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LOMA LINDA UNIVERSITY
School of Science and Technology
in conjunction with the
Faculty of Graduate Studies

Family Environment Externalizing and Internalizing Behaviors Among Adolescents in St. Lucia

by

St. Clair P. Alexander

A Dissertation proposal submitted in partial satisfaction
of the requirements for the degree of
Doctor of Philosophy in Family Studies

June, 2011

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Each person whose signature appears below certifies that this dissertation in his/her opinion is adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy.

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ABSTRACT of THE DISSERTATION

Family environment and internalizing and externalizing behaviors

by

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Doctor of Philosophy, Graduate Program in Family Studies
Loma Linda University, June 2010
Dr. Colwick M. Wilson, Chairperson

The family is uniquely positioned either to positively or negatively influence the well-being, development, and adjustment of adolescents. There is a considerable body of research in the general literature associating the family environment with adolescent externalizing and internalizing behaviors of adolescents. St. Lucia, and the rest of the Caribbean, have distinctive cultural and familial habits and patterns that may influence adolescents' behavior. However, little or no attention has been given to assessing empirically the role that family dynamics may play in adolescents' behavior on the island of St. Lucia. The purpose of this study was to explore the relationship between the family environment and internalizing or depression withdrawn, and somatic symptoms and externalizing behaviors or rule breaking and aggression among adolescents in St. Lucia. The sample was drawn from nine secondary schools and a total of 597 students and their parents also participated in the study. Result of multiple regression analysis revealed that family environment plays a complex role in its impact on adolescents internalizing and externalizing behaviors. That is, while system maintenance is inversely related to internalizing behaviors, relationship and personal growth are unrelated to this outcome. In contrast, relationship, personal growth, and systems maintenance are all unrelated to externalizing behaviors. Additional analyses of the subscales for the predictor and

outcome variables suggest relationships that were not indicated by the composite variables. Future research might include variables that are descriptive of the family environment, such as number of siblings and family structure that were not included in this study. The results of this study points to the importance of a comprehensive assessment of family environment in predicting adolescents' behaviors in St. Lucia, and offer important implications for theory, research, and practice.

CHAPTER ONE

INTRODUCTION

The unique position of the family to positively or negatively influence adolescent well-being has been well documented (Barrera, Chassin, & Rogosch, 1993; Kim, Hetherington, & Reiss, 1999). Studies conducted in the 1930s examined the effects of family environmental factors on maladjustment in adolescence. In a study comparing a sample of predelinquent with delinquent adolescents from three schools in Chicago, researchers found that delinquency was associated with socioeconomic status, family structure, family type, size of the family, family communication dynamics, mother's employment outside the home, level of parental supervision, and parent–child relationship (White House Conference on child health and protection, 1934).

Over the decades, studies have replicated, extended, and refined the links between the family and behavior outcomes among children and adolescents (Chang, Blasey, Ketter, & Steiner, 2001; Costa, Weems, Pellerin, & Dalton, 2006; Marmorstein & Iacono, 2004; Taylor & Kliewer, 2006). Therefore, the empirical literature suggests that the family environment is an important predictor in adolescent behavior across different contexts and settings (De Ross, Marrinan, Schattner, & Gullone, 1999; Matherne & Thomas, 2001; Shiner & Marmorstein, 1998; Shek, 1997). Specifically, family environment is associated with adolescent psychological well-being during development (Shek, 1997). One area that has received attention in the empirical literature is the connection between psychological well-being as a primary factor in the development and prevalence of internalizing and externalizing behaviors among adolescents (Bradley & Corwyn, 2007; Deng & Roosa, 2007). As a result, there is a large body of empirical

literature associating family environment with externalizing and internalizing behaviors among adolescents (Kim, Heatherington, & Reiss, 1999; Loeber & Dishion, 1984; Patterson & Stouthamer-Loeber, 1984; Pike et al., 1996).

The purpose of this study is to explore the relationship between family environment and adolescents internalizing and externalizing behaviors in St. Lucia. Specifically, family environment is conceptualized in this study as the quality of the relationship, personal growth, and systems maintenance. Internalizing behaviors are defined as anxious/depressed, withdrawn, and somatic complaints and externalizing behaviors include rule breaking and aggression. There are at least three arguments that may be advanced in support of the current study.

First, although there is a considerable body of research in the general literature associating the family environment with adolescent externalizing and internalizing behaviors, the available research was conducted largely with samples from developed countries (Gorman-Smith, Tolan, Loeber, & Henry, 1998; Henderson, Dakof, Schwartz, & Liddle, 2006). The Caribbean region in general, and St. Lucia in particular, are not represented in the body of literature that focuses on family environment and internalizing and externalizing behaviors.

In addition, there are questions regarding the generalizability of these findings to the family milieu in the Caribbean in general and St. Lucia as an island in the region. Notwithstanding the generally accepted psychological processes (i.e. development of self esteem), behavioral problems (i.e. defiance), and challenges (pubertal changes) that are associated with adolescence development (Alsaker, 1995; Lewis & Volkmar, 1990; Seifert, & Hoffnung, 2000), there are reasons to expect that the cultural and historical

background of different contexts will influence the quality and nature of the adolescent experience in ways that may vary to that of developed countries (Lange & Rodman, 1994). St. Lucia and the rest of the Caribbean have distinctive cultural and familial habits and patterns, such as the nurturing role of the grandmother in the family that may be implicated in adolescent behavior (Lange & Rodman, 1994; Leo-Rhynie, 1994). The mating patterns and habits in the Caribbean region give rise to a considerable number of children who are born to young and unmarried parents in unstable relationships (Russell-Brown, Norville, & Griffith, 1997). Usually the matriarch would assume the parenting responsibilities and enjoy a very close relationship with the children in the family. The matriarch, like the extended family, serves as a protective mechanism for the developing child (Baptiste, Hardy, & Lewis, 1997). However, little or no attention has been given to empirically assessing the role that family dynamics may play in adolescent behavior among families on the island of St. Lucia. There is a need to address this paucity of knowledge on the relations of family environment to adjustment problems among adolescents in St. Lucia.

Second, the literature has consistently shown a relationship between the African American family and negative adjustment outcomes in adolescence (Bannon & McKay, 2007; Bynum & Kotchick, 2006; Deater-Deckard, Dodge, Bates, & Pettit, 1996; Taylor, Seaton, & Dominguez, 2008). There is a bourgeoning body of literature that indicates the connection between African American and Afro-Caribbean in terms of similarities in family milieu, such as, family forms, management patterns, and parenting behaviors (Bryant et al., 2008; Taylor, Chatters, & Jackson, 2007). The similarities alluded to in the literature are largely indexed on the adult population. Hence the importance for empirical

studies that explore the extent to which adolescents may vary in the context of their family environment and the resulting impact on internalizing and externalizing behaviors. This is especially pronounced when studying ethnic groups that have traditionally been consider as a monolithic in the empirical literature. Additionally, the samples that have been typically used in these studies are most based on adult populations. While appropriate insights could be gained from adults in our understanding of adolescents, it is clear that a more direct assessment of this group is desired. This gap in the literature could more directly be attended to by studies that are designed to compare the adolescent population, than from approximations and generalizations gained from adult samples of families in the United States. The similarities in family forms between the two ethnic groups may not necessarily provide satisfactory justification for believing that the experience of one group will be exactly that of the other. This is especially so since the studies noting the similarities between the two groups are based on the adult population within the United States. There is some merit to replicating similar studies in the Caribbean region, with a focus on the adolescent population.

The findings of such studies may help confirm or redefine the general claims of similarity between the two ethnic groups documented in the literature. Specifically, the findings of this study may provide important insights about adolescents in St. Lucia and may serve as a reference point for possible comparison with findings in the general literature. In particular, this study will seek to provide empirical information about the relations between the family environment and adolescent internalizing and externalizing behaviors in St. Lucia.

Third, the maladaptive problems of adolescents in the Caribbean region are both complex and enormous. There is, however, inadequate and inconclusive theory on the etiology of the maladaptive behaviors among adolescent population from that region (Crawford-Brown, 1997). Although the region shares some commonality in family patterns, the measure to which certain values are inculcated can alter or influence behavior among the population of interest (Oropesa, 1997). There is a likelihood that behavioral patterns may vary across and within people groups with similar family patterns and organizations.

Studies on the etiology of adolescent health risk behaviors in the wider Caribbean implicate some family dynamics as the antecedent of such outcomes (Halcon et al., 2003; Maharaj, Nunes, & Renwick, 2009). For example, Maharaj, Nunes, and Renwick (2009) in a meta-analysis consisting of 95 studies on health risk behaviors among adolescents in the Caribbean, noted that psychopathology was associated with family of origin, home environment, and parent-child relationships. They acknowledged that specific cultural norms and mores might account for some variance in the adolescent experience. However, the factors that give rise to risk taking behaviors are widespread within the Caribbean region. The observation that specific cultural realities might influence the adolescent experience raises questions about the generalizability of these findings. The previously mentioned study (Maharaj, Nunes, and Renwick, 2009) serves as a basis for reflection on how a specific nation with its unique culture and family patterns will compare to the region as a whole.

It must be noted that a significant number of the studies included in the aforementioned meta- analysis came from the larger and more developed island nations.

For example, this meta analysis included only one study (Perks & Jameson, 1999) from the island of St. Lucia. That study addressed the issue of behavioral problems and depressive symptomatology among children who witness domestic violence. The study utilized a small sample (n = 60) of children and adolescents and noted that this was one of the methodological problems (Perks, & Jameson, 1999). There are, however, other methodological challenges that merit attention. The study was comparative in nature; thus the virtual sample on which the findings are indexed was smaller (n = 30). The sample was divided into four groups; there were two groups who were exposed to violence, the first consisted of fifteen children 12 years and under, and the other had fifteen adolescents 13 years and older. The other two groups were the control groups which matched the others according to age, school, and grades. Although the sample was organized to facilitate a comparative analysis, there are obvious limitations associated with the size of the subgroups. The findings from this study provide some insight into the relations between the family and mental health outcomes among adolescents. However, the findings are based on a single study which highlights the need for additional studies with larger samples to allow for more appropriate within group analyses.

Another important consideration in the Perks and Jameson (1999) study is the method of identifying and selecting those exposed to violence. The four school principals, who were third party informants, provided information that guided the selection of participants. The investigators provided justification from the literature for utilizing third party informants to identify potential participants. Although some parents may have been reluctant to discuss their involvement in marital violence, others might have willfully participated. Their participation as primary informants would add a

measure of richness to the data. The reluctance argument is weakened by the fact that the sample is small. Again, a larger sample size would be helpful in future studies.

This present study addressed the sample size issue by involving a larger sample to assess a more global construct of the family milieu for possible correlations to a number of different adolescent adjustment problems. In addition, it utilized a different sample selection strategy. Sample selection was done through direct interaction with primary informants. Finally, this study extended the mental health emphasis of the aforementioned study by looking at how the family environment correlates with internalizing and externalizing behaviors among adolescents.

The current study holds special interest because there are indications that the family in the Caribbean region is gravitating away from the extended family support system (Carter, 1995; St. Bernard, 2003). This deviation from established familial patterns holds implications for the socialization of children. For example, the traditional extended family format usually headed by a matriarch served as an invaluable source of support for young mothers and their offspring (Dudley-Grant, 2001). The socialization and nurture of generations of children were accomplished under the direction and supervision of the established matriarch (Barrow, 1996; Clarke, 1957; Evans, 1989; Safa, 2005; Smith, 1962). The demise or changes in the quality of this support base would likely pose additional developmental challenges to adolescents. Considering the diversity in contemporary family structure, along with the indigenous family patterns that adolescents live in, an examination into the role of the family environment may provide insights into a possible relationship between the family environment and adolescent developmental challenges.

Problem Statement

Not unlike adolescents in other parts of the world, adolescents in St. Lucia continue to struggle with negotiating the transition from childhood to adulthood. Existing studies from the Caribbean confirm the propensity of adolescents to practice health risk behaviors during that transition (Halcon et al., 2003; Maharaj, Nunes, & Renwick, 2009). These behaviors largely result from efforts to navigate the developmental challenges with which they are often confronted.

Adolescents live in diverse home environments in St. Lucia. It is not known to what extent their endemic family situation contributes to or alleviates the stressors inherent in the transition from childhood to adulthood. Many questions about the role of the family in the incidence of internalizing and externalizing behaviors among adolescents in St. Lucia remain unanswered. There is a need to ascertain the role and contribution of the family to the prevalence of internalizing and externalizing behaviors within this geographical context.

Significance of the Research

There is a paucity of empirical information associating a family etiology to behavioral problems among adolescents in St. Lucia. The extant literature from the Caribbean region has a health risk behavior focus. This study sought to extend the literature by looking primarily at the family environment for possible correlation with developmental problems among adolescents on the Island. Several studies have confirmed the association between family dynamics and maladaptive behaviors among adolescents (Forman & Davies, 2003; Matherne & Thomas, 2001; VanderValk, Spruijt,

de Goede, Maas, & Meeus, 2005). These studies were largely conducted in developed countries. This study seeks to examine the extent to which these findings may apply to St. Lucia.

St. Lucia is an island nation with unique family structures and patterns. For example, adolescents may reside in varying family structures ranging from single parent family units to three generational households. In these settings children are generally fostered by relatives within these varying family configurations and patterns. In addition, family cohesion may be disrupted by parental romantic relationship transitions. The setting in which children are reared provide the opportunity for varied levels of supervision, ranging from limited to over supervision. Thus differences in family styles, functions, patterns, and behaviors may account for some of the explained variance when seeking to understand adolescent development in St. Lucia. There are several potential benefits that may be derived from this study. Specifically, the study may provide important baseline empirical information on family functioning and adolescents' behavior in St. Lucia. The results of this study may provide unique insights for mental health and developmental problems among adolescents. Family life educators may utilize the finding of the study to design curriculum and strategies for working with parents, families, and teenagers.

Hypotheses

The goal of this study was to explore the potential association between the family environment and externalizing and internalizing behaviors among adolescents in St. Lucia. It was anticipated that the study would demonstrate direct and significant

relationship between three defining aspects (relationship, personal growth, and systems maintenance) of the family environment and the aforementioned outcomes among adolescents. The following hypotheses will guide this study:

1a. Internalizing behaviors among adolescents in St. Lucia will be related to the quality of the family environment in which they live.

1b. Family relationships as operationally defined by the level of cohesion, emotional expressiveness, and level of conflict will be inversely related to internalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home.

1c. Personal growth as measured by independence, achievement orientation, intellectual-cultural orientation, active-recreational orientation, moral-religious emphasis will be inversely related to internalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home.

1d. Family system maintenance as measured by family organization and control will be inversely related to internalizing behaviors after adjusting for the child's age, gender, number of friends, and frequency of activities with friends outside the home.

2a. Externalizing behaviors among adolescents in St. Lucia will be related to the quality of the family environment in which they live.

2b. Family relationships as measured by the level of cohesion, emotional expressiveness, and level of conflict will be inversely related to externalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home.

2c. Personal growth as measured by independence, achievement orientation, intellectual-cultural orientation, active-recreational orientation, moral-religious emphasis will be inversely related to externalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home.

2d. Family system maintenance as measured by family organization and control will be inversely related to externalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home.

3. Family relationship will be most important in predicting variations in internalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home?

4. Family relationship will be most important in predicting variations in externalizing behaviors after adjusting for the child's age and gender, number of friends and frequency of activities with friends outside the home?

CHAPTER TWO

FAMILY SYSTEMS THEORY

This study examined the family environment and internalizing and externalizing behavior problems among adolescents. The nature of the interrelationship between parents and children in a dynamic system may be viewed through the lens of a family systems theoretical framework. This theoretical lens was chosen among others to conceptualize the complex phenomena affecting the psychosocial development of these adolescents. The lens of family systems theory places family relationships in a context and provides a framework of epistemology (Braziller, 1973; Smith, Hamon, Ingoldsby, & Miller, 2009). That is because the systems perspective allows for conceptualization of the family as a unit in which an individual is portrayed as a unique part and product of the unit (Burgess, 1926).

The family systems approach makes the family unit the focus of investigation and not the adolescents. This perspective of adolescents' life and development provides a wider context for understanding behaviors (Sameroff, 1983). The development of the family systems theory paradigm is founded on general systems theory.

General systems theory is a way of looking at the world. The immergence of systemic thinking goes back to the early twentieth century (Bossard, 1956). Ludwig von Bertalanffy (1968), the architect of general systems theory, presented the scientific community with a different perspective for doing science. von Bertalanaffy (1968) digressed from the predominant mechanistic or cause and effect approach of the day and introduced a holistic approach. For example, classical physics sought to resolve natural phenomena by looking at individual elementary units that are governed by natural

invisible laws (von Bertalanaffy, 1968). von Bertalanaffy (1968) preferred that biological organisms are multifaceted, systematized, categorized, and interrelated. As such, an approach that acknowledges and integrates the multifaceted nature of organisms may be preferred for a better understanding of dynamic relationships. This global or holistic approach offered a new framework for understanding probable contradictions posited by linear perspectives (Galvin, Bylund, & Brommel, 2004).

The approach found acceptance and applicability in a wide range of disciplines such as the natural sciences, community organization and planning, computer science, and the social sciences (Weinberg, 1975).

The basic assumptions that characterize the systems perspective are: 1) the elements of a system are interrelated, 2) a system is best understood as a whole, 3) all systems affect themselves through environmental feedback (White & Klein, 2002; Whitchurch & Constantine, 1993).

A system consists of various elements or parts that are interconnected. The interconnection is like a process that goes through the system, linking and uniting components to one another (Bavelas & Segal, 1982). This relation is more than a singular linear cause and effect alliance. There is circular causality that goes on. One action elicits a response, and that response generates another reaction (Skyttner, 2001; Whitchurch & Constantine, 1993).

One of the major assumptions of systems theory is wholeness. This concept proposes that a system must be considered in its entirety and cannot be understood by examining individual elements separately (White & Klein, 2002; Whitchurch & Constantine, 1993). That is because the wholeness element which underlines the system,

exists in distinction to individual independent elements (Klein & White, 1996; Skyttner, 2001). A system is much more than the sum of its parts (Becvar & Becvar, 1982; Roberts, 1994). The illustration provided by Infante, Rancer, and Womack (1993) will suffice to make the point. The making of a cake involves several ingredients: butter, flour, eggs, milk, sugar, baking soda, and other properties to add flavor. The cake which is the end product is more than the individual characteristic of any one ingredient.

Systems affect their environment and are affected by their environment. A system generates an output toward its environment and the environment reciprocates (Skyttner, 2005; White & Klein, 2002). The aforementioned basic assumptions are part of the general systemic thinking that was incorporated into family therapy and family sciences.

Family systems theory was born in the 1950s and is often associated with the work of Murray Bowen (Bowen, 1976). Bowen was one of the first influential theoreticians who posited that the behavior of one member of a family has a reciprocal effect on others (Bowen, 1978). He was among the first to develop a comprehensive theory of family functioning (Kerr & Bowen, 1988).

Systemic thinking influenced the work of early family therapists, such as, Bowen's multi- generational transmission of pathology, Minuchin's structural approach, the Milan group of systemic family therapy (Combrinck-Graham 1990; Goldenberg & Goldenberg 1991; Hoffman 1981), and Bateson and colleagues (Bateson, Jackson, Haley, & Weakland, 1956) who proffered that the family was a communication system. Bateson and colleagues (1956) argued that certain family dysfunctions such as double bind can result in one family member having symptoms of schizophrenia. Thus, the notion of an individual diagnoses with schizophrenia pointed to family system pathology

not individual pathology (Bowen, 1978; Broderick, 1993). This view of family systems placed emphasis on family processes (Kantor & Lehr, 1975). This systems type thinking in the realm of family therapy is commonly known as family process theory (Broderick, 1993).

However, the application of the systemic concepts to family science outside of therapy remained undeveloped for years, mainly because the family emphasis was buried within structural functionalism and did not get attention until the Second World War (Smith, Hamon, Ingoldsby, & Miller, 2009). There was a gradual evolution and acceptance of general systems theory in family sciences (Buckley, 1967).

Over time, researchers and family scientists proffered that the systems metaphor was more potent and holistic that the mere notions of family functions or family processes would allow (Klein & White, 1996). Consequently, during the 1970s, family scientists spearheaded research efforts to incorporate central concepts of general systems theory to the family (Broderick & Smith 1979). The paradigm shift was necessary for expanding the potential for understanding multiple influences on family relations and human development (Cox & Paley, 1997).

The systemic perspective provided an alternative framework for conceptualizing research and the interpretation of data. It allowed for research to become more complex and differentiated (Minuchin, 2002). This shift continued during the 1980s as systemic notions were used to conceptualize and differentiate a wide range of family issues in both family social sciences and therapy (McGoldrick & Carter, 1989; Minuchin, 2002; Nye & Berardo, 1981).

Eventually, family systems theory became an established conceptual and theoretical model for studies in family social sciences (Cox & Paley, 2003; Hughes & Gullone, 2008; Kreppner, 2002; Hill, 1972). The systemic approach to family life facilitates an understanding of the complexities of family dynamics, management, and organizations (Roberts, 1994; Straus, 1973). Family systems theory is an inclusive concept that views the family as a segment of a larger cultural reality. Bossard (1956) thinks that concept facilitates a view of the family as a way of life, with patterns of attitudes and set values that are unique to that unit.

This study utilized basic systemic concepts in an attempt to understand the family. The concepts that are fundamental and bear relevance for this study are hierarchy and subsystems, boundaries, feedback and control, equilibrium and homeostasis, and rules (Broderick, 1993).

Hierarchy and Subsystems

The family as a system operates at multiple levels which are arranged hierarchically. The various levels are called subsystems (Roberts, 1994). Each subsystem has appropriate authority, stipulated roles, and corresponding responsibilities (Klein & White, 1996).

Although there is a hierarchical arrangement of subsystems, the organization does not imply unidirectional management or functioning. The levels of the system exert an influence on each other (Bossard & Boll, 1956; Whitchurch, & Constantine, 1993). The higher level or executive position is occupied by parents. Parents manage the family by providing directions to the lower levels or subsystems which are subordinate positions

(Whitaker & Keith, 1981). The organization, interrelations and intrarelations of the subsystems are regulated by boundaries.

Boundaries

Boundaries are limitations imposed by the family to distinguish the rights and privileges of the subsystems and the family system (Spencer-Brown, 1972). These regulate the flow of information and interaction between subsystems and between a subsystem or the family and a foreign entity (Rosenblatt, 1994). Boundaries between the subsystems within the family unit allow for differentiation within the family system (Smith, Hamon, Ingoldsby, & Miller, 2009). Family boundaries can be classified as open and close. Open allows free flow of interaction both within the family milieu and between the family and the wider environment (Whitchurch & Constantine, 1993). Closed boundaries on the other hand, are rigid, limiting the flow of interaction and eliminating free exchanges between subsystems and between the family system and the outside environment (Broderick & smith, 1979).

The quality of the boundaries determines the effectiveness of the family functioning (Kanton & Lehr, 1975). Guided by the family rules, members have the liberty to interact within and across subsystems. Effective functioning is facilitated by flexible or open boundaries. Violations of family boundaries elicit a corrective or adaptive response from the system (Broderick & smith, 1979). That response is known as feedback (Buckley, 1967).

Feedback and Control

Feedback is the name given to the reaction from other members of the family to a behavior from one member (Smith, Hamon, Ingoldsby, & Miller, 2009). The behavior may be in violation of a family rule or in conflict with established communication or behavior patterns (Roberts, 1994). The initial behavior may be positive or negative and is likely to receive a corresponding feedback. Positive feedback serves to stimulate and encourage change or deviation from the established systemic patterns of behaviors (Whitchurch & Constantine, 1993). Negative feedback is behavior that is oriented to restore the norm (Becvar & Becvar, 1982). The restoration or maintenance of the norm is called homeostasis.

Equilibrium and Homeostasis

Equilibrium is a concept that depicts the system's attempt to balance change and stability (Ackerman, 1984; Smith, Hamon, Ingoldsby, & Miller, 2009). The process through which the system regulates itself in the face of demands to change is homeostasis (Bavelas & Segal, 1982). Homeostasis is the maintenance of stability, a constant condition, or normalcy within a system. This concept describes the self-regulating behaviors of the system (Roberts, 1994). These behaviors are guided by pre-established rules designed to enhance the function of the system. When confronted by any internal and external information that fosters change the system is forced to respond (Bertalanffy, 1968). That response is undertaken through a systemic feedback mechanism which allows it to evaluate information and generate an appropriate response (Robert, 1994). The aim of the response is course correction or to restore equilibrium, either through

maintenance of the status quo or by normalizing the new change (Whitchurch & Constantine, 1993). The maintenance of the norm, like the adjustment to facilitate change, is governed by rules and values.

Family Rules

A family unit is organized and governed by a core set of rules (Becvar & Becvar, 1982). These normative laws define, regulate, control, and legislate the behavior, interaction, and relationships of family members (Robert, 1994). The rules result from the redundancy principle, that is, the repetitive use of a selected set of norms which eventually define the family (Smith, Hamon, Ingoldsby, & Miller, 2009). This system of rules may in large part consist of unspoken laws that guide the repetitive patterns of operation within the family (Becvar & Becvar, 1982). They encapsulate the value system of the family and determine the quality of family interaction and functioning. These rules undergird the present and future expectations and demands associated with generally established and particular familial patterns of interactions (Broderick, 1993). The rules operate at several levels commensurate with the familial patterns of interaction and organization (Broderick & Smith, 1979).

Application of Theory to Present Study

For the purpose of this study, a model of the family systems theoretical framework was assumed which uses a number of the concepts. Some of the concepts and assumptions of family systems theoretical framework are used or implied in this present research. They will be integrated in a way that tests the suitability of this theoretical

framework in exploring the interrelationships associated with psychosocial development of adolescents in St. Lucia. This present study was not design to offer a complete testing of the model of family systems theory, it rather lays claim to a modest exploration of the veracity of the model in a Caribbean context. The study utilized two of the basic assumptions of family systems theory: the elements of a system are interrelated and a system is best understood as a whole. The family as a unit consists of members who relate to each other and are connected through various interacting patterns. These interacting patterns allow members of the family to influence each other. That interrelationship is an important element of the family dynamics that is deemed to be significant as the study investigates the relationship between the family environment and internalizing and externalizing behavior problems among adolescents. The interrelation and organization of the family unifies member and renders the family a unit. To that extent, this study focused on the family as a whole.

It is important to note that the developmental challenges such as internalizing and externalizing behavior problems of adolescents do not occur in a vacuum. Adolescents are connected to other family members and thus cannot be considered independently as aggregates. That interconnection between the members of the family is one of the important elements that make the family unit what it is. The members, by virtue of their membership in the family and the position they occupy, contribute to making the unit more than the sum of the members. This realization is important as it helps one understand the value and need to involve the family unit in consideration of the internalizing and externalizing problems among adolescents in St. Lucia.

The family is a unit that is organized with hierarchy and subsystems. These elements facilitate family operations through interaction and limits established by boundaries (Roberts, 1994). The subsystems such as siblings and parent subsystem are mechanism that foster and nurture relationships both within the subsystem and the wider family (Broderick, 1993).

The feedback mechanism allows the family to become aware of changes that occur within the family environment. Through the feedback process the family system has the opportunity to take control of the situation and reestablish the status quo or make appropriate adjustment to integrate the change (Broderick, 1993; Smith, Hamon, Ingoldsby, & Miller, 2009).

Since the action of one member has a direct influence on the action of other members of the family, the interaction between family members may be affected depending on whether the feedback is positive or negative (Becvar & Becvar, 1982). This element made two contributions to the study. It allowed for understanding of family as interacting persons helped explain the responses that unfavorable feedback elicits from the family. This concept of family systems theory helped in understanding how the family unit behaves when rules are violated. It is likely that during the adolescent transition the rules of the family will be challenged by behaviors (Feinauer, Larson, & Harper, 2010).

As the adolescent demands more autonomy, parents may adapt control to the needs. Mismatches between the adolescent's demands for freedom of action and parents' hold on control may result in friction. This development will exert a certain pressure on the communication of the family. The family will stipulate rules to govern family

relations and conduct. These rules may be exposed to challenges and changes during the transitions from childhood to adulthood.

On the other hand, strict enforcement of and adherence to rules that fail to take into account the need for adjustment to match the developmental needs of the individual, are likely to result in a stressful family environment. Family environments and situations that are tinted by stress are likely to produce unprecedented outcomes (DeCarlo Santiago, & Wadsworth, 2009; Kim, Conger, Elder Jr., & Lorenz, 2003; Timmermans, Lier, & Koot, 2010). In addition, given that parent-adolescent conflicts are common during the transition, rules may be one of the primary influential variables in the conflict. Thus, the management or mismanagement of rules may be a cause of psychological symptoms among adolescents (Feinauer, Larson, & Harper, 2010).

Summary and Conclusion

There are forces in a family system that can have tremendous impact on the environment. Some of the evidences of these dynamic forces may be maladjustment and bonadaptation. In the literature, as reviewed for this present study it seems clear that the nature of the family environment does and is likely to have impact on internalizing and externalizing problems in adolescents in this Caribbean context.

To be clear, no one is an island unto himself, adolescents through their lives, interactions, and behaviors are contributing to the dynamic environment. Perhaps, the siblings and other family members are contributing to the environment as well. No less, the parents are doing the same; however, none of these are acting alone. The adolescents is acting and reacting to the parent and the other siblings and the parent is acting and

reacting to the children. That continuous interdependency and interaction become a steady state that begins to define roles, rules, and the nature of relationships. The boundaries as they exist in that environment help to shape the level of influence, each person has on the system and receives from the system.

The family systems framework guided this research exercise to pay attention to family relationships for their influence on individual adjustments. The systems framework allowed for an understanding of particular behaviors in relations to the activities and relationship of other family members (Cox & Paley, 1997). One implication of the systems approach to this study was that family level constructs provide valuable information for understanding the functioning of adolescents. This is particularly so since adolescence is a transition that has an evolutionary trajectory, and would constantly require systemic adaptations (Minuchin, 2002). The core concepts of the theory, such as rules, were useful in understanding how family level constructs contribute to internalizing and externalizing behaviors.

This study proposed that internalizing and externalizing behavior problems among adolescents in St. Lucia will be related to the quality of the family environment in which they live. This is consistent with the concepts of the family systems theoretical framework that interrelationship between family members in an actual sense shapes the experience of the members. As a result, if the family environment is healthy it will facilitate wholesome adjustments. A healthy family environment would imply a flexibility that accommodates change to match the developmental needs of adolescents. On the other hand, the family environment that is inflexible and strives to maintain the status quo at the expense of facilitating change that is developmentally appropriate, will

most likely engender maladaptive behaviors. While the natural tendency of the family environment would be to foster normalcy, the maturation process of adolescents require that the family carefully assesses their developmental needs and respond in appropriate ways.

Family relationship is an important element in adolescents' development. There are certain factors that ultimately would influence the quality of that relationship. For adolescents these factors may include cohesion, emotional expressiveness within the family, and family conflict. The closeness and harmony that exist within the family unit communicates stability, acceptance, and importance to the adolescent. The absence of these properties signal indifference, instability and possibility rejection and are likely to have a corresponding negative impact on adolescents' adjustment.

In this present study, family relationship may prove to be the most influential factor on adolescent adjustment. A strong family relationship may not only have a positive influence on adjustment, it will supplement weaker areas of the family environment. For example, if the hierarchy of the family is not very supportive of the adolescents' quest for autonomy, but the family has a wholesome relationship, that relationship may still have a positive influence on adolescents' adjustments.

The quality of the support that the family unit provides will be proportionately related to successful adolescents' autonomy seeking behaviors and achievement orientation. On the other hand, weak and inadequate support may engender reactive behaviors which are symptomatic of maladaptation. The failure of the parent subsystem to relinquish control that is commensurate to appropriate self governance by the adolescents may occasion lopsided developmental growth. The family hierarchy that is

not threatened by the adolescents' drive to acquire autonomy will seek to balance the adolescents' quest with appropriate levels of control. The family unit that is effective, organized, and where control is judiciously administered may limit the incidences of maladjustment.

The management of the subsystems within the family unit will enable the family to maintain a stable and productive family environment. However, an over emphasis on retaining the established family management practices, while ignoring or neglecting feedback which calls for adaptation, can prove detrimental to adolescent adjustment. Efforts to maintain the management system of the family, the status quo, without due consideration of the relevance of adjustments and adaptations for adolescent development may prove detrimental.

CHAPTER THREE

LITERATURE REVIEW

The family unit is the primary agent and context for the socialization and development of the child (Elkin, 1963). It promotes and directs the development of the child by integrating various functions such as nurturing and parenting (Cowan, Powell, & Cowan, 1998). The unit is the basic social system through which the child learns social roles, values, and mores (Holmes & Morrison, 1979). It is the framework that directs and supervises personality development, influences the integration of individuality, and fosters the balancing of individuality with relational and communal abilities (Garrison, Kingston, & Bernard, 1967). The family models and transmits to the child the essential instrumental methods and approaches for effective functioning within the unit and the wider society (Kreppner, Paulsen, & Schuetze, 1982; Lidz, 1970). However, the role of the family requires certain adjustment to facilitate growth when children become adolescents. This is especially important given that adolescence is a period in the life cycle during which people move from childhood to adulthood (Newman & Newman, 1997). This important period of transition in the development trajectory is characterized by significant physiological, psychological, and social changes (Petersen & Leffert, 1995).

Ideally, the changes during adolescence would foster maturity and increase the individual's capability to function. Among the changes identified, psychosocial adjustment is one of the primary challenges that can affect functioning outcomes during adolescence. Changes in that sphere entail conceptions of self which include characteristics, beliefs, and emotions (Crockett & Petersen, 1993); identity formation

(Call & Mortimer, 2001); autonomy: self-reliance, self-control, the capacity for independent decision making, and interpersonal relationships (Savin-Williams & Berndt, 1990).

The adjustment period is known for the onset of developmental problems (McGee, Feehan, & William, 1995). Generally, the youth experiences tension and anxiety during this period of transition. However, an accumulation of stressors from various spheres of life increase the probability of maladaptation (Call & Mortimer, 2001).

The progress achieved during this developmental phase in the life cycle is influenced by experiences and opportunities which occur primarily within the family milieu (Ianni, 1989). The endemic family context can exert either negative or positive influence on the wellbeing of its members (Lansford et al., 2004). Historically, developmental problems in children and adolescents have been associated with negative familial influences (Gove & Cruchfield, 1982; Nye, 1958). The family environment in which adolescence is being negotiated may have a direct or indirect influence on either positive or negative outcomes (Dekovic, Janssens, & Van As, 2003; Kim, Heatherington, & Reiss, 1999; Lansford et al., 2004).

Research efforts have been directed at delineating variables associated with the direct and indirect influence of the family environment and their respective outcomes (Forman & Davies, 2003; VanderValk et al., 2005). Within this context the research literature has considered several factors for their correlational and causal links to externalizing and internalizing behaviors among adolescents (Gorman-Smith, Tolan, Loeber, & Henry, 1998; Henderson, Dakof, Schwartz, & Liddle, 2006). The literature indicates that peer relations constitute a risk factor for internalizing and externalizing

behaviors. The development of friendships and association with peers are natural aspect of child development (Newcomb, Bukowski, & Bagwell, 1999). However, the types of friendships and relationships become even more important during the adolescent's quest for usefulness, intimacy, social support, and personal identity (Howes, 1996). This is particularly true of relations and activities with deviant peers. There is an established relationship in the literature between associations with deviant peers and externalizing behavior problems among adolescents (Moss, Lynch, & Hardie, (2003). In addition to peer relations, there are other contributing factors to adjustment problems among adolescents.

The family has been identified as one of the causal links to externalizing and internalizing behavioral outcomes in adolescents (Florsheim, Tolan, & Gorman-Smith, 1996; Hagell & Newburn, 1996). What follows is a brief overview of the family environmental factors implicated in externalizing and internalizing problems, and an overview of externalizing, and internalizing behaviors.

Family and Adolescents Maladjustment

The empirical literature provides information that links social contextual factors with the etiology of behavioral and mental health problems in adolescents. The family is one of the main contextual factors that are associated with the prevalence of externalizing and internalizing behaviors among adolescents (Matherne & Thomas, 2001; Mc Cord, 1996). Familial characteristics such as the family environment correlate with the development of problems and prevalence of externalizing problems among adolescents

(Bradley & Corwyn, 2007; Deng & Roosa, 2007; Florsheim, Tolan, & Gorman-Smith, 1996).

Researchers and theorists have associated various aspects of the family environment with adolescent maladjustment (Kim, Heatherington, & Reiss, 1999; Loeber & Dishion, 1984; Patterson & Stouthamer-Loeber, 1984; Pike et al., 1996). For example, communication styles and patterns within the family environment have the potential to yield sensory and thought disturbances in children (Laing & Esterson, 1971). Various aspects of family functioning, such as parenting habits which include monitoring and harsh punishment, have been linked to disturbances in teenagers and predispose them to problem behaviors (Dekovic, Janssens, & Van As, 2003; Roelofs et al., 2006; Petit, Bates, Dodge, & Meece, 1999).

The problem behaviors that contribute to incarceration of female juvenile offenders have been linked to traumatic experiences and victimization within the family (Roe-Sepowitz, 2007). Communication as defined by family arguments and interpersonal disputes within the family is one of the leading factors in the typology of male juvenile homicide offenders (Cornell, Benedek, & Benedek, 1987).

Family functioning is another aspect of the family dynamics that are implicated in the etiology and development of maladaptive behaviors. It is conceptualized in terms of specific aspects of family life, such as parental supervision (Petit, Bates, Dodge, & Meece, 1999), parental control (Loeber, & Stouthament-Loeber, 1998), family management style (Swadi, 1999), parental support, physical discipline (Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004), and promotion of self-government (Gray & Steinberg, 1999). Specific parenting behaviors such as behavioral control and

psychological control are said to be influential in producing internalizing and externalizing behaviors in adolescents (Galambos, Baker, & Almeida, 2003).

In addition, distinctive family relationship factors, such as emotional warmth, cohesion, family roles and responsibilities, and the absence of appropriate boundaries have also been linked to externalizing problems (Farrington, 1994; Henggeler, Melton, & Smith, 1992). The aforementioned familial factors which are characteristic of families in the developed world (i.e. United States) support the argument that contextual factors contribute to adolescent maladjustment. Similarly, the family environment in developing countries such as St. Lucia may be associated with adolescent maladjustment.

Family in the Caribbean and St. Lucia

The Caribbean region consists of a heterogeneous group of islands which extends from the south coast of Florida in the USA to the northern coast of Venezuela in South America. The English-speaking Caribbean islands share similar political, social, educational, and cultural systems as a result of having a common British colonial heritage. Although the region is distinguished by a rich racial and ethnic diversity (Oropesa, 1997; Sharpe, 1997), it shares some cultural heritage and similarities in family patterns, systems, and organizations (Otterbein, 1965). The region is noted for being a complex social system (Greenfield, 1973), and having distinctive family features such as mating system, family structure, and family roles and organization with a predominant matrifocal emphasis (Gopaul-McNicol, 1993).

In the Caribbean, the family plays a significant role in the social adaptation and psychological well-being of the child (Blum et al., 2003). The family system is

characterized by an extended family and kinship which extends beyond consanguous relations (Smith, 1957). The traditional pattern is for several generations to form a household under the guidance of an elderly female with or without male household heads (Barrow, 2008; Clarke, 1970). Evans (1989) affirmed that childhood socialization almost entirely rested with grandparents. Parenting is largely relegated to grandmothers, who develop an affectionate indulgent relationship with their grandchildren (Barrow, 1996).

There is, however, some difference between the emphasis of current family forms and the traditional kinship centered approach. Ongoing acculturation and adaptations informed and attuned by the process of globalization through tourism and the influence of the media, promote practices and values that are alienating and individualistic (St. Bernard, 2003). Individualism represents an alteration to the cultural and historical functions and roles which promote inclusiveness, family connections, and support. The contemporary family in its endeavors to thrive with the limited availability of primary caregivers excludes the extended family subsystem from the socialization process of the developing child. Such limitations can potentially endanger the social and psychological adaptation and of the child (Carter, 1995; Dudley-Grant, 2001).

St. Lucia is one of the island nations that constitute the Anglophone Caribbean. The composition of the population is approximately 90 percent African or African-mixed descent. The remaining 10 percent consists of a racially mixed distribution with indo-Caribbean or Indian groups; a small ethnic European minority who are descendents of French, British, and Irish colonists; and small numbers of Greeks, Lebanese, Syrians, Italians, Chinese, Portuguese, and North Americans. Most St. Lucians speak English and *Kwéyo`l* or *Patwa,* the French-derived creole language which might be representative of

the nation's rich cultural heritage. The composition of family or household shows some variability and might include nuclear family with extensions of kin groupings and extended family.

The family milieu has been implicated for health risk behaviors, among which are some mental health outcomes in children and adolescents (Perks & Jameson, 1999). These findings indicate that adolescents in St. Lucia are exposed to family dynamics that are associated with internalizing and externalizing behaviors.

There is, however, a dearth in the literature associating family etiology to behavioral problems among adolescents in St. Lucia. Available literature from the Caribbean is dated and limited. In addition, the primary objective of these studies was not to assess the correlational and causal relation of the family environment to the well-being of children. Most of the literature is related to health risky behaviors among the adolescent population (Halcon et al., 2003; Maharaj, Nunes, & Renwick, 2009; Ohene et al., 2005).

Studies which associate certain aspects of the family dynamic to risk taking and behavioral problems among juveniles identify dysfunction in the family unit, physical discipline, unstable family structure (Sharpe, 1997), abusive family environment (Halcon et al., 2003), parental discord; conflict; hostility; domestic violence in the home (Perks & Jameson, 1999); psychological, physical, and sexual abuse in the home, household poverty (Cunningham et al., 2008); parental separation and divorce and the absence of one parent (Hickling, 1993); and drug and alcohol abuse among family members (Maharajh, Ali, & Konings, 2006).

The factors that have been implicated for placing adolescents at risk within the Caribbean region may not be different to those from developed countries. The general literature provides evidence that externalizing behaviors are common among the adolescent population and pose serious developmental risk (Kim, Heatherington, & Reiss, 1999; Loukas & Prelow, 2004; Matherne & Thomas, 2001).

Family and Externalizing Behaviors

Externalizing problems among adolescents is acknowledged as a serious mental health issue. Externalizing behavior problems is one of two primary forms of child and adolescent maladaptive behaviors. It is a distinguished independent construct in adolescent psychopathology (Achenbach, 1978). Externalizing problems may be more prevalent among adolescents who are predisposed by psychosocial risk, and males may be more prone to externalize than females (Maschi, Morgan, Bradley, & Hatcher, 2008; Young et al., 2010). The evidence also seems to indicate that there is a notable increase in levels of externalizing behaviors during adolescents (Aguilar et. al, 2000; Moffitt, caspi, Harrington, & Milne, 2002). Some of the deficits in the family that are noted risk factors for externalizing problems are: poverty, maternal depression, family conflict, and harsh parenting (Aguilar, Sroufe, Egeland, & Carlson, 2000; Denham et al., 2000).

Numerous studies have associated family interaction patterns with the presence of externalizing behaviors in adolescents (Formoso, Gonzales, & Aiken, 2000; Gardner, 1992; Pettit & Dodge, 1993). One of the primary contexts of interaction is the parent-child dyad. The literature establishes a relationship between parenting and disruptive behaviors. Several aspects of parenting and childrearing practices, such as poor parenting

(Frick et al., 1992), level of parental involvement, conflict management approaches between parent and child, parent monitoring, harsh discipline, and lack of consistency in discipline have been correlated with disruptive behaviors among children and adolescent (Frick, 1994; Wasserman et al., 1996).

In addition, some parental dynamics, such as harsh punitive discipline, are correlated with hyperactivity, aggression, oppositional and internalizing behaviors among adolescents (Stormshak et al., 2000). Parental negativity and disparity in treatment toward siblings contribute to externalizing behaviors (Pike et al., 1996). The link between the absence or low parental warmth to depression and oppositional behaviors is well established (Eddy, Leve, & Fagot, 2001; Gray & Steinberg, 1999). Authoritative parenting that neglects to demonstrate warmth may be perceived as rejection and could possibly result in anxiety, depression, and other forms of internalizing behaviors (Gray & Steinberg, 1999).

The research literature associates the externalizing behavior construct with a group of behavior problems which children and adolescents manifest within their external environment. The behaviors represent the negative response of adolescents to certain experiences and conditions within their social context (Campbell, Shaw, & Gilliom, 2000; Eisenberg et al., 2001). The term externalizing behavior is used to distinguish less severe disruptive and destructive behaviors (Shaw & Winslow, 1997). The classification includes argumentation and nonconformity with adult directives, hostile behaviors toward others, impulsivity, and hyperactivity (McMahon, 1994). These are generally thought to be the precursor to more serious behaviors.

Hinshaw (1987) conceptualized externalizing behaviors as those manifested in the form of aggression, delinquency, and hyperactivity. The literature expands the category to include negative, hostile, and defiant behaviors which characterize relations with adults, particularly parents and teachers (Bradley & Corwyn, 2007). The term externalizing is used synonymously with conduct problems and under-controlled behavior and includes variables like acting out and aggressive behaviors (Achenbach & Edelbrock, 1978; Dreger, 1982).

The externalizing behavior category can be divided into two subtypes that are conceptually distinguished as rule breaking behaviors and aggressive behavior. The literature has established the co-occurrence of rule breaking and aggressive behavior (Achenbach, 1991; Hopwood et al., 2009). There is consistency in the factor analytic literature which classifies rule breaking as a covert nonaggressive and delinquent factor, and defines aggressive behavior in terms of an overt and aggressive oppositional factor (Burt & Larson, 2007; Frick et al., 1993). The subtypes follow different developmental trajectories and severity of symptoms. The aggressive behavior syndrome has a childhood onset, and tends to be transitory. It gradually decreases after the early onset, then increases again briefly during mid-adolescence and is resolved by adulthood. Rule breaking behavior, on the other hand, appears to increase with age (Eley, Lichtenstein, & Moffitt, 2003).

Rule Breaking Behavior

Rule breaking behavior is identified as a subset of externalizing behaviors and is distinguished from aggressive behavior (Bartels, 2003). The rule breaking behavior

category includes behaviors that are in violation of legal and social norms. That cluster involves such acts as stealing, lying, cheating, destroying of property, talking back, hitting, fighting, fire setting, vandalism, running away from home, and disobeying adults (Quay, 1986). The dimensions of the clusters are not always consistent in the literature. Another classification restricts the rule-breaking behavior construct to swearing, truancy, drug use, lying, and lacking guilt (Achenbach, 1991). Rule breaking nonaggressive behaviors are strongly influenced by the environment and are related to impulsivity and disinhibition (Cohen & Strayer, 1996).

Some theorists have presented varying conceptualizations of rule breaking behaviors that may be accounted for by differences in personality (Burt & Donnellan, 2008). Notwithstanding the conceptual distinctions, however, rule breaking remains a reactive response to dynamics within the familial environment. In this context rule breaking behaviors are conceived as natural and developmentally appropriate behaviors during adolescence (Moffitt, 1993).

Aggressive Behavior

Aggressive behavior is another component of externalizing behavior that is characterized by hostile physical or verbal behaviors which cause injury or threaten to hurt other persons or objects, adults, and animals (Choynowski, 1995; Frick et al., 1993, Loeber & Schmaling, 1985). There are differential classifications and delineations in the literature for aggression (Ramirez & Andreu, 2006). The term refers to a cluster that can be divided into two subgroups defined as appropriate and self protective and destructive (Ferris & Grisso, 1996). Another model distinguishes instrumental aggression from

hostile aggression (Atkms & Stoff, 1993). Instrumental aggression is a purposeful goal orientated behavior organized to accomplish a desired end (Hartup, 1974; Hinde, 1970). The classification hostile aggression is marked by behavior that is emotionally charged and performed either willfully or in response to stimuli. The behavior is not performed with any predetermined intent (Dodge, 1991). Other categorizations are proactive or offensive, reactive or defensive aggression (Crick & Dodge, 1996; Larson, 2008; Phillip & Loclman, 2003), impulsive, and premeditated (Barratt & Slaughter, 1998). The various classifications of aggression are attempts to accurately capture and conceptualize the phenomenon.

Behaviorists who study adolescents note that they produce aggression without cause, provocation, or reason. Vitaro, Brendgen, and Barker (2006) observe that aggressive behavior identified as reactive or proactive function differently. The reactive type is a primary and predominant form of behavior, while the proactive style is an attained form of behavior motivated by secondary reinforcers. Some theorists emphasize the instrumental values, benefits, and gains, derived from the behavior while others include a frustration dimension (Bandura, 1973).

Both classifications of aggressive behaviors find expression among adolescents. The literature identifies adolescent maladaptive externalizing behaviors such as illegal acts and alcohol use which correlate with proactive aggression (Farrington, 1994; Olweus, 1992). Externalizing behaviors, however classified, may be understood as attempts by the adolescent to manage stressors within the family milieu. Internalizing behaviors, like externalizing, are behavioral outcomes that depict the developmental instability of the adolescent.

Family and Internalizing Behavior

Internalizing behaviors constitute another cluster of behavioral patterns that mark the response of teenagers to their environment. The term refers to conditions whose primary characteristic is disordered mood or emotion. These forms of behavior are primarily internalized psychological reactions to inherent stressors in the milieu. Children develop or display behaviors such as loneliness, social withdrawal, anxiety, inhibition, somatic complaints, and depression in response to stimuli from their environment (Kovacs, 1997; Kovacs & Devlin, 1998).

Eisenberg et al. (2001), in an attempt to distinguish emotionality from internalizing, developed two definitions to include social withdrawal, anxiety, depression, and psychosomatic complains. The study found that children with internalizing behaviors were susceptible to sadness, low attention regulation, and low impulsivity. This cluster of behavior is also distinguished by other terms such as neurotic and over-controlled (Campbell et al., 2000).

The literature also emphasizes the effects of parents and families on internalizing symptoms in adolescents (Hughes & Gullone, 2008). Studies show that punitive discipline, maternal depression, and family conflicts related to marital adjustment were significantly related to internalizing behavior among adolescent boys (Leve, Kim, & Pears, 2005; Stormshak et al., 2000). Poor family functioning exerts an influence on varying levels of disturbance in moods and emotions among teenagers. Such mood disturbances can be manifested as anxiety and depression (Liber, List, Van Loey, & Kef, 2006).

Anxious /Depress

Anxiety and depression are among the most prevalent symptoms in adolescents with internalizing behaviors **(**Jalenques & Coudert, 1993). Anxiety is marked by fear, worry, depression and apprehension. Sadness is the essential feature in depression **(**Brady & Kendall, 1992).

Blumberg and Izard (1985) found that the critical features of depression include guilt, low self-esteem, and diurnal variations of mood. Depressed adolescents are usually experiencing interpersonal difficulties which include disruptive peer relations, personal - isolation, and are preoccupied with negative cognitions (Kaslow, Rehm, & Siegel, 1984). Depression is one of the strongest predictor of suicide attempts among adolescent (Kovacs, 1997).

Family Relationships

Family relationship is one of the significant properties of the family environment that is important to adolescent development and adjustment (Anderson, Lindner & Bennion, 1992; Gjerde & Shimizu, 1995; Sroufe, 1991; Steinberg, 2001; Whitten & Weaver, 2010). Family relationship consists of various aspects or qualities that define and characterize the nature of family functioning. Some of the basic defining qualities are communication, cohesion, organizational structure, and beliefs about the family (Henggeler, Melton & Smith, 1992).

Some studies have associated these aspects of family relationship with adolescent externalizing behaviors (Henderson, Dakof, Schwartz, & Liddle, 2006; Patterson & Stouthamer-Loeber, 1984; Richmond & Stocker, 2006; Smith, Prinz, Dumas & Laughlin,

2001). Negative adolescent outcomes are associated with relationships that are defined by low levels of emotional warmth, lack of cohesion, loose organizational structure, poor communication, and beliefs about the family (Tolan, Gorman-Smith et al., 1997). For example, research has established associations between conflictual and aversive family relationships and the development of externalizing behaviors in children and adolescents (Branje, VanDoorn, Van der Valk, & Meeus, 2008; Loeber & Stouthamer-Loeber, 1998; Salafia, Gondoli, & Gundy, 2008). A family environment characterized by a healthy relationship neutralizes the negative influences that threaten adolescent well-being (Oliva, Jimenez, & Parra, 2009). Healthy relationships may be an indication of the quality of the cohesion in the family.

Cohesion

Family cohesion is defined as the emotional attachment or connection, openness, and flexibility that exist between family members (Olson, 2000; Richmond & Stocker, 2006). The cohesion dimension can be subdivided into four levels: disengaged, separated, connected, and enmeshed (Matherine & Thomas, 2001). The disengaged category consists of families that are characterized by high levels of independence and lack loyalty and closeness. On the opposite end of the scale, the enmeshed family is characterized by high levels of loyalty, and dependency (Matherine & Thomas, 2001).

Cohesion plays a significant role in the creation of synergism within the family and acts as a protective device for family members. Marsiglia, Parsal, and Kulis (2009) identified cohesion as a significant familial characteristic which protects adolescents against rule-breaking behaviors. Adolescents who experience close connections within the family

milieu are more likely to conform to conventional customs and patterns of behavior. Family cohesion serves as a network providing alliances for its members with the potential to buffer or exacerbate externalizing problems, such as aggressive behavior, conduct problems, and rule-breaking, and internalizing behaviors such as loneliness and anxiety (Juang & Alvarez, 2010; Marsiglia, Parsai, & Kulis, 2009). In addition, the cohesive environment provides the adolescent with the possibility of utilizing members for support and to voice personal concerns, problems, and needs (Gilbert, Christensen, & Margolin, 1984).

Several studies have linked low levels of cohesion, such as the absence of openness, communication, and flexibility, to delinquent behaviors (Cuffe, McKeown, Addy, & Garrison, 2005; Richmond & Stocker, 2006). Others have noted associations between deficiencies in the family cohesion with depression and suicidal risk (Bettes & Walker, 1986; Coles, 1989).

The significance of cohesion within a family environment must be seen within the context of the nature of the adolescence period. This period is noted for adjustments in adolescent relationships (Shulman et al., 1995). Family cohesion in particular is pivotal since adolescents need the security, warmth, and support of the family to accomplish various developmental tasks, such as individuation and the definition of self in distinction from and relation to others (Campbell, Adams, & Dobson, 1985; Grotevant & Cooper, 1985).

It is for this reason studies have suggested that a cohesive family environment is significant to adolescents, particularly those who are navigating the transiting through mid to late adolescence (Grotevant, 1998). During this developmental stage adolescents

may be more vulnerable to maladaptation. Cohesion is one family variable that has been associated with depression in the adolescence (Petersen et al., 1991). Some studies have employed observational techniques in an attempt to tease out the influence of family cohesion to maladjustment among adolescents (Richmond & Stocker, 2006).

The discussion in the literature also addresses the differential impact of family cohesion on adolescent internalizing behaviors. Asarnow, Carson, and Guthrie (1987) utilized a clinical sample and found an insignificant inverse relationship between family cohesion and depression. The findings of were confirmed by Cumsille and Epstein (1994) research using a clinical sample consisting of 93 families. Their research found that family cohesion was inversely related to depression. Adolescents' levels of satisfaction with the cohesiveness in the family were the strongest predictor of depression.

This association between family cohesion and depression is consistent with findings from nonclinical samples. McKeown et al. (1997) found that adolescent satisfaction with family functioning played a significant role in their stability and adaptability. If adolescents were satisfied with their family functioning, the quality of family cohesion did not significantly contribute to depression. McKeown et al. (1997) explained that exception by making a distinction between the mental assessment that the adolescent makes of the environment and the perceived nature of the environment itself. McKeown et al. (1997) proffered that the critical issue is not the degree of cohesion within the environment. It is the adolescents' level of satisfaction that the existing cohesion within the family meets their expectations of the family. The findings contribute an additional dimension to the role of cohesion in adolescent adjustment. They contribute

to an understanding of cohesion as an indicator of family relationship, and the role of cohesion in depression among adolescents.

The aforementioned discussion is an indication that child development literature acknowledges the impact of family cohesion on adolescents functioning and psychosocial adjustment. It is evident that families distinguished by deficits in emotional connections, warmth, and openness increase the possibility that adolescents will experience unhealthy social interaction, depression, and aggressive behaviors (Leary & Katz, 2004; McHale & Rasmussen, 1998). The quality of cohesion in the family may be directly related to the level of expressiveness that characterizes family relations.

Expressiveness

The consideration of emotional expressivity as a component of the family relationship is salient. The emotional climate of a family has unexpressed significance for the well-being of children (Campos, Frankel, & Camras, 2004). The emotional expressiveness within a family milieu can be a contributing factor to and a consequence of the family relationship (Cassidy, Parke, Butkovsky, & Braungart, 1992). Adolescents are vulnerable to the emotional climate of the family, to the extent that their emotional expressions are tied to the emotional socialization in the family (Saarni, 1989; Stocker, Richmond & Rhoades, 2007).

The literature is replete with discussions of negative attitudes in childhood and their implication for adult functioning (Bierenbaum, Nichols, & Schwartz, 1976; Bronstein, 1984; Halberstadt, 1984). Some emphasis has been placed on the role and

contribution of parents for emotional regulation, suppression, and elimination of negative emotional expression in children (Barth & Parke, 1993; Boyum & Parke, 1995).

Shields and Koster (1989) completed an assessment of parenting literature from 1915 to 1980 and noted the preoccupation with the need for parents to inculcate appropriate emotional expression in children. One of the prevailing themes during that six and a half decades was that emotional negativity of mothers had damaging influence on children.

The focus of the literature moved from parenting dynamics to family processes and environmental factors. There are consistent reports that negative family expressiveness directly influences children's relationships outside the home. For instance, children from family environments that are characterized by negativity generally display aggression in their interactions with peers (Boyum & Parke, 1995; Denham & Grout, 1993; Denham, Renwick-DeBardi, & Hewes, 1994).

The Ramsden and Hubbard (2002) study discusses the indirect influence of negative emotional expressiveness of family on aggression in children. This indirect relation is mediated through an apparent lack of emotional regulation in the home. In a climate of emotional deregulation, high levels of negative expressiveness along with material acceptance of negative emotional expression in children is reported to have contributed to aggression.

In a meta-analysis consisting of 29 studies Halberstadt and Eaton (2002) found that positive family expressiveness was consistently correlated with positive children expressiveness across age groups. However, negative family expressiveness and negative children expressiveness were linearly and curvilinearly related across age groups. These

findings are indicative of the fact that relationship patterns characterized by positive or negative expressiveness tend to fluctuate during the developmental process. The influence of negative parent emotional expressions was reported to be strong during the early years of life; declining over the individuation period, and strengthening again in late adolescence (Halberstadt & Eaton, 2002).

Studies have repeatedly stressed the relationship between family expressiveness and outcomes in children (Clark & Phares, 2004; Ramsden & Hubbard, 2002). In a longitudinal study involving 43students in fifth grade and 40 of them again after the completion of the twelfth grade, Bronstein et al. (1996) presents evidence that the family emotional climate is a predictor of emotional expressivity in both children and adolescents. However, in a position distinguished from the earlier curvilinear perspective, they claim that children's emotive styles and patterns persisted throughout fifth grade to adolescence. That is an indication that the influence of the family emotional climate, particularly family support for emotional expressiveness remains stable overtime. The curvilinear and stable family expressiveness perspectives are different but not necessarily inconsistent. What accounts for the difference is that the curvilinear position focused on the negative family emotional characteristic, and the stable position emphasized a global family emotional climate.

The quality of the emotional socialization within the family unit, whether conceptualized as modeling or coaching, plays a significant role in the development and severity of externalizing and internalizing behaviors in children and adolescents (Denham et al., 2000; Halberstadt, Fox, & Jones, 1993; Parke, 1995). There is consistency in the literature that childhood externalizing behavior constitutes a major risk factor for juvenile

delinquency, and crime and violence in adulthood (Betz, 1995; Farrington, 1989; Moffitt, 1993).

Family emotional climate which may be positive or negative, is likely to differ in regard to frequency, duration, and intensity within varying family compositions and experiences (Halberstadt, Denham, & Dunsmore, 2001). The variance in levels of expressiveness of discrete emotions may have related impact on adolescent behavior. Stocker, Richmond, and Rhoades (2007) examined parents' emotional expressiveness and adolescents' internalizing and externalizing symptoms and found that parents' negative expressiveness was positively related to internalizing and externalizing behaviors among adolescents. Clarke and Phares (2004) found that varying degrees of emotional expressiveness, particularly negative emotions, within the family environment was positively associated with various aspects of functioning among older adolescents, and that negative family expressiveness was a significant predictor of negative self expressiveness among adolescent.

Kim, Hetherington, and Reiss (1999) in a sample of 774 adolescents, looked at the influence of family processes on externalizing behaviors among adolescents by gender family type. Late adolescent girls from nonstep families and late adolescent boys from stepfamilies were less prone to display externalizing behaviors. However, high rates of negativity in mothers were associated with externalizing behaviors in adolescents without regard to gender or family type. Nevertheless, the negativity of mother was the most significant predictor of externalizing behaviors in boys.

The available literature on emotional expressivity indicates a distinct association between the family emotional climate and adolescent externalizing and internalizing

behaviors. According to Stocker, Richmond, and Rhoades (2007) that association is not moderated by gender. There is no gender difference in parental influence on externalizing and internalizing symptoms in adolescents. Their study which included (n = 131) 16-year- olds, and both parents found that coaching and negative emotional expressiveness of both parents accounted for significant independent variance in adolescents' internalizing behaviors.

The literature is divided on the differential socialization practices relative to the sexes. Maccoby and Jackin's (1974) review of literature on sex differences failed to support the position which advocates a difference in interpersonal orientation. The researchers found little evidence to support a disparity in emotional socialization of boys and girls.

The Balswick and Avertt (1977) study found that personal orientation was not a significant predictor of expressiveness for either sex. In addition, the study did not find gender differences in the expressiveness of anger.

Halberstadt (1986) found that the quality of the emotional expressiveness characterizing the family environment influences the styles of expression and skills in communication. It affects nonverbal and especially emotional expressions. People from families that are highly expressive are more likely to emote freely and globally. Their emotional communication is more spontaneous and natural than people from families that are low in emotional expression. That freedom of expressiveness allows for transmission of difficult items with greater facility and ease than others from less expressive family environments (Halberstadt, 1986).

The findings of Halberstadt (1986) proffer some explanation for the presence of externalizing and internalizing symptoms among teenagers. Deficits in emotional expressiveness within the family environment orient the adolescent to either internalize or externalize problems. However, a family environment that is receptive to emotional expression in children is correlated to psychological adjustment and well-being (Bronstein, Fitzgerald, Briones, Pieniadz, & D'Ari, 1993). Positive receptivity of emotions influences self-acceptance and self-esteem in girls and better regulation of behavior in boys (Bronstein, Fitzgerald, Briones, Pieniadz, & D'Ari, 1993). In addition, the family which encourages spontaneous expressions of feelings, and is emotionally available, provides children with a positive environment to understand emotions. It also helps them understand the possible impact of their emotional expressions on others, enhances child functioning, and stimulates healthy social relationships (Rubin & Krasnor, 1986). The literature indicates that adolescents from family environments with negative expressiveness display aggressiveness, anger, and frequent, intense, and poorly resolved interpersonal conflict (Clarke & Phares, 2004).

Conflict

Conflict is a known risk factor that exposes adolescents to adjustment problems (Neighbors, Forehand, & Bau, 1997). Adolescents who live in family environments that are filled with conflict report significantly more adjustment difficulties than those from healthy family environments (Barber, 1994; Borrine & Handel, 1991; Demo, 1999; Shelton & Harold, 2008; Tschann et al., 2002; Wadsworth & Compass, 2002). Negative family relations, as indicated by interparental conflict and parent-adolescent conflicts, are

contributors to adjustment problems among adolescents (Burt, McGue, Iacono, & Krueger, 2006).

The Clark and Phares (2004) study found that interparental conflict was one of the primary mediators of adolescent anger. Marital conflict was particularly influential in adolescent display of anger. In addition, the intensity of the conflict among parents was related to adolescent perception of parental emotional availability and parent-child relations.

These findings confirmed previous research that interparental conflict has the potential to adversely affect parent – adolescent relationships (Fosco & Grych, 2010; Tschann et al., 2002). The strain and stress of marital conflict influences the degree of parental emotional availability and emotional vulnerability for parent-adolescent relationships (Cummings & Davies, 1994; Osborne & Fincham, 1996).

The deficit in emotional availability for wholesome parent-adolescent relationship is correlated to adolescent aggression and depression (McClellan, Heaton, Forste, & Barber, 2004). In a study which assessed 491 adolescents, McClellan, Heaton, Forste, and Barber (2004) found covert parental conflict and lack of parental support were directly linked to adolescent internalizing problems, overt family conflict was related to adolescent externalizing behaviors.

In a multiethnic sample (n=286) of adolescents, Formoso, Gonzales, and Aiken (2000) found that protective familial factors, such as attachment and monitoring, have inverse effects on male and female adolescents. In the family environment that is marked by frequent conflicts the protective factors attenuate externalizing behaviors for girls but exacerbate externalizing for boys.

The significance of interparental conflict on adjustment difficulties in adolescents influenced a shift of emphasis in the literature from divorce to the nature and course of the parental conflict. Several studies limited the link between divorce and adjustment problems to conflict that occurs prior to divorce (Amato & Keith, 1991; Block, Block, & Gjerde, 1986; Doherty & Needle, 1991). Amato and Keith (1991) in a meta-analysis found support for the proposition that the process of a sustained interparental conflict is more detrimental than one particular event such as divorce. The damaging impact or influence of interparental conflict may extend beyond adolescence. Research has also indicated that the family environment that is defined by conflict is not conducive for wholesome transition into adulthood and it negatively influences post-adolescent functioning (Bronstein, Briones, Brooks, & Cowan, 1996).

Chess et al. (1983) in a longitudinal study found correlations between levels of parental conflict and poor adjustment scores in early adulthood. Adolescents from conflictual family environments report depressive moods, anger, and hostility more often than those from non-conflictual families (Hanson, Saunders, & Kistner, 1992; Lopez, Campbell, & Watkins, 1989).

Neighbors, Forehand, and Bau (1997) assessed a community sample during early to middle adolescence and 6 years later found that high rates of concurrent interparental conflict was related to high rates of male antisocial behavior. Strain and problematic relations with parents resulted in high levels of antisocial behavior for females. The effects of parental conflicts were also manifested in general psychopathology among males. Conflict was correlated to internalizing and externalizing behaviors for males and was correlated with internalizing behaviors for females.

Some studies distinguish adolescents' personality characteristics such as effortful control as a significant stabilizing factor for adolescent outcomes. Loukas and Roalson (2006) in the first and second wave of a larger study (n = 459) of 10 – 14 year olds found that adolescents with low levels of effortful control who were exposed to poor quality family environment were at risk for acting out and aggressive behavior.

The impact of marital conflict on adolescent behavior goes beyond that actual conflict. Various types of marital conflict resolution are correlated to deficits in adolescent developmental adjustments which results in externalizing and internalizing behaviors (Katz & Gottman, 1993).

There is consensus in the literature that frequent conflict in the family milieu places adolescents at risk for internalizing and externalizing behaviors (Fincham, Grych, & Osborne, 1994; Grych & Fincham, 1990; Harold, Shelton, Goeke-Morey, & Cummings, 2004; Porter & O'Leary, 1980; Salafia, Gondoli, & Grundy, 2008). The potential risk that a conflictual family environment poses to adolescent adjustment was noted by Rutter, Graham, Chhadwick, and Yule (1976). They found that adolescents with a predisposition for psychiatric problem were more likely to report disagreement in the family than those who were not.

The relationship between family conflict and adolescent adjustment problems is established in nonclinical samples. For example, several studies have reported that elevated rates of conflict in the family milieu negatively influence adolescent adjustment (Demo, 1999; Johnson, LaVoie, & Mahoney, 2001; Shelton & Harold, 2008). Family conflict has been associated to various negative out comes such as aggression among adolescents (Smetana, 1996). Studies using community samples have reported an

association between frequent conflict and adolescents' aggression, depression, withdrawal, deviancy, delinquency, and problematic peer relations (Adams & Laursen, 2007; Smetana, 1996).

Another salient aspect of the conflictural family environment that is present in the literature is parent-adolescent conflict. In an analysis involving 11 – 18 year old African American (n = 469), Anglo American, and Cuban American adolescents, Adams and Laursen (2007) found that negative parent–adolescent conflictual relationships were related to adjustment problems.

The presence and intensity of conflictual relations between parent and child during adolescence is a major marker for internalizing and externalizing problems (Boney-McCoy & Finkelhor, 1995). In their study of a national sample of youths aged 10 – 16 years, Boney-McCoy and Finkelhor (1995) found victimized respondents were at greater risk for psychological and behavioral problems than those not victimize.

There is another dimension of the conflictual family environment on adolescent behavior in the literature that deserves mention (Harold, Fincham, Osborne, & Conger, 1997). Some studies have suggested that the actual observation of conflict may not be as detrimental as the perception and interpretation of the conflict on adolescent adjustment and behavior (Cummings, Davies, & Simpson, 1994; Harold, Fincham, Osborne, & Conger, 1997). The Harold, Fincham, Osborne, and Conger (1997) study found that adolescents' perception of spousal conflict had both a direct and an indirect effect on their adjustment. Harold and colleagues (1997) found that internalizing behaviors were associated to both direct and indirect effects of perceptions, but externalizing problems were linked to indirect effects of perception. In another study involving a larger sample

(n = 451 families) and two rounds of assessment done 12 months apart, Harold and colleagues (2004) found significant association between direct and indirect effects of perceptions of marital conflict on internalizing problems among male adolescents. In addition to the associations mentioned earlier, abuse and domestic violence are two other aspects of family conflict that can potentially have a damaging influence on adjustment during adolescence.

Abuse and Domestic Violence

Domestic violence and abuse are dimensions of family conflictual relations that correlate to adjustment difficulties in adolescence (Edleson, 1999; Sternberg, Lamb, & Dawud-Noursi, 1998). The evidence in the literature attests that both domestic violence and abuse contribute to adolescent externalizing and internalizing behaviors (Lewis et al., 2010; Sternberg, Lamb, & Dawud-Noursi, 1998).

Studies have indicated that children exposed to child abuse are susceptible to a range of internalizing and externalizing problems (McLeer et al., 1994; McLeer et al., 1998). Adolescents who were exposed to abuse during childhood are more likely, than those who were not, to exhibit both externalizing and internalizing problems (Fergusson et al., 1996; Wisdom, 2000). These outcomes are similar for adolescents who were abused during adolescence. For example, Smith and Thornberrry (1995) found that adolescents who are subjected to maltreatment by parents have high incidence of externalizing behaviors. An analysis on gender differences among adolescents who were victims of sexual abuse revealed that female adolescents engaged in internalizing

behaviors and males were more prone to display externalizing behaviors (Chandy, Blum, & Resnick, 1996).

The association of contextual factors like abuse with externalizing behaviors has been made across generations (Capaldi, Pears, Patterson, & Owen, 2003; Conger, Neppl, Kim, & Scaramella, 2003). Parenting behaviors such as harsh discipline, which is likened to abuse, are linked to adolescents' externalizing behaviors across generations (Bailey, Hill, Oesterle, & Hawkins, 2006; Smith & Farrington, 2004). Bailey, Hill, Oesterle, and Hawkins (2009) analyzed a sample (n = 944) consisting of grandparents, parents, and children for the contribution of harsh punishment to externalizing behaviors, and found intergenerational continuity.

In addition to the impact of abuse on development, children who witness domestic violence were also susceptible to internalizing and externalizing behaviors. In an analysis of 31 studies on children who witnessed domestic violence, Edleson (1999) noted methodical difficulties such as the overreliance on adult reports in assessing risk and consequence. However, the analysis found unanimous evidence that there is statistical significant association between emotional and behavioral problems in children who witness violence in the family. The consistency in findings across different samples and methodologies attest that domestic violence is a significant risk factor for internalizing and externalizing problems among adolescents (Fergusson et al., 1996; McLeer et al., 1998; Wisdom, 2000).

The evidence in the literature is emphatic that there is direct correlation between domestic violence and negative developmental outcomes (Evans, Davies, & DiLillo, 2008; Fantuzzo & Mohr, 1999). In their meta-analysis which included studies (n. 60)

done between 1990 and 2006, Evans, Davies, and DiLillo (2008) found consistent support for a relationship between domestic violence and adolescent internalizing and externalizing problems. Another meta-analysis consisting of 41 studies, conducted by Wolfe et al. (2003) found exposure to domestic violence poses some risk to adolescents' development. Forty of the studies indicated that children who were exposed displayed emotional and behavioral problems. Wolfe and colleagues noted that the recent literature have made methodical progress such as isolating moderators. However, they identified several weaknesses in those studies; the most notable ones are inadequate control for confounding variables and lack of sound theoretical frameworks in the conceptualization of the studies. The discussion in the literature alludes to the complexity of the subject matter and at the same time highlights the need for specific theoretical platforms to conceptualize and attempt more complicated and defining analysis (Wolfe et al., 2003). There is a call for research guided by specific hypothesis and analysis design to isolate constructs that account for cause and effect relationships (Fantuzzo & Lindquist, 1989). The matter of cause and effect relationships relative to the impact of abuse and domestic violence on adolescent development was extended beyond analysis of abuse and domestic violence as individual variables.

Consideration has also been given to the combined effects of child abuse and domestic violence on maladjustment outcomes among adolescents. For example, Moylan et al. (2010) considered dual exposure through a prospective study design which included a sample (n = 457) of children. The data came from a longitudinal study which was designed to assess the developmental consequences of child maltreatment. The study started in 1970 with three waves of data collection at key developmental points for

children (preschool, school age, and adolescence), with a total of 416 participants assessed in adolescence. The results indicate that dual exposure to abuse and domestic violence increased the risk of internalizing and externalizing problems in adolescence. However, besides abuse and domestic violence there are other dynamic family variables such as family support that may potentially influence adolescent emotional and behavioral adjustment.

Family Support and Problem Behaviors

Family support is a defining component of family relationship which directly impacts adolescent adjustment (Masten, 2001). For instance, family support is an element of parenting behaviors that can increase the risk of problem behaviors among adolescents. There is unanimous evidence in the literature that low parental support is a significant risk factor for adolescent problem behaviors (Armsden & Greenberg, 1987; Kobak, Sudler, & Gamble, 1991; Lewinsohn et al., 1994; Papini & Roggman, 1992). Numerous studies found that low emotional support from parents are correlated to externalizing symptoms (Baumrind, 1991; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). The literature makes an association between low levels of parental support, which includes supportive behaviors such as weak or low levels of bonding and responsiveness of mothers during infancy, and externalizing problems in adolescence (Johnston et al., 2002; Wakschlag & Hans, 1999).

Oliva, Jimenez, and Parra (2009) a longitudinal study found that the quality of family support was a significant factor in externalizing behaviors among adolescents. High quality of supportive family relationships served as a buffer against externalizing

but not internalizing symptoms. The Oliva, Jimenez, and Parra (2009) study found that stressful life events increased externalizing behaviors when family support was at the middle range or lower. Although the sample in both the second (n =130) and third (n = 100) waves of the study on which the analyses are based are small, the findings do attest to the contribution of family support to developmental problems among adolescents.

The findings confirm the position that supportive family relationship plays a role in the developmental adjustment of adolescents. The study contributes to a body of literature on adolescents' resilience which highlights the role of family support as a major factor in helping adolescents manage adverse stressors (Luther, 2006; Masten, 2001).

In addition, family support has consistently been found to moderate the effects of a major stressor, such as parent-adolescent conflict on adolescent problem behaviors (Barrera, Chassin, & Rogosch, 1993; Barrera & Stice, 1998). Barrera and Stice (1998) in a cross-sectional and prospective analysis of 269 adolescents and their parents found support for the contention that high levels of parental support creates a social context that protects against risk factors within and outside the family. That protective device allows for adolescents to engage in conflicts with their parent without it leading to problem behaviors. The protective device is also instrumental in the prevention of internalizing behaviors. Research assessing the relation of supportive parenting to internalizing behaviors found that reduction in supportive parenting exacerbates depressive symptoms among adolescents (Pineda, Cole, & Bruce 2007).

There is an argument in the literature indicating that parental support of itself is not the primary protective factor in adolescent resilience to stressors (Youngstrom et al., 2003). Rather, it is the confidence of adolescents in the accessibility and dedication of

parents that makes the difference. It is the adolescent's internal working model of parental relationship that produces the psychological and mental satisfaction (Youngstrom et al., 2003). The relationship itself may not necessarily be wholesome or be of a high quality to produce the needed effects (Arbona & Power, 2003; Bretherton, 1985).

There is another variation to that position which posits that healthy psychological functioning is attributed to the adolescent perception of parental support (Johnson & Kliewer, 1999). Perceive support exerts a protective influence even in the face of elevated risk factors. A number of studies show that perceive support is correlated with fewer internalizing symptoms (Caldwell, Antonucci, & Jackson, 1998; Johnson & Kliewer, 1999). There is consistent support in the literature for the position that perceive support is associated to lower levels of internalizing symptoms for both males and females (Caldwell, Antonucci, & Jackson, 1998; Johnson & Kliewer, 1999). However, some studies show some variance in gender differences (Hammack et al., 2004). For example, Hammack et al. (2004) reported associations between perceive support and lower internalizing symptoms for females but not for males. One study found no association between perceived family support and internalizing symptoms for males (Paxton et al., 2004). Another study asserts that the association between perceive support and internalizing symptoms are more elevated for females because of their innate relationship orientation (Gilligan, 1982).

In summary, the evidence in the literature provides some confirmation for the value and role of relational bonds in adolescent development. The psychological well-being of adolescents is anchored in the quality of the security provided through familial

support. The potency of that bond is seen in the fact that perceived support serves as a bulwark in the face of adverse stressors in the family milieu. Much of the literature attests to the significance of the parent-adolescent relationship and its influence on adolescent resilience against internalizing and externalizing problems.

There is another component of the parent-adolescent relationship that holds significance for adolescent adjustment. Autonomy seeking is an important developmental task in adolescent that is tied to the quality of parent-adolescent relationship.

Adolescent Self Governance/Autonomy

Autonomy is a construct that encompasses the emotional, behavioral, and cognitive ability of adolescents (Steinberg, 1987). Emotional autonomy constitutes a mature perception of life with commensurate assumption of responsibility, values, and self management. It is achieved by the relinquishing of childish dependence on primary care givers (Steinberg & Silverberg, 1986).

Behavioral autonomy refers to functioning that is independent of parental and adult influences. It consists of activities that demonstrate self-reliance and a personal ability to assume responsibility for one's actions (Haase, Silbereisen, & Reitzle, 2008). Cognitively, autonomy is characterized by a freedom to make decisions without interference from others (Greenberger, 1982). It is a subjective sense of empowerment that does not seek validation and authentication of others (Greenberger, 1982; Greenberger & Sorenson, 1974).

The promotion of self governance is another element of the family environment that exerts influence on adolescent adjustment (Bean, Barber, & Crane, 2006). It is a

salient aspect of the continuous parent-adolescent relationship. The literature places adolescent autonomy within the context of familial relationship and support (Grotevent & Cooper, 1984; Steinberg, 1990). The emphasis on relationship ties and support is an attempt to locate autonomy related growth within the family dynamics (Bean, Barber, & Crane, 2006).

This emphasis in the literature highlights the continued quest by researchers to assess the capacity of the family environment to promote or stifle psychosocial maturity (Adams, Berzonsky, & Keating, 2006; Eccles et al., 1993; Freedman-Doan, Arbreton, Harold, & Eccles, 1993; Galambos & Tilton-Weaver, 2000). This maturity is indexed by the ability of the youth to balance autonomy and relatedness in interaction within and outside the family (Allen et al., 1994; Kuperminc & Allen, 1996; Phinney, Kim-Jo, Osorio, & Vilhjalmsdottir, 2005; Smetana & Gettman, 2006).

Racial or cultural variables may influence variances in the adolescent's quest for independence and autonomy (Markus & Lin, 1999; Haar & Krahe, 1999). This may be particularly so in collectivist cultural settings which value harmony as an index of family relationship; these settings contextualize and conceptualize independence as compliance, withdrawal, and negotiation (Markus & Lin, 1999). While the collectivist element may seem adverse to western conceptualization of autonomy, it is consistent with the position in the general literature that the family environment dictates measures and expressions of autonomy (Gabrielidis, Stephan, Ybarram, Pearson, & Villareal, 1997; Haar & Krahe, 1999).

Conger and Ge (1999) present another example of the cultural influence on adolescent autonomy seeking behaviors. They found that during early adolescence

European American adolescents tend to challenge parental authority and decrease compliance. This position is advanced by others who note the tendency to refute parent authority increases with age (Fuligni, 1998). Laursen, Coy, and Collins (1998) affirm that there is a corresponding affective intensity in parent-adolescent conflicts by middle adolescence. However, by late adolescence there is increase autonomy with better parent-adolescent relationships and improved conflict resolutions strategies (Collins & Laursen, 1992; Reese-Weber, 2000).

There are various components of the family environment, such as authoritarian parenting, which are related to adolescent autonomy that may have a direct influence on internalizing and externalizing behaviors (Ryan & Lynch, 1989); Lamborn & Steinberg, 1993). Parent-adolescent relationships are defined by inflexibility, stringent measures, rigid control, and over-restrictiveness are correlated to externalizing problems (Douvan & Adelson, 1966). The failure to encourage autonomy through appropriate facilitating behaviors, such as the relaxing of parental control may have a negatively influence on developmental adjustments in adolescents (Kandel & Lesser, 1972).

Parental warmth is another other aspects of parent-adolescent relationships that is related to emotional autonomy. In a study of 10 – 18 years old adolescents (n = 96) along with their mothers and teachers, Fuhrman and Holmback (1995) investigated the influence of familial variables, such as maternal warmth on emotional autonomy. The researchers found that positive affectivity that is evidence by high maternal warmth and low conflict in parent-adolescent relationships, contributed to healthy adjustments even if emotional autonomy was low.

In a longitudinal study involving 96 adolescents and their parents, Allen et al., (1994) found depressive affect and externalizing problems were associated with adolescents' quest to establish autonomy and relatedness in their families. In a similar vein, Pavlidis and McCauley (2001) in a study involving a sample of 20 adolescent-mother dyads, twenty dyads with externalizing youth, and 20 nonclinical dyads as controls, found that compared to the nonclinical group the externalizing youth exhibited high overt impairment in autonomy and relatedness. This study confirms to the idea that externalizing problems are linked to failure to achieve autonomy in the family environment.

Although the findings in this study conform to the general literature there are a few methodological concerns that may limit the generalizability of the study. The sample size was small (n = 60), and the study employed observation as a data collection method and the observation period was brief (10 minutes). In addition, the nonclinical sample may not reflect the general population, it that the sample was self selected as it consisted of those who were recruited by flyers.

The discussion regarding the contribution of autonomy granting in the socialization of adolescents moved beyond the mere promotion and restriction of autonomy in the family environment (Soenens et al., 2007). The new focus is on adolescent perception of parental autonomy support (Goossens, 2006; Hmel & Pincus, 2002; Zimmer-Gembeck & Collins, 2003). The literature advocates two possible approaches to the conceptualization and assessment of parental autonomy support. One position defines parental autonomy support as the endorsement and encouragement of independent functioning (Gray & Steinberg, 1999; Silk, Morris, Kanaya, & Steinberg,

2003). The other position conceptualizes parental autonomy support as the promotion of volitional functioning (Deci & Ryan, 2000; Grolnick, 2003).

The Soenens et al. (2007) study was devoted to establishing empirical distinctiveness of the two conceptualizations (i.e. promotion of independence and promotion of volitional functioning) and their contribution to adolescent adjustment problems. The researchers found that the promotion of volitional functioning uniquely predicted adjustments, and the promotion of independence did not. It is reasonable to deduce therefore that parental involvement that violates or is in contradiction to the adolescent quest to advance personal interest and values may be a risk factor for internalizing and externalizing problems.

Summary of Literature Review

The family environment is a significant contextual factor that predisposes adolescents to internalizing and externalizing behaviors. Adolescents from poor family environments report significantly more adjustment difficulties than those from healthy family environments. Various properties within the family environment contribute to these problems. The quality of the emotional socialization within the family unit can significantly influence the development and severity of internalizing and externalizing behaviors.

Family relationship variables such as conflict and support contribute to adolescent externalizing and internalizing behaviors. Parent-child relationship dynamics can influence levels of developmental stability and adaptation in adolescents. The evidence in

the literature is unanimous that children exposed to child abuse are susceptible to internalizing and externalizing problems (McLeer et al., 1994; McLeer et al., 1998).

The promotion of self governance is a crucial family environmental property that exerts influence on adolescent adjustment. The adolescent's quest for autonomy may find varying expressions within particular cultural context. However, the evidence in the literature attests that parental suppression of adolescents self-reliance initiatives negatively impact developmental adjustments and may result in internalizing and externalizing problems.

Several studies demonstrated relations between specific familial factors and negative outcome in adolescents. However, the review of literature noted some methodology concerns, notably small sample size and the lack of appropriate theoretical framework (Wolfe et al., 2003). This present study improved on these limitations by utilizing appropriate methodology and a systems orientation that is reflective of the complexity of the subject matter.

CHAPTER FOUR

METHODS

Data for the current study were derived from the St. Lucia study. The original research was conducted by professors and graduate students from the department of counseling and family sciences from Loma Linda University. The investigators received permission from the department of education and the principals of nine high schools that were selected from various locations on the island to represent the population, to recruit participants for the study. The schools that were selected came from five of the eight school districts on the island. These school districts consist of nineteen schools that are located in the central through northern regions of the island. Two religious schools were included because of the special population they serve, one is co-educational and the other is an all-girls school.

Study participants were identified and selected through the convenient sampling technique. The principal of each school selected classes representing each form level from 1 to 5 and divide the number of questionnaires proportionately. The teachers informed students of the study and ask those who wish to participate to identify themselves. The students who elected to participate were asked to meet in a designated location.

The student participants were screened to ensure that they were within the 12 to 18 age range for inclusion in the study and were informed of the purpose of the study. They were told that their participation was subject to parent consent and that they would complete the questionnaire after returning the package/consent from parents. They were then given a package of information for parents/guardians that included a letter of

invitation to participate and the description of the study, informed consent and the questionnaire for parents/guardians (see appendix A). Students were asked to avoid assisting or consulting with parents while they were completing the survey. After parents returned the consents, student participants were allowed to do the questionnaire. They were told that the questionnaire asks for their opinion of how their family functions; how they as individuals function in and outside their home, and the problems, concerns, and strengths that they may have.

Participants

Participants for the study were adolescents (age 12 – 18) who were attending school in St. Lucia. The 12 – 18 age range represents the normative age range for adolescents in St. Lucia. In addition, it is the age range that is more prominent in the extant literature on family and internalizing and externalizing problems among adolescents (Henderson, Dakof, Schwartz, & Liddle, 2006; Matherne & Thomas, 2001; Kim, Heatherington, & Reiss, 1999).

A total of 1000 student questionnaires and 1000 parent questionnaires were distributed. Six hundred and sixty two students and the same amount of parent questionnaires were returned. There were a number of (n=206) questionnaires that were removed from the analysis due to various reasons. Some were filled by children who were older than the stipulated age for participation in the study, and several questionnaires were returned less than 10% completed.

The actual sample for this present study consisted of 597 students (male 36% and female 64%) and 521 parents (male 17% and female 83%). Of the number of parent

participants 83% were biological parents, 2% adoptive parents, 0.7% adoptive parents, 3.7% grandparents, and 7.9% were other. The student participants (M age = 9.7 years, SD = 1.6) reported having varying numbers of close friends (M = 3.4, SD 0.5) outside the home. Some said they had no friends (4.2%), some had 1 friend (8.9%), others had 2 to 3 friends (29.3%), and some had 4 or more friends (57.5%). Students also participated with friends in activities outside (M = 2.1, SD = 0.8) the home with various frequencies, less than 1 time (26. %), 1 to 2 times (36.6%), and 3 or more times (36.6%).

Measures

This study utilized three instruments to constitute the protocol. These instruments are Child Behavior Checklist (CBCL), Youth Self Report (YSR), and Family Environment Scale (FES). The first two instruments are from the Achenbach System of Empirically Based Assessment (ASEBA). The ASEBA is a comprehensive evidence-based assessment system developed through decades of research and practical experience. The measures assess competencies, adaptive functioning, behavioral, emotional, and social problems from age 1½ to over 90 years (Achenbach & Rescorla, 2001).

Child Behavior Checklist (CBCL).

This measure was used to obtain parental appraisal and report on the behavior of the adolescent. The CBCL is an established dimensional rating scale for childhood and adolescent psychopathology (Costello & Benjamin, 1989). The CBCL rates behavior on three main scales, namely, total behavior, internalizing problems, and externalizing

problems. These scales are divided into eight categories or subscales. The subscale for internalizing are withdrawn, somatic complaints, and anxious/depressed, while the subscales for externalizing are rule breaking, and aggressive behavior. Some of the items included in the withdrawn subscale are: there is very little that I enjoy, I would rather be alone than with others, I refuse to talk, and I am too shy or timid. The anxious/depressed subscale includes but not limited to the following: I cry a lot, I am afraid of going to school, I feel that I have to be perfect, I feel worthless or inferior, I feel no one loves me, and I am too fearful or anxious (please see Appendix B for a list of all the items used across all of the subscales). These measures were designed to assess different aspects of the adolescent's behavior (Achenbach & Rescorla, 2001). The measure consists of two subsections: (1) 11 competence items that measure a caretaker's (i.e. parent) appraisal of the child's academic performance, association with peer, and participation in hobbies, games, sports, jobs, chores, friendship, and activities, and (2) 113 questions scored on a 3 point Likert scale with 0 indicating that a behavior is not true, 1representing that it is sometimes true, and 2 indicating it is often true (Achenbach & Rescorla, 2001). This is a parallel instrument to the YSR which can be used to cross check behaviors of children.

The Youth Self-Report (YSR)

The YSR was used to measure adolescents' perception of their functioning. The instrument is an established child-report measure that assesses problem behaviors along two broadband scales: Internalizing and Externalizing (Achenbach & Rescorla, 2001). The questionnaire has a counterpart of 105 of the CBCL problem items. It consists of two sections: (1) 11 competence items that allow the youth to describe their functions

(i.e. association with peer, and participation in hobbies, games, sports, jobs, chores, friendship, and activities), and (2) 112 questions scored on a 3 point Likert scale with 0 indicating that a behavior is not true, 1 that it is sometimes true, and 2 indicating it is often true. The items are designed to measure eight sub-scale symptoms: withdrawn, somatic complaints, anxiety and depression, social problems, thought problems, attention problems, aggressive behavior, and delinquent behaviors (Achenbach, 1991). The first three of the subscales withdrawn, somatic complaints, and anxious/depressed comprise the internalizing problems. Some of the items included in the withdrawn subscale are: secretive, keeps things to self, too shy or timid, and underactive, slow moving, or lack energy. The anxious/depressed subscale includes such items as: feels he/she has to be perfect, too fearful or anxious, self-conscious or easily embarrassed, and worries. The somatic complains subscale consists of items like: nightmares, overtired, and poorly coordinated or clumsy. The externalizing syndrome consists of rule breaking and aggressive behaviors. The rule breaking subscale has items like: drinks alcohol without parents' approval, lying or cheating, and steals at home. The aggressive behavior subscale includes such items as: argues a lot, cruelty, bullying or meanness to others, and temper tantrums or hot temper (please see Appendix B for a list of all the items used across all of the subscales). The internal consistency (Cronbach's alpha) for internalizing is .91, and .89 for externalizing behaviors. The test-retest reliability for the problem scales is .65 for 11 to 14 year olds and .83 for 15 to 18 year olds (Achenbach, 1991).

Family Environment Scale (FES)

The Family Environment Scale (FES) was developed by Rudolf H. Moos and Bernice S. Moos (1974), from the Center for Health Care Evaluation, department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Palo Alto, California. The scale is widely used for assessing the influence of family dynamics on behaviors (i.e. adaptation) (Billings & Moos, 1982; McGee, Williams, & Silva, 1984; Trickett, Aber, Carlson, & Cicchetti, 1991; Trief, Grant, Elbert, & Weinstock, 1998).

The Family Environment Scale (FES) is composed of 10 subscales that measure actual (form R), preferred (form I), and expected family social environments (form E). The form that was used in this study is Form R. There are 90 items which constitute the 10 FES subscales, which assess three sets of dimensions: relationship, personal growth, and system maintenance dimensions. The relationship dimension consists of three subscales: cohesion, expressiveness, and conflict. The cohesion subscale includes items such as: family members will really help and support one another, and members will often seem to be killing time at home. Some of the items included in the expressiveness subscale are: family members will often keep their feelings to themselves, members will say anything they want around the house, and it will be hard to "blow of steam" at home without upsetting somebody. The conflict subscale has items like: members will fight a lot, and family members will sometimes get so angry they throw things.

There are five subscales under the personal growth dimension: independence, achievement, intellectual – cultural, active recreational, and moral religious emphasis. The independence subscale consists of items as: members will not do things on their own very often, and in the family we will strongly be encouraged to be independent.

The system maintenance dimension is made up of two subscales: family organization and family control. The family organization subscale includes items like: activities in the family will be pretty carefully planned, members will generally be very neat and orderly, and it will often be hard to find things when you need them in the household (please see Appendix B for a list of all the items used across all of the subscales).

The relationship and system maintenance dimensions primarily reflect internal family functioning, whereas the personal growth dimensions primarily reflects the linkages between the family and the larger social context (Moos, 2009).

The internal consistencies are all in an acceptable range and vary from moderate for independence and achievement orientation to substantial for cohesion, organization, intellectual-cultural orientation, and moral-religious emphasis (Moos, 2009). The internal consistencies (Cronbach's alpha) for each of the 10 FES subscales are as follows: Cohesion .78, Expressiveness .69, Conflict .75, Independence .61, Achievement .64, Intellectual- Cultural .78, Active- Recreational .67, Moral-Religious Emphasis .78, Organization .76, and Control .67 (Moos, 2009).

Internalizing and externalizing behaviors are the main outcome variables for this study. Internalizing behaviors will be measured through the 27 items in the YSR measure and the corresponding 27 items in the CBCL measures. Externalizing behaviors will be measured through the stipulated items in the YSR and CBCL measures.

This study utilized three independent composite variables from the Family Environment Scale (FES): relationship which consists of Cohesion, expressiveness, and conflict; personal growth which is made up of independence, achievement orientation,

intellectual-cultural orientation, active-recreational orientation, moral-religious emphasis; and system maintenance which consists of organization and control.

Analysis

The data were analyzed through the use of the Statistical Package for the Social Sciences (SPSS) software program. Prior to conducting the actual statistical analysis, a series of analysis within the analysis was done to address quality assurance issues. The data were screened to assess the adequacy of fit between the data and some basic assumptions namely, normality, linearity, and homoscedasticity of multivariate procedures. The pre-analysis also involve identification and management of extreme values (i.e. outliers), and missing data. After data entry and pre-analysis were completed, variables were recoded as necessary and composite variables (i.e. internalizing behaviors) created. This was followed by a series of univariate, bi-variate, and multivariate analysis as preliminary testing of study hypotheses.

Descriptive statistical analysis was used to examine data for frequency distribution, means, and standard deviations. Preliminary analysis was undertaken to assess correlations between independent variables and outcome variables. The hypotheses of this study, as outlined above are evaluated in this study and presented below.

CHAPTER FIVE

RESULTS

Mean and standard deviation of the measures are presented in Table 1. The average of the respondents was 9.7 with a standard deviation of 1.6. There were more females (66% versus 34%) than males and all respondents reported an average of three friends. The mean for frequency of activities outside the house was 2.1 and the standard deviation was 0.8. The scores for the family environment variables were: relationship (M=134.9, SD= 10.0), personal growth (M=219.5, SD=15.6), and system maintenance (M=88.1, SD=7.0). Internalizing behaviors had a mean of 16.6 and a standard deviation of 7.2 as compared to an average score of 14.5 and a standard deviation of 6.4 for externalizing behaviors.

Table 1

Mean scores and Standard Deviations for covariates, predictors, and dependent variables

	Mean / %	Std. Deviation
Child's Age	9.7	1.6
Child's Gender	33.7 (Male) 66.3 (Female)	
Number of friends	3.4	0.8
Frequency of activities	2.1	0.8
Relationship	134.9	10.0
Personal Growth	219.5	15.6
System Maintenance	88.1	7.0
Internalizing	16.6	7.2
Externalizing	14.5	6.4

The correlations between the covariates and family environment variables and internalizing and externalizing subscales are presented in Table 2. A number of significant correlations were observed among the variables identified in the table.

Table 2

Bi-variate correlations between family environment and internalizing and externalizing variables

	1	2	3	4	5	6	7	8	9	10	11	Xll
1. Age	1											
2. Gender	-.051	1										
	.306											
3. Number	-.030	-.002	1									
of friends	.546	-.960										
4.	-.056	-.061	.255**	1								
Frequency	.266	-.177	.000									
of activities												
5.	-.133*	-.041	.004	.002	1							
Relationship	.026	-.366	.923	.973								
6. Personal	-.085	-.014	.062	.000	.742**	1						
growth	.094	.765	.169	.995	.000							
7. System	-.066	-.002	.033	.002	.745**	.762**	1					
maintenance	.194	.964	.463	.971	.000	.000						
8. Anxious	.109*	.070	-.035	.020	-.102*	-.031	-.091*	1				
	.030	.121	.429	.659	.024	.497	.044					
9.	.202*	.044	-.097*	-.072	-.064	-.034	-.078	.702**	1			
Withdrawn	.000	.328	.029	.112	.154	.452	.840	.000				
10. Somatic	-.194**	.129*	.022	.036	-.083	-.084	-.166*	.603**	.500**	1		
	.000	.004	.621	.427	.066	.066	.010	.000	.000			
11. Rule	.216**	-.040	.069	.153**	-.76	.011	-.046	.308	.458**	.408**	1	
breaking	.000	.375	.119	.001	.093	.983			.000	.000		
12.	.111*	.007	.122**	.080	-.032	.009	.055	.489**	.415**	.554**	.736**	1
Aggressive	.027	.870	.006	.074	.480	.851	.223	.000	.000	.000	.000	

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000;

However, while the family environment variables were correlation with each other, relationship was only (inverse) correlated with anxious but not with any of the other subscales for both dependent variables. Personal growth was unrelated to any of the five subscales for the dependent variables used in this study. System maintenance had positive correlations with anxious and somatic.

Table 3 presents the results for the hypothesis 1b that explores the relationship between three measures of family environment and internalization after adjusting for the child's age and gender, the number of friends the child has and the frequency of activities outside the home that the child in which the child is engaged. Model one examines the contribution of the child's age and gender; model two adds the number of friends and frequency of activities with friends outside the home; model three add the composite family relationships variable; model four is comprised of all the aforementioned variables except relationship but adds the personal growth family environment construct; model five drops personal growth and adds system maintenance; and the final model includes the four control variables and the three Family Environment subscales. This pattern of model building is consistent throughout these analyses.

There is a strong positive association between child's age and internalization (B =.171, P=.000) but child's gender was unrelated to the said outcome. This suggests that while gender does not predict variations in the dependent variable, older children as compared to younger children report higher levels of internalization. However, the model only accounted for 3% of the variance explained but the overall model was significant (F = 7.713, P = .001). There was a 1% increase in the r-square for model two (F =4.336, p = .002), and only child's age was noted as a significant predictor of internalization. In

Table 3

Standardized regression coefficients for the association of Socio-demographics ,number of friends, frequency of activities with friends, and family environment with Internalization Combined Sum

	1	2	3	4	5	
1. Child's Age	.171*** (.370)	.170*** (.371)	.170*** (.371)	.170*** (.371)	.171*** (.367)	.165*** (.369)
2. Gender (Female)	.073 (1.289)	.070 (1.298)	.084+ (1.303)	.077 (1.314)	.088+ (1.302)	.085+ (1.311)
3. Number of Friends		-.066 (.778)	-.066 (.775)	-.065 (.780)	-.060 (.768)	-.071 (.777)
4. Frequency of Activities With Friends		.031 (.822)	.031 (.818)	.031 (.821)	.032 (.851)	.032 (.817)
5. Family Relationship			-.105 (.061)			-.047 (.104)
6. Personal Growth				-.057 (.040)		.090 (.065)
7. System Maintenance					-.108* (.088)	-.151* (.152)
Constant	18.523	21.120	39.772	31.710	38.390	39.860
R^2	.033	.037	.047	.039	.048	.053

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000; standard errors in parenthesis

models three and four the results are almost identical to the findings in model two, except that in both models gender (P = .07 and .10 respectively) was marginally significant.

Also, as expected, an inverse statistically significant relationship was observed between relationship and internalizing behaviors (*B* = -.105, P =.023) among adolescents in St. Lucia. Five percent variance was explained by the variables in model 3 (F = 4.545, P = .000) and model four accounted for 4% of the variance explained (F = 3.720, P = .003). In model five systems maintenance was inversely related to internationalization (*B= -.108, p =.020).* This finding clearly suggests that higher levels of a combined score

for organization and control were associated with lower levels of internalizing behaviors. However, there was only a 1% increase in the r-square for model five (F=4.545, p=.000) over model four where personal growth was tested as the family environment variable. The final model includes all of the control variables and all three composite family environment variables. The general pattern of child's age being positively related to the outcome remains in the final model (*B* = .165, p=.000) and systems maintenance emerged as the only significant predictor (*B* = -.151, p = .050) of internalization among the other family environment variables. The model accounted for 5% of the variance explained as shown in table 3 and the overall model was significant (F=3.603, p=.001). Consistent with the description of the models for the results above, the results for externalizing behaviors are presented in table 4. The following information is the result of the testing of hypothesis 1c that examines the contribution of the three identified family environment variables after controlling for child's age and gender, number of friends, and frequency of activities with friends outside the home.

In model one, child's age was marginally related to externalizing behaviors (*B=.87, p=.059)* and females reported lower levels of externalizing behaviors than males (*B* = -.123, p=.008). The addition of number of friends and frequency of activities outside the home added a 1% increase (4% vs. 3%) in the r-square in model two over model one. While number of close friends was unrelated to externalizing behaviors, frequency of activities outside the home was significantly related to externalization (*B=.096, p=.046).* That is, frequency of involvement with friends outside the home is associated with higher levels of externalizing behaviors as defined by rule breaking and aggression.

Table 4

Standardized regression coefficients for the association of Socio-demographics, number of friends, frequency of activities with friends, and family environment with Externalization combined Sum

	I	II	III	IV	V	VI
1. Child's Age	.087+	.079+	.079+	.078+	.081+	.074
	(.346)	(.346)	(.346)	(.346)	(.345)	(.346)
2. Gender	-.123**	-.110*	-.104*	-.113*	-.100*	-.107*
(Female)	(1.207)	(1.209)	(1.220)	(1.228)	(1.221)	(1.228)
3. Number of		.044	.044	.042	.051	.037
Friends		(.722)	(.722)	(.724)	(.717)	(.24)
4. Frequency of		.096*	.096*	.067*	.098*	.098*
Activities		(.761)	(.761)	(.762)	(.759)	(.760)
with Friends						
5. Family			-.045			-.038
Relationship			(.056)			(.097)
6. Personal				.010		.127+
Growth				(.037)		(.061)
7. System					-.042	-.119
Maintenance					(.082)	(.143)
Constant	25.054	19.955	27.358	18.385	25.757	24.503
R^2	.033	.046	.040	.038	.041	.047

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000; standard errors in parenthesis

Given that model three does not add anything to the explained variance; it is not surprising that relationship was unrelated to externalizing behaviors (*B=-.045, p=.334)*. The results of the ANOVA analysis indicate that all three models were statistically significant (F=5.837, p=.003; F=4.547, p=.001; F=3.824, p=.002 respectively). Similarly, there was no difference in the r-square from model three to model four and personal growth was unrelated to externalizing behaviors (*B=.010, p=.826).* The overall model was significant at the levels describe for model two above (F=3.640, p=.003). Systems maintenance was also unrelated to externalizing behaviors as evaluated in model five (*B=-.042, p=.369).* The final model was not a significant improvement over model five (5% vs. 4% variance explained) as evidence by marginal significant coefficient for

personal growth (*B=.127, p=.094)* and non-significant associations between relationship (*B=-.034, p=.977)* and system maintenance (*B=-.053, p=.973).* Gender and frequency of activities with friends remain significant predictors of eternalizing behaviors consistent with the previously observed patterns.

The final two hypotheses sought to examine the contribution of the subscales for relationship (cohesiveness, expressiveness, and conflict), personal growth (independence, achievement, intellectual-cultural, active-recreational, and moral-religious, and system maintenance (organization and control) to internalizing and externalizing behaviors.

Table 5 and model one presents the results of the subscales described above and internalizing behaviors after controlling for child's age and gender, number of friends, and frequency of activities outside the home. Interestingly, while expressiveness (*B* =-.029, p=.619) was unrelated to internalizing behaviors, both cohesiveness (*B=.134, p=.013*) and conflict (*B=-.228, p=.000*) are significant predictors of the variations in the outcome variable. So while the composite relationship variable was not a significant predictor of internalizing behaviors, the two subscales – cohesiveness and conflict- were statistically significant predictors of the said outcome.

The results for the subscale analyses for personal growth and internalizing behaviors are shown in table 3 and model two. Personal growth as a composite variable was unrelated to internalizing behaviors described earlier. Not surprising therefore, achievement, intellectual-cultural, active-recreational, and moral-religious were unrelated to internalizing behaviors. However, independence was inversely related to internalizing behaviors (*B=-.152; p=.017).* The subscales for system maintenance, organization (*B* =-.087; p=.109) and control (*B* =-.036; p=.503) are both unrelated to internalizing

Table 5

The subscales of relationship, personal growth, system maintenance, and internalizing

	I	II	III	IV
1. Family Relationship				
Cohesiveness	.134*			.152*
	(.173)			(.196)
Expressiveness	-.029			-.009
	(.200)			(.220)
Conflict	-.228***			-.210***
	(.173)			(.189)
2. Personal Growth				
Independence		-.152*		-.101
		(.186)		(.184)
Achievement		-.007		.037
		(.230)		(.231)
Intellectual-Cultural		.015		.068
		(.220)		(.220)
Active-Recreational		.038		.110
		(221)		(.230)
Moral-Religious		.036		.097
		(.233)		(.239)
3. System Maintenance				
Organization			-.087	-.164**
			(.184)	(.219)
Control			-.036	-.103
			(.177)	(.220)
Constant	40.907	26.255	38.372	36.997
R^2	.085	.052	.048	.113

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000; standard errors in parenthesis.
Results adjusted for child's age, child's gender, number of friends, and frequency of activities outside the home

behaviors. It should be noted however, that the composite variable, systems maintenance is inversely related to internalizing behaviors. When all the subscales were considered together cohesiveness (*B=.152; p=.011),* conflict (*B=-.210; p=.000)*, organization (*B=-.164; p=.010);* and active-recreational was marginally significant (*B=.110; p=.074).*

Table 6 presents the results for the contribution of the subscales for relationship (cohesiveness, expressiveness, and conflict), personal growth (independence, achievement, intellectual-cultural, active-recreational, and moral-religious, and system maintenance (organization and control) to externalizing behaviors. The results for the association between cohesiveness, expressiveness, conflict and internalizing behaviors after adjusting for the child's age and gender, number of friends, and frequency of activities outside the home are similar to those for these variables and externalizing behaviors. That is, cohesiveness (*B=.153; p=.005)* and conflict (*B=-.176; p=.011*) are statistically significant predictors of externalizing behaviors, while expressiveness was unrelated to the outcome *(B=-.025; p=.668*).

Similar to the findings for the personal growth subscales and internalizing behaviors, achievement, intellectual-cultural, active-recreational, and moral-religious were not significant predictors of externalizing behaviors. Also consistent with the results for independence and internalizing behaviors, the coefficient for independence and externalizing was only significant *(B=-.124; p=.051*). The findings for organization and control were identical for both outcomes; neither of the subscales was related to externalizing behaviors. In the final model when all variables were included together, cohesiveness and conflict were similar in the relationship to externalizing behaviors as they were to internalizing behaviors. Marginal significant relationships were observed for moral-religious and organization in predicting rule breaking and aggression.

Table 6

The subscales of relationship, personal growth, system maintenance, and externalizing

	I	II	III	IV
1. Family Relationship				
Cohesiveness	.153**			.151*
	(.162)			(.184)
Expressiveness	-.025			-.028
	(.188)			(.207)
Conflict	-.176***			-.176**
	(.163)			(.178)
2. Personal Growth				
Independence		-.124+		-.078
		(.174)		(.174)
Achievement		.021		.057
		(.213)		(.217)
Intellectual-Cultural		.035		.079
		(.206)		(.208)
Active-Recreational		.018		.069
		(.204)		(.213)
Moral-Religious		.064		.113+
		(.217)		(.224)
3. System Maintenance				
Organization			-.029	-.119+
			(.171)	(.205)
Control			-.049	-.102
			(.165)	(.207)
Constant	25.054	14.564	25.755	23.239
R^2	.071	.049	.041	.095

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000; standard errors in parenthesis.

Results adjusted for child's age, child's gender, number of friends, and frequency of activities outside the home

Additional analyses were conducted (see table 7) to examine the relationship between all of the three composite variables (relationship, personal growth, and systems maintenance) and the subscales for internalizing behaviors (anxious/depressed, withdrawn, somatic complains); externalization (rule breaking and adolescent). Except

for marginal statistically significant results (relationship and anxious/depressed; system maintenance and withdrawn), personal growth and somatic complaints, system maintenance and anxious/depressed and somatic complaints were significant.

Table 7

Subscales for dependent variables, anxious, withdrawn, somatic, rule breaking, and aggressive

	Internalizing			Externalizing	
	Anxious	Withdrawn	Somatic	Rule Breaking	Aggressive
Family Relationship	-.092+ (.032)	-.057 (.023)	-.108 (.028)	-.032 (.030)	-.011 (.040)
Personal Growth	-.069 (.019)	-.046 (.014)	-.115* (.017)	.018 (.018)	.008 (.025)
System Maintenance	-.125** (.043)	-.091 + (.031)	-.142** (.038)	-.031 (.041)	-.058 (.055)
R-Square	.059/.055/.066	.069/.068/.074	.040/.042/.049	.105/.104/.104	.033/.033/.036

+ = p≤.10; * =p≤.05; ** =p≤.01; *** = p≤.000; Results adjusted for child's age, child's gender, number of friends, and frequency of activities outside the home

Discussion

This study was an analysis of the relationship between family environment and internalizing and externalizing behaviors among adolescents in St. Lucia. While there is a sizeable body of literature that documents the impact of family environment on internalizing and externalizing behaviors (e.g., Gorman-Smith, Tolan, Loeber, & Henry, 1998; Henderson, Dakof, Schwartz, & Liddle, 2006), little attention has been paid to these issues within the Caribbean region. Historically, the family has played an important and critical role in the lives of adolescents in the Caribbean area (Blum et al., 2003), however, there is a dearth of empirical studies that have documented the complexities of

family environment in this geographical context. This study explored the dynamics resident in the family environment and their role in two different conceptualizations of adolescent behavior outcomes. In this sense, this current study is an important contribution to our discussion and understanding of the role of family environment in the lives of adolescents in the Caribbean region. In particular, little or no attention has been given to these issues in St. Lucia; adolescents on the island have been experiencing some of the contemporary challenges that have become common in the lives of adolescents in the Caribbean region. For example, traditional family forms and structures are not as dominant as before on account of the impact of globalization, tourism and the influence of the media (St. Bernard, 2003). This study documents the salience of family environment characteristics on adolescent behaviors in this setting. As such, a number of important observations have emerged as a result of the analysis of data from over 500 adolescents and their parents in St. Lucia.

First, relationship, personal growth, and systems maintenance as measures of family environment were hypothesized to be inversely related to internalizing behavior after adjusting for some key confounding variables included in the study. The results indicated that while the coefficients for relationship and personal growth were negative, they were not statistically significant. However, system maintenance was both inversely and statistically related to internalization. Also, in analysis that evaluated these family environment variables together in the same model, systems maintenance remained statistically significant and in relative terms more impacting than relationship and personal growth. These results suggest that systems maintenance as compared to relationship and personal growth is critical in its impact on reducing the likelihood of

adolescents reporting that they are anxious, depressed, withdrawn, and have somatic complains. Systems maintenance is composed of organization and control and as such indicated that these factors are more consequential for internalizing behaviors than relationship and personal growth. The extent to which family environment in St. Lucia is characterized by organization (e.g., activities in the family are carefully planed, members of the family are generally neat, dishes attended to immediately after eating) and control (e.g., there are set ways of doing things in the home, strong emphasis on following rules in the family) is important in adolescents internalizing behaviors.

Child's age was a strong and consistent predictor across all of the models of internalizing behaviors. As expected, older adolescents were more likely to report that they are involved in rule breaking and aggressive like behaviors. This finding is consistent with other observations (Aguilar et al., 2000; Moffitt, caspi, Harrington, & Milne, 2002) that find that with increasing age, risk taking or externalizing behaviors also increased. Additional studies should be conducted to explore this finding more extensively to determine where precisely these differences lie.

Additionally, there was a marginal significant result that suggested that females tended to report higher levels of internalizing symptoms than males. While this finding should be interpreted cautiously, it does point to findings in the literature which reports that girls are at greater risk for internalizing behaviors (Sternberg, 1993). Additional analyses by gender across the subscales and the composite dependent variables might be of interest to further understand the role of gender in internalizing symptoms and externalizing problems among adolescents in the Caribbean region.

Second, similar analyses and models were used with externalizing behaviors as the outcome. It was also proposed that family environment would be inversely related to externalizing behaviors; rule breaking and aggressive behaviors. None of the three family environment composite variables was a significant predictor of the variations in externalizing behaviors in the sample of St. Lucian adolescents. These are interesting non significant findings in the sense that they suggest that in this sample the identified family environment variables do not help in discriminating adolescent behavior. However, in these analyses gender and frequency of activities with friends were significant predictors of externalizing behaviors in the face of all the variables used in this model. Thus, given the model used in this study, these variables tell us something about externalizing behaviors among adolescents in St. Lucia. The finding that males are more likely that females to engage in externalizing behaviors is consistent with other studies outside of this context (Maschi, Morgan, Bradley, & Hatcher, 2008; Young et al., 2010) that reported similar results. Males in St. Lucia, not unlike their counterparts elsewhere, are more likely to engage in rule breaking and aggressive behaviors than females who tend to shy away from these activities. A reflection of the cultural milieu may provide some explanation for that reality. In St. Lucia males are socialized to show strength and resolve, thus as opposed to females, they are more likely to go against family rules and display defiance. The family unit may be more tolerant of rule breaking and aggressive behaviors from males than it would from females.

Third, the other hypotheses in this study sought to tease out the nuances of the relationships between family environment and internalizing and externalizing behaviors. Analysis of subscales in both the predictor and outcome variables contributed to the

understanding that the richness of the relationship between family environment and internalizing and externalizing behaviors may be a function of the combining of these subscales. This is especially germane when using these measures with a population that has not been examined in these ways.

Fourth, when relationship and externalization was examined using the three subscales of the latent predictor variable, a complex pattern of findings emerged. While expressiveness was unrelated to internalization, conflict was inversely related but cohesiveness was positively related to the stated outcome. It would appear that expressiveness, though important in other settings is not as salient in this sample. Conflict however, when prevalent in the family environment increases the likelihood that adolescents would be anxious/depressed, withdrawn, and report somatic problems. This is consistent with other findings about the impact of conflict (Burt, McGue, Iacono, & Krueger, 2006) on adolescent behavior. This is particularly relevant when it occurs in the family context where adolescent may feel powerless to begin and may not know how to respond to the features of the conflicting environment and thus internalizing behaviors become a viable option. On the other hand, high levels of cohesion result in internalizing symptoms. When the family environment is high on cohesion it may interfere with the adolescent's quest for autonomy. By failing to provide the environment for the assertion of the individual the adolescent may resort to display internalizing symptoms. That is, parental control is identified in the literature to be associated with internalizing behaviors (Buehler, 2006). Parenting control may interfere with the child's ability to emote and hinder his/she self-definition. Adolescence is the period when young people seek to advance their quest for independence and self-definition. Behaviors or climates within the

family environment that obstruct rather than stimulate such developmental strides are likely to engender internalizing symptoms. For instance, the traditional St. Lucian family values organization and obedience to rule which may be enforced by older members of the family unit. Thus, rigid adherence to norms within the family unit may create a climate that does not necessarily encourage developmental growth.

The negative association between expressiveness and externalizing behaviors although not significant is noteworthy given the fact that there is a similar association with internalizing symptoms. The socialization practices of the Island may help provide some explanation for the results of this finding. Girls are socialized to value relationships and to be cautious with their emotional expressions. This may be an indication that the dynamics within the family do not necessarily provide the facility for girls to emote in developmentally appropriate ways. That reality may create a desire for them to satisfy that need outside the home.

In addition, analysis with the personal growth composite variable indicated that it was unrelated to internalizing behaviors but when the subscales were considered, independence was a significant predictor of internalizing symptoms. This inverse relationship between independence and internalizing behaviors suggests that when adolescents are allowed to be independent the lower their internalizing symptom score. When this finding is placed within the context of the earlier observation on cohesion about the lack of independence and its impact on adolescent internalizing behaviors, this result is in concert with the negative coefficient of independence.

Finally, with regards to the subscales of systems maintenance and internalizing behaviors, neither organization nor control was a significant predictor of internalizing

behaviors. However, when additional analyses were conducted with the subscales of internalizing behaviors they confirmed the inverse relationship observed for the composite systems maintenance variable and internalizing behaviors. That is, there were inverse relationships between systems maintenance and anxious/depress and somatic complaints. This may mean that it is the combination of organization and control that is more impacting than these factors in isolation. Reduction in internalizing symptoms seems to be more of a function of the balancing of issues of organization and control rather from a family environment where there is an emphasis on one as against the other.

Similar patterns of findings are also observed for the subscales for the family environment variables and externalizing behaviors. Additional, analyses with the composite family environment variables and the two subscales of externalizing problems do not provide any clue about the variations across all of the family environment subscales. Overall, family environment appears to be more consequential for internalizing symptoms than for externalizing problems. In this setting, parents may be more aware and attentive to externalizing behaviors than they are of internalizing symptoms. Actually, internalizing behavioral responses may go undetected or even rewarded as appropriate. These results point to the importance of defining and understanding adolescent behaviors in this geographical context.

Limitations

This study utilized a cross-sectional design for reasons such as resources, expediency, and time, which have influenced the use of cross-sectional research design over the years. Although the cross sectional research design is the most common format

used in the literature, there are some inherent limitations. In this design, conclusions are based on data collected at one point in time. Since such studies are seeking to explore causal relationships built over time, information gathered at the one point is not the ideal method for accomplishing the intended purpose. Future study might want to make use of a longitudinal design that will conduct assessments at various points during adolescence.

This study utilized convenient sampling, although data collection was done at selected locations to increase the likelihood of the sample representing the population, the sample may not necessarily be an accurate representation of the population. Therefore, caution is recommended in the generalization of findings. For the aforementioned reasons, future studies might want to utilize a different method such as probability sampling.

Another limitation of the study is the administration of the survey. A self administered questionnaire was used, while this method may be the predominant style used in the literature, there are some limitations. The self administered option, as in the case of the parent questionnaire for this study, did not afford the investigator the option to supervise the process. As a result, the investigator could not guarantee the absence of consultation between members of the family (contamination). The parent survey was sent home to parents and returned after they were completed. Future studies might utilize research assistants to interview participants as this will help eliminate contamination.

Strengths

The strengths of the study consist of five contributing factors. First, the study employed an empirically-based research design. It utilized standardized measures that

reflect the discussion in the extant literature. Current research efforts are geared at designing and replicating theoretically based research designs and methodology. These efforts seek to identify nuances that influence behavior outcome among the population of this study.

The sample size is a valuable component of the strength of this study. The five hundred and ninety seven high school students and 523 parent or guardian constitute a represents is significant and healthy distribution of participants of the study. The sample size assures the applicability of the findings of the study to the population.

The findings represent an important strength of the study. There is a dearth in the literature regarding the place and role of the family in the development of the child. The expressed intent of the study was to address the gap in the literature. Thus the study provides baseline information and contributes to the knowledge of child development. The findings of this study contribute to the knowledge of the development of high school students in St. Lucia. It highlights the significance of the family in the development of high school students.

In addition, the particular emphasis of the study makes a contribution to a growing body of literature on adolescents in the region. The findings contribute to an emerging body of empirical literature on the role of the family in maladaptive outcomes and health risk behaviors among high school students. Finally, the fact that data was collected from multiple informants represents an additional strength of this study. The contribution of multiply informants allow for wider representation of the subject of interest in the study

Implications

The influence of the family on internalizing and externalizing behaviors among adolescents is well attested in the literature (Formoso, Gonzales, & Aiken, 2000; Leve, Kim, & Pears, 2005; Tamplin & Goodyer, 2001). The evidence from various ethnic groups, European American (Matherne & Thomas, 2001; VanderValk et al., 2005), African American (Bannon & McKay, 2007), and Hispanics (Schwartz, 2005), appears to consistently affirm the role of the family in the aforementioned maladaptive behaviors among adolescents.

However, certain family dynamics are likely to have varying intensity on the same maladaptive behaviors among different ethnic groups. For example, parenting styles may influence greater levels of externalizing behaviors among European Americans than they would among African Americans (Lansford, 2004). The evidence indicates that while there is commonality in terms of the presence of internalizing and externalizing behaviors, the experience of adolescents from one locality or ethnicity cannot necessarily be generalized. This is especially applicable to situations where evidence is sparse, such as, the wider Caribbean and St. Lucia is particular. St. Lucia is an island nation with an ecological niche that is different to populations from which the large evidence in the literature is derived.

This study attempted to respond to that need by examining the place of the family in mental health outcomes among the adolescent population. Specifically, it examined the relationship between the family environment and internalizing and externalizing behaviors among adolescents. The findings may contribute to an emerging body of empirical evidence on the role of the family in maladaptive outcomes and health risk

behaviors among adolescents in the Caribbean (Halcon et al., 2003; Maharajh, Ali, & Konings, 2006; Maharaj, Nunes, & Renwick, 2009; Ohene, Ireland, & Wm Blum, 2005). This study may have general or specific contributions to theory, research, and to the delivery of services to families in St. Lucia and the Caribbean region in general.

Theory

The study may provide theoretical insights that may be relevant for future studies addressing the issues. It may serve as a point of reference for other endeavors seeking to examine ways in which the environment may influence or contribute to patterns of socialization and acculturation in the Caribbean context.

Emotional and behavioral problems among children and adolescents in St. Lucia are generally conceived as individual pathology. The predisposing condition is thought to be an outcome of individual characteristics or innate predispositions. This study suggests that there are other pervading factors that influence maladaptive outcomes among adolescents in St. Lucia. An integrative model that utilized family systems theory offers some explanations for maladaptive behaviors that go beyond the contribution of the individual. The family environment appeared as an important contributor to internalizing and externalizing problems among the adolescent population in St. Lucia. The study highlights the need to develop theoretical explanations for the influence or contribution of the family environment to patterns of socialization and acculturation.

The influence of the family environment may be conceptualized from two possible theoretical approaches. First, attempts to maintain the normative family situation, may result in families failing to make appropriate adaptations to complement

the developmental demands of the adolescent. Second, the family might be a climate in which development is not adequately monitored due to the family's attempt to attenuate certain limitations, such as, the ability to manage or reduce conflict and to limit family instability. Disruptive events such as, divorce and parental romantic relationship transitions, which interrupt and undermine family cohesiveness and render the family environment unstable, are likely to increase children's vulnerability to psychological problems (Amato & Keith, 1991; Forman & Davies, 2003). In addition, attempt to organize and control what happens in the family structure to maintain the system, may encroach on or hinder adolescent autonomy and emotional expressiveness may provide theoretical direction for future studies (Barber, 1996; Pardeck & Pardeck, 1990).

Research

This study responded to the need for empirical literature on the subject by examining the place of the family in mental health outcomes among the adolescent population. The findings may contribute to an emerging body of empirical evidence on the role of the family in maladaptive outcomes and health risky behaviors among adolescents in the Caribbean. They might serve to stimulate other endeavors toward building a body of empirical data on the influence of the family on adolescent development in different geographical settings. Outcomes from this study may possible provide a basis for family scientists to explore various aspects of the family dynamic for their potential contribution to developmental adjustments among adolescents.

This study may serve as a point of reference to examine possible relationships between various aspects of the family system and internalizing and externalizing

behaviors. For instance, one of the measures used in this study asked for the adolescents' perception of the current family environment in general. Our measures allowed us to capture adolescent perception of the family dynamics; future research may include more informants, such as siblings, who can possibly contribute additional perspectives to the study. Future studies can include interpersonal family dimensions, such as, interactional, expressive, and socioemotional variables which represent various types of relationships, within the family system. Finally, future studies should seek to examine the subject through the use of a longitudinal research design.

Practice

The study established that was a strong and direct relationship between family dynamics and child development. The study holds important implications for the practice of family life education. This study can potentially make a unique contribution to the family life education on the island. The findings established baseline information on the relations between the family environment and the development of the child. That information may be used to identify needs, design content, and to strengthen and improve family relationships as a catalyst for bonadaptation among adolescents.

The findings may also be utilized to design specific curriculum and strategies for working with parents and families to reduce developmental problems among teenagers. Family life educators may utilize the finding of the study to design curriculum geared at eliminating the gap between what is perceived as sufficient family involvement and the needs of the developing child.

The findings may also inform presentations and lectures at youth forums and conferences directed at empowering and preparing children to navigate the adolescent transition. They may inform the content of presentation to government officials in the development of family policy.

Summary and Conclusions

The extant literature identifies the family environment as a contextual factor that is associated with adolescent maladjustments. The evidence indicates that while there is commonality in terms of the presence of internalizing and externalizing behaviors, the experience of adolescents from one locality or ethnicity cannot necessarily be generalized. This is especially applicable to situations where evidence is sparse, such as, the wider Caribbean and St. Lucia is particular. Family dynamics are likely to have varying intensity on the same maladaptive behaviors among different ethnic groups.

The purpose of this study was to investigate the association between the family environment and internalizing and externalizing behaviors among adolescents in St. Lucia. The results indicated that the family exerts an influence on internalizing and externalizing behaviors among adolescents in St. Lucia. The results confirmed that the family plays a role in the adjustment of adolescents. The quality of the organization and control within the family environment is likely to have an impact on the wellbeing of adolescents. Additionally, socio-demographic characteristics appear to be important contributors to adolescent behaviors. This study points to the need to continue exploring the role of family environment on adolescent behaviors in the Caribbean context.

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APPENDIX A

INFORMED CONSENT FORM FOR PARENT(S)/GUARDIAN(S)

Dear Parent(s)/Guardian(s)
You are invited to participate in this study about how families and teenagers get along and how this affects the teenager. This study is conducted by a graduate student under the direction of a faculty member from the Department of Counseling and Family Sciences at Loma Linda University in the United States.

Purpose

The purpose of this study is to gain insight and knowledge about how family life relates to teenage behaviors. This will help broaden knowledge about family life and how it relates to children's development and adjustment.

Procedures

Parent(s)/Guardian(s) invited to participate are kindly asked to read and sign this consent form and return it to the study investigator. After the consent form is returned the survey will then be sent to you. After you receive the survey, complete it and place it in the envelope provided, seal it and return it to the investigator. The questionnaire asks for your opinion of your child, how he/she functions in your home and in general, what his/her personal characteristics are, and whether he/she displays any behavioral and emotional problems. It will take you about 30 minutes to complete the survey.

Confidentiality

To protect your confidentiality please note that it is not required for you to put your name or any identifiable information on this Questionnaire. Parents and students are asked to complete their survey separately and are discouraged from discussing, consulting, or sharing their answers. Parent(s)/guardian(s) must give permission for the child to participate in the study. However, students are allowed to participate even if parent(s)/guardian(s) decide not to complete the survey. Your responses, and that of other participants, will be stored in a locked cabinet that is only accessible to the investigators of this study.

Voluntary

Your participation in completing this questionnaire is voluntary. You have the right not to participate and to withdraw your participation at any time. Please note that your refusal to participate will not affect your standing at school or grades in any way.

Possible Risks or Benefits

You are asked not to put any names on any of the forms so that the information you provide will be unidentifiable. We do hope that since you cannot be identified that you will answer the questions provided. If there is a need to seek counseling you may contact Dr. Franklin Bray, Clinical Psychologist and Director of the AGAPE Family Counseling and Psychological Services Center, Castries, St. Lucia, or call Tel. (758) -453-7213. The center normally charges a fee for counseling services provided.

Impartial Third Party

If you wish to contact an impartial third party that is not associated with this study regarding any question or concerns about the study, you may contact Mr. Donavan Rene,

Education Superintendent of the St. Lucia Mission of Seventh-day Adventist, by calling (758) 542-4195.

Consent Statement

After you have read the contents of this letter, you may sign this consent to indicate that you have chosen to participate in this study. A section is also provided for your signature granting your child permission to participate. Please keep the attached copy of this letter for your future reference, and return the signed copy to the researcher right away. You may also call the study investigator, St. Clair P. Alexander, at (758)453-7873 if you have additional questions.

I have read this consent and have been given a copy of the form and I agree to participate

_____ _____

Signature of Parent(s)/guardian(s) Date

I agree for my child to participate

_____ _____

Signature of Parent(s)/guardian(s) Date

Thank you so much for your participation,

Colwick Wilson, Ph.D.
Professor of Counseling and Family Sciences
Loma Linda University

Curtis Fox, Ph.D.
Professor of Counseling and Family Sciences
Loma Linda University

St. Clair P. Alexander M.A., M.S.,
Department of Counseling and Family Sciences
Loma Linda University

APPENDIX B

THE YOUTH SELF REPORT (YSR)

Anxious/depressed	Withdrawn	Somatic Complaints	Rule Breaking	Aggressive
I cry a lot	There is very little I enjoy	I have nightmares	I drink alcohol without parents approval	I argue a lot
I am afraid of certain animals, situations, or places	I would rather be alone than with others	I feel dizzy or light headed	I don't feel guilty after doing something I shouldn't	I am mean to others
I am afraid of going to school	I refuse to talk	I feel overtired without good reason	I break rules at home, school, or elsewhere	I try to get a lot of attention
I am afraid I might think or do something or bad	I am secretive or keep things to myself	Aches or pains (not stomach or headaches)	I hang around with kids who get in trouble	I destroy my own things
I feel that I have to be perfect	I am too shy or timid	Headaches	I lie or cheat	I destroy things belonging to others
I feel that no one loves me	I don't have much energy	Nausea, feel sick	I would rather be with older kids than kids my own age	I disobey my parents
I feel worthless or inferior	I am unhappy, sad, or depressed	Problem with eyes	I run away from home	I disobey at school
I am nervous or tense	I keep from getting involved with others	Rashes or other skin problems	I set fires	I get in many fights
I am too fearful or anxious		Stomachaches	I steal at home	I physically attack people
I feel too guilty		Vomiting, throwing up	I steal from places other than home	I scream a lot
I am self-conscious or easily embarrassed			I swear or use dirty language	I am stubborn
I think about killing			I think about sex too	My moods or feelings

myself			much	change suddenly
I worry a lot			I smoke, chew, or sniff tobacco	I am suspicious
			I cut classes or skip school	I have a temper
			I use drugs for nonmedical purposes	I threaten to hurt people
				I am louder than other kids

Child Behavior Checklist (CBCL)

Anxious/depressed	Withdrawn	Somatic Complaints	Rule Breaking	Aggressive
Cries a lot	There is very little he/she enjoys	Nightmares	Drinks alcohol without parents approval	Argues a lot
Fears certain animals, situations, or places	Would rather be alone than with others	Constipated, doesn't move bowels	Doesn't seem to feel guilty after misbehaving	Cruelty, bullying, or meanness to others
Fears going to school	Refuses to talk	Feels dizzy or lightheaded	Breaks rules at home, school, or elsewhere	Demands a lot of attention
Fears he/she might think or do something bad	Secretive, keep things to self	Overtired without good reason	hangs around with others who get in trouble	Destroys his/her own things
Feels he/she has to be perfect	Too shy or timid	Aches or pains (not stomach or headaches)	Lying or cheat	Destroys things belonging to he/her family or others
Feels or complains that no one loves him/her	Underactive, slow moving, or lacks energy	Headaches	Prefers being with older kids	Disobedient at home
Feels worthless or inferior	Unhappy, sad, or depressed	Nausea, feel sick	Runs away from home	Disobedient at school
Nervous, highstrung, or tense	Withdrawn, doesn't get involved with others	Problem with eyes	Sets fires	Gets in many fights

Too fearful or anxious		Rashes or other skin problems	Sexual problems	Physically attacks people
Feels too guilty		Stomachaches	Steal at home	Screams a lot
Self-conscious or easily embarrassed		Vomiting, throwing up	Steals outside the home	Stubborn, sullen, or irritable
Talks about killing self			Swearing or obscene language	Sudden changes in moods or feelings
Worries			Thinks about sex too much	Sulks a lot
			Smokes, chews, or sniffs tobacco	Suspicious
			Truancy, skips school	Teases a lot
			Uses drugs for nonmedical purposes	Temper tantrums or hot temper
			Vandalism	Threatens people
				Unusually loud

Family Environment Scale (FES)

Relationship			Systems Maintenance	
Cohesion	Expressiveness	Conflict	Organization	Control
Family members will really help and support one another	Family members will often keep their feelings to themselves	Members will fight a lot	Activities in the family will be pretty carefully planned	Family members will rarely be ordered around
Members will often seem to be killing time at home	Members will say anything they want to around the house	Family will rarely become openly angry	Members will generally be very neat and orderly	There will be very few rules to follow in the family
Members will put a lot of energy into what they do at home	It will be hard to "blow of steam" at home without up setting somebody	Family members will sometimes get so angry they throw things	It will often be hard to find things when you want them in the household	There will be one family member who makes most of the decisions
There will be a feeling of togetherness in the family	Members will tell each other about their personal problems	Family members will hardly ever lose their temper	Being on time will be very important in the family	There will be set ways of doing things at home
Members will rarely volunteer when something has to be done at home	If members feel like doing something on the spur of the moment they often just pick up and go	Family member will often criticize each other	People will change their minds often in the family	There will be a strong emphasis on following rules in the family
Family members will really back each other up	Someone will usually get up set if you complain in the family	Family members will sometimes hit each other	Family members will make sure their rooms are neat	Everyone will have an equal say in family decisions
There will be very little group spirit in the family	Money and paying bills will be openly talked about in the family	If there's a disagreement in the family, members will try hard to smooth things over and keep the peace	Each person's duties will be clearly defines	members will be able to do whatever they want to in the family
Members will really get along with each other	Members will usually be careful about what they	Members will really get along well with each	Money will be handled very carefully in the	Rules will be pretty inflexible in the

	say to each other	other	family	household
There will be plenty of time and attention for everyone in the family	There will be a lot of spontaneous discussions in the family	Family members will believe that you don't ever get anywhere by raising your voice	Dishes will usually be done immediately after eating	you won't be able to get away with much in the family

Personal Growth

Independence	Achievement	Intellectual-Cultural	Active-Recreational	Moral-Religious
Members will not do things on their own very often	Members will feel that it is important to be the best at what ever you do	Members will often talk about political and social problems	Members will spend most weekends and evenings at home	Member will attend church, synagogue, Sunday School fairly often
In the family, we will strongly be encouraged to be independent	Getting ahead in life will be very important in the family	members will rarely go to lectures, plays, or concerts	Friends will often come over for dinner or to visit	Members will not say prayers in the family
Members will think things out for themselves in the family	How much money a person makes will not be very important to family members	learning about new and different things will be very important in the family	Nobody in the family will be active in sports, little league, bowling, etc	Members will often talk about the religious meaning of Christmas, Passover, or other holidays
Members will come and go as they want to in the family	Members will believe in competition and "may the best man win"	Family members will not be that interested in cultural activities	Members will often go to movies, sports events, camping, etc	Members won't believe in heaven or hell
There will be very little privacy in the family	Members will always strive to do things just a little better the next time	Members rarely have intellectual discussions	Everyone in the family will have a hobby or two	Family members will have strict ideas about what is right and wrong
Family members will almost always rely on themselves when a problem comes up	Family members will rarely worry about job promotions, school grades, etc	Someone in the family will play a musical instrument	Family members will not be very involved in recreational activities outside work or school	Members will believe there are some things you just have to take on faith
Family members will strongly encourage each other to stand up for their rights	Family members won't try that hard t succeed	Family members will often go to the library	Family members will sometimes attend courses or take lessons for some hobby interest (outside of school)	In the family each person will have different ideas about what is right and wrong
It will be hard to be by	"Work before play" will	Watching TV will be	Family members will go	The bible will be a very

yourself without hurting someone's feelings in the household	be the rule in the family	more important than reading in the family	out a lot	important book in the home
Family members will not really be encouraged to speak up for themselves	Family members will often be compared with others as to how well they are doing at work or school	Family members will really like music, art, and literature	The main form of entertainment in the family will be watching TV or listening to the radio	Family members will believe that if you sin you will be punished