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SOCIETAL EXPECTATIONS AND EDUCATIONAL OPPORTUNITY: A STUDY OF FUTURE ORIENTATION, EXPECTANCY VALUING, AND ACADEMIC PERFORMANCE OF ST. LUCIAN YOUTH

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SOCIETAL EXPECTATIONS AND EDUCATIONAL OPPORTUNITY: A STUDY OF FUTURE ORIENTATION, EXPECTANCY VALUING, AND ACADEMIC PERFORMANCE OF ST. LUCIAN YOUTH

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY

Dr. Barbara A. Greene, Chair

Dr. Raymond B. Miller

Dr. H. Michael Crowson

Dr. Xun Ge

Dr. Catherine A. John

DEDICATION

When my parents were children in the 1940's, there were not many opportunities to get an education in St. Lucia. My parents received the most basic education that was available for poor, rural, working class people living in a British colony. Furthermore, when my grandmother died unexpectedly at an early age, my mother was obligated to forgo her education to take care of her siblings as she was the oldest girl in the family. My father too, growing up as the only child of a single mother, felt compelled to pursue work instead of school. Having missed out on educational opportunities for themselves, my parents did everything they could to make education attainable for their children. I recognize that there were extraordinary sacrifices made especially for me. I wish to honor my mother, Philomene Lubin and my father St. Louis Lubin. I dedicate this dissertation to their legacy.

Mama and Daddy, thank you for teaching me the lessons not written in books. You never give up. You never surrender. You carve out your own space in this world. I will remember you.

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ABSTRACT

Correlation and regression analyses were used to examine variables that explain the academic motivation of students in St. Lucia based on the theories of future-orientation. A new variable representing individuals' reactions to the academic opportunity structure (RAOS) in St. Lucia was introduced and tested in conjunction with motivation-related variables from the above theoretical perspectives. Participants were 921 students from 33 classes in four secondary schools in St. Lucia. The results showed that the new variable capturing the reactions to the academic opportunity structure in St. Lucia was a significant predictor of achievement in both mathematics and English. Additionally, students' self-efficacy predicted achievement in mathematics but not in English. Finally, future orientation and attainment/utility valuing were not direct predictors of achievement. Further research is needed to understand more about achievement motivation in the complex St. Lucian context.

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CHAPTER 1

Introduction

There is ample research suggesting that people's current behavior is related to their future-orientated motivation (e.g. Raynor, 1970; Nurmi, 1991; Gjesme, 1981; Lens et al., 2001). This evidence demonstrates that individuals' performance as well as their persistence and engagement in learning tasks are affected by the ways in which they are oriented toward the future. Importantly, the socializing forces within a person's specific context contribute, at least in part, to his or her future-oriented motivation (Nurmi et al., 1995). Furthermore, it is possible to examine the features of a social context that orient people toward future aspirations and self-definitions. Such an examination may be useful in explaining people's current behaviors with regard to their educational attainment within specific social contexts.

While future orientation is one important aspect of motivation that has been found to be influenced by a person's social context, expectancy-value theory (Eccles et al., 1983; Wigfield & Eccles, 1992, 2002) is another perspective on motivation that demonstrates the role of individuals' personal values and beliefs. Expectancy-value theory has been used to demonstrate a relationship between people's behaviors and their subjective task value and self-concepts of ability. Subjective task value influences peoples' subjective definitions of situations or contexts so that activities and events in their immediate situation acquire either positive or negative valence. Self-concept of ability represents people's perceived competence and self-evaluations about their capabilities (Eccles et al., 1983). By combining ideas from these literatures we may be able to better understand peoples' motivation and behaviors toward pursuing education.

A goal of the present study was to examine how the constructs from these literatures would help us understand the relationship between motivation and achievement in a Caribbean context.

The Caribbean provides useful contexts for educational researchers to examine the variables related to these perspectives. The Caribbean's unique characteristics may help advance our knowledge of the relationship between motivation and educational attainment. The Caribbean is often conceptualized as a class-conscious society wherein exists an educational opportunity structure that assigns social status to individuals (Gordon, 1981). Thus, in the Caribbean, educational pursuits are uniquely intertwined with individuals' expectations of social mobility, their notions of self-definition and personal meaning, and their beliefs about the value of hard work and personal effort (Silverman & Casazza, 2000), all within the realm of the possibilities in the opportunity structure. Yet, nonetheless, individuals' educational and occupational aspirations are constrained by a narrow set of prescribed options for future selves. This means many children enter school expecting to be doctors, lawyers, engineers, and other similar prestigious professionals in careers that are partial to academic versus vocational ideals (Lubin, 2009).

Although the Caribbean region has the need for all types of technical and professional people, academic related careers are held in higher esteem and are more strongly promoted within both families and schools than are others. This remains the case even when it is clear that only a small percentage of the population can achieve those 'top' careers. While this may not be a characteristic unique to Caribbean societies, the remarkable issue here is the accompanying disregard for other careers that do not carry

scholarly significance. There is little or no emphasis on technical training for the many trade jobs that a majority of young adults will eventually fill. Furthermore, the economic conditions do not allow for universal education and many children are sifted out of the system at very young ages due to the competition over the limited resources available (Lubin, 2009).

Statement of the problem

Despite the fact that the majority of Caribbean children will not end up as doctors, lawyers, or other similar prestigious professionals, they are all still strongly encouraged to pursue only these scholarly careers. Children are not encouraged to even consider other career paths. Given that children are conscious of the limited scope of the opportunity structure, that is to say, they are aware that they might be among those not to reach those top careers, how is the academic motivation of these children affected by the singular academic emphasis in the Caribbean educational system?

It seems prudent to examine children's future-oriented motivation, their own expectancies and values, and their perceptions of the structural values about education that are being transmitted by their society in the face of the obvious limitations of the opportunity structure. Although there is ample research on future orientation and expectancy valuing, a noticeable gap in the literature involves the lack of systematic empirical examination of people's perceptions of societal expectations and opportunity in the Caribbean and the impact of those perceptions on individuals' academic motivation. To address this gap, we need to be able to assess peoples' perceptions of the academic opportunity structure that reflects the cultural meaning of education that is transmitted by parents, extended family, and teachers, and the wider society. I developed an instrument,

based on a pilot study (Lubin, 2009), to capture individuals' reactions to the academic opportunity structure (RAOS) that focused on three important facets of education in the Caribbean. Education is seen as a means of social mobility, a means of achieving personal and cultural identity, and additionally, educational attainment brings into sharper focus the value of hard work and individual effort for Caribbean people.

The goal of this research was to gain a better understanding of issues related to future-orientated motivation, expectancy-valuing, and academic performance in the context of Caribbean societies, taking into account individuals' perceptions of the academic opportunity structure. In the past, educational research in the Eastern Caribbean region has tended to focus almost exclusively on social and economic issues within the scope of comparative education (e.g. Hoogvelt, 1997; Sander, 1997; Crossley & Holmes 1999; Louisy, 2001, 2004; Holmes & Crossely, 2004). There has been little research involving psychological theories applied to educational issues. Educational researchers have yet to focus on the psychological implications for educational attainment in the complex Caribbean context. What we can learn by examining education in the Caribbean may enhance our overall understanding of issues related to motivation and educational attainment.

The remainder of this document will be arranged in the following way. I will present a brief historical overview to introduce and describe the socio-cultural context of the Eastern Caribbean. This will be followed by a review of theoretical perspectives that may be applied to understand educational issues unique to the Caribbean context. The methods for a proposed study will then be presented.

CHAPTER 2

Literature Review

Part I. Historical Overview

Educational attainment and its relation to self-definition in Caribbean society: Understanding the sources of motivation.

Many theorists and researchers who explore Caribbean educational systems have either lived in a former colony or in a city that has benefited from the exploits of colonialism. My perspective comes from growing up and being educated in a former colony. My country of origin is St. Lucia, a small country which gained independence in 1979, only a few years after I was born. It is there that I received all of my British colonial education prior to going to college in the United States. I grew up at a time when my country, like many others in the Eastern Caribbean (EC), was poised for decolonisation. Therefore, I will draw from my own knowledge and experiences to describe issues related to motivation and education in the post-colonial St. Lucia and the wider Eastern Caribbean.

As a fairly young society, the people of the Caribbean have been struggling with issues of self-definition and identity. This challenge, according to Côté and Levine (2002), is common for people living in modern and late modern society, who historically have not been exposed to degrees of choice about issues of self-meaning and personal identity. Côté and Levine (2002) suggest that the development of adult identities has become problematic for modern societies where "choice has replaced obligation as the basis of self-definition" (p. 1).

Historically, this challenge seems even greater for Caribbean societies, who even in modern history have been denied opportunities for choice and negotiation about self and identity. In fact, the colonial project attempted to promote Eurocentric identities for the displaced people of the Caribbean. People of the Caribbean have in the past been characterized as people without identity, mere fragments of greater societies, non-people (Walcott, 1992). These fragments of African, Asian, European, Mediterranean, and indigenous Amerindian origin have been thought of as disconnected from their original identity and incapable of self-definition in the fragmented community of others (Côté & Levine, 2002) that the Caribbean represents. Therefore, acquiring a sense of self has become one of the main preoccupations of post-colonial Caribbean society. This, in my opinion, is the focal point for future-oriented motivation in the Caribbean. While the people of the Caribbean cannot afford to forget their past, their subjective anticipations of their emancipated and self-defined future lives receive high prominence.

Unfortunately, in the Eastern Caribbean, there exists a well-established conflation of self-definition and educational attainment. As Caribbean societies continue to dust off the shackles of slavery and oppression, education has been hailed as a means to attaining true freedom. This pronouncement is fueled by the common sentiment that the displaced people of the Caribbean can never again be enslaved as long as they become educated. Unfortunately, complications and complexes abound in regards to what and whose values of education are relevant (Louisy, 2001; Holmes & Crossely, 2004). The famous lyrics "emancipate yourselves from mental slavery" (Marley, 1977) takes on special significance to Caribbean people, who have experienced direct economic, political and educational control by other nations (Henry, 2000). The lyrics suggest that Caribbean

people should not locate their self-esteem in the colonial mindset most exemplified by the formal education system.

These intricacies notwithstanding, educational attainment has become synonymous to personal meaning-making and self-definition. For the common Caribbean citizen, becoming an educated person partially entails doing one's part in ensuring the emancipation and advancement of his or her nation. Education undertakes a national agenda of fostering national identities in defiance of post-colonial or neo-colonial hegemony (Louisy, 2001; Holmes & Crossely, 2004). National ideologies concerning education have become filtered down to the population and processed into personal identities (Henry, 2000).

Social and economic challenges for educating children in St. Lucia: A brief look at the context and its links to motivation

Understanding issues related to future-oriented motivation in St. Lucia is difficult and necessitates, at the least, a brief discussion on the complex relationships linking economics, knowledge, education, and the local people and context. St. Lucia is a formally colonized state. It was France who first colonized St. Lucia in 1642, but the country's colonial history ended with England in 1979. Between the two European empires, St. Lucia changed hands 14 times as wars were fought over the rights of possession. It was not until 1814 that the French finally ceded control of St. Lucia to Britain at the Treaty of Paris. By way of the West Indies Act in 1967, St. Lucia attained self-government. Subsequently, on February 22, 1979, St. Lucia became an independent member of the Commonwealth of Nations.

At the turn of the 20th century, the education system in St. Lucia bore many similarities to education in most developing states. The language used in schools was that of the former colonizer which has impacted the types of values that have been disseminated and the availability of education to sections of the population (Henry, 2000). Kwéyòl speakers and members of rural communities have been greatly disadvantaged in terms of access to education. Moreover, the general structure and organization of schools reflected a foreign model, namely that of Europe, with school curricula that still reflected the textual attitude of former colonial rulers (Hickling-Hudson, 1998, 2006). Foreign agencies donated textbooks, curricula and expatriate teachers. Foreign educational aid packages were either testing experimental models or were simply not suitable for Caribbean contexts but were still accepted with little or no policy consideration and critical evaluation.

In response to these conditions, many formerly colonized societies have increasingly made strides to decolonize the process of education so that it is more relevant to their populations in terms of cultural, sociohistoric, and linguistic significance (Lubin & Serieux-Lubin, 2007; Holmes & Crossley, 2004). Post-colonialism speaks of a mode of thinking that is concerned with deconstructing colonial systems and advancing alternative perspectives (Henry, 2000). These small states have exemplified the relationship between nationalism and education, which is the need to impart knowledge from close realities first, moving progressively to outside realms. One aspect of post-colonial education policy, therefore, is to seek ways to harness the potential of local knowledge and local cultural values so that former colonized societies can achieve intellectual autonomy and cultural identity.

There are also other issues facing small Caribbean states that can be compared to neo-colonialism in terms of the scope of its social consequences and implications for education. For example, global economic trends seem to place smaller states at a disadvantage on the basis of their inherent social and cultural heterogeneity (Louisy, 2001, 2004). Globalization seems to encourage the notion of a world undifferentiated in terms of culture, education, economics and politics. Smaller states that have historically relied on the merits of their unique cultural capital continue to be pressured into abandoning their cultural inimitability in favor of global ideals patronized by world super powers (Louisy, 2001, 2004).

Resistance against the dual hegemonic tensions of neocolonialism and globalization has prompted the need for educational policies that also serve dual purposes; education must be able to facilitate Caribbean states in making a significant impact in the global market, where knowledge is the primary resource, and education must also have the capacity to promote local knowledge. This state of affairs accurately characterizes the current trends in St. Lucia (Lubin & Serieux-Lubin, 2007; Holmes & Crossley, 2004). In St. Lucia educational attainment is related to expectations of occupational success in the global market, and also to defining the essence of St. Lucian and Caribbean identity.

The structure of the education system in St. Lucia is similar to that of the other islands of the Eastern Caribbean. St. Lucia currently has 83 primary schools, 20 secondary schools, and one tertiary school. The tertiary institution, the Sir Arthur Lewis Community College, also supports instruction for the University of the West Indies. Other higher education institutions not supported at the state level include extensions of

Spartan Medical School and Monroe University (St. Lucia, 2001; Statistical Digest, 2006).

Upon attaining independence from Britain in 1979, the local government was charged with the mandate of providing for the needs of the people of St. Lucia. The complete transfer of power to the people of St. Lucia, though historic and widely celebrated, brought with it harsh economic consequences. One consequence is the inability of the now independent economy to provide education for everyone who wanted it. Limited resources meant access to education had to be screened in some way. Unable to sustain universal education, the government adopted an education policy of necessity. Whether implicitly or explicitly, decisions had to be made about what knowledge was most important, how that knowledge would be made accessible to as many as possible, and most importantly, out of sheer necessity, how to provide educational access to individuals most likely to succeed in education. In the final analysis, the education system of the former colony was adapted along with its implications of maintaining a class structure (Bowles & Gintis, 1976; Bourdieu & Passeron, 1977; Henry, 2000).

The unfortunate reality of scarcity resulted in competition for the limited educational resources available. There were simply not enough schools, teachers and education personnel to meet the growing capacity. As it turns out, the individuals with the most influence and connections were the ones who were able to guarantee spots for their children. To legitimize this state of affairs, a series of admission criteria had to be invented. For example, access to secondary education is still based on success in the Common Entrance Examination. Note that many Caribbean countries have only recently achieved universal primary education through age 14, and universal secondary education

is still out of reach. The top scorers get their first bid of the best schools, and best implies the potential for providing a formal education.

Competition over limited resources has a number of implications for educational motivation. In St. Lucia, children are socialized both implicitly and explicitly to believe that their placement in school signifies others were left out. Therefore education is regarded as almost sacred. From an early age children understand that the education system is designed to sift out the best and that failure to perform at any grade can result in premature ejection from the system. These ideas, if internalized, can generate anxiety, which has been shown to have negative consequences for children (Covington, 1984, 2000; Wolf, Smith, & Birnbaum, 1997).

Competition can affect intrinsic value of learning (Epstein & Harackiewicz, 1992; Deci & Ryan, 1985, 1987). In addition, competition can both increase or decrease interest and performance (Epstein & Harackiewicz, 1992). The researchers found that interest was discouraged when individuals focused more on successful competition than on the intrinsic value of a task. Furthermore, the researchers found that when individuals are made to compete with others they perceive as superior, they become intimidated, frustrated and may even withdraw from participation (Epstein & Harackiewicz, 1992). From my own childhood experiences, I recall many instances when I could not identify any opportunities to win, acknowledged the inevitability of defeat, and simply lost motivation.

Another crucial aspect of education in St. Lucia and many countries in the Caribbean is the reliance of corporal punishment for correcting behavioral problems and motivating performance. Coupled with the fear of losing one's spot, corporal punishment

endorses a scare model of motivation in Caribbean countries. Corporal punishment is the use of force to inflict pain but not hurt individuals while trying to change their behavior (Patterson, DeBaryshe, & Ramsey, 1989; Straus, Sugarman, & Giles-Sims, 1997). Of consequence, corporal punishment has been shown to be related to increased levels of immediate compliance and lower levels of moral internalization (Gershoff, 2002). This is an important consideration, especially for a people who have been historically oppressed via physical force. In my opinion, post-colonial education should encourage critical consciousness and espouse moral and ethical ideals. Thus, it seems counterintuitive to use physical force, which encourages docility and conformity to authority, to endorse emotional and psychological freedom.

From my own experience with working with children in St. Lucia, I have observed that students use corporal punishment as a way to avoid academic failure or labeling. What I have observed, from a motivational standpoint, is similar to the motivation to avoid failure described by Covington (1984, 2000) where students avoid engaging in school activities lest their self-perceived inadequacies are discovered by teachers and relevant others. In St. Lucia, I have seen students demonstrate bad behaviors so that others would associate their punishment with negative behaviors rather than academic failure.

Perhaps the most visible manifestation of the troubling state of affairs in the Caribbean is the high dropout rates at all levels of education. For example, Education Statistics Digest (2006) published data on primary and secondary school enrollment and dropouts in St. Lucia for the academic years 1998/99 through 2005/06. At the primary school level, cumulative dropout stood at a staggering 1528 students, representing a

cumulative percent dropout rate of 4.6. The cumulative percentage of dropouts was 7.4 for boys and 3.5 for girls. What is also alarming is that cumulative totals (girls and boys) for grades eight and nine (ages 13 and 14) were 861 and 374 students respectively, over the six year period. This age group represents the largest group of dropouts (Education Statistics Digest, 2006).

Included in the total number of school leavers in secondary schools are dropouts, transfers out of St. Lucia, and students who leave for undisclosed reasons. Cumulative dropout was 1780 students including 851 (15.2 %) boys and 929 (13.2 %) girls. Cumulative percentage of school leavers (male and female) during the six year period was 14.1. Moreover, when one examines the figures for 2005/06, it appears that total number of dropouts increased by 150 over the previous year (Education Statistics Digest, 2006). These figures represent an alarming number of very young children who, voluntarily or involuntarily, do not get the opportunity to advance educationally.

Many of these children quickly find acceptance in alternative social networks, such as the Rastafarian society. Such alternatives networks satisfy children's need for relatedness while also stressing the value of education and mental emancipation. However, many of the alternative networks students join promote educational ideologies that eschew formal colonial education by rendering it as machinery of the oppressor. Although these students continue to identify with the values of education, they believe formal education has failed them.

Others leave the country and even the region in search of education systems that are more responsive to their educational goals, values and expectancies. We do not know how the disaffected youths experience the educational system or what they think the

future has in store for them, given all that they face. The next section will discuss theoretical perspectives that may be useful when thinking about these serious issues facing Eastern Caribbean youths.

Part II. Theoretical Perspectives

Conceptualizing future orientation

Research on temporal perspective is the study into the subjective experience of time; its content, directionality and duration (Trommsdorff's, 1983). Various frameworks have been used to study and measure how people conceptualize the future, including future time perspective (FTP) and future time orientation (FTO). Husman and Lens (1999) argue that future time perspective examines how far into the future people plan (extension), the amount and frequency (density) of the thematic content of their plans, and how realistic their anticipations or plans are (realism). In this regard, FTP is viewed as a multidimensional concept. On the other hand, FTO is generally thought of as unidimensional construct that presumably measures a somewhat stable trait pertaining to peoples' views of the future (Husman & Lens, 1999).

The literature on these topics can be confusing since it is difficult to figure out which perspective is being referred to at any given time. Furthermore, there are instances where these perspectives are used interchangeably. To avoid confusion in this literature review, a more general term, future orientation (FO), will be used to describe peoples' conceptions of the future. Future orientation will be used to combine ideas relevant to both FTP and FTO, the essence of which refers to how people come to terms with the meaning of their lives in the future.

Since it possesses both cognitive and motivational characteristics, Trommsdorff (1983) conceptualized future orientation as a cognitive-motivational perspective. The cognitive aspects refer to how individuals structure future events or anticipations in the form of cognitive schemata. This type of cognitive structuring has been assessed in several ways including the measurement of the thematic content, density, coherence, and extension of anticipations (Wallace & Rabin, 1960; Kastenbaum, 1961, 1965; Trommsdorff et al., 1982; Seginer, 1992). Additionally, anticipatory cognitive schemata represent how people structure the experience of future events in terms of their temporal sequence and the causal order (Trommsdorff, 1983; Seginer, 1992).

The subjective future can also consist of motivational and affective aspects. For instance, some researchers (e.g. Beck et al., 1974; Trommsdorff & Lamm, 1975; Trommsdorff, Lamm & Schmidt, 1979) have described future orientation in terms of a general optimism/pessimism dichotomy. In addition, the future can also encompass peoples' needs, desires, hopes, fears, and goals (Trommsdorff, 1983; Lamm et al., 1976). Importantly, the motivational/affective and the cognitive aspects of the subjective future are interrelated and their relationships are based on peoples' situational contexts and the thematic content of peoples' anticipations (Trommsdorff, 1983). The motivational role of the anticipated individual future has been shown to vary across cultures (Seginer & Halabi-Kheir, 1998; Phalet & Lens, 1995; Nurmi, et al., 1994, 1995; Nurmi & Salmela-Aro, 2002) and is therefore important to this discussion. Later in this review, I will examine more closely the impact of cultural contexts on people's views about what the future holds for them; however, I must first discuss the relationship between future orientation and achievement motivation.

Future-oriented motivation: The motivational role of the future

One of the earliest attempts to relate future orientation to motivation (Nuttin, 1964) was based on the assertion that future orientation shapes motivated behavior. The central premise in Nuttin's (1964) suggestion is that human motives are goal-directed, that is, people are motivated by their needs to achieve specific goals or avoid unwanted occurrences or events. The motivated actions or behaviors that people exhibit are mediated by the expectations and the value associated with their goals (Eccles et al., 1983). People are motivated to engage in activities based on their assessment of the situations that frame these activities. To the extent they expect to be successful in a given situation they will perform activities geared toward their individually relevant goals and desires (Atkinson, 1964; Atkinson & Feather, 1966; Eccles et al., 1983; Wigfield & Eccles, 2002). Expectations for success are based on peoples' perceptions that a situation provides for a high probability of success and the conditions will lead to positive consequences. Expectations also include peoples' perception of positive self-concepts of ability. The value of the goals and the perceived instrumentality (Miller & Brickman, 2004) also play a crucial role in encouraging behaviors in a given situation.

With these ideas in mind, educators often attempt to use the temporal context of education, the future importance of school, to motivate students. Educators and other socializing agents encourage learners to work hard in school and to think about the future. However, the connection between working hard in school and long-term goal fulfillment is usually not fully discussed and parents and teachers often neglect to explain to students exactly how their current engagement is instrumental to their future goals.

Without a clear understanding of the instrumentality of school to their future goals students' personal investment in school may become undermined.

Many researchers have since examined hypotheses on the relationship between future orientation and motivation (e.g. Atkinson & Feather, 1966; Raynor, 1969, 1970; Gjesme, 1981). Among the early theories proposed is one by Atkinson and Feather (1966). The researchers built off from Nuttin's (1964) distinction of motives to achieve success and motives to avoid failure. Atkinson and Feather proposed that individuals whose motives to achieve success were greater than their motives to avoid failure would exhibit greater motivation to engage in activities in achievement situations. On the other hand, the opposite is true for the behavior of people who are higher in the motive to avoid failure than the motive to achieve success; such individuals would be less likely to exhibit achievement-related behaviors. Later, Atkinson (1974) articulated that achievement motivation is determined by the strength of an individual's motive for success (M_s) and influenced by the subjective probability of achieving success (P_s) and the incentive value for achieving success (I_s). The same principle also applies to the motive to avoid failure, which is reflected by the degree to which individuals feel humiliated or embarrassed. The motive to avoid failure is likewise influenced by the incentive value or the strength of a person's motive to avoid failure, and a person's subjective probability of experiencing failure in a given situation (Atkinson, 1974).

Raynor's (1969, 1970) theory of future time perspective added new dimensions to the achievement motivation framework. Raynor theorized that there was a difference between the motivational influence of current or immediate goals and future or anticipated goals. Raynor also introduced the idea of contingency to the achievement

motivation framework. Contingency suggests that success at one level is essential for future success and leads to progression at the next level. According to Raynor (1970), people who are high in the motivation to avoid failure will not be motivated to act in contingent circumstances because they tend to perceive the next step or level as uncertain or unpredictable and therefore not worth investing in. On the other hand, individuals who are high in motivation to achieve success will be very motivated by contingent situations and engage in goal-related activities.

A few years later, Gjesme (1981) insightfully proposed that there were individual differences in the way people perceived the distance of goals and those individual differences in psychological distance were motivationally relevant. Gjesme (1981) theorized that the way a person was oriented toward the future influenced his or her perceptions of the actual distance of a given goal. When compared to individuals who are low in future time orientation, individuals who are high in future orientation tend to see distant goals as closer in time. Possessing a higher level of future orientation, and consequently, greater capacity to see distant goals as nearer in time, increases an individual's motivation to engage in goal-related behavior.

These early works have inspired other theoretically generated hypotheses on the FO- achievement relationship using other variables. For instance, DeVolder and Lens (1982) introduced the valence of distant goals and the anticipation of long-term consequences of goal-related behavior. According to the researchers, children who are high achievers not only are able to see far into the future, but they also tend to strongly value distant goals; thus, they work hard in school in anticipation of achieving goals far into the future. Other researchers (Trommsdorff et al., 1982) have introduced another

variable for examination, namely, the anticipated causality of future events or control beliefs. Trommsdorff et al. (1982) hypothesized that those individuals who feel more responsible for their future outcomes will presumably be more motivated to invest in goal-related activities than those who tend to perceive more external causality over their future outcomes.

Future Orientation can be shown to have several important implications for young people's academic motivation in that students who have higher levels of FO will see goals as nearer and thus have higher motivation to invest in academic activities. These students will also value schooling as instrumental to later success. There is no reason to believe that these findings would not apply to the Eastern Caribbean context. However, although FO has been shown to predict peoples' motivated actions or behaviors, FO may be influenced by individuals' expectations and the value associated with their desired goals (Eccles et al., 1983; Wigfield & Eccles, 2002).

Expectancy-Value Theory

Expectancy-value theory has been a central theoretical perspective in motivation psychology since Atkinson's (1957) early conceptualizations. Since then, there has been a lot of focus on theories that involve expectations and subjective values, most of which have been concerned with individual differences in achievement related behaviors (Eccles et al, 1983; Wigfield & Eccles, 1992; Eccles & Wigfield, 1995; Feather, 1988). The goal of this approach has been to relate action (e.g. engagement, persistence, choice, and performance) to expected outcomes. In other words, individuals' actions or behaviors have been thought to be influenced by subjective task values (valence) and their

expectancies for success (Eccles et al, 1983; Eccles & Wigfield, 1995; Greene & Miller, 1996; Greene et al., 1999).

Subjective task valuing. The task value component of expectancy-value theory has been described in numerous ways, such as the value of attaining goals (Battle, 1966; Crandall, 1969) and the anticipated reward from engaging in activities (Rotter, 1982). Eccles et al, (1983), conceptualized subjective task value by describing how four integral components are related to peoples' needs, goals, personal values and motivational orientation. The value of an activity to a person, is related to how important it is for the person to perform that activity (attainment value), how much personal enjoyment the person experiences from participating in that activity (intrinsic value), the usefulness of that activity in helping the person reach other goals (utility value), and what the person thinks he or she must forgo in order to participate in the activity (cost) (Eccles et al, 1983; Feather, 1988).

Task values are informed by past affective memories of similar tasks. In addition, Eccles and Wigfield, (1995) argue that there are also self-referent factors that give value to a task. For example, a task is seen as valuable if it helps to confirm a person's self-schema. Task value not only confirms integral aspects of individuals' self-concepts; it also influences their affect and motivation (Feather, 1987, 1988; Eccles et al., 1983; Parsons & Goff, 1980; Eccles & Wigfield, 1995).

Task-related beliefs. Expectancies for success simply refer to a person's beliefs about whether he or she will be successful in performing a future task. Thus, expectancies for success predict goal-related behaviors (Eccles et al., 1983; Eccles & Wigfield, 1995). When they first conceptualized expectancy valuing theory, Eccles et al. (1983) theorized

that self competence beliefs or ability perceptions were empirically different and separate from expectancies. However, such a distinction has not found full empirical support in later research (Eccles & Wigfield, 1995; Greene & Miller, 1996; Greene et al., 1999). This study uses a single construct of individuals' self-efficacy or perceived ability to represent their expectancies. The proposed study intends to follow in the long tradition of looking at values and expectancies in the context of academic behaviors. For students to engage in academic behaviors, they must first possess the beliefs that academic success is a valuable future goal and then have positive expectations about the potential outcomes from engaging in goal-related academic activities.

Thus far in this literature review, I have described important historical and cultural features of the Eastern Caribbean. Additionally, I have reviewed psychological theories that may be applied therein to explain innate conditions. For example, I discussed how FO has been shown to predict peoples' motivated actions or behaviors and that FO is influenced by individuals' expectations and the value associated with their desired goals (Eccles et al., 1983; Wigfield & Eccles, 2002). While making this case, however, I sensed that there still remained missing conceptions, unique to the Eastern Caribbean context, required to connect peoples' individually relevant values and expectations about educational attainment to their subjective experience of the future. If presumed conceptions existed, identifying them would require in-depth examination of the Eastern Caribbean context. A qualitative pilot study was designed and implemented to address this conceptual gap. More specifically, I examined individuals' perceptions of the psychosocial conditions in Eastern Caribbean culture relevant to their expectancy valuing and their future orientation.

Contributions from a pilot study

In a qualitative study of Caribbean students in an American university, participants expressed varying perceptions of an opportunity structure within their societies that discriminates against individuals on the basis of what they are worth academically. Importantly, the discrimination described by the participants was not notably based on race or class structures. Instead, the discrimination was reflective of an approach used in the Eastern Caribbean societies to administer or allocate scarce educational resources to the population. The psychological impact of this opportunity structure may be one of the aforementioned missing conceptions germane to the present study. For this reason, the following section will discuss the findings of the pilot study in some detail.

The pilot study: Interviews with successful students from the Eastern Caribbean

The aim of the pilot study was to gain insight into how the educational system in the Eastern Caribbean is experienced. I hoped to get a better understanding of what education means to Caribbean youths and I also wanted to know what were the influences, motives and conditions responsible for peoples' academic-related behaviors. The study was thus designed as a qualitative, multiple-case study. I conducted an indepth analysis of the psychosocial conditions that influence young peoples' future orientation (Nurmi, 1991).

I used four broad, overarching questions to guide the inquiry: 1)What is the nature of the interpersonal contexts that orients youth's attention toward education and the future? 2) What social, political, and/or economical conditions influence educational goals and behaviors? 3) What are young people's perceptions about the role of school and

the paths to their own educational attainment? 4) What can be learned from the young peoples' affect and motivation toward school? The participants in this study were ten college students (four male and six female) in a midwestern university, who are natives of the three different countries (St. Lucia 5; Dominica 3; Grenada 2) and ranged in age from 21-35. I used 20-30 minute, face-to-face, semi-structered interviews as the method for generating data for the study. Although a complete discussion of the findings is beyond the scope of this paper, below I summarise the four themes relevant to the present study: *Career aspirations or future life options; Degree of realism in educational planning; Meaning of school*; *and Value judgments and consequences of failure.*

Career aspirations or future life options. In the Eastern Caribbean, future success is defined by a narrow set of unrealistic educational options that emphasize academic rather than vocational ideals. Students' career aspirations focused overwhelmingly on academic fields. First of all, nearly every participant reported wanting to be a doctor or indicated an interest in science or a medical related field. However, although the majority of students aspired to be doctors or science-related professional, almost all of them have switched and are pursuing different majors in college. Importantly, external agents such as family and teachers are reported as influencing students' academic proclivities. It seems that the value of academic ideals and school has been carefully planned or devised to have a precise appeal to young children. Students reported that they were told by parents and guardians that they were going to be doctors or lawyers. "I was told that I had to be a doctor. And so I was geared towards becoming a doctor" one student said.

Students were asked if they had a sense of what their friends wanted to be and responded almost unanimously that most children aspired to be doctors and lawyers. One of the female students explained:

> "Well some of them were being told that they were going to be a lawyer. That was a big thing, being a lawyer. You hardly heard anything about being a teacher or even a nurse surprisingly. But it was always a doctor, a lawyer or maybe an accountant. But generally these were the major career decisions being made for you."

Another important aspect was the strikingly obvious disregard for trades and other technical jobs. The students' responses suggested that they were not even allowed to consider trades or technical careers. These options were only reserved for those who had failed in school or who did not complete school. There is a stigma attached to trades and technical jobs and the resulting lack of appeal is used to motivate students to do well in school and pass their exams. A student describing how his mother motivated him and his siblings explained:

> "Well she basically threatened us, telling us that that if we didn't go to school, we were gonna become farmers, and then that's what we were going to do for the rest of our lives. And if we didn't finish school she wouldn't have taken care of us. I did perceive that as a threat. I did not want to go to the country and plant produce."

Students went on to explain that even if you had an aptitude and love for technical subjects, you were not allowed to pursue them as career options. One student explained

that she selected a few technical subjects in high school and run into conflict with her parents.

Degree of realism in educational planning. Another useful way of assessing future orientation is to examine the dimension of realism (Nuttin, 1985). How realistic were the anticipations of the students? I wanted to know whether there was effective planning that could function to facilitate achievement of desired goals or whether the anticipations were fantasies or escapes that were unlikely to promote real success. Students were asked simply whether they had a plan early on to achieve their career goals.

In primary school, most of the students did not have a plan for how they were going to accomplish their goals. They just knew it was something they had to do. One student said "No, it's like you have the mindset that okay this is what you want to be. But you never actually planned it." Another student tried to explain "Well we were all in a similar situation, being told what we were going to be and then we just adopted those views, that okay; this is what I was going to be. Even though we maybe did not have the means to achieve those goals." Finally, another student provided a compelling assessment of this state of affairs:

> "I think that was the general consensus among young people, teachers, and doctors. Everyone wants to be a doctor, or lawyer or something. But I wouldn't think a lot of kids really think about it. In order to be a lawyer or a doctor you have to do this, this and this. To me we just say things because it sounds nice. A lot of parents you always hear them say, I want my son to be a doctor, so I think that's why. Yes. I don't think all the time as kids we are really realistic. Some

maybe but not all, everybody says that they want to be a doctor but not really thinking about what it takes to actually do that."

This lack of an overall plan for success becomes problematic in high school. Once it becomes clear that they have to choose certain subjects in order to stay on track, some students begin having difficulties? While, some students changed career paths upon realizing the coursework their aspiring careers would entail, others reported that they picked courses which were not their preference in order to stay aligned with the careers chosen for them.

Another important observation was that although students reported not having concrete plans for achieving their professional careers, it was obvious that they had a sense that leaving the country was an essential aspect of any plan for success. Students reported that even at a young age, there was some sense that they would have to leave the country to pursue their careers. Most of the students argued that going to university was required even though access to university is limited in the Eastern Caribbean islands. As confirmation of this sentiment, there was consensus among students concerning where they believed the successful people in their community got their training. Almost unanimously students said that successful people were trained oversees.

Further analysis suggested that in the Caribbean society, education is perceived by children as indispensable, and children exercise uncritical compliance with regard to their participation in school. For example one student observed that "School meant to me... it meant a lot at least, in a sense that I have to do it. I didn't have a choice. In my family education was, you have to, you have to, no but, no can't or perhaps. You have to achieve at whatever costs." Furthermore, I observed an overwhelming sense of conformity, that

is, agreement between individuals' perceptions and behavior and their parents' and teachers' standards or expectations. School was very highly valued as a path to career success, yet in the interpersonal contexts of the family and primary school, it was not explained to students exactly how their current engagement was instrumental (Miller & Brickman, 2000) to their future goals. As I discussed earlier, Eastern Caribbean society endorses immediate compliance (hence the continued use of corporal punishment. Therefore, instead of explaining the importance and instrumentality of school, students are expected to uncritically accept that valuing school and doing well is all that matters. And as a result, students' educational plans may remain unrealistic until they get older, go to secondary school, and come across more intense academic difficulty.

Meaning of school. In Eastern Caribbean society, future life success is measured by academic success. When asked what school meant to them when they were growing up, students reported 1) school was foundational to success in life, 2) school was the only path to success, and 2) school meant a sense of self-definition and identity. First of all, there was some consensus among the participants that school was a foundational and essential element of society. "School is the foundation: school is the backbone," one student said.

Secondly, several of the participants indicated that they perceived school as the only means to success. Another student was noted as saying,

> "I think school meant all because that's what we were taught – without school you're nowhere. And there was that saying, you miss school, you miss out. So we always knew that, you don't go to school, that's it. You would not be able to achieve anything in life. That's the perception."

Lastly, school also meant a way of defining oneself. A student stated that "To become a man, to be something in the world, you have to do well in school." Another explained that she always wanted to be different and school created the opportunity to escape from the norm, from labels and from any self-fulfilling prophecies. She revealed,

> "Because that was what was going on in the neighborhood in which I grew up. That was the scene, that was the norm; you either finished and then got pregnant or you had to drop out because you got pregnant. So I guess they thought I would fall into that path. Yes," she said, "I was determined to prove them wrong."

Many of the students said that school meant that they did not have to be like their parents, they could be their own persons. On a personal level, this idea coincides with students' perceptions of opportunities for upward mobility. From a broader standpoint it represents students' social consciousness related to a sense of obligation to move their society forward. Finally, for another student, school was an escape from the harsh realities of a dysfunctional family. She explained tearfully that school meant

> "An escape because I grew up in a dysfunctional home, if somebody wasn't fighting, somebody was cussing, somebody was drunk, whatever. I'm there to go, school was that escape…And then you begin to listen to people telling you, that school is education. Especially for us at home, education is what we have."

In fact, not only did students perceive school as a path to defining themselves, they say school itself as defining individuals. "School plays... it actually decides a lot of people's lives. So it kind of really defines you."

As a follow-up question later in the interview, students were asked what they thought was the relationship between school and society. Overall they explained that

school exists in society to teach social roles and the social code and, separately but not exclusively, school also teaches conformity to the social code. Students unanimously expressed the following ideas reflective of their perceptions of expectations and opportunity within their society: 1) society teaches students to have a sense of debt to society and an obligation to follow the rules; 2) society stresses the importance of sacrificing for success; 3) society stresses that following the rules of school will yield success, which includes sticking to goals "no matter what."

Students also perceived the following about their society: 4) there was a degree of inflexibility and restrictiveness in that they could not afford to change course and the straight and narrow path is valued; 5) that contiguity in school was necessary, meaning dropping out at any point eliminates ones' chances of succeeding; 6) that there was no return from failure, no redemption, and sense that failure at any point meant permanently loosing one's spot; 7) that academic failure was accompanied by societal labeling even if one got kicked out and managed somehow to get qualified with an alternative path; 8) that any child can succeed regardless of background or social class; and finally, 9) since everyone had an equal chance, they had to compete even though educational advancement, ironically, was not possible for everyone.

Value judgments and consequences of failure. Students' definition of success and failure were whether or not people accomplished the goals they set for themselves and the goals set up for a person by society. Both success and failure carry important consequences. By the students' definition, it is school failure that is regarded as the main failure in society. Students referred to failure as not being able to matriculate. Students reported that their society makes value judgments about people on the basis of the results

of academic qualifications including performance on the Common Entrance Exam. Based on this exam, students who qualify are placed in one of a series of ranked high schools reflected by their test scores. In the Eastern Caribbean, students may be disqualified at an extremely young age (10-13 years for Common Entrance) with little or no means of recovering. Those who do not pass these exams are destined for technical, vocational, and skilled work for which there is little or no training. Moreover, pursuing technical or skilled work is truly undesirable as students are typically not supported for generating or valuing these types of goals. The distinction must be clearly made between academic education, which is highly valued and sought after, and technical education, which is devalued and not encouraged. Even when students achieve excellence in technical subjects, their accomplishments are not sincerely valued, or they do not perceive being valued.

Conclusions from pilot study

In my opinion, the culling of students referred to by participants in my pilot study speak to the conditions and consequences of scarcity in the Caribbean. Since there are no resources to waste on those who are not likely to succeed, a vetting system is necessary to identify the most promising students. Eastern Caribbean societies however, make judgments about individuals' future academic performance based on their present and past behaviors. The vetting system is designed to steer students along what society perceives as students' most likely future. If a person does not perform well, then no one envisions a bright and impactful future for that individual.

The academic opportunity structure referred to by students reflects the cultural meaning of education that is transmitted by parents, extended family, and teachers, and

the wider society. Silverman and Casazza (2000) provide a definition of cultural meaning of education that may be useful in studying the motivation of students from the Caribbean, who have a reputation for striving for educational success (Gordon, 1981). According to Silverman and Casazza (2000), "the cultural meaning of education is connected to historical tradition in the society as well as social structure. It includes the value placed on education, as well as beliefs about effort and hard work" (p.110). This definition brings into focus three core aspects of education in the Caribbean. Educational attainment in the Caribbean corresponds to 1) the means to social mobility, 2) the need for personal and cultural identity, and 3) the value of hard work and individual effort. These three interrelated themes are tied together by the historical traditions of European colonialism.

Social mobility. In the Caribbean, there is high value placed on education as the primary means of social mobility. Alfred (2003) describes this situation in terms of the consequences of British colonial education. According to Alfred (2003) the competitive nature of secondary education caused it to be reserved for top academic achievers. The elementary school structure emphasizes didactic instruction and content mastery designed to prepare students for secondary school consistent with the British Common Entrance Exam (Alfred, 2003). The education system in the Caribbean thus reflects the power dynamics in the British education system from which it was derived. Consequently, inherent in the culture are the power dynamics that define people's "social location by academic excellence" (Alfred, 2003, p. 250). Gordon (1981) provides one of the most compelling descriptions of this state of affairs.

> Education has a high value among British West Indians [same as Eastern Caribbean] for its acquisition not only moves one into desirable occupational areas but also is a stronger validation of status in a class-conscious society than money derived from low-status occupations (p. 227).

Personal and cultural identity. Colonialism, through slavery and later indenture, destroyed the cultural identities of the displaced people of the Caribbean and produced in them a deep sense of ontological fragmentation (Henry, 2000). Post-colonial Caribbean societies, however, have not settled for the fragmented identities of freed-slaves and their descendants, but have searched for new identities. Educational achievement is viewed as a means of establishing an identity for Caribbean people as intellects, not just laborers. This is important to people whose identities were tied to the value of their physical strength and skills in colonial plantation systems. Ironically, academic excellence in the Caribbean is still assessed by many of the same standards derived from the British education systems, only modified to be more culturally appropriate.

Value of hard work and individual effort. Alfred (2003) qualitatively studied the impact of prior socio-cultural context of Anglophone Caribbean immigrant women who were in the post-secondary system in the US. Like the participants in my pilot study, women in Alfred (2003) described their educational success in part as a result of the cultural value their communities had for education. Common to both sets of participants is the idea that success was directly related to their individual efforts and hard work. Even though the students in my pilot study expressed an awareness of the structural constraints that limit mobility and contribute to inequality, they seem to share in the common beliefs or values that hard work and individual effort result in success. These students in my pilot

seem to have bought into society's message about the value of education and the significance of hard work. The students value sticking to their goals 'no matter what' and never changing course in the hopes of academic success and social mobility.

A similar phenomenon, achievement ideology, has been articulated to explain the motivational characteristics of mainstream students in American culture (Mehan, Hubbard, Villanueva, 1994; Ford, 1992). Achievement ideology simply refers to the belief that a person can reach a socially-perceived definition of success by education and hard work. People who share this ideology believe that education and hard work supersedes everything else, such as their social circumstance, race, and sex, when it comes to the factors that determine their success (Mehan, Hubbard, Villanueva, 1994; Ford, 1992).

The significance of individuals' reactions to the academic opportunity structure. The participants in my pilot study all seem to have positive views about the cultural value of education in the Eastern Caribbean. They all believed that education was a means to social mobility, that education was essential in developing a sense of personal and cultural identity, and that their academic success thus far was a direct consequence of their personal effort and hard work in the face of limited opportunity. It appears that holding these views may be beneficial to students in the Caribbean.

Unfortunately, a limitation of the pilot study is that it captures only on the experiences of one part of the population, chiefly those who are academically successful. These college students in my pilot study have experienced success in the Eastern Caribbean educational system and have found opportunities to advance to higher

education in the United States. In fact, these students are experiencing the educational ideal as defined by Eastern Caribbean society.

However, due to the inequality in Caribbean education systems, many other students fall off the expected educational path early on with little chance of recovery. In St. Lucia, children attend secondary school for a total of five years. According to government reports (Statistical Digest, 2006), almost 70% of all secondary school dropouts in St. Lucia are from forms four and five. In terms of the motivational characteristics, it may be that students who drop out of school may not agree with the societal message about the cultural value of education. As I discussed earlier, many students have unrealistic goals about their future careers when they are very young. Once these students get to secondary school, they experience greater academic challenges that breed new uncertainties about their futures.

My pilot study did not provide an opportunity to test whether holding positive views about the cultural value of education actually fosters success and whether disagreeing with these views is detrimental to the academic success of students. It became evident that future research must include both students who are likely to succeed and those who are at risk of dropping out of school. Therefore, I designed an instrument, the reactions to the academic opportunity structure scale (RAOS), to measure how individuals' respond to the societal message concerning the value of education. Items were formulated based on Silverman and Casazza's (2000) definition of cultural value as it related to the Eastern Caribbean.

The RAOS scale was designed to examine the academic motivation of Caribbean youth. I assume that people's reactions to the opportunity structure in the Eastern

Caribbean can conceivably be captured with an instrument measuring social mobility, educational identity, and beliefs about hard work and effort. There may be relationships between students' reactions to the opportunity structure, future orientation, expectancy valuing and their perceptions about the quality of their schools that need to be explored. I will also be interesting to explore how all the variables mentioned come together to predict the academic achievement of young people in the Eastern Caribbean. If youths do not buy into the cultural value of education for social mobility and identity, they will also likely fail to possess intrinsic, attainment, or utility value of school or positive academic self-concepts. The same is true if students do not buy into, or have given up on, the belief that hard work will yield success. Additionally, Eastern Caribbean youths who believe that they will not receive the payoff from school in spite of their best efforts will be less likely to invest in academic behaviors and thus have lower academic achievement.

Summary

Human motivation has been described as serving three main psychological functions, which are to activate, direct, and regulate behavior (Ford, 1992). Over the years, many different perspectives have emerged to explain the functions of motivation. For example, perspectives surrounding human needs suggest that humans are born with basic needs that drive motivation. Self-determination theory SDT is one theory that describes motivation as directed by the psychological need for autonomy, relatedness, and competence (Deci & Ryan, 1985; Ryan & Deci, 2000). Self-determination theory also incorporates ideas from social-cognitive perspectives that also attempt to explain the psychological functions or characteristics of motivation (Pintrich, 2003). Social-cognitive perspectives focus on individuals' beliefs, cognitions, and emotions, but also on

environmental factors that influence achievement-striving (Alderman, 2003). Thus, a common theme of needs and social-cognitive perspectives is that motivation to learn is described as a context-specific set of psychological characteristics.

Social cognitive theory while emphasizing individuals' self-focused beliefs about their competence, efforts, and goals, also focuses on the effects of the environment and social context on motivation (Bandura, 1986, 1997; Weiner, 1990; Pintrich, 2003). In this framework, Bandura (1986) described the reciprocal interaction between cognitive-emotional and environmental factors and people's performance related behaviors. The reciprocal interaction highlights the need to pay specific attention to the nature of learning contexts. Thus, the current study examines learning in the Eastern Caribbean with a keen focus on understanding how motivation-related behaviors are distinctively interrelated to cognitive-personal factors unique to that socio-cultural environment.

The previously reviewed literature suggests that the current academic performance of Eastern Caribbean youth can be predicted by students' future-orientated motivation (e.g. Raynor, 1970; Nurmi, 1991; Gjesme, 1981; Lens et al., 2001). Ample research (e.g. Nurmi et al., 1995; Trommsdorff, 1983) suggests that a person's future-oriented motivation is influenced by important socializing forces in his or her specific context and that it is possible to examine the features of a social context that orients people toward future aspirations and self-definitions. On the other hand, while future orientation can outline the role of socializing agents, expectancy-value theory demonstrates the role of individuals' personal values and beliefs (Eccles et al., 1983; Wigfield & Eccles, 1992, 2002). Both theories may be useful in the examination of the socio-cultural context of the Eastern Caribbean.

Future oriented theory (Raynor, 1970; Nurmi, 1991; Gjesme, 1981; Lens et al., 2001) is an appropriate lens for understanding educational motivation in the Eastern Caribbean for at least two important reasons. First, the once-enslaved, formerly-colonized people of the Caribbean have a strong sense of urgency regarding doing things in the present to guarantee social and economic independence for the future. Second, in the Caribbean the future is narrowly defined and prescribed for children through academically slanted expectations of families and teachers and the ramifications of this narrow prescription on the motivation of Caribbean students is an important question for both theory and practice.

The theory of expectancy valuing (Eccles et al., 1983; Wigfield & Eccles, 1992, 2002) is also suitable for the Caribbean. The educational values held by Caribbean societies are unique and complex and require a robust theory capable of capturing that value complexity. Given the prescribed futures and the other unique characteristics of these cultures, examining the role that values play in student motivation will surely be informative for understanding the motivation of students within the defined context of Eastern Caribbean countries. Additionally, the post-colonial region of the Eastern Caribbean is beleaguered by economic scarcity. Consequently, vetting systems have been created to allocate limited educational resources to growing populations. These conditions have resulted in students' perceptions of an opportunity structure in their society that influences their educational advancement. Students' perceptions of opportunity in turn, may have led to the development of various academic ideologies and strategies that influence students' educational values and are yet to be explored empirically.

A pilot study (Lubin, 2009) provided preliminary evidence of students' perceptions of opportunities that seems to fit within the framework of future orientation and expectancy valuing. The opportunity structure that is proposed to exist in the Eastern Caribbean reflects the cultural meaning of education in those societies. The cultural meaning of education consists of three components; effort and hard work, social mobility, and identity, all of which seem to fit with the above literatures.

First, in terms of its connection to future orientation, the RAOS relates individuals' subjective experience of the future to their perceptions of the future educational and career opportunities that are necessary to change their social location and to provide gauges of personal and cultural identity. This subjective experience of a prosperous and impactful future, social mobility and identity provides the relevant context for achievement motivation for individuals in the Eastern Caribbean.

Further, in terms the connection to individuals' expectancies, task related beliefs, or self-efficacy, the RAOS captures individuals' beliefs about their own personal effort and hard work in determining their future prospects. Expectancies for success refer to a person's beliefs about whether he or she will be successful in performing a future task. Thus, expectancies for success predict goal-related behaviors (Eccles et al., 1983; Eccles & Wigfield, 1995). In this case, I am interested in students' expectations about their success in secondary school and how those beliefs are related to their beliefs about their own efforts.

Finally, with regards to the connection with subjective valuing, the RAOS relates individuals' intrinsic, attainment, and utility valuing of school to their beliefs about education as the guiding mechanism for success later in life. Further, the valuing aspects

of subjective valuing theory are related to people's values about the role education plays in their society, its structural significance, as well as its historical traditions and symbolic meaning. By combining ideas from these literatures, I hope to gain a better understanding of the motivation of EC youths toward pursuing their education. I also hope to provide empirical evidence of the psychological impact of these conditions on students' academic motivation.

Overview of the Study

The purpose of the present study was to explore relationships among variables related to future-orientation, expectancy-valuing, perceived ranking of school, academic performance, and reactions to the academic opportunity structure from a sample of first and fourth year secondary school students in St. Lucia. The exploration of the variables was guided by the following questions.

1) Can reactions to the academic opportunities structure (RAOS) in the East Caribbean country of St Lucia be measured reliably with a scale that measures social mobility, educational identity, and beliefs about hard work and effort? Can the three subscales be used as a single measure of the construct or does EFA support three separate subscales?
2) Are there relationships among the measures of RAOS, motivation (future orientation, subjective valuing, and expectancies), perceived ranking of school, and academic performance? Are the relationships different for grades 7 and 10?
3) Are there different findings for the career and educational aspects of future orientation?

4) If there are relationships found with RAOS, do those relationships support the construct validity of the RAOS?
5) How do these variables (RAOS and motivation) come together to predict academic performance?

As far as the role of the demographic variables, there is some supporting evidence suggesting that students' grade level and perceptions of the quality of their school accounts for some variance among the constructs mentioned above (Epstein & McPartland, 1976; Nurmi, 1991). As already discussed the majority of secondary school leavers in St. Lucia are in forms four and five (grades nine and ten respectively). The temporal proximity to leaving secondary school is different for older students than for younger ones and this should result in variations in future orientation and academic performance among students. In addition, students' perceptions of the quality of education provided by their school should influence students' perceptions of what the future has in store for them and also influence their personal investment in school (Epstein & McPartland, 1976). The following section defines the research design of this study, including the methods, participants, and plan for data analysis.

CHAPTER 3

Research Methodology

The aim of the study was to explore factors affecting the academic motivation and learning of secondary students in St. Lucia. This chapter explains the methods and procedures for the study. Below I describe the context and participants, as well as the data sources, instruments, and procedures.

Sample and context

Statistical Digest (SD) is a publication reporting data pertaining to various sectors in St. Lucia including the education system. According to its latest updates in 2008, there are 20 secondary schools in St. Lucia. The present study employed the convenience sampling method to obtain participants enrolled in forms one and four from four secondary schools within eight miles of the St. Lucia's capital city, Castries. The sample was restricted to this locality to avoid confounding variables uncharacteristic of city schools, such as economic stressors associated with poverty (Jules & Panneflek, 2000).

Participants were 921 students enrolled in 33 classes; 18 form one and 15 form four. The distribution of participants by school was as follows: School 1 (n = 233, 25%); School 2 (n = 195, 21%); School 3 (n = 277, 30%); and School 4 (n = 216, 24%). The sample contained 387 males and 525 females. Students ranged from ages 11 to 18 and the average age was 13. There were 80 students who were 11 years old and only one student who was 18. There were 29 students who did not report their age. The students were fairly evenly distributed in terms of the home communities. Thirty three percent of the students were from urban communities, 31 percent from the suburbs, and 33 percent reported living in rural communities. Thirty one students did not disclose information

about their home communities. Finally, while 87% percent of the students spoke English as the main language outside of school, over 11% spoke Kwéyòl or something else as the main language.

Study Procedures

The College of Education and the IRB at the University of Oklahoma reviewed the procedures to ensure they were aligned with standards for the ethical treatment of humans. After the human participants review processes were completed, permission was granted by the school principals of the participating schools for recruitment of students to participate in this study. There were two rounds of data collection for the present study; the first involved obtaining data directly from the students, while the second involved obtaining data from the schools. In the first round, with the informed consent from school principals, students completed the anonymous questionnaires in school during class-time under the supervision of teachers. Questionnaire packets were prepared in advance and the order of the subsections of the questionnaires was random to counterbalance across participants. However, the Biographical Form, which contained questions about students' demographics, was placed always at the end of the packet to avoid priming from the biographical questions. The questionnaire packets contained instruction sheets along with all instruments written in English. All other materials including pencils and paper were provided for the participants. Students took 30 minutes to one hour to complete the questionnaires. The data from the questionnaires were then processed and stored for further analysis. In the second round of data collection, school principals provided end-of-term grade averages for participants in the study. Those data were matched and added to the previous data collected on those participants.

Correlation and Regression analyses (Stevens, 1996, Pedhazur, 1982) were used to address research questions pertaining to relationships among motivation variables and academic achievement. All analyses for the present study were conducted using the Statistical Package for Social Sciences (version 16; SPSS Inc., Chicago, IL). Assumptions regarding regression analysis were evaluated using stem and leaf analysis and Bivariate scatterplots (Stevens, 1996, Lomax, 2001). Effect sizes were evaluated following Cohen (1988), thus .10 were considered small; around .30 were considered moderate; and values above .50 were considered large. For the present study grouping variables were dummy coded for use in regression analysis.

Measures

I used a multi-section questionnaire to measure the intended variables. One section contained items that elicited biographical or demographic information. Another section contained questions related to the other psychosocial and motivational constructs in the model. A complete version of the scale is shown in Appendix A.

Demographic information. The participants were asked to complete a demographic questionnaire called the Student Biographical Index (SBI), which solicited information including age, sex, place of birth, grade level in school, and religious or spiritual background. The proposed scale is shown in Appendix A.

Perceptions of the Relative Quality of School. Currently in St. Lucia, there has been a push to provide universal secondary education. That high school education is accessible to all is an ostensible claim concealing the fact that school placement is still based on Common Entrance Exam scores that determine which of the ranked schools children will attend. The results of the exam are applied such that students who score

highest are placed in the best ranked schools. It is unclear exactly what the current criteria are for ranking schools. The top ranked schools remain from a historical perspective, the first secondary schools in the country. These schools took on a certain prestige since, for a long time, they remained the only schools that were available. Moreover, access was almost exclusively granted the affluent. As more schools were built they were ranked in succession.

I conceived that individuals may have different perceptions of the relative ranking or quality of their school than is actually assigned to their school by the Ministry of Education pass rates and other performance indicators. From the perspective of what influences an individual's future orientation, the individual's perception of the relative ranking of their school would be a better measure than the school's official ranking. Students were presented with a list of schools (including their own) and were asked to rank them on a six-point scale in terms of perceived quality. Students were asked to "rank these schools on a scale of 1-6, 1 being the best and 6 being the worse place to get a secondary education. Appendix A contains a complete version of the measure.

Future orientation. The present study used the sections of The Prospective Life Course Questionnaire (Nurmi, Seginer, & Poole, 1991; Seginer, Nurmi, & Poole, 1994) focusing on the prospective domains of education and career. The two subscales contain 18 items; 8 measured future education orientation, and 10 measured future career orientation. Participants were asked to respond to a 5-point Likert-type scale ranging from 1 (not much thought or planning for the future) to 5 (having serious thoughts and plans for the future). Sample items included ''How often do you think about or plan your studies and plan for your future education?'' ''How often do you think about or plan your

future career?" Nurmi et al. (1991) have found reliabilities of .79 and .81 for the education and career subscales respectively. A complete version of the proposed scale is shown in Appendix A.

Reactions to the academic opportunity structure (RAOS). Reactions to the academic opportunity structure was measured with the RAOS scale, which was developed for this study based on the qualitative pilot study. The measure was used to assess students' agreement or disagreement relative to their support for the cultural value of education transmitted by Eastern Caribbean society. The scale consisted of three subscales; social mobility (3 items), education and identity (6 items), and hard work and effort ideology (2 items). The participants responded to the scale using anchors of 1 ("Strongly Agree") and 5 ("Strongly Disagree"). Sample items might include "Academic excellence is vital to me moving up in society" "Education is part of who I am as a Caribbean man or woman" "Above all else, it is my hard work and effort in school that will determine my success in life." Appendix A provides a complete version of the RAOS scale.

Subjective academic valuing. Academic valuing was measured by a set of scales that measure intrinsic value (3 items), utility value (3 items), and attainment value (9 items). These scales included items adapted from Eccles et al. (1983) and Wigfield (1984) as well as items created by Greene et al. (1999). In the past, the scales have focused on task-specific values such as valuing of mathematics or science. For this study, I modified the items to reflect school level as opposed to subject level. For example, an original utility value item, "I can see the importance of mathematics in my everyday experiences," was adapted as "I can see the importance of school in my everyday

experiences." Items in this study were assessed using a five-point Likert-type scale anchored on 1 (Strongly Disagree) and 5 (Strongly Agree). Greene et al. (1999) assessed internal reliabilities ranging from .73 to point .87 using these scales. Refer to Appendix A for a complete version of the ACVAL scale.

Self-efficacy. Bandura (2006) suggested keeping all measures at the same level of specificity when designing self-efficacy scales. Already, my measure of achievement would have reflected students' current term grade average. To align both measures, I used a self-efficacy scale that also leads students to focus on the current school term. The self-efficacy scale I used has been validated by several researchers (e.g., Greene and Miller, 1996; Miller et al., 1996; Greene et al., 2004). These researchers had students respond to a eight-item, four-point scale measuring the degree of confidence a student has that he/she can be successful learning in their current classes. For this study, in accordance with Bandura's (2006) guidelines, the phrase "this term" was added to each item to replace "in the current class." Greene et al. (2004) assessed an internal reliability of .91 using this instrument. A complete version of the proposed self-efficacy scale can be found in Appendix A.

Academic performance. In St. Lucia, the academic year is divided into three terms (rather then two semesters). In the first and third terms, students are assessed solely with achievement test. In the second term, schools use a variety of assessments throughout (continuous assessment) to arrive at students' end-of-term grade average. This study used current term grade averages for English and mathematics, AchEng and AchMath respectively, as the measures of academic achievement. School Principals provided these students current term grade average at the end of the current term.

CHAPTER 4

Results

The goal of the study was to examine variables that help explain the academic motivation and learning of secondary students in St. Lucia. This chapter presents the analyses of the data collected for the study. The data were analyzed using descriptive statistics, correlation coefficients, MANOVA, and multiple regression analyses. The research questions presented earlier are used to guide presentation of the results.

Item-Level Inspection and Missing Data

I conducted an item-level inspection on the data and found no errors. Missing data also was not a problem in this data set, thus, the original number of cases (921) was retained for further analysis. Further, seven items were reverse coded for the data set.

Instrument Reliabilities

In response to question one, I computed Cronbach alpha reliabilities for all subscales to serve as an index of internal reliability. Both the RAOS and Subjective Task Value scales had alphas that typically would be considered too low (e.g., they ranged from .50 to .66). The analyses for each did not reveal items that would raise the reliability if deleted. Therefore, factor analysis was used to explore whether these subscales showed items that loaded differently than intended. This was particularly important for the RAOS since it was a new scale. The Cronbach alphas for the other scales ranged from .67 to .84. The final Cronbach alpha values are shown in Table 3, along with other descriptive statistics for each variable.

Factor Analysis

To further address question one, I conducted Principal Axis factor analysis with varimax rotation on the RAOS measure. Initially, I had thought that the RAOS measure would consist of three subscales; beliefs about hard work and effort, social mobility, and identity. However, four factors were extracted with Eigenvalues ranging from 1.01 to 3.97. A Scree Plot confirmed a four-factor structure. After rotation, the four factors accounted for approximately 36.7% of the variance (factor 1 = 13.15%; factor 2 = 12.86%; factor 3 = 12.86%; and factor 4 = 5.34%).

Further examination of the rotated factor matrix revealed six items met the loading criteria of $\left|.35\right|$ (Grimm & Yarnold, 1998; Tabachnick & Fidell, 2002; Stevens, 2002) to define factor 1 and another six items were found to describe factor two. Three items met the loading criteria of $\left|.35\right|$ for factor three and two items loaded onto factor four. See Table 1 for the specific factor loadings.

Factor two was conceptually related to factor one, which seemed to be about beliefs about hard work and effort, and social mobility. The difference between factors one and two is that factor two contained reverse ordered items. A sample item from factor one is, "RAOSWk1: Above all else, it is my hard work and effort in school that will determine my success in life." A corresponding factor two item was "RAOSWk4_R: Hard work and effort is unlikely to lead to high status for me." Other items from factors one and two respectively, include "RAOSSoc1: My life can be better if I achieve academic success," and "RAOSSoc3_R: Academic excellence is not a guarantee to a better life." This suggested that the two subscales measured similar constructs for this

sample and so they were combined into one variable that I called effort/social mobility. These items combined account for 26% of the total variance in the responses.

The identity construct was designed to measure individuals' beliefs about value of education to their identity as Caribbean people. My hope was to tap into the role of education in the social structure in light of historical traditions in the region. Sample items included "RAOSEd6: Academic success in my secondary school defines me as a Caribbean person." And "RAOSEd5: Without academic success Caribbean people are nothing." There was one item that loaded on factor one that was intended to measure identity. Although it loaded strongly, the item (In the Caribbean, it is important to our freedom to achieve academic excellence, RAOSEd7) did not fit conceptually with factor one and was excluded from that factor. Another item that also was intended to measure identity loaded strongly on factor two. As in the previous case, the item (My identity as a Caribbean person is not defined by academic success, RAOSEd8), did not fit conceptually with factor two and was not included on in that factor. Both items were left in the identity scale. However, a third item (In the Caribbean society, education is not important, RAOSEd3_R), which also was intended for the identity subscale, seemed conceptually to fit with Factor two and was allowed to load on that factor. The remaining items intended for the identity subscale loaded onto two additional factors that were too conceptually similar to be treated separately, and thus were combined. The two factors combined accounted for 10.70% of the total variance.

In Sum, EFA did not support the three-factor structure anticipated for the RAOS. Instead, the results suggested that the social mobility and beliefs about hard work and effort subscale could be combined into one variable which I called effort/social mobility.

Table 1

Rotated Factor Matrix for RAOS Items

Item	Factor			
	1	2	3	4
RAOSSoc1	.623	.140	.080	.163
RAOSWk1	.598	.133	.159	-.041
RAOSWk3	.561	.097	.241	-.062
RAOSWk2	.539	.113	.107	-.067
RAOSSoc2	.528	.176	.053	.167
RAOSEd7	.448	.046	.213	.261
RAOSWk5_R	.182	.751	.043	-.104
RAOSSoc4_R	.175	.714	.048	-.155
RAOSSoc3_R	.150	.625	.051	-.012
RAOSEd3_R	.184	.473	.147	-.275
RAOSWk4_R	.073	.438	-.140	-.166
RAOSEd8_R	-.002	.419	.020	.106
RAOSEd2	.368	.045	.594	.169
RAOSEd6	.230	.023	.387	.302
RAOSEd1	.282	.045	.357	.014
RAOSEd5	.100	-.136	.034	.561

Note. RAOSSoc = beliefs about social mobility; RAOSWk = beliefs about hard work and personal effort; RAOSEd = beliefs about education and identity.

Table 2

Rotated Factor Matrix for Subjective Valuing Items

Item	Factor	
	1	2
SavUtil3	.622	.009
SavAttain1	.589	.168
SavAttain3	.575	.170
SavAttain2	.557	.107
SavUtil2	.500	.109
SavUtil1	.469	.347
SavIntrin3	.104	.800
SavIntrin2	.095	.734
SavIntrin1	.221	.594

Note. SavUtil = subjective utility valuing; SavAttain = subjective attainment valuing; SavIntrin = subjective intrinsic valuing.

The remaining items were combined into a single variable that I called identity. Although the structure is slightly different from what I expected to find, the scale as a whole was not very different conceptually, that is, in terms of the constructs it was designed to measure. See Table 3 for reliability analyses that supported the two factor solution.

Subjective academic valuing. I conducted an exploratory factor analysis to assess the coherence and independence of the subjective academic valuing subscales with the current sample.

Table 3

Summary of Means, Standard Deviations, and Cronbach Alpha Reliabilities for Reformulated Variables

Variable	Variable Description	Mean	SD	Alpha
FO	Future Orientation	3.99	.44	.82
FOEd	Future Education Orientation	4.00	.48	.67
FOCar	Future Career Orientation	3.97	.50	.73
SELF	Self-Efficacy	4.33	.54	.84
ATTUTIL	Attainment/Utility Valuing	4.61	.47	.73
INTR	Intrinsic Valuing	3.87	.83	.76
EFFMOB	Effort/Social Mobility	4.17	.64	.77
IDENT	Identity	3.88	.67	.60

I did so because the initial reliability analysis did not support the three factors (attainment, utility, and intrinsic valuing) predicted by Expectancy Value theory (Wigfield & Eccles, 1992). Principal Axis factor analysis with varimax rotation was conducted. Two factors were extracted with Eigenvalues ranging from 1.58 to 3.18. After rotation, the two factors accounted for approximately 40.49% of the variance (factor 1 = 21.25%; and factor 2 = 19.24%). See Table 2 for the specific factor loadings. An examination of the rotated factor matrix revealed six items met the loading criteria of $\left|.35\right|$ to define factor one and three items were used to describe factor Two. A Scree Plot confirmed a two-factor structure. Factor one consisted of all the items measuring attainment and utility valuing subscales with loadings ranging from .47 to .62. The

second factor contained all of the items measuring intrinsic valuing with loadings ranging from .59 to .80. None of the items cross loaded. I decided to reformulate the valuing scales in light of the low initial Cronbach alpha coefficients. I treated factor one and two as two separate variables, one measuring attainment and utility value and two measuring intrinsic value, respectively. Table 3 describes these new variables along with a summary of the means, standard deviation, and Cronbach alpha coefficients for all of the re-computed variables.

Measures of Central Tendency and Normality

I then conducted variable level inspection of the data to analyze the distributions (skewness and kurtosis) and identify outliers. I analyzed descriptive statistics with histograms and stem and leaf boxplots. The skewness and kurtosis were mostly asymmetrical with negative skewness within the -3 to +3 range, which is considered acceptable (Stevens, 1996). Additionally, the mean, median, and mode for all the variables were adequately congruent.

All the subscales were negatively skewed with skews ranging from -.27 to -2.20. This indicates that most participants scored on the higher end of the Likert-type scales than on the lower end. The skewness values for the subscales are as follows: The future orientation subscale (Skewness = -.41); future orientation education subscale (Skewness = -.54); future orientation career (Skewness = -.39); self-efficacy (Skewness = -1.08); attainment/utility valuing (Skewness = -2.20); intrinsic valuing (Skewness = -.70); effort/social mobility (Skewness = -.62); and identity (Skewness = -.27).

Only two of the seven subscales had negative kurtosis values. The kurtosis values ranged from -.46 to 7.78. The kurtosis value of 7.78 for the attainment/utility value

subscale represents a moderate deviation from normality (Stevens, 1996) and suggests that there was very little deviation from the mean in response to items in the subscale. The kurtosis values by subscale are follows: The future orientation subscale (kurtosis = .09); future orientation education subscale (kurtosis = .16); future orientation career (kurtosis = .16); self-efficacy (kurtosis = 1.70); attainment/utility valuing (kurtosis = 7.78); intrinsic valuing (kurtosis = .28); effort/social mobility (kurtosis = -.35); and identity (kurtosis = -.46). The data was left untransformed given the lack of violations.

I also analyzed linearity and homogeneity of variance. Bivariate scatterplots conducted on pairs of variables chosen at random revealed linear relationships in the data. There were no observed curvilinear relationships. There were also no violations in assumptions concerning homogeneity of variance. This means the data met the assumptions for regression analyses, which I will discuss later.

Zero-Order Correlations

Question two was about relationships among the variables. In addressing this question, I analyzed Pearson product-moment correlations among the variables (see Table 4). I had thought that all the variables would have positive and statistically significant inter-correlations. The results were mostly consistent with my expectations. In terms of the RAOS measure, effort/social mobility correlated significantly with English and mathematics achievement as well as with future orientation, self-efficacy, and attainment/utility valuing. Identity was significantly correlated with future orientation, self-efficacy, attainment and utility valuing, and intrinsic valuing. However, identity was not significantly correlated to achievement.

Table 4

Pearson Product-Moment Correlations among the Variables for Full Sample

Variable	1	2	3	4	5	6	7	8	9	-
1. AchEng	-									
2. AchMath	.52**	-								
3. FO	.18**	.20**	-							
4. FOEd	.22**	.21**	.88**	-						
5. FOCar	.12**	.15**	.93**	.64**	-					
6. SELF	.22**	.33**	.54**	.50**	.47**	-				
7. ATTUTIL	.17**	.27**	.31**	.33**	.25**	.53**	-			
8. INTR	.09*	.07*	.37**	.36**	.32**	.50**	.35**	-		
9. EFFMOB	.22**	.30**	.21**	.22**	.16**	.28**	.41**	.09*	-	
10. IDENT	.05	.09*	.25**	.24**	.22**	.38**	.27**	.31**	.08*	-

Note. * $p < 0.05$, ** $p < 0.01$.

Future orientation was positively and significantly correlated with self-efficacy, attainment/utility valuing, and intrinsic valuing. Additionally, future orientation was significantly correlated with both English and mathematics achievement. These findings are consistent with Eccles and Wigfield (1995). Finally, both self-efficacy and attainment/utility valuing were significantly correlated with English and mathematics achievement. Other studies (e.g. Wigfield & Eccles, 1992; Greene et. al, 1999) have found similar results. Importantly, although intrinsic valuing was statistically correlated with achievement in both English and mathematics, the correlations were too small and therefore did not warrant meaningful interpretation.

Table 5

Pearson Product-Moment Correlations among the Variables for Grade Levels 7 and 10

Grade 7										
Variable	1	2	3	4	5	6	7	8	9	-
1. AchEng	-									
2. AchMath	.38**	-								
3. FO	.05	.02	-							
4. FOEd	.14**	.05	.85**	-						
5. FOCar	-.03	-.02	.91**	.55**	-					
6. SELF	.14**	.27**	.47**	.45**	.40**	-				
7. ATTUTIL	.18**	.36**	.30**	.34**	.21**	.58**	-			
8. INTR	.03	.00	.34**	.36**	.25**	.50**	.40**	-		
9. EFFMOB	.18**	.38**	.15**	.18**	.09*	.30**	.41**	.10*	-	
10. IDENT	.00	.01	.15**	.14**	.13**	.32**	.19**	.25**	.01	-

Grade 10										
Variable	1	2	3	4	5	6	7	8	9	-
1. AchEng	-									
2. AchMath	.53**	-								
3. FO	.19**	.26**	-							
4. FOEd	.21**	.28**	.91**	-						
5. FOCar	.16**	.22**	.95**	.73**	-					
6. SELF	.14*	.27**	.56**	.52**	.51**	-				
7. ATTUTIL	.15**	.17**	.32**	.31**	.29**	.49**	-			

8. INTR	-.17**	-.10*	.32**	.29**	.31**	.43**	.31**	-		
9. EFFMOB	.33**	.24**	.28**	.27**	.26**	.27**	.41**	.08	-	
10. IDENT	-.05	.07	.32**	.33**	.28**	.34**	.36**	.31**	.16**	-

Note. * $p < 0.05$, ** $p < 0.01$.

Additionally, intrinsic motivation was moderately and positively correlated with identity. Finally, although both identity and intrinsic motivation were significantly correlated to effort/social mobility, the correlations were too small to be interpreted as meaningfully.

The second part of question two asked whether there were grade level differences in the relationships among the variables. Table 5 presents the Pearson product-moment correlations among the variables for grade levels seven and 10. The differences between the two tables are very small; the correlations between the variables at the two levels were relatively similar. One exception is the relationship between future orientation and English and mathematics achievement. Future orientation was significantly correlated with the English and mathematics achievement, but only for grade 10.

A second exception was that there was a stronger interrelationship between attainment/utility valuing and mathematics achievement exhibited in grade seven than in grade 10. A third exception was that there was a notably stronger relationship between effort/social mobility and English achievement in the higher grade than in the lower grade. I used Fisher's z transformations in order to tell if the differences in the latter two were statistically significant. The difference in correlations between attainment/utility valuing and mathematics achievement for grade seven and 10 was found to be statistically significant (Fishers's $z = 1.42$, $p = .01$). The difference in correlations

between effort/mobility and English achievement at the different grades was found to be statistically significant (Fishers's $z = 2.09$, $p = .05$). Therefore, there were few, but significant differences in the relationships among the variables at the two grades.

Question three asked whether there were different finding for the career and education aspects of future orientation. After examining the correlations, the two components of future orientation were found to be so highly correlated as to suggest that they could function as one construct for this sample. Stevens (2002) recommends as a means of combating multicollinearity to combine measures related to a single construct which have high intercorrelations. Therefore, future orientation was treated as a single variable in the remainder of the analyses.

Question four inquired about the construct validity of the RAOS. The RAOS was conceptualized as a measure of the degree to which students buy into or submit to the cultural meaning of education in their society. I conceptualized that if students accepted the meaning of education as disseminated by family, teachers, and wider society, they would demonstrate higher academic motivation. Those who rejected or at least failed to endorse the cultural meaning ascribed to education would not see value in investing in school and would correspondingly show lower academic motivation. In essence, the RAOS would act in much the same way as the other motivation variables (future orientation, expectancy valuing) in term of its relationship to academic achievement.

The results provided partial evidence supporting the construct validity of the RAOS. As noted earlier, the effort/social mobility subscale was positively and significantly related to the other predictor variables, future orientation, self-efficacy, and attainment and utility valuing, as with English and mathematics achievement. The

identity subscale of the RAOS was strongly correlated with other motivation variables, future orientation, self-efficacy, attainment/utility valuing, and intrinsic valuing, but not with effort/mobility or achievement.

Analysis of Mean Differences and regression analysis

The final question explores the predictive nature of the set of the motivation-related variables on achievement. Before attempting to evaluate the predictive power of the motivation-related variables, I wanted to first assess what, if any, variance could be accounted for by the set of grouping variables in the study. For this study, grouping variables consisted of school and grade level. Table 6 shows means and standard deviation for all the variables in consideration. I examined mean differences for statistical significance using Multivariate Analysis of Variance (MANOVA) for each of the six motivation-related variables. A Bonferonni adjustment ($\alpha/6 = .05/6 = .008$) was computed for the univariate test of mean differences. Effect sizes were evaluated following Cohen (1988), thus Eta-squares below .01 were considered small; around .06 were considered moderate; and values above .1 were considered large.

There was a statistically significant main effect for the school on the set of motivation-related variables, Wilks' $\lambda = .759$, $F(18, 2090) = 11.9$, $p < .001$. The η^2 value of .088 indicates that the size of the effect was moderate (Cohen, 1988). The observed power for the model was 1.0. The univariate test for school demonstrated that statistically significant effects were present for future orientation [$F(3, .824) = 4.566$, $p = .004$, $\eta^2 = .018$]; attainment/utility valuing, [$F(3, 2.123) = 10.41$, $p < .001$, $\eta^2 = .040$]; intrinsic valuing, [$F(3, 9.813) = 17.128$, $p < .001$, $\eta^2 = .065$]; effort/social mobility, [$F(3, 8.417) = 23.679$, $p < .001$, $\eta^2 = .087$]; and identity, [$F(3, 2.271) = 5.199$, $p < .001$, $\eta^2 = .021$].

However, no statistically significant effects were found for self-efficacy, [F(3, .128) = .466, p =.706, η^2 = .002]. Because of the large sample size, significant results should be interpreted with caution. It is necessary to look at effect sizes. The effect sizes for future orientation and identity (both around .02) were small. The effect sizes ranged from .04 to .09 for effort/social mobility, attainment/utility valuing, and intrinsic valuing, which are considered small to moderate effects.

There was a statistically significant main effect for grade level on the set of motivation-related variables, Wilks' λ = .860, F(6, 739) = 20.13, p < .001. The η^2 value of .140 indicates that the size of the effect was large. The observed power for the model was 1.0. The univariate tests for grade level demonstrated that statistically significant interactions were present for future orientation [F(1, 7.377) = 40.88, p = .004, η^2 = .052]; self-efficacy, [F(1, 9.385) = .34.122, p < .001, η^2 = .044]; intrinsic valuing, [F(1, 43.886) = 76.598, p < .001, η^2 = .093]; and identity, [F(1.7481) = 17.127, p < .001, η^2 = .023]. Grade level was not statistically significant on the remaining motivation-related variables. The effect size for identity, future orientation, self-efficacy, and intrinsic valuing ranged from .02 to 09, which are small to moderate.

Finally, there was a statistically significant interaction effect between school and grade level, Wilks' λ = .879, F(18, 2090) = 5.419, p < .001. The η^2 value of .042 indicates a small to moderate effect with an observed power of 1.0. The univariate test for the interaction of school and grade level demonstrated that statistically significant interactions were present for attainment/utility valuing, [F(3, 2.656) = 13.021, p < .008, η^2 = .050]; intrinsic valuing, [F(3, 5.498), p < .008, η^2 = .037]; and effort/social mobility, [F(3, 3.267) p < .008, η^2 = .036].

Table 6

Means, Standard Deviations, and Number of Students in Grade 7 and 10 on Scaled Variables

Variable	School 1		School 2		School 3		School 4	
	G7	G10	G7	G10	G7	G10	G7	G10
FO	4.04	3.85	4.19	3.90	4.14	3.89	3.93	3.85
	.39	.46	.42	.48	.40	.48	.36	.44
	128	68	80	66	122	103	105	84
SELF	4.49	4.11	4.31	4.25	4.48	4.17	4.43	4.25
	.50	.54	.54	.53	.47	.61	.51	.52
	128	68	80	66	122	103	105	84
ATTUTIL	4.72	4.53	4.24	4.60	4.75	4.57	4.64	4.67
	.34	.57	.65	.56	.30	.42	.38	.47
	128	68	80	66	122	103	105	84
INTR	3.94	3.36	4.08	4.02	4.10	3.18	4.27	3.83
	.73	.81	.81	.60	.74	.87	.69	.75
	128	68	80	66	122	103	105	84
EFFMOB	4.39	4.13	3.60	4.01	4.36	4.25	4.21	4.22
	.57	.66	.57	.68	.54	.62	.61	.56
	128	68	80	66	122	103	105	84
IDENT	4.00	3.79	4.02	3.92	3.80	3.65	4.10	3.75
	.64	.71	.55	.64	.74	.68	.61	.69
	128	68	80	66	122	103	105	84

In looking at the means for attainment/utility valuing in Table 6, grade seven students showed higher means in all the schools except school number 2, where means at grade 10 were moderately higher and school number 4, where means for grade levels were about the same.

From the means shown in Table 6, the exact pattern of differences for attainment and utility valuing was repeated for the effort and social mobility variable. Finally, the means for intrinsic valuing of school showed higher means at grade seven for all the schools except school number 2 where the means between the grade levels were about the same. The effect sizes ranged from .04 to .05 for effort/social mobility, attainment/utility valuing, and intrinsic valuing, indicating that there was a moderate effect for the interaction on those variables. In sum, the grouping variables seem to account for some significant variation in mean differences and should be carefully considered in further analysis.

Regression Analyses

Given the findings for school and grade level, in order to address question five, dummy coding of the categorical variables school and grade level was required so that they could be used in the regression analysis (Pedhazaur, 1982). School was recoded as three (k-1) variables; SCH1, SCH2 and SCH3. Grade level was recoded as CLASSIF, a classification variable with values of 1 for grade seven students and 0 for grade 10 students. I conducted multiple regression analyses with English and mathematics achievement serving as the outcome variables, respectively. I followed Cohen's (1988) recommendations for multiple regressions. Values were considered small if $R = .14$ or R^2

= .02; values were medium if R = .36 or R^2 = .13; and values were large if R = .51 or R^2 = .26.

In the first multiple regression, school and grade level were first entered together, with future orientation, self-efficacy, attainment/utility valuing, and effort/social mobility entered in the second block to predict English achievement. Recall that intrinsic valuing and identity were statistically and positively correlated with achievement, yet, their correlations with achievement were too small to be interpreted as meaningful. For this reason, they were not used in the regression equation. The first regression equation with school and grade level yielded a significant R^2 (R^2 = .187, F = 41.666, $p < .001$). The addition of future orientation, self-efficacy, attainment/utility valuing, and effort/social mobility into the overall model also yielded a statistically significant R^2 change (R^2 = .225, F = 26.069, $p < .001$). Importantly, the R^2 change from step one to step two indicated that adding future orientation, self-efficacy, attainment/utility valuing, and effort/social mobility into the regression equation accounted for an additional 3.7% of variance, F = 8.700, $p < .001$. Furthermore, as can be seen in Table 7, regression coefficients indicated that effort/social mobility yielded a statistically significant Beta value.

Table 7

Multiple Regression Results for English Achievement

Variable	*B*	*SE B*	*β*	*P*
Step 1				
(Constant)	44.504	1.228		.000
SCH1	3.793	1.541	.101	.014
SCH2	-2.821	1.597	-.071	.078
SCH3	4.153	1.421	.122	.004
CLASSIF	12.560	1.095	.388	.000
Step 2				
(Constant)	12.391	6.466		.056
SCH1	3.281	1.515	.087	.031
SCH2	-.940	1.657	-.024	.571
SCH3	3.446	1.408	.101	.015
CLASSIF	12.144	1.118	.375	.000
FO	1.459	1.450	.040	.315
SELF	.901	1.337	.030	.501
ATTUTIL	1.558	1.423	.046	.274
EFFMOB	3.683	.945	.149	.000

Note. $R^2 = .188$ for Step 1; $\Delta R^2 = .049$ ($p < .001$), ** $p < .001$, * $p < .05$

Table 8

Multiple Regression Results for Mathematics Achievement

Variable	*B*	*SE B*	*β*	*P*
Step 1				
(Constant)	40.926	1.223		.000
SCH1	12.005	1.535	.280	.000
SCH2	-14.637	1.603	-.319	.000
SCH3	7.552	1.416	.194	.000
CLASSIF	11.288	1.090	.306	.000
Step 2				
(Constant)	-6.413	6.299		.309
SCH1	11.610	1.460	.270	.000
SCH2	-13.232	1.598	-.289	.000
SCH3	6.960	1.359	.179	.000
CLASSIF	9.497	1.074	.257	.000
FO	.925	1.398	.022	.509
SELF	6.808	1.282	.198	.000
ATTUTIL	1.139	1.400	.028	.416
EFFMOB	2.357	.912	.083	.010

Note. $R^2 = .39$ for Step 1; $\Delta R^2 = .071$ ($p < .001$), ** $p < .001$, * $p < .05$

In the second multiple regression, I used the same set of predictor variables entered in the same sequence, with mathematics achievement serving as the outcome variable. Step one yielded a significant R^2 ($R^2 = .385$, $F = 111.602$, $p < .001$) as did step two ($R^2 = .451$, $F =$

73.406, $p < .001$). As with the previous regression, the addition future orientation, self-efficacy, attainment/utility valuing, intrinsic valuing, effort/social mobility, and identity yielded a statistically significant R^2 change of .066, $F = 14.493$, $p < .001$. As can be seen in Table 8, self-efficacy and effort/social mobility yielded significant Betas.

Question five asks how the variables come together to predict achievement. After accounting for the contributions of school and grade level variables, the combination of the motivation-related variables resulted in small amounts of variance (4% to 7%) in both English and mathematics achievement (Cohen, 1988). Additionally, not all the predictor variables were statistically significant.

I conclude that overall, the motivation-related variables do not function very well in accounting for variation in achievement. The overall results are not as I expected. I expected all the variables to be significant, positive predictors of both mathematics and English achievement for this sample. However, there appears to be differences in the pattern of predictions for the two domains. For, example self efficacy was a reliable predictor in mathematics but not English. Additionally, the effort/social mobility component of the RAOS was a reliable predictor of mathematics achievement, and a less reliable predictor of English. It is important to consider here that the observed school and grade level differences may be accounting for large amounts of the variance thereby masking the true nature of the motivation variables.

Non-parametric Analyses

A final set of analyses was needed to address part of question one, which asked about the effects of students' perceived quality of their schools. I had thought that students' beliefs about the quality of their school would be related to their grade level and

would affect their academic achievement. I wanted to know whether there were relationships between school, grade level, and students' perceptions of the relative rank of their school. Since it is not a continuous variable, students' perceptions of school quality had to be treated separately from the previous correlation and regression analyses.

In St. Lucia students are placed in secondary schools based on their performance on the Common Entrance Examination and the school options they select. Students who score the highest get their pick at what are perceived to be top schools and the rest get to pick from the schools that are left. Unfortunately, the option to choose one's best school means that some students will be placed in schools that are not among their list of choices, and sometimes they are placed in schools that they would consider to be bad schools.

I presented students with a list of schools (including their own) and asked them to rank the schools on a six-point scale in terms of their quality. Specifically, students were asked to "rank these schools on a scale of 1-6, 1 being the best and 6 being the worse place to get a secondary education." The Chi-square test of association was used to determine whether or not an association existed between the ranking and the categorical variables of school and grade level. There appears to be statistically significant relationships between school ($p < .001$), grade levels ($p = .01$) and students perceptions of the relative quality of their school. Thus, for the current sample, students' perceptions of the relative quality of their school were related to the school they attended and their grade level.

Furthermore, I wanted to know if there were relationships between students' perceived relative rank of their school and their academic achievement. The raw English

and mathematics scores were converted to ranks and Bivariate correlations were conducted using Kendall's T (tau) as the correlation estimate. Kendall's T was used since there were tied ranks on the variables (Siegel & Castellan, 1988). The analysis revealed a statistically significant correlation between perceived rank of school and English achievement (tau_b = .103, $p < .01$, 2-tailed). The results also showed a statistically significant correlation between perceived rank of school and mathematics achievement (tau_b = .24, $p < .01$, 1-tailed). It is important to note that correlations do not signify causation, and I did not test for direct causal relationships. Nevertheless, the results suggest that students' perceptions of school quality are relevant and may contribute to their academic success.

Chapter 5

Discussion

The purpose of this study was to investigate the interrelationships between students' academic achievement and their future orientation, expectancy valuing, perceptions of the relative quality of their schools, and their reactions to the academic opportunity structure purported to exist in St. Lucia and the Eastern Caribbean. The study was based on research that suggests a person's future-oriented motivation can influence their academic performance (Raynor, 1970; Gjesme, 1981; Trommsdorff, 1983; Nurmi, 1991; Nurmi et al., 1995; Lens et al., 2001). The study was also guided by research suggesting individuals' personal values and expectations, their expectancy-valuing, can predict their academic success (Eccles et al., 1983; Wigfield & Eccles, 1992, 2002). A new variable representing individuals' reactions to the academic opportunity structure (RAOS) in St. Lucia was introduced in the present study and was tested in conjunction with the motivation-related variables above.

The results showed that a component of the new variable capturing the reactions to the academic opportunity structure (RAOS) in St. Lucia predicted achievement in both mathematics and English, though the contribution was greater to the prediction of English achievement than mathematics. That component measured students' beliefs about personal effort and social mobility. For achievement in English, effort/social mobility was the only motivation-related variable to be a significant predictor. For achievement in mathematics, self-efficacy was the stronger predictor; effort/social mobility was also a statistically significant predictor. This chapter will proceed with a review of the findings,

followed by a summary of the study's limitations, and then the implications for the future research.

Review of the Findings

My goal was to explore the role that future orientation, expectancy valuing, and students' reactions to the academic opportunity structure played in influencing academic achievement of St. Lucian students. The results from correlation analysis revealed that each of the proposed predictor variables was correlated with achievement except for intrinsic motivation and identity, which were moderately inter-correlated. Intrinsic motivation and identity also significantly and positively correlated with effort/social mobility but with correlations too small to be interpreted meaningfully..

Intrinsic valuing has been considered by many (e.g. Deci and Ryan, 1985, 1987) to be very important in achievement-oriented situations. Intrinsic valuing is characteristic of students with learning goals, those for whom learning is innately rewarding, and engaging in academic work is for the purpose of increasing competence, skills and knowledge. Students with learning mastery goals are unconcerned with relative standing, but instead, they seek feedback on their progress and simply enjoy learning. Ideally, these are the best students to have in any achievement-oriented situation. Unfortunately, as the results suggest, intrinsic valuing is not the guiding value for secondary students in St. Lucia. It seems that, at least for the students in my sample, school and academic success is not about enjoyment but about future opportunities for success. I believe the culture of schooling in St Lucia causes learning and education to be viewed by students as a means to an end, and not an end in itself. Correspondingly, I think students in this context have internalized that it does not matter whether or not they love learning; what matters is that

they must work and put forth effort if they are to achieve success in school and be successful later in life. Importantly, the findings for this sample are different from previous research in other contexts that show intrinsic valuing as highly correlated to achievement (e.g. Greene et al., 1999)

Identity, which is one of the components of ROAS, was modestly correlated with the other motivation variables. However, as indicated earlier, identity was not correlated with achievement or effort/social mobility. There may be several reasons why the identity scale did not function as well as the effort/social mobility scale. One reason may be that the psychological need for relatedness in this sample is not in the form of a national identity. A goal of the study was to examine variations in how students internally represent the societal expectations and values of education in the St. Lucian culture. One of the important values reported by students in the pilot study was a sense that education had some historical significance. Students reported that people in their families and the wider society constantly reminded them of how "fortunate" they were to be able to go to school and be educated. Parents and teachers were pointing to the fact that people in the colonial Caribbean society were once denied education. Thus, their descendants are to embrace not just the opportunity to learn but the cultural and symbolic value of an education. In other words, parents, family, teachers, and the wider society try to connect academic success to cultural identity in terms of a kind of post-colonial nationalism.

Regardless of these efforts, students in my sample did not seem to be internalizing education and school in that way. I think the reason for this is the fact that the connection between embracing the cultural significance of one's education and long-term goal fulfillment is not fully discussed and the socializers in this context are neglecting to

explain to students exactly how their educational identity is instrumental to their future goals. Students simply are expected to make these connections on their own. Students may be thinking that cultural identity does not get to the bottom line of success in school.

However, there may be an alternative explanation. Rather than taking an absolutist approach to thinking about how people internalize societal values of (e.g. internalizing or not internalizing societal messages), it may be useful to consider that people may be exhibiting varying degrees of internalization in regards to those values. According to Deci and Ryan's (1985) framework, students can perceive the value of education to their identities from any one of the points along the self-determination continuum, or some combination of them. The continuum shows the different types of motivation or regulation guiding behaviour. For example, students with external regulation tend only to engage in tasks to avoid punishments or to obtain extrinsic rewards. Such regulation results in merely superficial task engagement. By contrast, students who exhibit identified and integrated regulation tend to engage in tasks because they have identified with the task domain or recognize performance as important to attaining personally valued future goals (future utility). For these students, task engagement is very high and processing is deep, however, these students are still not totally intrinsically motivated. In contrast, intrinsically motivated students are completely self-determined. Task engagement is the reward, and, therefore, the quality of engagement is high and processing is deep. According to Deci and Ryan's framework (1985), students who exhibit these different levels of motivation will internalize the value of education to their identities differently.

Another reason the identity subscale did not work as expected may be that differences in values about education and identity represent a generation gap. It may be that proximity to the events of colonialism may affect people's existential views, that is, their views about who they are. Those who experienced colonial Caribbean society may have more emancipatory views than the generations after them who experienced their society differently. Further, for younger citizens, it may be that they are dealing with adolescent identity issues that are more personal than cultural issues that carry more social significance.

Finally, the problem could be in the measure of identity itself. Perhaps, the questions were not constructed well enough to capture the essence of the construct and need to be revised. The instrument may be measuring identity in the wrong ways. For example, rather than assessing an individual's educational identity as a Caribbean man or woman, it might be more useful to assess an individual's educational identity as simply a person with goals and aspirations. This could mean that further qualitative research may be necessary to develop a more refined set of items for this subscale. Additionally, the sample may have been too heterogeneous for the instrument to capture sufficient variance among people's responses. This may be why the reliability of the identity subscale was so low (.60).

The results from the regression analyses indicate that the combination of the predictor variables accounts for a small to moderate amount variance in academic achievement in the sample of high school students from St. Lucia. Importantly, not all the predictor variables turned out to be statistically significant. Below I discuss these findings in more detail.

Future orientation and achievement in St. Lucian students. Inconsistent with prior research (e.g. Nurmi, et al., 1991; Seginer, et al., 1994; Kerpelman & Mosher, 2004), future orientation was not a direct significant predictor of either English or mathematics achievement even though future orientation was highly correlated with achievement. It may be that future orientation has some indirect influence on achievement that is being mediated or moderated by one or more motivation-related variables in the study, such as students' perceptions of the opportunity structure. The results suggest that further work is needed before relationships between future orientation and achievement can be more clearly articulated. In the past, researchers (e.g. Nurmi, et al., 1991; Seginer, et al., 1994; Kerpelman & Mosher, 2004) have treated education and career aspects of future orientation as separate subscales, even though they are very highly correlated. For example, Kerpelman and Mosher (2004) separated the two subscales that were significantly and positively correlated at $r = .77$ on a sample of 403 African American students from rural high schools. I found no differences in findings for the educational and career aspects of future orientation for this current sample of secondary school students. I combined the two subscales since it appeared that they could function as one single construct for this sample.

In appears that students in St. Lucia are viewing future education and career almost synonymously. Secondary school students may be assessing that their current performance in school is only a stepping stone to their future education, and it is this future education that is going to bring career opportunities. I believe students are taught from an early age that the goal of their current performance in school is to get to the next level of school, and then the next, with more schooling equaling more career

opportunities. In this view, students see education and career as the same future goal related to success later in life. A challenge for parents and teachers would then be how to convince students that they are capable of succeeding at the next level of school. Students who do not know what to expect at the next level may consider dropping out instead of investing further in school. Students who feel confident that they can successfully continue their educational path would be more likely to invest in school.

Of additional importance, the results indicated grade level differences for the combined future orientation variable. Future orientation was significantly correlated with achievement, but only in the higher grade level. This finding makes sense if one considers that the proximity to leaving school is greater for students in form four than those in form one. The subjective experience of the future is perhaps more salient for students who are closer to leaving secondary school than those who have just started. Importantly, the MANOVA results indicated that there was a significant main effect found for grade level. This grade level effect may be accounting for some of the variance and may explain why future orientation was not a direct significant predictor of achievement in the regression analyses.

Expectancy valuing and achievement in St. Lucian students. The results of the regression analysis reveal that the attainment/utility valuing aspect of expectancy valuing theory was not a direct predictor of achievement. This finding is not consistent with other research that has found attainment and utility valuing to be related to achievement (e.g. Wigfield & Eccles, 2002). The expectancy part of expectancy-value theory (self-efficacy) was a statistically significant predictor of mathematics achievement but not English achievement. This finding is only partially consistent with prior research supporting

expectancy value theory (e.g. Wigfield & Eccles, 1992; Raynor, 1970; Nurmi, 1991; Gjesme, 1981; Lens et al., 2001), that has found self-efficacy (sometimes self concept of ability) to be significantly related to achievement in both domains.

Eccles (Parsons) et al. (1983) proposed that task value was made up of several components. The researchers theorized that while attainment value reflects the importance an individual places on doing well on a task, intrinsic value consists of how much the individual likes or enjoys the task, and utility valuing representing the usefulness the individual ascribes to the task for achieving his or her future goals. Later, Eccles and Wigfield (1995) found strong evidence supporting the theoretical components of task valuing. The researchers suggested that others should assess how those components become differentiated from one another in future examinations of achievement of motivation.

In this study, expectancy valuing comprised of the self-efficacy and the attainment, utility and intrinsic valuing variables. The items related to valuing were split into two factors. One of the factors contained items measuring intrinsic valuing and another contained a combination of items measuring attainment and utility valuing variables. I turned to reliability data to decide how to treat the values variables and observed that both variables had internal reliabilities that fell well below the range of acceptability. I concluded that combining attainment and utility valuing would greatly improve overall internal reliability. Greene et al. (1999) faced a similar decision, but decided to maintain the three separate factors since the internal reliabilities were high.

It appears that students in the St. Lucian sample did not differentiate items measuring attainment and those measuring utility valuing of school. Eccles et al. (1995)

described attainment valuing as representing the importance of performing well in a task (in our case doing well in school) as it relates to one's self-schema and core personal values. Attainment valuing of school is therefore related to maintaining a positive self-image. In other words, to protect their self-esteem, students who are not doing well are likely to report that they do not place high importance or value in school. Students who are doing well will say that school is very important. Utility valuing represents the value a task (in this case doing well in school) has for reaching future goals. It is unclear how students in the St. Lucian sample are internalizing the attainment and utility valuing constructs in the present study. More research is needed to address this question.

The RAOS and achievement in St. Lucian students. In terms of the RAOS measure, the effort/social mobility subscale was found to significantly predict both English and mathematics achievement. However, some caution must be taken when interpreting effort/social mobility as a predictor of mathematics achievement in light of high power and a small Beta value. With regard to the identity subscale, recall that it was excluded from the regressions due to lack of relationship with achievement. While effort/social mobility was highly correlated with the future orientation and attainment/utility valuing variables, the latter were not direct statistically significant predictors of achievement.

The RAOS was conceived as comprising three subscales that capture people's perceptions of education as a part of their identity, people's perceptions of education as a means of social mobility, and people's perceptions about the value of their own hard work and effort in education situations. This conception of the RAOS stemmed from a

pilot study (Lubin, 2009) and from previous theory and research (Silverman & Casazza, 2000) on Caribbean culture.

The data indicated some support for the measure, in that the construct validity was mostly maintained in spite of small structural changes. Exploratory factor analysis did not support the three-factor structure that was conceptualized for the ROAS. On the contrary, two factors emerged encompassing the original items: one for identity; and another combining social mobility with hard work and effort. Further, although the effort/social mobility scale had acceptable reliability, the alpha for the identity scale was relatively lower (.60 versus .77). As mentioned earlier the low internal reliability may be one reason why the identity subscale was not found to be related to achievement.

Overall, the results indicate that my conception of a construct that stands for individuals' responses or reactions to the opportunity structure in St. Lucia is a plausible one. I conceived that the RAOS would be positively correlated to the other motivation-related variables in the study (future orientation, expectancy valuing) and operate similarly to the other motivation variables in term of its relationship to academic achievement. The results provide some evidence supporting the construct validity of the RAOS in terms of these expectations.

Limitations of the Study

There are limitations to the present work that should be noted including the study design and instrumentation, the nature of the correlational and causal-comparative methodologies, the nature of self-report measures, and the nature of unforeseen contextual factors. I will discuss these limitations below.

The chief limitation of the current study is the use of an untested instrument, the RAOS, in the design of the study. Although the RAOS was designed specifically for this study, it had not gone through the rigors of instrument validation with previous samples. This means that there were no opportunities to address potential problems with the instrument both in terms of reliability and construct validity. However, within the context of the present study there is evidence to suggest that the instrument held up reasonably well. I will discuss the RAOS in more detail later. The results should thus be interpreted with caution, specifically with regard to any predictions made, until new data emerges. Additionally, I used a future orientation instrument that only measured the career and educational aspects of future oriented motivation. It is conceivable that other dimensions of future orientation, such as family and marriage, are relevant to the current sample and may have contributed to additional sources of variation in achievement.

This study used correlational and causal-comparative methods that do not provide any evidence of causation. True experimental designs provide the strongest evidence of cause-and-effect relationships (Mertens, 2005). Although the current study is not experimental, it still provides useful information about the relationships among the variables. Nevertheless, it is only prudent to recommend caution when interpreting the findings and when making value judgments based on these interpretations.

Lastly, in every study researchers experience unanticipated contextual issues and the present study is no exception. One issue that I experienced involves the varying degrees of literacy of students in the sample. In some schools, I encountered problems with students with poor reading skills. Some of these students needed a lot of help from teachers and the researcher to complete their survey. In one school the problem was very

pronounced and students exhibited the behavioral problems typically exhibited by students with performance avoidance goals. They were disruptive, and it was difficult to get them to stay on task. Although the questionnaires were developed so that they would be suitable for the targeted grade levels, I did not fully anticipate the reading needs of some of the students. In future studies it will be necessary to lower the reading level of the instruments even further.

Implications for Future Research

Several interesting and potentially important questions exist regarding the motivation of secondary school students in St. Lucia. First of all, there seem to be differences in terms of the value of English and mathematics as achievement domains. From my own experience, I can recall more emphasis placed on mathematics as it was essential for learning science. This is not to say that English is not valued. However, once more, the preference for academic related subjects becomes apparent as mathematics and science are considered more academic in this context than English. I believe that encouraging students to value one kind of achievement more that others is ambiguous and sends the wrong message about the need for intrinsic and mastery learning goals. In fact, the results indicate that intrinsic valuing of school, although a predictor of achievement, yielded negative betas.

On the other hand, effort/mobility positively and significantly predicted achievement. It can be interpreted that students in the sample are buying into the cultural meaning of education. They believe that it is their own hard work and effort that is responsible for success. Given my knowledge that there are limited opportunities available for these students when they leave school, I wonder how realistic students are

being. A future study can attempt to account for students' degrees of realism alongside their academic motivations.

Students in my sample have seen examples of people in the society who were successful in school but did not succeed later in their life. The question of to what they attribute this failure seems qualitative in nature. It seems though that the society has succeeded in convincing students that their hard work will lead to opportunity. Perhaps being unrealistic about future opportunities in this context is a vital adaptive strategy. It may be the basis for keeping students in school and the society functioning.

The other motivation variables were not direct predictors of English and mathematics achievement as measured here for this sample. One exception is that self-efficacy that emerged as the reliable predictor of mathematics. This may be because students place higher value in mathematics and generally see it as more challenging. Attainment valuing, utility valuing, and future orientation, all failed to be reliable predictors of achievement. Again, one needs to consider the fact that school and grade level might be masking the true nature of the motivation variables. The basis for this argument lies with the results of the MANOVA, which indicated statistically significant main effects for school and grade level as well as a statistically significant interaction.

It would appear, at least superficially, that the students in my sample are not thinking about the future as I had conceived. There are other dimensions of future orientation that may be relevant to this sample other than career and education. Not thinking about the future may also be an adaptive strategy given the possibility of not succeeding later in life regardless of success or failure in school. Since these instruments have predicted achievement in many other contexts, I believe it is the unique

circumstances of the Caribbean context that must be accounting for their ineffectiveness at predicting achievement.

The RAOS seems to have some promise for the future. In the immediate future, I plan to modify the instrument taking into account the empirical data from this study. I will pay close attention to the revision of items to ensure their preciseness and relevance to the sample. I then plan to validate the RAOS on other samples using structural equation modeling (SEM). SEM will allow me to more accurately test my theoretically derived hypotheses about the structure of the motivation variables. Additionally it will allow me to make more explicit conclusions about direct and indirect influences of the predictor variables and allow for the testing of multiple alternative models. In doing so I will be able to better articulate how the variables come together to predict achievement.

Summary and Conclusion

Despite the limitations, the study provides some empirical data on achievement motivation for St. Lucian students, as measured by performance in English and mathematics. The results showed that effort/social mobility was a significant predictor of achievement in both mathematics and English. Additionally, students' self-efficacy predicted achievement in mathematics but not in English. Finally, future orientation and attainment/utility valuing were not direct predictors of achievement for the sample. Further research is needed to understand more about achievement motivation in the complex St. Lucian context.

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APPENDIX

Instruments

The Prospective Life Course Questionnaire (Nurmi, et al., 1991; Seginer, et al., 1994; Kerpelman & Mosher, 2004)

Subjective Academic valuing (Greene, DeBacker, Ravindram, & Krows, 1999)

Self-efficacy (Greene et al., 1999; Greene et al., 2004; Miller et al., 1996)

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Semi-structured Interview Protocol

Future Orientation: The Prospective Life Course Questionnaire (Nurmi, Seginer, & Poole, 1991; Seginer, Nurmi, & Poole, 1994; Kerpelman & Mosher, 2004)

Directions: These questions ask your opinions and thoughts about the future. These questions have no right or wrong answers. Therefore, I would like you to circle the answer that best fits your personal beliefs. Read each statement and indicate how much you agree that the statement is true of the way you think about your future. Use the 5-point scales below to indicate your response.

Future Education

1. In thinking of your future education, which of these statements describes you best? Please circle one number.

    1. I have not yet thought about matters relating to my future education.

    2. Sometimes I look at one possibility or another relating to my future education.

    3. I am seriously looking into several possibilities concerning my future education.

    4. I am looking into one serious possibility concerning my future education.

    5. After looking into several possibilities concerning my future education, I am focusing on one serious possibility.

2. How often do you think about or plan your studies and plan your future education? Please circle your response.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Daily

3. When you think of your plans for future education, which of these statements below describes you best? Please circle you response.

    (1) It is completely clear that I will not continue a higher education.

    (2) It is quite clear that I will not continue a higher education.

    (3) I am not yet sure whether I will continue a higher education or not.

    (4) It is quite clear that I will continue a higher education.

    (5) It is completely clear that I will continue a higher education.

4. How determined are you to fulfill your plans about future education after secondary school? Please circle your response.

1	2	3	4	5
Definitely Not	Probably Not	Maybe Yes Maybe Not	Probably Yes	Definitely Yes

5. How likely do you think it is that your educational plans will happen? Please circle your response.

1	2	3	4	5
Definitely will not happen	Quite sure will not happen	Maybe yes maybe not	Quite sure will happen	Definitely Yes

6. How important a role do you think education plays in your future life? Please circle your response.

1	2	3	4	5
Not at all important	Not very important	Somewhat important	Rather important	Very important

7. How often do you find yourself doing something to bring you closer to your educational goals? Please circle you response.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Daily

8. Which of the following statements best fits how you feel about matters relating to your education? Please circle a number.

(1) I believe that everything will progress in the best possible way.

(2) Generally everything will go well despite some small difficulties.

(3) At certain times matters will progress well and at other times less well.

(4) Generally things will not proceed in the most desirable way although there will also be some successes.

(5) Everything will fail.

Future work and Career

9. When you think about matters concerning your future career which of the following statements best describes your situation? Please circle your response.

   (1) I have not yet thought about matters relating to my future career.

   (2) Sometimes I look at one possibility or another concerning my future career.

   (3) I am seriously looking into several possibilities concerning my future career.

   (4) I am looking into one serious possibility concerning my future career.

   (5) After looking into several possibilities concerning my future career, I am focusing on one serious possibility.

10. How often do you think about or plan your future career?

1	2	3	4	5
Never	Rarely	Sometimes	Often	Daily

11. How important is it for you to achieve your career goals?

1	2	3	4	5
Not at all important	Not very important	Somewhat important	Rather important	Very important

12. In thinking of matters relating to your future career, which of the following alternatives best describes you? Please circle one.

   (1) There are so many different alternatives on my mind, that I have a bad time choosing one.

   (2) There are many alternatives on my mind and they all seem possible.

   (3) There are some alternatives on my mind that seem possible.

   (4) There are two alternatives on my mind and I plan on choosing one.

   (5) I have already reached a decision concerning my future career.

13. In your opinion, how much information on various careers do you have?

1	2	3	4	5
None	Not a lot	Some	Quite a bit	A lot

14. When you think about your plans for a future career, which of these statements describes you best? Please circle one.

(1) It is completely clear that I will not develop one specific career.

(2) It is quite clear that I will not develop one specific career.

(3) I am not yet sure whether I will develop one specific career or not.

(4) It is quite clear that I will develop one specific career.

(5) It is completely clear that I will develop one specific career.

15. How determined are you to fulfill your plans about future work and career?

1	2	3	4	5
Definitely Not	Probably Not	Maybe Yes Maybe Not	Probably Yes	Definitely Yes

16. How likely do you think it is that your career plans will happen?

1	2	3	4	5
Definitely will not happen	Quite sure will not happen	Maybe Yes Maybe Not	Quite sure will happen	Completely sure will happen

17. How important of a role do you think you work and career play in your future life?

1	2	3	4	5
Not at all important	Not very important	Somewhat important	Rather important	Very important

18. When thinking about your future career, can you say that you actually have done something to bring you closer to your goals? How often do you find yourself doing that?

1	2	3	4	5
Never	Rarely	Sometimes	Often	Daily

Nurmi, J. E., Seginer, R., & Poole, M. (1991). The future orientation questionnaire. Helsinki, Finland: University of Helsinki, Department of Psychology.

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Kerpelman, J. L., & Mosher, L. S. (2004). Rural African American adolescents' future orientation: The importance of self-efficacy, control and responsibility, and identity development. Identity: An International Journal of Theory and Research, 4, 187–208.

Subjective Academic valuing (Greene, DeBacker, Ravindram, & Krows, 1999)

Directions: The following statements represent values students may have about school. Read each statement and indicate how much you agree that the statement is true of the way you value academics in your **secondary school**. Use the 5-point scale below to indicate your response. Circle the answer that corresponds to your best response.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Intrinsic Value

1. Doing school work is personally satisfying. 1 2 3 4 5
2. I find doing school work to be enjoyable. 1 2 3 4 5
3. I find doing school work to be interesting. 1 2 3 4 5

Attainment Value

4. It is important for me to master my school work. 1 2 3 4 5
5. It is important for me to get good grades in my school work. 1 2 3 4 5
6. It is important for me to understand my school work. 1 2 3 4 5

Utility Value

7. I can see the importance of school in my everyday experiences 1 2 3 4 5
8. The things I learn in school are useful in my daily life outside of school. 1 2 3 4 5
9. Doing school work is useful for what I want to do after I graduate. 1 2 3 4 5

Greene, B. A., DeBacker, T.K., Ravindran, B. & Krows, A. J. (1999). Goals, values, and beliefs as predictors of achievement and effort in high school mathematics classes. *Sex Roles*, *40*(5), 421-458.

Self-efficacy (Greene et al., 1999; Greene et al., 2004; Miller et al., 1996)

Directions: The following statements represent beliefs that students may about their confidence that they can be successful learning in their secondary school. Read each statement and indicate how much you agree that the statement is true of your confidence in being successful in your secondary school **THIS TERM**. Use the 5-point scale below to indicate your response. Circle the answer that corresponds to your best response. When answering think about your grade level, e.g. Form 1 or Form 4.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1.	Compared to others in my form, I think I am good at learning my school work	1 2 3 4 5
2.	I am certain I can understand the material presented in school this term.	1 2 3 4 5
3.	I am confident I can do as well or better than other students in this form.	1 2 3 4 5
4.	I am confident I can perform as well or better than others in this form.	1 2 3 4 5
5.	I am confident I have the ability to understand the ideas taught in school this term.	1 2 3 4 5
6.	Compared with other students in this form my learning and study skills are strong.	1 2 3 4 5
7.	I am certain I can learn the concepts taught in school this term.	1 2 3 4 5
8.	I am confident about my ability to do the assignments in school this term.	1 2 3 4 5

Greene, B. A., DeBacker, T.K., Ravindran, B. & Krows, A. J. (1999). Goals, values, and beliefs as predictors of achievement and effort in high school mathematics classes. *Sex Roles*, *40*(5), 421-458.

Greene, B. A., Miller, R. B., Crowson, H. M., Duke, B. L., & Akey, C. L., (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary Educational Psychology, 29,* 462-482.

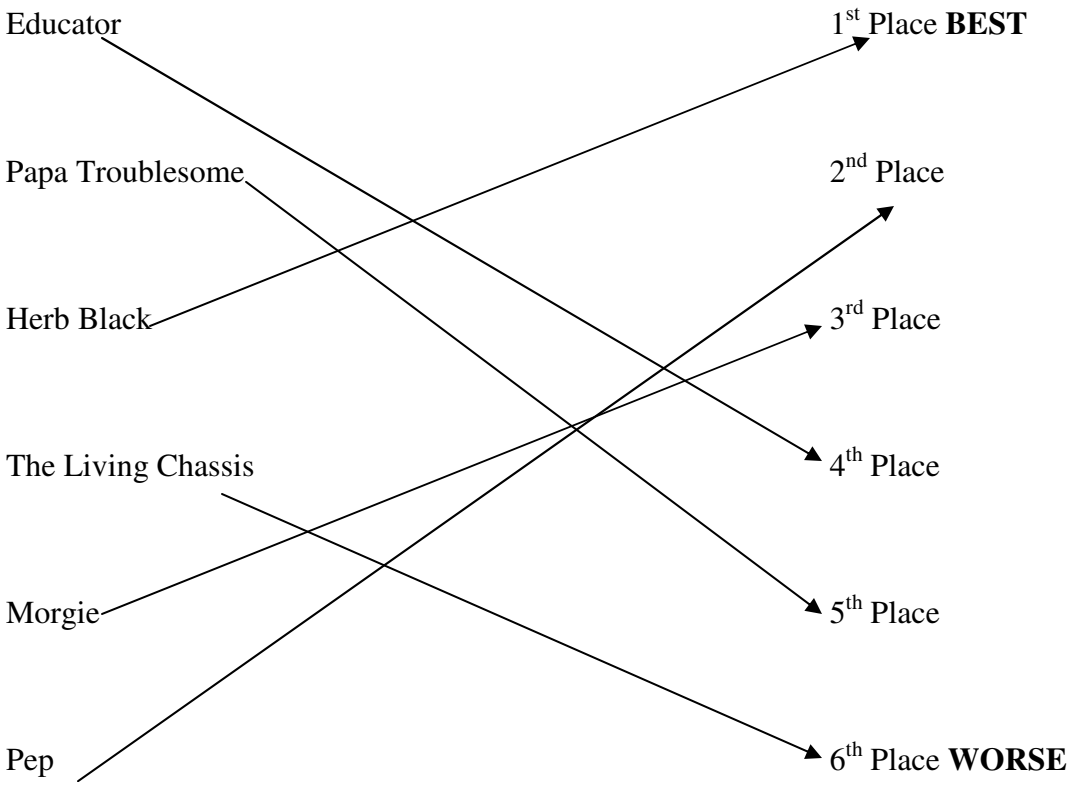
Miller, R. B., Greene, B. A., Montalvo, G. P., Ravindran, B., and Nichols, J. D. (1996). Engagement in academic work: The role of learning goals, future consequences, pleasing others and perceived ability. *Contemporary Educational Psychology, 21*, 388–422.

Participants' Ranking of School

Directions: Rank the following six secondary schools in St. Lucia based on the quality of education you think they provide to students. Below is a box with the names of the schools on the left and options for ranking the schools on the right. Draw connecting lines to match each school with on the left with one of the options on the right that you think best describes the quality of the school. In other words, you will be ranking the schools from 1st place to 6th place in terms of which schools are the best and the worse places to get a secondary education.

Example: If I were to rank my favorite Calypsonians in St. Lucia, here is how it would look:

Name of Calypsonian	**Rank of Calypsonian**



Please go to the next page…

Now it's your turn to rate your school. Remember **1st place** is the ***BEST*** and **6th place** is the ***WORSE*.**

Name of School	**Rank of School**
Vide Bouteille Secondary	1st Place **BEST**
Corinth Secondary	2nd Place
George Charles Secondary	3rd Place
Leon Hess Secondary	4th Place
Sir Ira Simmons Secondary	5th Place
Castries Comprehensive Secondary	6th Place **WORSE**

Reactions to the Academic Opportunity Structure

Directions: The following statements represent values students may have about their education. Read each statement and indicate how much you agree that the statement is true of the way you value academics in your **secondary school**. Use the 5-point scale below to indicate your response. Circle the answer that corresponds to your best response.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Social mobility

1. My life can be better if I achieve academic excellence 1 2 3 4 5
2. I must achieve academic excellence if I want to do better than my parents in terms of my career 1 2 3 4 5
3. Academic excellence is vital to me moving up in society 1 2 3 4 5

Education and identity

4. Education is part of who I am as a Caribbean man or woman. 1 2 3 4 5
5. Education is a big part of Caribbean society 1 2 3 4 5
6. In the Caribbean, we are not a people without our education 1 2 3 4 5
7. Without academic success Caribbean people are nothing 1 2 3 4 5
8. Academic success in my secondary school defines me as a Caribbean person 1 2 3 4 5
9. In the Caribbean it is important to our freedom to achieve academic excellence 1 2 3 4 5

Hard work and effort ideology

10. Above all else, it is my hard work and effort in school that will determine my success in life. 1 2 3 4 5
11. Anybody can succeed in life if they work hard and put forth effort in school. 1 2 3 4 5

Student Biographical Index

Directions: Thank you for taking the time to fill out this survey. This information is confidential and will be used to help us learn about the students who participating in this study. Please circle the answer that describes you or fill the information where indicated.

1. Name: _____ **2. Age:** _____
First Middle Last

3. Sex
a. Male
b. Female

4. Grade Level
a. Form 1
b. Form 4

5. Religion
a. Catholic
b. Protestant
c. Specify if Other _____

6. What school do you attend?
a. Castries Comprehensive Secondary
b. George Charles Secondary
c. Leon Hess Secondary
d. Vide Bouteille Secondary

7. What is the main language you speak at home?
a. English
b. Kwéyòl
c. Other

8. How do you describe your family?
a. Single parent *(mother)*
b. Single parent *(father)*
c. Nuclear
d. Extended
e. Specify if Other _____

9. Who do you live with?
a. Mother
b. Father
c. Grandparents
d. Other Guardian

10. What is the highest level of education of your mother?
a. Less than high school
b. Some high school
c. High school graduate
d. Attended or graduated from technical school
e. Attended college, did not graduate
f. College graduate
g. Completed graduate school/advanced degree

11. What is the highest level of education of your father?
a. Less than high school
b. Some high school
c. High school graduate
d. Attended or graduated from technical school
e. Attended college, did not graduate
f. College graduate
g. Completed graduate school/advanced degree

12. How would you describe your community?
a. Urban
b. Suburban
c. Rural

Semi-Structured Interview Protocol

Title of Study: Societal expectations and educational opportunity: A study of future orientation, expectancy valuing and academic performance of St. Lucian youth.

Interviewer: _____ Date: _____ Time: _____

Interviewee: _____

What influenced the perceptions?
What do you want to be when you grow up or latter in life? Why do you want to be that person? Do you have a plan to reach that goal? Tell me about your plan?
What does school mean to you?
Does anyone influence your beliefs about school? What do/does he/she/they say? How does that make you feel? What impact do you think others' influence has on you?

Who were the people involved?
Do you have any mentors? Who do you look up to? Why are they (or him/her) important? Who are your friends and what do your friends want to be?

Success and failure
How do you define success? In terms of your definition, how do you think you are doing right now? Who are the successful people in your community? Where did they get the training they needed for their careers? Are you finding the opportunities in your society to achieve your own goals? How do you define failure? What are the characteristics of a person who has failed?
Who are the people who have failed in your community? I know there are important qualifying exams in your country … Did you worry about the exams and how they might impact your future? How are/were your goals impacted by these exams? Overall, what impact do you think these exams have on the goals of other students who have to take them?

School and social mobility
Which subjects do you enjoy most? Are you good at those subjects? Are these the subjects you needed for your career? How did you go about picking those subjects? What role does school play in society? Do you think "School" maintains the class structure, or helps people rise above their existing situation? In your country, does your social circumstance at birth influence your opportunities for school? Does school success or failure in school affect your social circumstance later in life?

Identity, hopes and fears
What type of person do you hope to be? Is there anything getting in the way of you becoming that person? On the opposite side of that, what kind of person do you fear becoming? Is there anything that might influence your life to become that person? What does education mean for a St. Lucian/Caribbean person?