participate and that we stay on track. The researcher will record and summarize your comments. Before we get started, I want to let you know two things. First, the information we garner today will only be used strictly for research purposes. Secondly, you do not have to answer any questions that you are uncomfortable with. This focus group today is anonymous and confidential. "Anonymous" means that we will not be using your names and you will not be identified as an individual in the study. "Confidential" means that what we say today should not be repeated outside of this platform. Whilst, I cannot control what you do when you leave, I must ask each of you to respect each other's privacy and not repeat anything that was said by others here today. We hope everyone on this platform treats this in strict confidence,

Let's begin with introductions.

12. Each of you, tell us something you love to do in your free time. (5 minutes)
13. What do you value most of all for your child/children? (6 minutes.)
14. What are your expectations for your child/children as you prepare him/her for school every day? (6. minutes)
15. How often do you tell your child/children of your expectations of them? (6 minutes)
16. What kind of support do you provide at home/school to assist your child with his/her homework? (8 minutes)
17. When you go to P.T.A meeting, what generally is your concern and why? (8 minutes)
18. In the home, what do you do to demonstrate that education is an important value to you and by extension the home? (9 minutes)
19. Do you provide a special study area in your home for your child/children to study? (5 minutes)
20. Suppose you were to live your life all over again, what would you do differently for your child/children in terms of their educational involvement? (8 minutes)
21. If you were given the opportunity to attend school again, what would you do differently to learn and why? (9 minutes)
22. Of all the things we have talked about, what is the most important to you and why? (6 minutes)

Total time = 65 minutes

APPENDIX E: CHILDREN'S QUESTIONNAIRE

My name is Steadley Isaac McPherson, a doctoral student of UNICAF University where I am reading for the Doctoral of Education degree.

My research title is: Relating Parents' Educational Attainment to Students' Academic Performance in Selected Primary Schools in Rural Jamaica**.**

Your contribution to this data collection is solicited and all information given is solely for research process and as such, will be held in strictest confidence.

SECTION A - Demographic Information
Instruction: Put a tick (□) in the appropriate box to indicate your response

1. To what age group do you belong?
□ 9 years   □   10 years □   11 years   □ 12 plus years

2. How many other siblings (brother/sister) live in your home?
□ 1 - 2   □   3 - 4   □   5 – 6   □   6 and over

3. Do you live with both parents?
□   yes   □ no
4.   What is your gender?
□   Male   □   Female

SECTION B
For each item, place a tick (□) in the appropriate box

SD = **strongly disagree, D = disagree, U= Undecided, A = agree, SA=strongly agree**

	Statements					
5.	I have a specific place to study at home which is kept clean and orderly	1	2	3	4	5
6.	I have learning materials (books, laptop, dictionary etc.)	1	2	3	4	5
7.	My parents motivate me to do well in my school work	1	2	3	4	5
8.	I have internet at home to assist me with my school work	1	2	3	4	5
9.	My school performance is a result of my parents' involvements	1	2	3	4	5
10.	I get PATH (free) lunch at school.	1	2	3	4	5
11.	I believe your parent's financial status affects their ability to help me more in your education	1	2	3	4	5
12.	My parent(s) work(s) long hours.	1	2	3	4	5
13	My parents read to me regularly	1	2	3	4	5

APPENDIX F: GATEKEEPER LETTER

Address:

Date

Subject: Permission to Conduct Research

Dear XXXX,

I am a doctoral student at Unicaf University, Zambia.

As part of my degree, I am carrying out a study on: Relating Parents' Educational Attainment to Students' Academic Performance in Selected Primary Schools in Rural Jamaica.

I am writing to request permission to conduct the research at your school as well as to enquire whether you would be interested in/willing to participate in this research.

Subject to approval by Unicaf Research Ethics Committee (UREC) this study will be using online focused group discussion and face to face questionnaires to be administered to 30 students (and their parents) from grades 4 – 6.The study is an explanatory sequential mixed method study of quantitative and qualitative approaches to answer he research questions. My supervisor

———————————————————

I am seeking your assistance to select thirty (30) students (along with their parents) from across grades 4- 6 and sensitize them of the study. The parents must be contacted by telephone for their willingness to participate before you send them the consent letters which I will supply you along with the questionnaires. On receiving the signed consent, I will visit the school to administer the children's questionnaires. The parent's questionnaires will be delivered by the children for them to be self-administered. This should be returned to you by the parents the following morning. Their contact numbers must be collected for the online focused group discussion to be carried out thereafter.

Thank you in advance for your time and for your consideration of this project. Kindly let me know if you require any further information or need any further clarifications.

 Yours Sincerely

Student's Name:
Student's E-mail:

Student's Address
and Telephone:

Supervisor's Title
and Name:
Supervisor's
Position:
Supervisor's E
Mail:

APPENDIX G: GUARDIAN INFORMED CONSENT

UNICAF UNIVERSITY

UU_GIC - Version 2.1

Guardian Informed Consent Form

Part 1: Debriefing of Participants

Student's Name:

Student's E-mail Address:

Student ID #:

Supervisor's Name:

University Campus: Unicaf University Zambia (UUZ)

Program of Study:

Research Project Title:

Date:

Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).

The above named Student is committed in ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, _____, ensure that all information stated above is true and that all conditions have been met.

Student's Signature:

I