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Abstract

Grounded in Cultural Ecological Framework, Interpersonal Acceptance-Rejection and Social Learning theories, and guided by Hofstede's Cultural Dimensions framework, this study sought to test the applicability of parenting typologies within the Ghanaian context. In addition to ascertaining maternal and paternal culturally specific parenting typologies, the associations among parenting typologies, and sociodemographic correlates, adolescents' academic and behavioral outcomes were determined. Variations in the prevalence of parenting styles, academic and behavioral outcomes across different Ghanaian cultural regions were also examined. A sample of 800 adolescents, including 489 (61.1%) females and 311 (38.9%) males drawn from high schools located in two southern sector regions (Greater Accra and Eastern) in Ghana participated in the study. Adolescents indicated belongingness to six Ghanaian cultural regions - Greater Accra, Eastern, Ashanti and Brong Ahafo, Central and Western, Volta, and Northern. Using Mplus Version 7.4 software package (Muthén & Muthén, 1998-2015), four distinct parenting typologies emerged from a latent profile analysis (LPA) for mothers and fathers. They included moderately authoritarian (not for play); Neglectful (abi-zi-bii); Good Enough (oye ara); and Authoritative (oho ni ho) parenting typologies. Adolescents whose parents were authoritative in their parenting style indicated lower externalizing and internalizing problem behaviors and higher prosocial behaviors compared to adolescents whose parents engaged in other parenting typologies. Significant differences were not found across six Ghanaian cultural regions in the prevalence of parenting styles, behavioral and academic outcomes. Findings of this study have implications for development of programs and services directed towards improving parent-adolescent relationships and advancing adolescent wellbeing.

Parenting Typologies and Adolescents' Academic and Behavioral Outcomes in Ghana

by

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Dissertation

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Human Development and Family Science

Syracuse University

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"Thus far God has brought me". To God be the glory!

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Table of Contents

Introduction	1
Statement of the Problem	6
Literature Review	8
Parenting in Sub-Saharan African Cultures	8
Parenting in Ghana	14
Conceptualization of Parenting Styles, Behaviors, Practices, and Strategies	16
Authoritarian Parenting Style	17
Authoritative Parenting Style	18
Permissive Parenting Style	19
Neglectful Parenting Style	20
Formal School Enrolment and Achievement in Ghana	21
Academic Outcomes	24
Behavioral Problems	26
Ghanaian Cultural Values	26
Conclusions	28
Research Questions	
Theoretical Frameworks	29
Interpersonal Acceptance Rejection Theory	30
Social Learning Theory	32
Hofstede's Cultural Dimensions Theory	33
Research Hypotheses	38
Research Design	
Approval to Conduct Study	48
Proposed Sample Size & Characteristics	48
Methods	52
Procedures and Recruitment.	52
Participants	53
Measures	59
Sociodemographic Correlates	61
Adolescent Outcomes	62
Ghanaian Cultural Values	63
Data Cleaning	65
Analytical Strategy	66
Results	
Fathers (Hypothesis 1)	69
Mothers (Hypothesis 1)	
Fathers (Hypothesis 2)	
Mothers (Hypothesis 2)	77
Fathers (Hypothesis 3)	80

Mothers (Hypothesis 3)	86
Hypothesis 4	92
Hypothesis 5	95
Hypothesis 6	96
Discussion	
Limitations and Future Directions.	
Conclusion.	
Appendix	
References.	
Vita	
v Ita	14/
Tables	
Table 1	46
Table 2	
Table 3	
Table 4	
Table 5	
Table 6 Table 7	
Table 8	
Table 9	
Table 10	
Table 11	
Table 12	80
Table 13	83
Table 14	86
Table 15	
Table 16	
Table 17	
Table 18	
Table 19	
Table 20	97
Figures	
Figure 1	39
Figure 2	
Figure 3	
Figure 4	
Figure 5	
Figure 6	
riviire n	/4

Figure 7 8	1
Figure 8	2
Figure 9	3
Figure 10 84	4
Figure 11 84	4
Figure 12 8:	5
Figure 13 85	5
Figure 14	7
Figure 15 8	8
Figure 16	
Figure 17 90	
Figure 18	
Figure 19	1
Figure 20	
Maps	
Map 1	5
Map 2	

Parenting Typologies and Adolescents' Academic and Behavioral Outcomes in Ghana

Introduction

Ghana is a Sub-Saharan African country and is situated along the Gulf of Guinea and the Atlantic Ocean. Based on data from the 2010 Ghana Population and Housing Census (PHC) report, Ghana has a population size of 24,658,823 (almost the population size of Texas) and can be divided into regions namely, Greater Accra (16.3%), Eastern (10.7%), Ashanti and Brong-Ahafo (28.8% [19.4 and 9.4%], respectively), Central and Western (18.5% [8.9% and 9.6%], respectively), Volta (8.6%), and Northern [Northern, Upper East, and Upper West] (17.1%) [10.1%, 4.2%, and 2.8%], respectively). Upper East, Upper West, and Northern regions make up the Northern rural sector whereas the remaining regions constitute the southern urban sector. There are over 100 ethnic groups (Berry, 1995; Konadu & Campbell, 2016) which are categorized into five main ethnic groups (Akan, Ga-Adangbe, Ewe, Guan, and Mole-Dagbani). While some urban areas in the southern sector, like the Greater Accra region, are ethnically diverse, others like the Volta region are more ethnically homogenous (mostly Ewe). Each region has its capital with distinct dialects and practices, as well as different cultural histories that may drive different parenting practices and styles and determine different outcomes for children and adolescents. To understand the characteristics of parenting styles and adolescent outcomes in Ghana, this investigation is focused on evaluating (a) the nature and characteristics of adolescents' perceptions of their father and mothers' parenting typologies within the Ghanaian context; (b) the relationship between sociodemographic predictors of parenting typologies; (c) the association between parenting typologies and behavioral and academic outcomes; (d) the nature of Ghanaian national and regional (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta and Northern (Northern, Upper East, and Upper West)) cultural values; and (e) the association between six Ghanaian cultural regions - Greater Accra, Eastern,

Ashanti & Brong Ahafo, Central & Western, Volta and Northern (Northern, Upper East, and Upper West), and prevalence of parenting typologies, behavioral, and academic outcomes.

In Ghana, the culture of ethnic groups greatly influences parenting strategies (Nyarko, 2014b). For example, the Ga-Adangbe people, predominantly situated in the Greater Accra region in the urban southern sector of Ghana, consider harsh parenting as a vital component of child-rearing practices (Azu, 1974). On the other hand, the Mole-Dagbani people, mainly located in the rural Northern sector, use less harsh parenting behaviors as indicated by a 2014 United Nations International Children's Emergency Fund's (UNICEF's) Child Protection Baseline Research Report. These differences in parenting behaviors are a result of the interaction of rural-urban differences combined with other factors such as ethnicity and religion. The predominant religion in the northern regions of Ghana is Islam, and according to a Pew Research Center (2013) report, Islam does not support severe punishment. In the southern sector of Ghana, the Akan people, concentrated in the Ashanti, Central and Western regions, use both low responsive and high control (authoritarian) and high responsive and high control (authoritative) parenting behaviors consecutively (see, e.g., Nyarko, 2014b; Ofosu-Asiamah, 2013). The other four main ethnic groups (Ga-Adangbe, Ewe, Guan, and Mole-Dagbani) solely utilize low responsiveness (authoritarian) parenting behaviors (see, e.g., Nyarko, 2011c; Ofosu-Asiamah, 2013; UNICEF Report, 2014). These ethnic groups are predominantly patriarchal, yet, they do not have any shared ethnic history that influence parenting behaviors. In contrast, the Akan people are primarily matriarchal and their stiffest resistance to British rule (Ukpabi, 1970), contributed to their unbending approach to parenting. Common to all ethnic groups and in the early years of development, Ghanaian parents teach their children shared values like respect and honor of persons in authority (Marbell & Grolnick, 2013; Nyarko, 2014b; Sarpong, 1975).

These values are obligatory and internalized social norms that inform parenting behaviors of mothers and fathers in the Ghanaian culture.

Although a considerable number of studies suggest that, in the Ghanaian culture, most parents employ harsh parenting strategies, some postulations (see, e.g., Ofosu-Asiamah, 2013; Roman et al., 2016) indicate that more fathers than mothers utilize high responsiveness and high control (authoritative) in their parenting behaviors. Additionally, researchers have suggested that high parental control (both psychological and behavioral) utilized by authoritarian and authoritative Ghanaian parents is tantamount to parental interest in positive adolescent outcomes (see, e.g., Marbell & Grolnick, 2013; Owusu-Kwarteng, 2015) as practiced in some western cultures (see, e.g., Chao, 1994). To better understand Ghanaian parenting behaviors, some researchers contend that childrearing practices take several forms and as a result, parenting behaviors cannot be distinctly isolated within the Ghanaian culture (Kugbey, Mawulikem & Atefoe, 2015). Although childrearing practices involve "diverse mechanisms" (Asakawa, 2001, p. 185) including, strictness, physical and verbal punishment, and shaming in the Ghanaian culture (Salm & Falola, 2002), the use of parenting behaviors stem from a person's "cultural background and upbringing" (Sahithya et al., 2019, p. 357).

There is widespread evidence that parenting behaviors negatively or positively impact adolescent's developmental outcomes (see, e.g., Davids, Roman & Leach, 2015; Sidze & Defo, 2013), and growing evidence that the associations between parenting behaviors and developmental outcomes may vary across ethnic groups (Brown & Iyegar, 2008; Chao, 1994). While low responsiveness and high control parenting behaviors are common among "ethnic minorities", these behaviors have not necessarily yielded negative child outcomes (Dixon et al., 2008, p. 3). As such, the significance and essence of understanding variations in how parents

socialize their children across cultures cannot be minimized (Bornstein, 2012; Keller, Lamm, Abels, Yovsi & Borke, 2006).

An impressive body of work over the last four decades has firmly established the pivotal role of parenting typologies (e.g., authoritarian, permissive, authoritative) in adolescent academic (see, e.g., Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Nyarko, 2014b; Owusu-Kwarteng, 2015; Pinquart, 2015; Spera, 2005) and behavioral outcomes (see, e.g. Hoskins, 2014; Lorence, Hidalgo, Pérez-Padilla, & Menéndez, 2019; Pinquart, 2017). Some of the early research on the characteristics of parenting typologies spearheaded by Baumrind (1967; 1971), was later extended by Maccoby and Martin (1983) and others (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn et al., 1991). The use of a typological approach to the study of parenting was centered on capturing variations in the dimensions of parental demandingness (control, supervision, discipline) and responsiveness (warmth, supportiveness, involvement) employed in parent-child interactions. Parents were characterized as *authoritarian* (low responsiveness and high control), authoritative (high responsiveness and high control), permissive (high responsiveness and low control), or neglectful (low responsiveness and low control) based on the combination of two dimensions of parenting behaviors - responsiveness and control. Much of the early research on parenting typologies was conducted with young children in European American families, later research by Baumrind and others have applied the typologies to adolescents in many ethnic communities in the United States and across the world (see, e.g., Akinsola, 2010; Roman, Makwakwa & Lacante, 2016; Roopnarine, Krishnakumar, Narine, Logie, & Lape, 2014).

The relevance of Baumrind's parenting typologies across cultural and social contexts has received mixed support from parenting researchers, splitting them two ways with one group

acknowledging its relevance and the other dissenting. For example, Sorkhabi (2005, p. 552), postulates that Baumrind's typologies are applicable in both individualistic and collectivistic cultures, precisely, cultures that foster *independence* and *interdependence*, respectively. Similarly, Bornstein (2012, p. 212) suggests that although parenting behaviors may vary to some extent across cultures, 'universals' in parenting behaviors are still reflected across cultures. In contrast, Stewart and Bond (2002) disagree on the applicability of Baumrind's typologies across cultures on the basis that, the conceptualizations of parenting styles and practices in western cultures may have different meanings in different cultures. As such, "western-based parenting styles may not fully capture ethnic variations" (Garg, Levin, Urajknik, & Kauppi, 2005, p. 659).

The ongoing debate has fueled the concern for the applicability of Baumrind's parenting typologies in non-western samples (see, e.g., Asakawa, 2001; Cenk & Demir, 2016).

Consequently, parenting typologies in varying cultural contexts and domains have persistently remained a viable interest for parenting researchers. In this investigation, the goal is to assess the nature of parenting typologies of parents of adolescents in Ghana. Using specific parenting behaviors that are characteristic of Ghanaian parents, such as warmth or support, physical coercion, and verbal hostility, the assessment of parenting typologies will be conducted using Latent Profile Analysis (LPA) techniques rather than the use of factor analytic approaches that have characterized many investigations. This approach was undertaken because even though there may be "a universal repertoire of potential parenting responses" (Slonim, 1991, p.71), there is the potential for the emergence of additional parenting typologies (see, e.g., Rodriguez et al., 2009) that may better capture the interactional nature of parent-adolescent relationships within the Ghanaian context. Beyond examining the culturally situated parenting typologies within the Ghanaian culture, this investigation will also examine the background correlates of Ghanaian

parenting typologies (economic hardship, social organization (matriarchal or patriarchal), marital status) and adolescent academic and behavioral outcomes (internalizing and externalizing problem behaviors as well as prosocial behaviors) associated with different parenting typologies.

Central to this investigation is the examination of the important role of cultural dimensions and parenting typologies. Hofstede, Hofstede, and Minkov (2010, p. 6), characterized culture as a "collective phenomenon" which denotes acceptable behaviors and expectations that are socially reinforced and alternately inform parenting. The six-dimensional framework provided by Hofstede and his colleagues - *power distance* (acceptance of the unequal distribution of power); *individualism* (encouragement of individuality); *masculinity* (assertiveness of members of a group); *uncertainty avoidance* (tolerance of the unknown); *long-term orientation* (maintenance of traditions and norms); and *indulgence* (controlled desires and impulses) will be used to better understand national and regional cultural values in their association with the prevalence of different parenting typologies, adolescents' academic and behavioral outcomes.

Statement of the Problem

Researchers have extensively documented the association between parenting behaviors (e.g., monitoring & control) and adolescents' problem (internalizing or externalizing) behaviors (see e.g., Asiseh, Owusu & Quaicoe, 2017; Hoskins, 2014; Kumador, Tackie-Ofosu & Mahama, 2018). Internalizing behaviors are negative behaviors directed towards oneself and they include worry, fearfulness, and anti-social behaviors while externalizing behaviors entail negative behaviors toward others (e.g., bullying and aggression) and oneself (e.g., substance use). Asiseh et al., (2017), found that parental monitoring mediates adolescents' externalizing behaviors while Kumador et al.; (2018) found that a higher socio-economic status precipitates adolescents'

externalizing behavior. While these studies have not been replicated, several studies in western countries have shown that the levels of parental behavior impact adolescents differently (see, e.g., Hoskins, 2014). Research on adolescent problem behavior using a Ghanaian sample has been geared toward high-risk behaviors including sexual risk-taking, alcohol, and drug abuse, (see, e.g., Doku, 2012) which is not the focus of this paper. In a bid to deal with the declining standards of education, the Ghana Government enacted measures to revamp the education system.

Several policies and programs including the restructuring of the education system in 1987, which introduced three years each of junior and senior high school, was implemented by the Ghana Government due to the declining standards of education (McCarthy, McCarthy, Gyan & Baah-Korang, 2015; Ofusu-Asiamah, 2013) and the concerns that the current educational system was failing (Ansong, Ansong, Amopomah, & Adjabeng, 2015; Dei, 2005; Jones & Chant, 2009). Unfortunately, the outcomes of policies and programs did not yield the desired results. As much as the educational policies and the school environment have been geared towards optimal adolescents' academic success, families, parents, and their adolescents all play an integral role in their "own learning" (Nsamenang & Lo-Oh, 2010, p. 397), regardless of their culture.

In Sub-Saharan African cultures, parenting style is a new "area of research" (Roman, et al., 2016, p. 2). The bulk of the parenting research in Sub-Saharan Africa has been conducted in South Africa (Lachman, Cluver, Boyes, Kuo & Casale, 2014). Cultures in Sub-Saharan Africa are faced with civil, tribal, and political uprisings, as well as famine and hunger, in varying degrees. As a result of the socio-economic, political, and health conditions (Granich et al., 2015; Huang, Abura, Theise & Nakigudde, 2017), parenting behaviors have differing interpretations

and connotations across Sub-Saharan African cultures (Stewart & Bond, 2002). Additionally, cultural, and ethnic groups have "unique ways of parenting" (Bornstein, 2012, p.212), which makes generalizations of "findings from any one culture as normative" (p. 214) credulous. It is not unusual also, to have variations in parenting behaviors within and between Sub-Saharan ethnic cultures (Roman et al., 2016) as well as child outcomes. Therefore, the use of a non-western based sample is a much-needed research strategy necessary to determine why some parenting styles may be associated with positive developmental outcomes in one culture but detrimental in another culture. Also, it is necessary to identify if any hidden groups and patterns of parenting behavior exist within a culture. In this dissertation, the prevalence of different parenting practices and adolescents' outcomes across different Ghanaian cultural regions will be ascertained.

Literature Review

Parenting in Sub-Saharan African Cultures

Sub-Saharan Africa lies south of the Sahara and comprises 48 countries excluding Algeria, Egypt, Libya, Morocco, Tunisia, Western Sahara, and Sudan which forms part of the bloc of the Arab world (see, Times Books & Bartholomew, 2014, p. 86 & 89). Geographically, Sub-Sahara is divided into four main regions namely, Central Africa (e.g., Angola, Burundi, Cameroon, and Congo), East Africa (e.g., Ethiopia, Kenya, Tanzania, and Uganda), Southern Africa (e.g., Angola, Malawi, South Africa, and Zambia) and West Africa (e.g., Ghana, Nigeria, Senegal, Sierra Leone, and Togo).

There are over 3000 ethnic groups (Pulsipher, Pulsipher & Johansson, 2020) and 2000 languages spoken in Sub-Saharan Africa (Brenzinger & Batibo, 2010), the most linguistically diverse region in the world. Studies on parenting typologies in Ghana are limited and this review

will begin with an evaluation of studies on parenting typologies conducted in Sub-Saharan Africa followed by an analysis of studies on parenting typologies in Ghana. An overview of the parenting research in Sub-Saharan African cultures indicates a clear difference between paternal and maternal parenting styles (see, e.g., Davids, Roman & Leach, 2015). Roman, Makwakwa, and Lacante (2016) found a significant difference in parenting practices between regions and within the various ethnic groups in South Africa. Adolescent boys perceived their mothers to be more authoritarian than girls, while girls perceived their mothers as authoritative. In the same study, mothers were consistent in their parenting styles, unlike fathers who were inconsistent within groups. Mothers were typically the primary caregivers, while fathers were usually absent in their children's lives (Koen, van Eeden & Venter, 2011). According to Holborn and Eddy (2011), "70% of African fathers" were absent from their children's lives before age 15 (as cited in Koen et al., 2011, p. 206). Also, although "traditional Cameroonian fathers" represent "an authority figure", they are disconnected from their children and this separation has no bearing on the differentials of time spent with the child by each parent (Akinsola, 2013, p. 82). Yuan (2016) stated such fathers parent under distress equal to or greater than married parents or single mothers. Within the Sub-Saharan Africa context of parenting, 'absent fathers' is synonymous with 'uninvolved fathers' although an absent uninvolved parent may be because of death, socioeconomic factor, polygamy, and concubine lifestyles (Akinsola, 2013; Sikweyiya, Nduna, Khuzwayo, Mthombeni, & Mashamba-Thompson, 2016). The factors impacting a father's absenteeism are the same as the overrepresentation of mothers and their adolescents in research studies (see, e.g., Patel & Mayungu, 2016).

A few studies have focused on parenting in single and two-parent families in South Africa. For example, Roman (2011) studied parenting in single-mother and married-mother families in South Africa. Children from both families perceived their mothers as using "autonomy-supportive" and "involved parenting" (p. 582). These dimensions indicate an authoritative parenting style. Grove and Naude (2016) also studied parents in Central South Africa and found that adolescents perceived their parents to use both the permissive and authoritative parenting styles. On the effect of family structure on parenting styles, Nyarko (2014) indicated that single mothers employed the permissive parenting style due to time constraints. What is unclear in the literature is whether progressively parents changed their parenting styles as children grew to become young adults. In most Sub-Saharan African countries like Ghana, a female child, irrespective of her age remains in her parent's home until married although she may also be responsible for the upkeep of the house. Roman et al., (2016) found mothers' authoritative parenting style to be the most used parenting style across ethnic groups in South Africa.

Unlike South Africa, few studies have examined parenting within the West African context. Akinsola (2013) noted two important themes central to parenting in West Africa – "shared activity" and "shared meaning" (Akinsola, 2013, p.79). The idea of a 'shared activity' and 'shared meaning' denotes a collectivist society in which parenting is not solely carried out by parents, but also by other members in the society with common beliefs, goals, and aspirations. In Nigeria, like most West African countries including Ghana, the hierarchy and patriarchy systems underscores the importance of "obedience to authority and compliance with parental instructions" (Akinsola, 2013, p. 81). Hierarchy is a system whereby men are ranked higher than women. In a patriarchal system, men hold higher roles than women. Consequently, fathers could be authoritarian in their parenting while mothers authoritative.

In another study on parenting in Sub-Saharan West African cultures, Babatunde and Setiloane (2014, p. 248) studied the Yoruba ethnic group of Nigeria and found that parenting was based on three principles namely, (a) hard work ethics; (b) maintenance of discipline; and (c) social etiquette. Maintaining discipline signifies an authoritarian parenting style and it is exercised harshly by the father while the provision of 'comfort" by the mother implies nurturance in Sub-Saharan African cultures. Discipline and nurturance are viewed as two complementary roles of parents in Sub-Saharan African cultures. In Sub-Saharan African cultures, any adult within the community as well as siblings may instantly discipline a child or adolescent (Babatunde & Setiloane, 2014; UNICEF, 2014). It is also important to note that in corporal punishment is permitted in the school setting. Punishment ranges from standing with piles of books in both hands for hours, to being lashed with special canes of different lengths and widths (Nyarko, 2014b; UNICEF, 2014) in most Sub-Saharan African cultures.

In western Sub-Saharan African cultures, matriarchy (lineage through a mother's bloodline) and patriarchy (lineage through a father's bloodline) systems ascertain which parent is more "interested" and involved with parenting (Babatunde & Setiloane, 2014, p. 235). For example, in the patriarchal system, since property is transferred from father to son because only males carry the identity of the family, it follows that fathers may be keener on parenting their sons than their daughters. Conversely, in the matriarchy system, since rights are transferred from mother to daughter, and males in the matriarchy society are inherited by their sister's son and not their biological sons, mothers would be more devoted to parenting their daughters than their sons. According to Cooper (2012, p. 641) obligations to "members of both systems" far exceeds obligations to persons outside of the systems.

A few cross-cultural studies have been conducted by South Africans. For example, Keller, Voelker, and Yovsi (2005) studied the Nso women of Cameroon and women of Northern Germany and found that Cameroonians valued *compliance* and *respect* while the women of Northern German valued *independence* and *cognitive competence*. Also, Akinsola (2013) studied Cameroonian parents of Central Africa and Indian Gujarati Rajput families located on the continent of Asia and found that the Cameroonian parents of Central Africa were more indulgent or permissive than Indian parents (as cited in Keller et al., 2005). The authoritarian and permissive parenting styles are practiced simultaneously by Cameroonian parents and those fathers and mothers either parent differently or use 'conflicting parenting styles' (see, e.g., Ofosu-Asiamah, 2013, p. 79).

Conflicting parenting style entails the adoption of parenting behaviors that entirely oppose each other and are in divergence. For example, while mothers are permissive in their parenting, fathers are authoritarian. This creates disagreement and confusion in the home. Conversely, when both parents use the same parenting styles that balance each other out, adolescent growth and development are promoted (Mckinney & Renk, 2007; Ofosu-Asiamah, 2013). For instance, a father embodies power, strength, and authority (Babatunde & Setiloane, 2014) and may use coercive or punitive measures (authoritarian), while a mother exhibits warmth, support, and nurturance (authoritative). While research on differential parenting is necessary, the essence is for parents to be consistent in their parenting behavior to ensure the achievement of the best child and adolescent outcomes (Ofosu-Asiamah, 2013).

Common in the Sub-Saharan parenting literature is the use of more than one parenting style at a time. This is commonly referred to as "hybrid parenting" (Akinsola, 2013, p.83). For example, Cameroonian adolescents may report that their parents use "authoritarian parenting

style, permissive parenting style, and authoritarian/permissive parenting style" (p.83). Hybrid parenting entails harsh parenting, and it is encouraged early before adolescent years. Cameroon and Nigeria are both collectivist countries like Ghana, but parenting styles vary across these countries. Variations also persist in how parenting practices have been studied. Using samples from Sub-Saharan Africa, some researchers studied parenting behavior instead of parenting styles. Parenting behaviors entail practices like monitoring and supervision. For example, Cameroonian parents monitor their adolescents as well as supervise both the adolescent and their friend's whereabouts (Sidze & Defoe, 2013). Similarly, Kabiru, Elungata, Mojola, and Beguy (2014, p.7) stated some parents use "close parental monitoring" to prevent their adolescents from engaging in behaviors that may compromise their health. This type of monitoring resembles helicopter parenting whereby parents overly monitor their adolescent experiences even at tertiary institutions (Calarco, 2020). To prevent adolescents from engaging in risky behaviors, some Sub-Saharan African parents adopted new ways of parenting which vies from traditional parenting practices like caning. Also, the fear of an adolescents' health being jeopardized due to illicit sexual activity has created creative ways of parenting such as the use of more than one parenting style (hybrid parenting). Also, Sub-Saharan African parents have learned the art of balancing traditional parenting practices with the current socio-economic and health conditions in Sub-Saharan Africa. Contemporary Cameroonian parents employ excessive monitoring to keep their adolescents safe from harm. Through a four-step process of observational learning ("monitor, instruct, direct and control"), there is an expectation that children and adolescents would "observe and imitate" their parents (Akinsola, 2013, p.82). Akinsola states that such practices reflect an authoritarian parenting style common in predominantly patriarchal and collectivistic societies, like Nigeria and Ghana.

Parenting in Ghana

Ghanaian parents employ parenting practices utilized by most Sub-Saharan African cultures. The common goal is to train and raise competent adolescents who would become useful members of society. The socio-economic, political, and health issues impact all Sub-Saharan African cultures, only that conditions vary per country. Social organization systems including matriarchy and patriarchy are prevalent in Ghana. Value systems like respect and honor are also upheld in the Ghanaian culture. Sub-Saharan African countries with smaller populations are ethnically diverse and Ghana is no exception.

In Ghana, parenting behavior varies to some extent per ethnic group, since "the culture of the different tribes" is a determinant of the type of parenting style to be employed (Nyarko, 2014b, p.414). Further, authoritarian, and authoritative parenting styles are most used whether it is simultaneously employed or not (see, e.g., Akinsola, 2013; Nyarko, 2014b; Ofosu-Asiamah, 2013). Ghanaian parents are authoritarians in their parenting, (Akinsola, 2013; Boateng, Ampofo, Sefah, Baah, & Azewara, 2020; Marbell & Grolnick, 2013), enforcing rules and making sure that rules are obeyed. The authoritarian parenting style elicits obedience but deprives Ghanaian children and adolescents of their self-confidence (Owusu-Gyan, 2013). Strict parenting styles like 'restrictiveness-containment" (characterized by "strong behavioral and emotional control"), and "restrictiveness-intradependence" (characterized by the importance of shared goals and rankings) emerged when Ghanaians were studied (Pachan, 2012, p. xiv). Although these studies focused more on parenting behaviors and did not use Baumrind's parenting typology, it was clear that the harsh and coercive parenting behaviors exhibited by these parents typified authoritarian parenting style.

Researchers have drawn parallels between Ghanaian parents' use of harsh parenting and important Ghanaian values like respect and honor to persons in authority including parents, to legitimize the use of force, by indicating that adolescent outcomes have been positive.

Adolescents are forced to comply and obey their parent's orders without any complaints.

Although parental control may be forceful, the stance that positive and beneficial outcomes have been achieved resonates with most Ghanaian parents.

In terms of outcomes, when Ghanaian parents employ an authoritative parenting style, it is associated with positive outcomes. The authoritative parenting style is associated with optimal adolescent outcomes in western cultures and the Ghanaian culture. For example, Ofosu-Asiamah (2013), found that authoritative parenting which is the most used parenting style in Ghana, produced positive effects on adolescent's academic outcomes. Authoritarian and authoritative parenting styles both yielded positive outcomes. Furthermore, the use of more than one parenting style by Ghanaian parents is the *hybrid* parenting style identified by Akinsola (2013).

In Ghana, parenting research demonstrates that childrearing responsibilities do not fall heavily on biological parents alone although they are deemed the "best caregivers" (Coe, 2014, 14). Parenting takes several forms in Ghana (Kugbey, Mawulikem & Atefoe, 2015) because of the extended family system. Ghanaians value extended family members' (grandmother and relatives) role in childrearing. Due to factors including urbanization and migration, the extended family system is on the decline while nuclear families (two-parent, single-parent & polygynous union) are on the rise (Kpoor, 2015).

Parenting behaviors are also impacted by the double descent system which incorporates both matriarchal and patriarchal elements (Nyarko, 2014b). According to Nyarko, Ghanaian mothers exemplify the permissive parenting style due to their 'liberal approach' to parenting and

are more 'accepting' and less 'punitive' (p. 236). Even if Ghanaian mothers are less punitive, they still carry out punishment though to a lesser degree when Ghanaian fathers' parenting behavior is considered. Nyarko (2014a; 2014b) did not consider the possibility that some mothers take on both the mother and father roles of parenting, depending on the family structure or composition. However, Nyarko (2014b) observed that some mothers appear authoritarian while some fathers appear permissive with their adolescents. This is an interesting finding and demonstrates that not all Ghanaian fathers employ the authoritarian parenting style. Different parenting styles are employed with different members of the family depending on their conduct. Although Ghanaian parents may employ different parenting styles with each adolescent (differential parenting) depending on the gender and age of the child (Mboya, 1995), little is known about this concept within the Ghanaian context.

Conceptualization of Parenting Styles, Behaviors, Practices, and Strategies

The constructs of parenting styles, practices, strategies, and behavior have been used interchangeably (Masse & Watts, 2013; Spera, 2005) in the parenting research literature cross-culturally. According to Darling and Steinberg (1993, p. 488), parenting style is "a constellation of attitudes that are communicated to the child and that, taken together, create an emotional climate in which the parent's behaviors are expressed". In contrast, parenting practices are the specific behaviors utilized by parents in the child's school (e.g., attendance of school events) or home (e.g., help with homework) environments, to effect child outcomes (e.g., academic and behavioral outcomes). However, other researchers have conceptualized such parenting practices as parental involvement (see, e.g., Karbach et al., 2013; Khajehpour & Ghazvini, 2011). Darling and Steinberg (2003) conceptualized parenting behavior as the employment of specific strategies (e.g., monitoring) to attain a particular outcome (e.g., academic achievement). Borawski et al.,

(2003, p. 60) defined parenting strategies as a "system of dynamically interrelated dimensions" like "attention" and "tracking", a definition which is like Darling and Steinberg's (1993) conceptualization of parenting behavior. The distinctions of the concepts are necessary for identifying the type of behaviors, strategies, or styles that impact child outcomes across cultures.

These conceptualizations were recapitulated into a two-dimensional system of the levels of parental demandingness (control, supervision, discipline) and responsiveness (warmth, acceptance, involvement, supportiveness). Maccoby and Martin (1983) critiqued Baumrind's (1967) parenting typology and made modifications by dividing the permissive parenting style into indulgent and indifferent styles. As a follow-up on Maccoby and Martin's research, Lamborn et al., (1991) categorized adolescent's families into four groups (authoritarian, authoritative, permissive, and neglectful). In non-western cultures, some researchers classify parenting styles using Baumrind's (1967) three-way categorization (authoritarian, authoritative, permissive) (see, e.g, Masud et al., 2015; Roman et al., 2015; Roman, et al., 2016), while others specify all the four types of parenting styles (see, e.g., Roderiquez, Donovic & Crowley, 2009; Brown & Iyengar, 2008). Although parenting styles may have different connotations crossculturally (Stewart & Bond, 2002), irrespective of the culture, Baumrind's parenting typology still exists in all cultures (Sorkhabi, 2005).

Authoritarian Parenting Style

The authoritarian parenting style is characterized by strict rules with high demands and expectations of compliance. Failure to comply may result in punitive measures or punishment of the child without explanation. In the Ghanaian culture this parenting style is utilized in conjunction with Ghanaian values of obedience and respect. Authoritarian parenting style is low on warmth, nurturance, and parental responsiveness, but high on behavioral control (Baumrind,

1978). A common assertion is that the authoritarian parenting style has negative effects on a child's intellectual and academic achievement (Chowa, Masa & Tucker, 2013). Similarly, Hyojung, Jayoung, Boyoung & Sang (2012) found that authoritarian parenting was associated with lower math and reading scores. In contrast, Darling (1999) found that adolescents whose parents were authoritarian performed moderately well academically. Similarly, Hoskins (2014) postulates that the authoritarian parenting style may not necessarily be detrimental to a child especially when contextual factors like high-risk neighborhoods are considered. As such, racial and ethnic differences and outcomes persist in the use of the authoritarian parenting style.

Authoritative Parenting Style

The authoritative parenting style is characterized by warmth, nurturance, and responsiveness (Baumrind, 1978). While there may be expectations and a level of control, this parenting style uses non-punitive measures as a form of discipline and provides reasons when restrictions are imposed. There is an equal balance of responsiveness and demandingness (high warmth and high control). Thus, while parents have high expectations for their children, it is within the context of warmth. Additionally, the authoritative parent values and grants independence and encourages verbal communication with the adolescent. Authoritative parenting has been found to have positive effects on children's intellectual and academic achievement (Dornbusch, Ritter, Leidermann, Roberts, & Fraleigh, 1987; Marbell & Grolnick, 2013; Zahari, Suet & Poh, 2012). Furthermore, in western cultures, authoritative parenting is deemed the most effective parenting style in terms of outcomes including adolescent's academic achievement and behavioral outcomes. When parents use an authoritative parenting style, the adolescent's competence is enhanced (Baumrind, 1991). According to Simons & Conger (2016), authoritative parenting serves as a buffer for detrimental adolescent outcomes, while

authoritative parents produce the best adolescent outcomes. Globally, authoritative parenting style yields optimal child outcomes.

Permissive Parenting Style

According to Baumrind (1967), the permissive or indulgent parent is lax, accepting, and makes fewer demands on the child. Supervision, expectations, and accountability are low, and punishment is rarely used. If punishment must be carried out, non-punitive measures are employed. Generally, across cultures, and in comparison to authoritarian and authoritative styles, most studies found permissive parenting styles to be positive predictors of low academic achievement (see, e.g., Elham et al, 2012; Hyojung et al., 2012; Kim & Rohner, 2002; Ofosu-Asiamah, 2013; Rahimpour et al., 2014; Roman et al., 2016; Spera, 2005). On the contrary, Barnhart, Raval, Ashwin, and Raval (2013) found permissive parenting style to be more effective than authoritarian and authoritative styles. Permissive parenting has been attributed to mothers and authoritarian to fathers in Sub-Saharan countries, and due to the high incidence of uninvolved fathers in Sub-Saharan Africa, mothers take on the role of both parents (Roman et al., 2016). Hinnant, Erath, Tu, and El-Sheikh (2016) found that permissive parenting did not predict externalizing behaviors in African American adolescents although there were indirect effects. In another study, Roche, Ensminger & Cherlin (2007) found a higher risk of problematic behavioral outcomes for African Americans in higher-risk neighborhoods when permissive parenting is employed.

Neglectful Parenting Style

The neglectful parenting style is low on responsiveness and low on demandingness. Such parents have no expectations for their child and therefore no punishment is discharged. Parents

are also low on warmth and nurturance (Baumrind, 1978). Neglectful parents are not involved in any aspect of the child's life and there is also not much interaction between parent and child. Of all the parenting styles, neglectful parenting is the most detrimental to both children and adolescents (Maccoby & Martin, 1983). Additionally, adolescents of neglectful parents contend with truancy and delinquent issues and as a result become low academic achievers (Ofosu-Asiamah, 2013), while others may be resilient and excel academically. Factors leading to positive academic and behavioral outcomes of neglectful children, particularly in non-western cultures is a promising area of research, but outside the scope of this present study. Generally, in the parenting research literature, there is more focus on authoritarian, authoritative, and permissive or indulgent parenting styles but limited research on neglectful parenting in both western and non-western cultures.

Although there is staggering evidence that parenting styles negatively or positively impact children and adolescent's developmental outcomes (see, e.g., Davids, Roman & Leach, 2015; Sidze & Defo, 2013), there is growing evidence that across cultures, differing outcomes of Baumrind's (1967) parenting styles may be achieved when ethnic differences are considered (Brown & Iyegar, 2008; Chao, 1994). For instance, authoritarian parenting style which is common among "ethnic minorities" has not consistently produced negative child outcomes in some cultures (Dixon et al., 2008, p. 3). Even in Sub-Saharan African cultures, where the bulk of the research on parenting originated, parenting styles and child outcomes vary.

Formal School Enrollment and Achievement in Ghana

In terms of formal school enrollment and academic success, there are variations between the northern and southern sectors of Ghana. Despite the many efforts to improve and increase

educational institutions and opportunities for all Ghanaians, formal school enrollment and school achievement varies by child gender and region of child residence (Abukari & Laser, 2013; Chowa et al., 2013; GSS, 2014). Many of these educational disparities have persisted since the early 19th century when the colonial masters introduced educational institutions primarily in the southern sector. The northern parts of the country were neglected in terms of development and infrastructure. A 2016 Pew Research Center report indicates that Muslims in Ghana are twice as likely (65%) as Christians (30%) to have no formal education. This is because many children in the northern areas of Ghana attend religious schools sponsored by the significant Muslim population which is not part of the national education system. The PHC (2010) indicates that the Northern sector of Ghana (Northern [59.71], Upper West [38.79%], & Upper East [27.35%]) have the highest distribution of the Muslim population with the lowest Muslim population in the Volta region (5.71%). Generally, religion forms an integral part of parenting. Christians in Ghana go by the adage "spoil the rod, spoil the child", and Muslims, "punishment awaits those who disobey" (AbdulQader & Atyah, 2017). Although harsh punishment is entrenched in religion and the Ghanaian culture, Muslims use less harsh parenting behaviors. Many school curriculums in the northern regions are based solely on religious ideology despite the introduction of secular classes into the curriculum because of a 1987 initiative spearheaded by the Islamic Education Unit (United States Agency for International Development [USAID], 2007). The 2010 Ghana (PHC) report indicated that twice as many Ghanaians in the northern sector compared to Ghanaians in the southern sector did not have formal education (33.1% compared to 14.2%).

There are also gender variations in the rates of completion of formal education. In the northern rural areas, 13.8% of males and 19.4% of females had no formal education compared to

4.6% males and 9.5% females in the southern sector (PHC, 2010). Findings from the Ghana Demographic and Health Survey [GDHS] report (2014), which included a nationally representative sample of 9,396 women between 15 and 49 years and 4,388 men between 15 and 59 years indicated that 17.9% females versus 10.3% males in the southern urban sector had no formal education, whereas 34.9% females in the northern rural sector and 24.5% males had no formal education. According to a 2015 United Nations Educational, Scientific and Cultural Organization [UNESCO] report, traditional gender labor roles like household chores and child-rearing, hinder females in most Sub-Saharan African countries like Ghana from obtaining a formal education. Overall, more females than males in both sectors, do not have a formal education and are not enrolled in formal education.

School enrollment rates have also consistently reflected gender and regional disparities. For example, 6.1% of the 14.5% Ghanaian school-going children who live in the northern rural sector are females whereas 8.5% of the 18.3% Ghanaian school-going children who live in the southern urban sector are females (PHC, 2010). The Ghana Statistical Services (GSS, 2014) indicates that gender and regional disparities widen after the completion of 'free' basic education. Basic education entails two years of kindergarten, six years of primary education, and three years of junior high school. Based on the 2010 (PHC), the GSS (2014) indicates that nationally, more males (18.0%) attain higher education than females (11.7%). To bridge the gender, enrollment, and attainment gaps, the government introduced measures like the 1987 Education Reform which was geared towards increased accessibility to Basic Education; the Free-compulsory Universal Basic Education of 1995 which was set to improve the quality of education and the Capitation Grant of 2005-2006 which subsidized expense in sending children

to school was implemented (Abukari & Laser, 2013; Chowa et al., 2013). Unfortunately, educational disparities persist within the Ghanaian context.

The sociodemographic, religious, cultural, and educational disparities between the northern and southern sectors in Ghana would require an emic focus within each of the two sectors to understand the relationship between parenting practices and school attainment. Hence, I decided to focus my dissertation on parenting styles and adolescent's academic and behavioral outcomes on families in the southern sector alone – more specifically, on the Greater Accra and Eastern regions.

Even within the southern sector where educational institutions and opportunities are widely available, there are variations in academic achievement and enrollment (PHC, 2010). For example, according to a 2007 Ministry of Education (MOE), Science, and Sports report, the gross enrollment rate (GER) in the Eastern region is 45.1 whereas in the Greater Accra region the GER is 20.9. Furthermore, in the Eastern region, the Senior Secondary School Certificate Examination (SSCE) rate in Math is 32.3 and 36.8 in English. The Central region has the highest (46.1) GER, the Ashanti region has the highest SSCE rate (37.0) in Math while the Greater Accra region has the highest SSCE rate (42.3) in English. Volta and Western regions both have the lowest SSCE GER rate (25.6) in Math. Respectively, Volta and Western regions record the two lowest SSCE rates in English (26.9 and 27.9). While the grading system may appear to be stringent, MOE's grading practices are to ensure that grades are internationally accepted.

Socio-demographic factors such as parental education, child's age, and gender have been identified as determinants of children's academic attainment (see, e.g., Pestana, Duarte & Coutinho, 2016). However, within the Ghanaian context, the child's gender is the most important single factor influencing school enrollment (see, e.g., Iddrisu, Danquah & Quartey,

2017) especially in the northern areas where farming is the main source of livelihood (UNDP, 2009). Furthermore, a child's gender is a significant predictor for transitioning from kindergarten to primary school and from Junior High School (JHS) to Senior High School (SHS). However, after JHS years, poverty, or the ability to financially support children from SHS to the tertiary level becomes the most important determinant of school enrollment (GSS, 2014). This is because SHS and tertiary education are not free or compulsory and require financial assistance. Families struggling with "economic challenges" also contend with "educational barriers" and in families with lower socioeconomic status (SES), parents tend to lack the impetus to invest in their children's education thereby profoundly impacting educational outcomes (Wolf & McCoy, 2019, p. 260). Past research has mainly focused on the disparities between the northern and southern sectors of Ghana (see, e.g., Osei-Assibey, 2014) or on one region alone (see, e.g., Abudu & Fuseini, 2013; Fuseini, Abudu & Nuhu, 2014; Ofosu-Asiamah, 2013). Therefore, a focus on inter-regional variations is very much needed.

Academic Outcomes

Academic achievement, performance, educational achievement and academic outcomes have been used interchangeably in the parenting research literature. Academic achievement is conceptualized as attaining success in school. In a systematic literature review by Masud et al., (2015), on the importance of parenting and parenting styles which impact academic outcomes, 327 articles from the years 1987 to 2013 were initially selected. Of those, 132 articles were chosen, but only 39 articles were most relevant to the study. The articles covered four continents including Australia, Europe, Asia, America, and two or more continents. Across all four continents, the authoritative parenting style was linked to positive academic outcomes and authoritarian parenting to lower academic achievement. Only one study (Kim & Rohner, 2002)

linked the permissive parenting style to positive academic achievement. Findings from studies conducted in Sub-Saharan Africa on the association between parenting styles and academic outcomes have indicated inconsistent findings. Results have indicated authoritative and authoritarian parenting styles yielded positive academic outcomes (see, e.g., Nyarko, 2011). This means that a mother or father's parenting style may mainly affect adolescents' academic outcomes. Also, when parenting styles of both parents (mother and father) were compared among ethnic groups, significant differences within and between groups were realized (see, e.g., Roman et al., 2016).

Other studies have investigated the impact of parental investments on academic outcomes in low-income families (see, e.g., Simons & Steele, 2020; Wolf & McCoy, 2019). These studies show the indirect and direct effects of parental involvement on academic outcomes as well as the specific forms of parental investment (e.g., educational materials, impact academic outcomes, school involvement) which impact school readiness (e.g., literacy, numeracy, socio-emotional). Findings have shown that measures developed for non-western based samples were used. Although the relationship between parenting behavior and academic outcomes has been established in most western countries, when non-western samples have been utilized, results have varied and parental investments did not positively impact children and adolescents' academic outcomes (see, e.g., Wolf & McCoy, 2019). Unlike findings in western cultures, McCoy, Wolf and Godfrey (2013) found no relationship between parents' values and academic achievement.

Behavioral Problems

Using search terms like "Ghanaian adolescent problem behaviors", "Internalizing and Externalizing behaviors in Ghanaian adolescents" and "Conduct problems in Ghanaian

adolescents" yielded limited results. Internalizing behaviors are harmful behaviors that are toward oneself (e.g., fearfulness, worry) whereas externalizing behaviors although harmful, are toward others (e.g., aggression, bullying) and oneself (e.g., substance use). The scant literature on adolescent behavioral issues was largely focused on sexual risk-taking behavior (see, e.g., Darteh, Dickson, & Amu, 2019; Glozah, Oppong Asante, & Kugbey, 2018; Osafo, Asampong, Langmagne, & Ahiedeke, 2013) and adolescents' reproductive health (see, e.g., Wutoh et al., 2006). Additionally, adolescents living with their extended relatives particularly grandparents, or living alone had a higher risk of engaging in sexual activity at an early age compared to adolescents living with their biological parents.

Few studies investigated the association between maternal warmth and adolescent externalizing and internalizing problem behavior. Salaam and Mounts (2016) found that higher levels of warmth and behavioral control positively impacted adolescent's internalizing behaviors. The scant literature bears support for the use of parental monitoring by Ghanaian parents to deter their adolescents to some extent from engaging in sexual risk-taking behaviors.

Ghanaian Cultural Values

Culture is a pervasive term that constitutes many facets of human behavior including beliefs, customs, norms, and values. As a result, the conceptualization of the term has become difficult and several definitions have evolved. The Encyclopedia Britannica (1988, p. 649), defined culture as the "learned patterns of thinking, feeling and acting which become established in an ongoing social group, and transmitted from one generation to another" (as cited in Slonim, 1991, p. 4). Culture may also be defined as the "adaptive response of people to their environmental and historical circumstances" (Slonim, 1991, p. 5). To put culture in perspective, King and McInerney (2014, p.176) defined culture as "the set of values, beliefs, and traditions

that influence the behaviors of a social group". The Ghanaian culture is a combination of indigenous cultural practices, past encounters with British colonial rulers, and present experiences (Berry, 1995; Ibhawoh, 2008; Salm and Falola, 2002). Akinsola (2013, p. 79) described culture as having a "shared activity" and a "shared meaning" (psychological perspective) and that the culture that people live in shapes "values and beliefs" (cross-cultural perspective). Taken together, cultural values entail norms, traditions, and beliefs of a given culture or family. Hofstede (2011) defined culture as "a collective phenomenon which distinguishes the members of one group or category of people from others" (p. 3). What is common about the definitions is that culture entails physical and observable actions. Although differences in cultural practices persist among ethnic groups in Ghana, there is still a degree of commonality based on shared values (e.g., respect, honor).

Several cultural models have been employed by researchers in different disciplines (e.g., anthropology, psychology, and social science), to provide a framework for examining value differences and meanings cross-culturally. Hofstede's (2011) cultural model was initially intended to study organizational culture (Soares, Farhangmehr & Shoham, 2007; Young, 2008) but has been utilized extensively to study national and societal culture (see, e.g., Chen, 2007; Greenfield, 2009). Studies employing Hofstede's model to study the relationship between parenting styles and children's academic and behavioral outcomes have usually utilized one dimension, for example, individualism (see, e.g., De Oliveira, 2015; Ofosu-Asiamah, 2008). Few studies have utilized all six dimensions (see, e.g., Wu, 2006), although all the dimensions are necessary for understanding a country's culture (Hofstede, 2011).

Parents from differing cultures and ethnic groups have distinctive socialization goals by which their children and adolescents learn about values and social skills. For instance, in

individualist cultures like the United States (U.S.), autonomy and self-reliance are valued, whereas in collectivist cultures like Ghana, "interdependence and respect for elders" are upheld as important Ghanaian values (Marbell & Grolnick, 2013, p.79). Furthermore, collectivist cultures like Ghana value shared goals over individual aspirations. Additionally, members of a collectivist society employ similar parenting styles in the hope to obtain outcomes that are aligned with the country's socialization goals and what they value. However, differences persist in how children are socialized. For example, aside from the shared goals and values, while parents in the southern part of Ghana may encourage their adolescents to obtain an education, parents in the northern sector where agriculture is the main sustenance, may value more hands on the farm instead. The subtle differences in parenting strategies may also be due to ethnic differences and traditions peculiar to each tribe or region.

Conclusions

A review of the extant literature from Sub-Saharan Africa and Ghana supports the use of parenting typologies to understand the emotional context of parenting (see, e.g., Davids et al., 2015; Nyarko, 2014; Roman et al., 2015). However, most of these investigations have utilized questionnaires to ascertain parenting typologies using factor analytic techniques (a variable-centered approach) and have not utilized Latent Profile Analysis techniques (a person-centered approach) to understand the nature and characteristics of parenting typologies that are unique to the Ghanaian context. Additionally, an overview of the literature has supported the association between parenting styles and adolescent outcomes in Sub-Saharan Africa and the Ghanaian context has produced inconsistent findings. Whereas studies have pointed to parents' use of authoritative parenting style and positive academic achievement (Akinsola, 2010; Nyarko, 2011; Roman et al., 2016), other studies have not linked an authoritarian parenting style with negative

adolescent outcomes (Dixon et al., 2008). Finally, there could be variations of parenting styles employed by different ethnic groups in the Ghanaian context given the differences in practices, religion, and cultural histories across groups (see, e.g., Akinsola (2013); Azu, 1974; Nyarko, 2014b; UNICEF, 2014) but these differences have not been assessed. Based on these limitations, the following research questions were examined.

Research Questions

Question 1: What is the nature and characteristics of mothers' and fathers' parenting typologies?

Question 2: What is the relationship between sociodemographic predictors, adolescent outcomes, and mothers' and fathers' parenting typologies?

Question 3: What are the Ghanaian national and Ghanaian cultural regional (Greater Accra, Eastern, Ashanti and Brong Ahafo, Central and Western, Northern, and Volta) scores on the cultural values of Power distance index (PDI), Individualism (IDV), Uncertainty avoidance (UAI), Masculinity (MAS), Long-term orientation (LTO), and Indulgence (IND)? Question 4: What is the association between Ghanaian cultural regions and the prevalence of mothers' and fathers' parenting typologies and adolescent outcomes?

Theoretical Frameworks

This study is informed by four theoretical frameworks – Interpersonal Acceptance-Rejection Theory [IPARTheory] (Rohner, 2016), Social Learning Theory (Bandura, 1969), Cultural Ecological Framework, and Hofstede's Cultural Framework (Hofstede, 2013). These theories will be briefly discussed in this section of the dissertation.

As early as the 1930s and 1940s, Behaviorist and Freudian theorists have been interested in understanding the impact of childrearing practices on child and adolescent development. An overview of the socialization research literature over the years has extensively pointed to the role

of parental support and control (Rollins & Thomas, 1979) or responsiveness vs. demandingness (Baumrind, 1967, 1991) as the two major underlying dimensions central to socialization (e.g., acceptance versus rejection and dominance versus submission (Symonds, 1939); emotional warmth versus hostility and detachment versus involvement (Baldwin, 1948); warmth versus hostility and restrictiveness versus permissiveness (Becker et al., 1962); warmth and permissiveness versus strictness (Sears, Maccoby, & Levin, 1957); love versus hostility and autonomy versus control (Schaefer, 1959). These dimensions have been extensively used in the literature.

Interpersonal Acceptance-Rejection Theory

Interpersonal Acceptance-Rejection Theory (IPARTheory) (Rohner, 2016), an evidenced-based theory (EBT), forms the basis of this study. The main premise of IPARTheory is that everyone experiences varying degrees of warmth from the people they deem important in their lives. In a meta-analytic review by Khaleque and Rohner (2011), IPARTheory has been tested and found relevant in several societies. For example, in Sub-Saharan African countries, with Nigerian mothers and fathers (Haque, 1981) and in the Bloc of the Arab world, with Egyptian mothers (Ahmed, 2006). Ethnically diverse samples of mothers were drawn from Mexico (Roll, 1977) and Puerto Rico (Matos, 2006). In western cultures like the United States (see, e.g., Granum & Starkey; Rohner, 1999; Rohner & Rohner, 1979), and in international settings including Turkey (Erkman & Rohner, 2006), the Caribbean (Steely & Rohner, 2006; Grannum, 2007; Rohner, 1987; Matos, 2006), Czek Republic (Matějček, 1980), the Middle East (Ahmed, 2007 & Barahmand, 2006), and overwhelmingly with Asian countries like Pakistan (Khaleek et al., 2007), Korea (Hahn, 1980), Bangledesh (Khaleque et al., 2008), India (Reddy, 1982;Rohner & Chaki-Sircar, 1982). Except for Haque (1981) and Chaki-Sircar (1982), these studies

examined mother-child relationships instead of fathers-child relationships. This bears support to the gender bias in research whereby more females than males participate in research studies.

Another review of 12 meta-analytic studies showed the significance of IPARTheory in relation to child and adult behavioral processes and personalities across cultures (Khaleque & Ali, 2017). Studies included in the meta-analyses support the notion that both children and adults respond in similar ways when they perceive acceptance or rejection from a significant person. There are three sub-theories (personality, coping, and sociocultural) of IPARTheory. Personality sub-theory postulates that irrespective of gender or ethnicity, people respond in similar ways when they are accepted or rejected, and they carry this perception throughout their adult life. Coping sub-theory suggests that some individuals cope better than others when faced with rejection while the Sociocultural sub-theory delves into why some caregivers are warm and supportive and others cold and neglecting. This current study investigated neglectful parenting addition to Baumrind's authoritarian, authoritative and permissive parenting behaviors by postulating that the absence of these three parenting typologies is equivalent to neglect. Like Baumrind's parenting typologies, IPARTheory assumes that neglect encompasses the deficit of material, physical, social, and emotional need. According to Rohner (2016, p.5), child and adolescent reports are "internal, psychological states" of the child. A child or adolescent's response to their mother or father's rejecting or neglectful parenting style may cause this child to have "a host of psychological, behavioral, physical health and other problems including internalizing and externalizing" problem behaviors (Rohner, p. 21; Rohner & Britner, 2002). Both theories (IPARTheory and Baumrind's parenting typologies) guided the selection of the parenting measure (Parenting Style and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Oslen, & Hart, 2001) utilized for this current study. Another important facet of IPARTheory is

that parenting gestures (e.g., praise) vary from one setting to the other. IPARTheory also suggests that individuals that are single, young, economically poor, or are lacking social and emotional support, are more prone to using parenting behaviors that may be perceived as low warmth or neglectful. This current study included financial strain, economic hardship, social organization (matriarchal or patriarchal) and marital status as predictors of parenting behavior.

Social Learning Theory

Bandura's (1969) social learning theory (SL theory) also guided the present study. SL theory is a combination of cognitive and behavioral learning theories. This current study investigated adolescents' academic and behavioral outcomes. Cognitive learning theory suggests that learning is influenced by thought processes and that choices and decisions are made using reasoning and logic (Pagnotta, 2018) while behavioral learning theory suggests that behavior is learned by observation and imitation from the people in a person's life which includes the extended family and members of society within the Ghanaian culture. Cognitive theory has been useful in the fields of education and it helps explain gender, enrolment, and attainment gaps within the school system. Bandura (1978) discussed three facets of aggression including the origins (e.g., observational learning), instigators (e.g., physical threats and verbal insults) and regulators (e.g., punishment or rewards) of aggression found in SL theory. SL theory provides good understanding of adolescent's externalizing behaviors by suggesting that externalizing behaviors may also be *learned* from their parents, *reinforced* by their caregivers, and may also be contingent on structural determinants like the society or the neighborhood in which these adolescents live. Additionally, the type of behavior (internalizing or externalizing) may be due to how the adolescents evaluate or interpret the parenting behavior employed by their parents. This current study aims at determining adolescent's perception of their parents' parenting

behavior and the unwarranted use of punishment by parents which may cause adolescents to exhibit internalizing or externalizing problem behaviors.

Although children and adolescents learn by their responses to what they observe and experience, the learned behavior and experiences may show up immediately (internalizing or externalizing behavior) or later in their lives, however, the values of respect and honor which Ghanaian parents instill in the lives of their child or adolescent stays with them throughout their adult lives.

Hofstede's Cultural Dimensions Theory

Hofstede's cultural dimensions theory is a framework that has been utilized cross-culturally with countries in the Americas (e.g., Venezuela, Costa Rica, Ecuador), Europe (e.g., Italy, Spain, Greece), Ex-Soviet (e.g., Czech Republic, Romania, Estonia), Asia (e.g., Thailand, Singapore, Indonesia), and Africa (e.g. South Africa, Uganda, Ghana). The original framework was developed as early as 1967 with only four dimensions (individualism-collectivism; uncertainty avoidance; power distance and masculinity-femininity), but by 2010, two more dimensions (long-term orientation and indulgence) were added (Hofstede, 2013). Although the theory was initially intended for IBM employees to test the culture of the workplace, this theory has gained a lot of popularity and grounds in several fields of study including social sciences.

Hofstede's (2013) cultural dimensions (power distance (PDI), individualism (IND), masculinity (MAS), uncertainty avoidance (UAI), long term orientation (LTO) and indulgence (IND) was adopted to understand national and regional variations within the Ghanaian culture, no matter how subtle the differences may be. The framework has been used to understand the impact of a society's culture on the value system of its members, and to determine how these values relate to behavior. In relation to other cultures worldwide, on a scale of one through 100,

Ghana's national scores were: PDI = 80, IDV = 15, MAS = 40, UAI = 65, LTO = 4 and IND = 72 (LeFebvre & Franke, 2013). Based on the national scores, Ghana is a collectivist country with high maintenance of rigid and strict rules (Hofstede, Hofstede & Minkov, 2010).

Long-term Orientation (LTO) is the society's maintenance of links with their past (e.g., traditions) and their cynicism for change. Ghana's low score of 4 is indicative of Ghanaians respect for traditions and norms as well as their maintenance of rigid rules (Hofstede, 2011). If traditions, norms, and rules are strictly maintained in the Ghanaian culture, then it follows that Ghana's long-term orientation score would be low because short-term oriented cultures uphold traditional methods. Consequently, Ghanaians would rather make short term goals than long term goals if the future is not their present focus. The adolescent who focuses on short-term goals may engage in "risky and problematic" behaviors like excessive drinking and smoking (Holden, 2010, p.8). These risky behaviors indicate that the adolescent may be thinking less about the future and the consequences they would have to face, and more about the present, immediate gratification, and rewards. Risky behaviors may in the long-term negatively impact their academics. It also follows that if Ghanaians focus on achieving quick results within the shortest possible time, then their UAI will be high (65).

Uncertainty Avoidance (UAI) is the acceptance of vagueness and the ability to deal with unexpected situations as well as the willingness to adjust or adapt to change (Hofstede, 2011). A high UAI score of 65 which suggests that Ghanaian parents have rigid rules, regulations, and beliefs with an expectation that their children would obey (Boateng & Ampofo, 2016; Salm & Falola, 2002), is not surprising. This is because of their low LTO score of 4 which implies their resistance to change. The five main features of UAI are rigid codes of belief; intolerance of orthodox ideas; the emotional need for rules; inner urge to be hard working; and resistance to

change (https://www.hofstede-insights.com/country-comparison/the-usa/). To gain autonomy from their parent, adolescents decide on the rules that they would continue to keep, and discard those they find outmoded (Benish-Weisman, Levy & Knafo, 2013). This current study determines whether adolescents' input on family rules are encouraged (autonomy-democratic participation) or whether power within the home is not shared.

Power Distance (PDI) is the degree to which power is unequally distributed within a culture or an institution (e.g., the family), and determines how people within a culture feel about the unequal distribution of power (Hofstede, 2011). In a patriarchy home, the father is the head of the family and the breadwinner, and the children have the least power. As children grow and become adolescents, their perspective might change on the unequal distribution of power as they make meaning of roles and positions in the home. A pushback from an adolescent is a way to gain independence from their parents. Parents grant adolescents autonomy by involving them in the decision-making process in the home and by giving them the freedom to act on their judgment, values, and interests (autonomy-granting). According to Hofstede et al., (2010), a high PDI score means adolescents accept rankings within the family and their positions as being at the bottom of the hierarchy ladder. A low score is indicative of the adolescent's perception that power is equally distributed. Being at the top of the ladder entails more responsibility than being ranked at the bottom. A high PDI might suggest that adolescents view their maternal and paternal parenting style as authoritarian with little discussion about the rationale behind rules, orders, or instructions. Adherence to strict family or group rules may impact how adolescents achieve a sense of individuality separate from other members of the family and the society to which they belong.

Individualism (IDV) is the "degree to which individuals are integrated into groups" (Hofstede, 2011, p.11). According to Hofstede, the extent to which a culture or an institution values group goals determines how often the pronoun "we" or "I" is emphasized within the culture or the home setting. A low IDV score of 15 for Ghana means a strong emphasis and prioritization of group or family goals over individual goals and aspirations. Since group goals are more important than individual goals, commitment, and loyalty to the group may be highly observed (Anarfi & Owusu, 2011). Adolescents in their quest to obtain an education find themselves balancing their personal goals on one end and their familial goals on the other. However, it is not uncommon within the Ghanaian culture for comparisons to be made amongst families in terms of how well members do academically and behaviorally. Although an adolescent may work hard to attain success, the adolescent's success is viewed as an achievement for both the individual and the family. Adolescents are in a constant bid to control their desires or forfeit them for the family in which they belong.

Indulgence (IND) is the extent to which desires and impulses are controlled. IND is dependent on how one is raised. A child raised to delay gratification learns in later years to do the same (Hofstede, 2011). According to Hofstede, a high IND score of 72 is indicative of positive and optimistic attitudes as well as the tendency to satisfy immediate and personal needs. However, a low individualism score of 15 contradicts the notion of Ghanaians high propensity to satisfy personal ambitions and become distinct from other members of group, family, or culture. This current study aims at determining differences in parenting behavior and academic and behavioral outcomes across and within Ghanaian cultural regions. Worth noting, an indulgent parent is one who has difficulty disciplining a child; spoils a child or has tolerance for the child's misbehavior. This is dissimilar to Hofstede's definition of indulgence (IND). In the Ghanaian

culture, the father usually exerts power in the home and this is contingent on the family structure and composition even though the Ghanaian culture is moderately feminine and not masculine (Hofstede, 2011).

Masculinity (MAS) is the cultural attributes and roles assigned to males in a society. In a masculine culture, competition is an important value, and it supersedes nurturing as it is found in a feminine society. Standing out as a group (family) and not as an individual is highly commendable in the Ghanaian culture. A high MAS score indicates significant differences between males and females' roles as would be expected in a masculine society. With a national masculinity score of 40, it implies that Ghana is a moderately feminine society. This national score is somewhat a surprise due to well defined roles and balance of power in the home. Families of a patriarchal system may be more masculine than families of matriarchy descent. This is because in patriarchy the father is seen as the head of the family whereas, in a matriarchy, mothers or females are often the head of the family. The northern regions of Ghana are mainly patriarchal and more male dominating. However, in the southern sector, there are large areas (e.g., Greater Accra region) that are mainly of patriarchal descent and areas that are predominantly matriarchal [e.g., Ashanti region] (PHC, 2010). Significant disparities in education and gender persist between the northern and southern sectors of Ghana, and such differences also exist throughout the southern regions of Ghana for reasons not limited to patriarchy and matriarchy systems (PHC, 2010; UNICEF, 2014).

Overall, Hofstede's (1980) theory guided the present study in understanding the relationship between parenting styles and adolescent's academic and behavioral outcomes.

Also, the theory helped explain the variability realized in outcomes based on the parenting styles employed by both parents. Ghanaians are deeply rooted in their traditions but differ sharply on

customs, beliefs, and practices depending on the ethnic group in which they belong. With the "multicultural and multiethnic" (Salm & Falola, 2002, p. 5) or "poly-ethnic" (Laird, 2011, p. 434) nature of Ghana, Hofstede's cultural dimensions framework will become useful in understanding subtle differences between and within ethnic groups. Choosing a few dimensions to understand a given culture as most researchers have done (see, e.g., De Oliveira, 2015; Ofosu-Asiamah, 2013) may not capture all of the variations present within the Ghanaian culture especially when mixed results have been achieved. Also, this study is one of the first to employ sophisticated methods by employing all six of Hofstede's cultural dimensions. Aside understanding variations in academic and behavioral outcomes, this theory guided the present study in understanding the correlates of parenting styles when adolescent's cultural values orientation was considered. Hofstede's framework helped explain and understand the multiple cultures and ethnic groupings in the Greater Accra and Eastern regions as well as adolescents' cultural regions of belonginess. In the next section of this dissertation, the research hypotheses of this study will be discussed.

Research Hypotheses

Few investigations have examined the relationships among maternal/paternal parenting styles, sociodemographic correlates, and academic and behavioral outcomes within the Ghanaian context. As such, the hypotheses for the current investigation are based mostly on the literature in Sub-Saharan Africa, theoretical frameworks, the Ghanaian literature where available, and information from the broader scientific literature.

Hypothesis 1. It is hypothesized that adolescent reports of fathers' and mothers' parenting behaviors (adolescent reports) of warmth and support, autonomy granting, verbal and physical punishment, and inductive reasoning, will generate between 2 and 5 parenting typologies. It is

expected that at least two of the latent parenting classes for fathers and mothers parenting typologies will be authoritative and authoritarian.

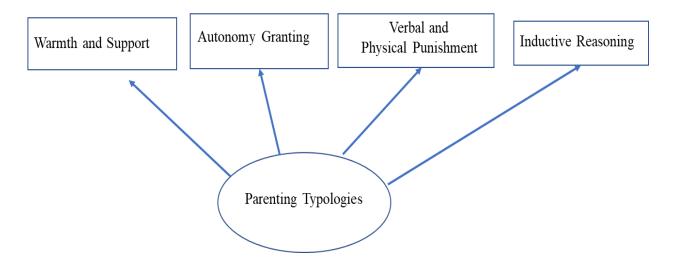


Figure 1: Parenting typologies and items

Given the limited number of studies that have used a sophisticated method like Latent Profile

Analysis to study parenting styles utilized by Ghanaians, the hypothesized expectation of at most
five latent classes was based on evidence from studies of adolescents' perception of parenting
styles in Sub-Saharan Africa (see, e.g., Davids et al., 2015; Roman et al., 2015). Tancred and
Greeff (2015) and Romans et al., (2011) used the PSDQ to determine mothers' and fathers'
perception of parenting styles. Based on the limited studies on parenting styles in Ghana and
even in most Sub-Saharan African cultures, most parents utilize authoritarian and authoritative
parenting styles (see, e.g., Akinsola, 2013; Boateng et al., 2020; Marbell & Grolnick, 2013;
Ofosu-Asiamah, 2013). Research has indicated that most Ghanaians use an authoritarian
parenting style. Also, an important aspect of IPARTheory states that all people experience
warmth and support from important persons in their lives and the absence of these indicators
denote neglect. IPARTheory in the dimensions of warmth and neglect, and Baumrind's
framework helped answer this hypothesis. Also, both theories help explain the model. This

hypothesis and other hypotheses in this current study are strongly guided by the Cultural Ecological Framework which indicates that the environment in which people live in, their beliefs, all shape parenting behaviors.

Hypothesis 2. It is hypothesized that sociodemographic characteristics (family social organization, marital status, English language spoken at home, parent age, employment status, financial strain, and Ghanaian regions) will be associated with different parenting clusters (adolescent reports). It is hypothesized that patriarchal social organization and financial strain will be associated with an authoritarian parenting style whereas matriarchal and English language spoken at home will be associated with an authoritative parenting style. The nature of the associations between other sociodemographic characteristics and parenting clusters are less established.

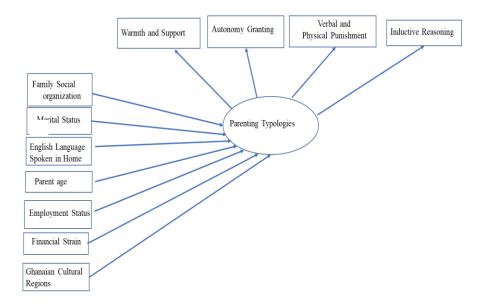


Figure 2: Background correlates and parenting items.

Support for this hypothesis is based on the parenting research literature in Sub-Saharan African cultures. The socio-economic conditions and socio-demographic status of people living in Sub-Saharan African cultures are difficult circumstances that impact parenting behaviors. Due to

socioeconomic factors, Ghanaian parents utilize support from extended family members. A positive association between financial strain and authoritarian parenting style indicates that fathers are usually the breadwinners and wield the most power in the home (Akinsola, 2013). This hypothesis is based on the research conducted with Ghanaian families (see, e.g., Nyarko, 2011; Ofosu-Asiamah, 2013). Also, although the English language is spoken at home to ensure command of the language at school, based on the breadwinner and homemaker model, it is expected that mothers instead of fathers will spend more time with their adolescents at home (Toyin, Osabutey & Gbadamosi, 2017). A Trading Economics (2020) report indicates that the female labor force participation is 46.44%. Given the limited number of investigations that have examined the effect of these predictors, specific predictions could not be made. This hypothesis is situated within the Cultural Ecological Framework. Also, from the perspective of Rohner's work and Baumrind there are some social and cultural factors that drive people to use a particular parenting style.

Hypothesis 3. It is hypothesized that there will be differences in academic (teacher reports; English, Integrated Science, Math, and Social Studies) and behavioral (internalizing and externalizing) outcomes (adolescent reports) across different parenting typologies. Mothers and fathers (adolescent reports) who engage in Authoritative parenting styles will experience the most positive behavioral and academic outcomes compared to those in other parenting typologies.

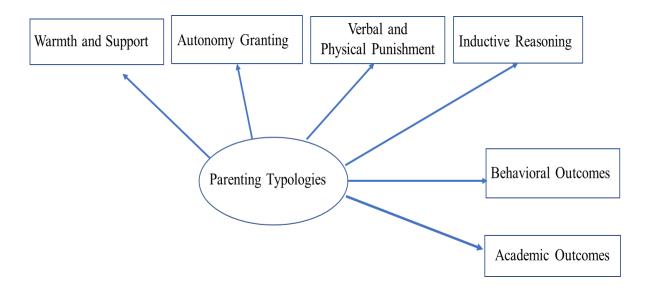


Figure 3: Parenting typologies, items, and academic and behavioral outcomes

Across cultures, an authoritative parenting style has been found to produce optimal adolescent outcomes and the parenting research in Ghana indicates a positive relationship between an authoritative parenting style and adolescents' academic outcomes (see, e.g., Ofosu-Asiamah, 2013) and positive behavioral outcomes. Predictions were based on the extant literature (both using western and non-western samples). Baumrind's (1967;1971) parenting typologies and SL theory will provide clarity in understanding the relationship between parenting typologies and adolescent behavioral outcomes. The Cultural Ecological Framework will help in understanding the parenting behavior utilized since the choice of parenting behavior will be contingent on the environment and belief systems.

Hypothesis 4. There are likely to be variations in the levels of different cultural variables (Power Distance (PDI), Uncertainty Avoidance (UAI), Individualism-Collectivism (IND), Masculinity-Femininity (MAS), and Long-Term vs. Short-Term Orientation (LTO) (adolescent reports) across six Ghanaian cultural regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern (Northern, Upper East, and Upper West).

Hofstede's cultural framework will provide an understanding of the variations between the different levels of cultural values across regions. At higher levels of power distance index values, the association between authoritarian parenting style and academic achievement would be stronger than lower levels of power distance index values. Higher power distance means higher control and with higher control, adolescents are expected "to be told what to do" (Hofstede, 2011, p.9). It is expected that at higher levels of individualism (individualism-collectivism scale) the association between authoritarian parenting style and academic and behavioral outcomes will be weaker than lower levels of individualism, the reverse finding may hold on the association between authoritarian parenting style and academic and behavioral outcomes. Ghana is classified as a highly collectivist society with a low individualism index score of 15 (Hofstede, 2001; Schwartz, 2006). The nature of the associations between parenting styles and adolescent academic and behavioral outcomes for different levels of the different adolescent cultural values when parents' ethnicity is considered will be explained by Hofstede's cultural values dimensions.

Hypothesis 5. There are likely to be differences in the prevalence of fathers' and mothers' parenting typologies (adolescent reports) across various Ghanaian cultural regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern).

The prevalence of adolescent reports of the parenting typologies is based on typography and demography and not empirical support. The schools surveyed were situated in the southern sector of Ghana. The chances that adolescents' region of belonginess would be from the northern parts of Ghana will be less due to topography. Parenting typologies utilized by fathers and mothers in the northern regions will vary greatly when compared to the prevalence of fathers' and mothers' parenting typologies across the other cultural regions (Greater Accra,

Eastern, Ashanti & Brong Ahafo, Central & Western, Volta). However, differences in the prevalence of fathers' or mothers' parenting typologies between parents in the Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, and Volta) regions could not be specified. Hofstede's cultural dimensions, Cultural Ecological Framework and Baumrind's (1967) parenting typologies will help explain this hypothesis and understand the choices of parenting behaviors employed by parents.

Hypothesis 6. There are likely to be mean differences in adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, prosocial behaviors, and academic outcomes) across various Ghanaian regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern).

Few studies have investigated the relationship between cultural values orientations (Hofstede's six cultural dimensions) and parenting styles and adolescents' academic and behavioral outcomes in the Ghanaian context. The mean differences in adolescent outcomes in externalizing and internalizing problem behaviors will vary depending on the parenting behavior employed by mothers or fathers. Based on the literature review and the baseline UNICEF (2014) report, it is expected that when an authoritarian parenting style is employed, adolescents will exhibit high levels of externalizing behaviors than when an authoritative parenting style is utilized. Also, based on the literature review, it is expected that a neglectful parenting style will yield lower levels of externalizing behavior than when an authoritarian parenting style is employed. Predictions could not be made for mean differences across regions due to the limited literature on regional level differences. IPARTheory in their dimensions of warmth and neglect, Baumrind's parenting typologies and Cultural Ecological Framework guided this hypothesis.

Research Design

Data for this study were drawn from the Ghanaian high schools in Greater Accra and the Eastern regions. Before discussing the sample selection process, the characteristics of the Ghanaian school system in the two regions from which the data were drawn will be discussed.

Established under Civil Service Law 327 and PNDC Law 1993, the Ministry of Education (MOE) is the department that oversees junior high Schools (JHS), senior high schools (SHS), Technical, and Special Education schools in Ghana (Berry, 1995). According to a 2014-2015 MOE report, there are 863 SHS in Ghana. Of those, the Eastern region has 117 SHSs. There are 27 more senior high schools in the Eastern region than in the Greater Accra region. In the 2014-2015 school-years, MOE recorded 74,537 senior high school students (35,958 were boys) in Greater Accra. On the other hand, there were 120,942 SHS students in the Eastern Region in the 2014-2015 school year (60,056 were boys). The SHS gross admission rate (GAR) in the 2014-2015 school year was 47.3% boys versus 44.7% girls. The percentage change in GAR for the 2014-2015 school year from the previous 2013-2014 school year was -0.4% for boys and 1.9% for girls. The SHS consists of three classes (SHS1, SHS2, and SHS3) (equivalent to 10th, 11th and 12th grades in the U.S. school system).

The source material selected for the proposed study is drawn from the MOE's secure website (http://www.edughana.net/searchsecondary.htm). MOE is responsible for the national education system curriculum and for the implementation of approved educational policies and programs, which is detailed on MOE's website (www.moe.gov.gh). The MOE has the listing of all Senior High Schools in each of the 10 regions, basic statistics on enrollment, school admissions, and graduation rates. Also, key indicators like percentage change between previous and current school years, student-classroom ratio, student-teacher ratio, gross admission rate (GAR), and gross enrollment rate (GER) are available on the secure website. Up-to-date

information is provided on all schools in each region and the most current report posted on MOE's website is for the 2014-2015 school year.

Senior High School in Eastern Region

In 2016, 2205 students (SHS1 [831], SHS2 [796] SHS 3 [578]) were enrolled and 1063 were boys (MOE, 2016). Except for enrolment numbers for the year 2016, all available data on MOE's website (retrieved 2/23/18) were from 2011 to 2015 (see, Table 1) below.

Table 1

Senior High School in the Eastern Region: Performance in Four Core Classes Over Five

Years (2011-2015) in the West African Senior Secondary Certificate Examination

Year	Math	English	Science	Social Science
2011	360	494	342	493
2012	359	428	395	437
2013	259	801	670	836
2014	148	234	130	256
2015	54	373	118	285

Source: Ghana Education Service - Ministry of Education – 2016 Report.

The number of students performing well in all four core subjects significantly dropped within five years, except for 2013 where an increase was realized in all subjects except Math.

Only 51 students qualified for tertiary education in 2015, 246 in 2013, and 105 in 2014. Overall, there has been a decrease in the number of students graduating from Senior High School in the Eastern region.

The Senior High School is in the Greater Accra region. In 2016, 1899 students (SHS1 [733], SHS2 [584] & SHS 3 [582]) were enrolled at the school. Apart from the enrolment data, there is no available data on MOE's website about the school. The SRSB report, which is like the yearly reports submitted to MOE's website, tracks student's performance each school year. Except for enrolment numbers for the year 2016 on MOE's website, there was no available data

on the school. Therefore, the performance of students in four core subjects from 2011 to 2015 (see, Table 2), was obtained from the School Principal - School Records for the School Board report (SRSB, 2016) (Headmaster, personal communication, May 12, 2019).

Table 2
Senior High School in the Greater Accra: Performance in Four Core Classes Over Five Years (2012-2016) in the West African Senior Secondary Certificate Examination

Year	Math	English	Science	Social Science
2012	584	596	598	599
2013	441	554	513	556
2014	344	458	379	442
2015	406	458	446	489
2016	442	605	599	594

Source: School Records for the School Board report (SRSB) - 2016 Report.

From the two tables (Table 1 and 2), grades fell over the years for both senior high schools. Also, although both schools are in the southern sector of Ghana, there were regional variations in academic achievement.

Approval to Conduct Study

Approval for the study was obtained from the Institutional Review Board at Syracuse University. Student participation in research studies did not require the approval of the school board but rather the school principal at each school who evaluated the research proposal and made the decision for the students to participate in the study. Flyers about the project and consent forms were given to students to take home to their parents. The consent forms briefly described the proposed study and the risks and benefits of participation. Students whose parents permitted their children to participate in the proposed study could participate in the study. In

addition to permitting their adolescents to participate, their mothers or fathers also indicated whether they were willing to participate in the proposed study.

Proposed Sample Size and Characteristics

Based on the results from simulation studies, researchers have made recommendations about the minimum sample size required to conduct latent profile (LPA) analyses (see, e.g., Tien, Coxe & Cham, 2013; Yang 2006). It is commonly understood that having a small sample size could result in studies with insufficient power for latent class detection as well as lead to biased standard errors. According to Tien, Coxe & Cham (2013, p. 641), an "under-powered" study results in "too few or too many latent classes". This makes sample size and characteristics of important factors to consider when employing LPA as an analytical strategy. Yang's (2006) focused his simulation studies on two sample sizes where (N = 700) and (N = 1000) while Tien et al., (2013) utilized three samples sizes (N = 250), (N = 500), and (N = 1000) which yielded at most 5 latent classes. A minimum sample size of >250 is the rule of thumb (see, e.g. Tien et al., 2013) while Spurk et al., (2020) indicated 500 (as cited in Nylund et al., 2002) to ensure accuracy in latent profile identification. However, an increase in sample size did not necessarily reduce the AIC values (Tien et al., 2013; Yang, 2006). Furthermore, these suggestions are meaningless in their ability to adequately recommend appropriate sample size requirements for LPA analyses without being linked to techniques including the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), sample-size adjusted BIC (SABIC), and entropy. Tien et al., (2013) suggested Monte Carlo simulations for sample size estimation.

A software program developed by Soper (2014) was used to determine the a priori sample size required for this project instead of Monte Carlo simulations. The limited number of investigations that have examined differences or similarities on the mean levels of different

parenting styles, adolescent academic and behavioral outcomes, and adolescent cultural values in the Ghanaian setting using LPA, have used prior work for population parameter values and power estimations. The calculation was based on the number of observed and latent variables in the proposed conceptual model, the anticipated effect size (small, moderate, or large effect size (d= .10, d = .30, d= .50 respectively), the desired probability (p < .05) and statistical power level of .80. Based on these specifications, the minimum sample size to detect effect for this study was 195, the minimum sample size required given the structural complexity of the model was 669, and as such the recommended minimum sample size for the study was 669.

Adolescents from three classes (SHS1, SHS2, and SHS3 which is equivalent to 10th, 11th and 12th grades in the U.S. school system) from a school in the Eastern region which is located in the East Akim Municipal District (EAMD), and another in the Greater Accra region located in the Greater Accra Metropolitan Area (GAMA) were selected for the proposed study. Boys and girls between ages 15-18 years of age from the three SHS grades and attending those schools were part of the sampling frame. These adolescents and their parents agreed to take the pencilpaper survey and therefore provided written consent and assent forms. Also, the headmaster and headmistress (Principals) of the schools agreed for the surveys to be conducted in their schools. Thus, student participants attended the two schools in the Eastern and Greater Accra regions. Eligibility, Inclusionary, and Exclusionary Criteria. The need for setting inclusion and exclusion criteria is to rule in or out specific characteristics of the target population and determine who is eligible to participate in the study. Students eligible to participate in the proposed study were enrolled in SHS1, SHS2, and SHS3 and were between 15 and 18 years (middle to late adolescence). Age 15 through 18 years is a crucial period for children due to a few reasons. First, adolescents must succeed academically to qualify for tertiary or higher

education programs, which in turn would increase their chances of securing better-paying jobs. Second, developmentally, adolescence experience physical, psychological, and hormonal changes, and the changes they go through may impact their behavior. Third, during ages 15 through 18, adolescents develop their identity by experimenting and exploring different behaviors (Strasburger, Wilson & Jordan, 2014). Fourth, the adolescent years are a period in which children decide on their cultural values through a differentiation process by prioritizing "self-oriented values" like achievement over "other-oriented values' like tradition (Benish-Weisman, Levy & Knafo, 2013, p. 615) to gain independence from their parents. As such, adolescents begin to make their own decisions during this period while at the same time benefiting and rejecting their parental mandates (Aavik, Aavik, 2012; Shaffer & Kipp, 2014). Adolescent girls have a greater relationship with their parents than boys, and "the younger the adolescent the closer the association with their parents" (Mboya, 1995, p. 956).

Ages 15 through 18 have been viewed as a stage which is "directly tied to chronological age" in western cultures like the US, however, in non-western cultures like Ghana, the child is defined by their ability to carry out developmental tasks, for example, being socially responsible (Timyan, 1998, p. 10). Parental support and involvement during ages 15 through 18 years are also crucial because it increases the likelihood that adolescents will do well in school (Chowa et al., 2012; Nyarko, 2008; 2011). The ability of the parent to be supportive and involved in the lives of their adolescent is impacted by socio-demographic factors like marital status, educational level, and the gender of the child (Chowa et al., 2012). According to Akuffo (1987), it is a privilege for girls than boys in Ghana to be enrolled in school because girls are "destined to marry and take on domestic responsibilities" (as cited in Laird, 2002, p. 898). Both parents and their adolescents must contend with such cultural beliefs and the unspoken rules of society.

Fathers or Mothers were selected as participants for the study because they are the primary givers. Also, polygyny is common in Ghana and many fathers reside in separates homes with other wives ("1st wife, 2nd wife, 3rd wife") and children, a common description for men who have children with more than one woman. The sample largely consists of Ghanaians from both the matriarchal and patriarchy descent systems. Mothers were considered the head of household in some homes and the most likely parent in the home environment because they lived separately with members of their matriarchy group instead of their husbands to ensure continuity of their lineage. Fathers of the matriarchy system ("Matrilineal fathers") also typically show "little interest in their children but more interest in their nephews" because nephews are deemed successors to their "inheritance" (Nyarko, 2014, p. 235). Although this places mothers in a better position to answer questions about their parenting styles, the living arrangement of the patriarchy Ga-Adangbe married couple does not automatically "lead to co-residence" (Annim et al., 2015, p.568), the parent who is most likely to be available to take the survey, as well as read and write completed the survey.

Methods

Procedures and Recruitment

After sending out letters to Principals in the Southern sector of Ghana, two Principals agreed for research to be conducted in their schools. On prearranged dates, face-to-face meetings were arranged with the School Principal, Head Teachers, and Classroom Teachers from two High Schools located in the Greater Accra and Eastern regions of Ghana. Adolescents enrolled in three Senior High School classes (SHS1, SHS2 & SHS3) (equivalent to 10th, 11th, and 12th grades in the U.S. school system) were invited to participate in the study.

On a prearranged date, I met with the students in their classes to introduce the research project and to answer their questions. Following the introduction of the research project, recruitment packets (consent forms, information about the study, and benefits and risks of participation) were distributed to the students in each classroom. Students were asked to take the recruitment packets home to their parents. Mothers or fathers who wished to participate in the study provided written consent for their adolescents between 15 and 17 years of age to participate in the research study. Additionally, adolescents between 15 and 17 years also provided written assent before participating in the study. Following receipt of parental consent and written assent, the survey was administered to students in the school cafeteria. Adolescents 18 years or older personally provided written consent if they wished to participate in the study. For privacy and confidentiality, adolescents, and their parents (mother/father) were randomly assigned a matching five-digit number. Since access to computers and the internet could not be guaranteed by the School Principals, the paper-and-pencil survey method was chosen over the administration of online computer surveys. After completing their surveys, either mother or father returned the completed survey in a sealed envelope to their adolescent's classroom headteacher. All study protocols were approved by the Syracuse University Institutional Review Board (IRB #18-097).

Participants

An initial sample of 819 adolescents (497 [60.7%] females and 322 [39.3%] males) completed a paper-and-pencil survey which took approximately 45 minutes to complete.

Inclusion criteria were as follows: (a) adolescents age should be 15 through 18 years; (b) adolescents must attend the participating schools in Eastern and Greater Accra regions; (c) parents should live in the same household as their children, and (d) both parent and adolescent

should agree to participate in the study. Exclusion criteria entailed: (a) adolescents 19 years or older; (b) adolescents not attending the two participating schools in Eastern and Greater Accra regions; (c) parents not living in the same household as their children, and (d) if either parent or adolescent decide not to participate in the study after one party decides to do so. Respondents who did not meet the eligibility criteria were excluded from the study and after data cleaning, a final sample of 800 adolescents (489 [61.1%] females and 311 [38.9%] males) were included in the study. The 19 respondents excluded from the study provided limited information on the key variables in the study. There were no differences in the sociodemographic characteristics between the 800 participants who participated in the study and the 19 participants who did not. The sociodemographic characteristics of the participants are presented in Table 3.

Table 3
Sociodemographic Characteristics of Participants

Sample Characteristics	N (Percentage) / Mean (SD)
Parent Age (years)	46.0 (8.70)
Marital Status	
Married	556 (69.5%)
Single	244 (30.5%)
Couple Relationships	
Single never married	57 (7.1%)
Visiting relationship	28 (3.5%)
Divorced/Separated	90 (11.3%)
Common Law	5 (.6%)
Customary/Traditional	167 (20.9%)
Islamic	29 (3.6%)
Ordinance marriage	147 (18.4%)
Married	209 (26.1%)

Widowed	62 (7.8%)
Other	6 (.8%)
Fathers/Mothers Educational Level	,
Senior high school and higher	358 (44.75%)
Adolescent Gender	
Female	489 (61.1%)
Male	311 (38.9%)
Adolescent Age (years)	16.43 (1.12)
Ethnicity	
Akan	406 (50.8%)
Ga-Adangbe	170 (21.3%)
Ewe	125 (15.6%)
Guan	26 (3.3%)
Mole Dagbani	17 (2.1%)
Other	56 (7%)
Social Organization	
Patriarchal	369 (46.1%)
Matriarchal	431 (53.9%)
Cultural Regions	
Greater Accra	184 (23%)
Eastern	199 (24.9%)
Ashanti and Brong Ahafo	113 (14.1%)
Central and Western	106 (13.3%)
Volta	142 (17.8%)
Northern (Northern, Upper East, and	56 (7.0%)
Upper West)	
English language that is spoken at	595 (74.4%)
home	
Parent employment (at least one parent	646 (80.8%)
employed)	

Note: *N*= 800

Nearly three-quarters (69%) of the adolescents participating in the study live in two-parent households while more than a quarter (30.5%) live in single-parent households. The unmarried group comprised of parents who were single never-married, widowed, those involved in a visiting relationship, separated, or divorced. Since the national divorce rate is only 10% (AMA, 2019; PHC, 2010), it was not surprising that married parents outnumbered unmarried parents. Over a quarter (28.5%) of parents were unemployed while nearly three-quarters (71.5%) of parents had full-time or part-time jobs including policing, farming, petty trading,

chemist, mining, and Islamic Priests (*Maalam*). Additionally, over three-quarters (80.8%) households included were *dual-income earners* who made significant financial contributions to the upkeep of the home. The dissipation of the traditional *breadwinner* and *homemaker* model in most Sub-Saharan African cultures (Toyin, Osabutey & Gbadamosi, 2017) is also evident within the Ghanaian culture.

In this study's sample, the main dialect of communication at home by nearly half (42.9%) of the adolescents participating in the study was Twi followed by English (24.3%). In Ghana, students are encouraged to speak English at home and school as there could be sanctions meted out to them if they do not comply with speaking English in the school setting (Edu-Buandoh & Otchere, 2012). Edu-Buandoh and Otchere have stated that even though English is a "prescribed language" in Ghana, many adolescents view English as the "mark of the educated" (p. 306).

In this study, 60% of the parents did not answer the question on their level of education. Disclosure of one's level of education may be sensitive and awkward to some people. Social desirability may be another reason why most participants skipped questions on their educational level. Parental educational level is highly correlated with positive academic outcomes (Benner, , Boyle & Sadler, (2016). Among those who answered this question, only 4.1% had no formal education. The educational level of the parents participating in the study ranged from 150 (18.8%) Junior High School (JHS) graduates to 46 (5.8%) Master level (MBA/Ph.D./MD) degree holders. There were 51 more SHS graduates than first-degree holders and 81 more JHS graduates than Technical School certificate holders. The adult literacy rate in Ghana for persons over 15 years of age is 79.4% (World Bank Report, 2018) and so the expectation for this study was to have more adult literates than illiterates. Also, the Education Reform which was geared

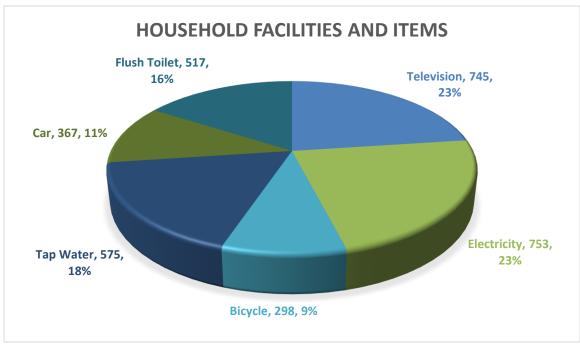
towards increased accessibility to Basic Education and the Free-compulsory Universal Basic Education of 1995 may account for why JHS graduates are the largest subset among parents.

Education coupled with religion shapes the values and beliefs of Ghanaians. According to Opoku, Manu, and Wiafe (2015, p.6), "education and religion are inseparable". The PHC (2010) indicates that Ghanaians in the southern sector of Ghana are primarily Christians (79.8%). Participants in this study were predominantly Christians (94.8%). Less than a quarter (4.9%) of the participants were Muslims and only 2 (.3%) were Traditionalists. Comparatively, nationallevel scores on religious affiliations indicate similar ratios (71.2%, 17.6% and 5.2%), respectively (PHC, 2014). Religion remains central to Ghanaians way of life, identity, and culture (Heaton & Darkwah, 2011), however, religion and ethnicity are linked in "intricate ways and sometimes overlap, partially or completely" (Langer, 2010, p. 9). Although most ethnic groups practice Christianity in the southern sector of Ghana, the Ewes in the Volta region are associated with the African Traditional religion, belief in lessor gods, and are likely to dabble in supernatural and mystical practices (Nyamuame, 2013). Irrespective of one's ethnic group, Ghanaians are mainly classified by their descent through their mother's (matriarchy) or father's (patriarchy) bloodline. This social organization is a determinant of the parent who becomes more involved in parenting the child and it also has inheritance implications (Nyarko, 2014b). According to Huang, Bornheimer, Dankyi, and de-Graft Aikins (2018), the person (preferably the father) who wields the power for making decisions in the household including parenting is a function of Ghanaians social organization. In some cases, matriarchy and patriarchy determine whether the child would live in the same household with their biological father or mother, or an aunt or uncle in an extended family system.

Although the adolescents were drawn from Greater Accra and Eastern regions, participants indicated which Ghanaian region they belonged to or considered their home.

Participants indicated that they belonged to 6 cultural regions – Greater Accra, Eastern, Ashanti and Brong Ahafo, Central and Western regions, Volta, and Northern regions.

In terms of the quality of materials used for house construction, over three-quarters (84%) of the adolescents resided in cemented houses and the remaining 16% resided in brick, wood, mud, or iron sheet houses. Wood, mud, or iron sheet houses are indicative of families living in poverty and although such houses are affordable, they are considered temporary structures for low socio-economic status (SES) families (Breshna, 1997). Temporary home structures are not rare in Ghana. For example, *Core Houses*, are considered a "hybrid solution" to the housing shortages in Ghana. Families utilize "local materials and skills" to build simple single room houses which may be renovated with time as finances permit (Jackson, Uduku, Appeaning Addo & Assasie Opong, 2019, p.516). Over three-quarters of the study, participants had access to electricity (755 [94.4%] and tap water (577 [72.1%]) at home. Over a quarter 519 (64.9%) houses did not have a flush toilet, 367 (45.9%) had a car; 298 (37.3%) owned a bicycle, and 747 (93.4%) had a television at home (see Figure 4).



Note: *N*= 800

Figure 4: Number and percentages of household facilities and items

Overall, the sample is heterogeneous in terms of the variability in age, sex, employment, educational level, and living conditions. On average, there were more females than males, more males employed than females, and more males with more than one job than females.

Comparatively, more males had work outside their homes than females. On average husbands were significantly older than their wives. Ethnicities varied across the six groups of regions in Ghana and even though two southern sector schools in the Eastern and Greater Accra regions were surveyed, there were representations from all regions of Ghana. Adolescents travelled from differing parts of a country to attend school especially when most Senior High Schools require students to stay on campus (Boarding Schools). Also, due to internal migration from the northern and hinterlands of Ghana to the southern part of the country, where social amenities are commonly found it is not far fetching to have a good representation of Ghanaians or subpopulations concentrated within the southern sector of Ghana.

Measures

Parenting Behaviors. Parenting behaviors were assessed by the 32-item Parenting Style and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Oslen, & Hart, 2001). Two subscales of the PSDQ were not included in the study – indulgence, and non-reasoning/punitive dimensions. The items associated with these two subscales were not included in the study because of their inappropriateness of use with the Ghanaian population and adolescents between 15 and 18 years. Generally, Ghanaian parents provide strict rules, guidelines, and structure for their children and have no problem disciplining them. Also, within the Ghanaian community, punishing a child by taking away privileges is deemed a foreign and non-Ghanaian parenting practice. Additionally, taking away privileges with little explanations is considered a parenting behavior reserved for children between the ages of two to eight years (toddlerhood to early childhood). Adolescents responded to the 25 PSDQ items on a 5-point scale ranging from 1 (Never) to 5 (Always). Four constructs were assessed: warmth/support (e.g., "I give this child praise when he/she has been good", "I comfort this child and understand this child when he/she is upset"), physical coercion and verbal hostility (e.g., "I spank/hit beat this child when he/she has been disobedient", "I scold and criticize this child when this child's behavior does not meet expectations"), autonomy democratic participation (e.g., "I encourage this child to freely express himself/herself even when we have disagreements, "I take into account this child's preferences when making plans for the family"), and inductive reasoning (e.g., "I explain to this child how I feel about his/her behavior", "I explain to this child about the consequences of one's behavior on others"). Adolescents reported on their mothers and fathers warmth/support, physical coercion and verbal hostility, autonomy democratic participation, and inductive reasoning.

Using SPSS version 24 (IBM Corporation, 2018), a principal component analysis (PCA) was conducted on the items of the PSDQ separately for adolescent reports of fathers and mothers. Items that loaded below .30 were dropped while those that loaded above .30 were maintained. Out of the seven warmth/support items, one item was dropped ("I am not responsive to this child's feelings and needs") due to poor loading for both mothers and fathers. Based on the responses to this question, it appears that many adolescents had problems understanding the question. The Cronbach alpha coefficient for the warmth/support subscale was .81 for the adolescent report of mothers and .86 for the adolescent report of fathers. The mean and standard deviation of the warmth and support subscale was assessed for mothers (M = 4.11, SD = .86) and fathers (M = 3.75, SD = 1.04). The 8 items for physical coercion and verbal hostility indicated strong factor loadings and none of the items were dropped. The Cronbach alpha coefficient for the physical coercion and verbal hostility subscale was .63 for the adolescent report of mothers and .65 for the adolescent report of fathers. The mean and standard deviation of the physical coercion and verbal hostility subscale was assessed for mothers (M = 2.51, SD = .60) and fathers (M = 2.39, SD = .64). All five items autonomy-democratic participation items indicated strong factor loadings and none of the items were dropped. However, one out of five autonomydemocratic participation items ("I do not take this child's desires into account before asking him/her to do something") was dropped to increase the reliability of the scale for mothers and fathers. The Cronbach alpha coefficient for the autonomy-democratic participation subscale was .75 for the adolescent report of mothers and .71 for the adolescent report of fathers. The mean and standard deviation of the autonomy-democratic participation subscale was assessed for mothers (M = 3.67, SD = 1.04) and fathers (M = 3.53, SD = 1.05). The 5 items of the inductive reasoning subscale indicated strong factor loadings and none of the items were dropped. The

Cronbach alpha coefficient for the inductive reasoning subscale was .67 for the adolescent report of mothers and .77 for the adolescent report of fathers. The mean and standard deviation of the inductive reasoning subscale was assessed for mothers (M = 4.00, SD = .88) and fathers (M = 3.81, SD = .98).

Sociodemographic Correlates

Sociodemographic characteristics such as parent age, adolescent age, adolescent gender (1= male, 0 = female), parents' marital status (1= Customary/Traditional Marriage, Islamic Marriage, Ordinance/ Church/Court Marriage; 0 = Single, divorced), were included as correlates of mothers' and fathers' parenting typologies. Customary/Traditional Marriages are marriages contracted between a man and a woman and entails the performance of certain customs required by the family of the bride-to-be. Ordinance marriage is marriage instituted in accordance with the Marriage Ordinance between the years of 1884-1985. This type of marriage is the one wife, one-man type of marriage which is unlike the customary/traditional marriage whereby more than one may be allowed. Traditional marriages are not registered under the law. Islamic marriages allow for more than one wife and it is polygynous in nature. Also, customs are performed as demanded by the bride-to-be's family. An Islamic marriage may be legally recognized. Other correlates include English language (the main language of communication at home), family social organization (matriarchal) or patriarchal), and financial strain.

Financial strain. Parents responded to eight questions on their experiences of financial strain in their families. Indicators of financial strain included parents' inability to afford a home, clothing, furniture, car, food, medical expenses; economic difficulties paying bills, having money left each month, postponing medical/dental, food shopping/eating habits, and working an extra job to meet expenses. Parents responded to these items on a five-point Likert scale ranging from (1)

"Strongly Agree" to (5) "Strongly Disagree. Cronbach's alpha for the scale was .92. The mean and standard deviation of the financial strain subscale was assessed (M = 3.51, SD = .87)

Adolescent Outcomes

Academic Outcome. The West African Senior School Exam (WASSCE) core curriculum classes include English Language, Mathematics, Integrated Science, and Social Studies.

Irrespective of whether students are enrolled in different programs or tracks such as Science, Visual Arts, or Business, all SHS students were required to take the four core curriculum classes. Grades of students in each of the core curriculum classes were assessed on an alphanumeric system set forth by the West African Examination Council (WAEC) (A1 (80-100%), B2 (70-79%), B3 (65-69%), C4 (60-64%), C5 (55-59%), C6 (50-54%), D7 (45-49%), E8 (40-45%), and F9 (0-30%). Grades for each of the core curriculum classes for each student were obtained from the school principal. According to Dornbusch et al. (1987), GPA is the most accurate way of assessing academic achievement instead of using standardized tests (as cited in Gonzales et al., 1996). The mean and standard deviations for the four core classes were as follows: English (*M*=58.35, *SD*= 12.30), Math (*M*=55.05, *SD*= 16.70), Integrated Science (*M*=56.55.95, *SD*= 15.32), Social Studies (*M*=66.46, *SD*= 14.31).

Adolescents' Problem Behaviors. This study utilized the Strengths and Difficulties

Questionnaire (SDQ; Goodman, 1997) a 25-item scale, to assess adolescent's externalizing and internalizing problem behaviors, and prosocial behaviors. Adolescents externalizing (conduct problems, hyperactivity/inattention) (e.g., "I am restless, I cannot stay still for long", "I fight a lot. I can make other people do what I want"), internalizing (emotional symptoms) (e.g., "I worry a lot", "I have my fears, I am easily scared") were assessed with 10 items each. Prosocial behaviors were assessed using 5 items (e.g., "I often offer to help others", "I try to be nice to

other people. "I care about their feelings"). All items were assessed on a 3-point Likert scale (1 = not true, 2 = Somewhat true, 3 = certainly true). The Cronbach's alpha for internalizing problem behavior was .86, externalizing problem behavior was .72, and prosocial behaviors was .76. Adolescents' responses to these subscales were summed to create internalizing (M = 6.56, SD=3.42), externalizing problem behaviors (M = 6.55, SD=3.42), and prosocial behavior (M = 8.37, SD=1.71) subscales.

Ghanaian Cultural Values

Adolescents responded to 24-items on the Value Survey Model questionnaire (VSM; Hofstede & Minkov, 2013) that assessed six dimensions - Power Distance Index (PDI), Uncertainty Avoidance Index (UAI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), Long Term Orientation versus Short Term Orientation (LTO) and Indulgence versus Restraint (IVR). Adolescents responded to the 24 items on a 5-point Likert scale, ranging from 1 (of utmost importance) to 5 (of very little or no importance).

Table 4

Hofstede's Cultural Dimensions Based on the value Survey Model Questionnaire (VSM; Hofstede & Minkov, 2013)

Question		ITEM
Q1	I have sufficient time for my personal or home life	IDV
Q2	I have a parent I can respect	PDI
Q3	I get recognition for good performance	MAS
Q4	I have the protection of my parent	IDV
Q5	I have pleasant people to work within my home	MAS
Q6	I do schoolwork that is interesting	IDV
Q7	I am consulted by my parent in decisions involving my work	PDI
Q8	I live in a desirable and good area	MAS
Q 9	I attend a school respected by my family and friends	IDV
Q10	I have chances of being promoted to the next class	MAS
Q11	Keeping time free for fun	IVR
Q12	Reasonably, having a few desires	IVR
Q13	Doing service to a friend by being helpful	LTO
Q14	Not spending more money than needed	LTO

Q15	How often do you feel nervous or tense?	UAI
Q16	Are you a happy person?	UAI
Q17	Do other people or circumstances ever prevent you from doing what you really want to do?	IVR
Q18	All in all, how would you describe your state of health these days?	UAI
Q19	How proud are you to be a citizen of your country?	LTO
Q20	How often, in your experience, are children afraid to challenge their parents or students their teacher?	PDI
Q21	One can be a good teacher without having a precise answer to every question that a child may raise about his/her work	UAI
Q22	Continuous efforts are the surest way to results	LTO
Q23	A school or home in which there are two bosses should be avoided at all cost	PDI
Q24	A school or home rules should not be broken even when a child thinks breaking the rule would be in the school or home's best interest	UAI

The formulas for calculating the different indexes were generally based on Hofstede's formula. According to Hofstede (2013, p. 7) to calculate the index formula for different cultural values, for example, power distance, the formula is PDI = 35(m07 – m02) + 25(m20-m23) – C(pdi) where m02 is the mean score for question 02, etc. and C(pdi) is a constant (positive or negative) which is a country's score on the score based on Hofstede's country-level data. The constant can be chosen to move PDI scores to values between 0 and 100. Ghana's national score on each of the six cultural values was as follows: Power Distance Index (PDI): 80, Individualism (IDV): 15, Masculinity (MAS): 40, Uncertainty Avoidance (UAI): 65, Long Term Orientation (LTO): 4, Indulgence (IVR): 72 (Hofstede, 2013). These were used as constants to assess Ghana's national cultural values based on the adolescent participants (see Table 5).

Table 5

Hofstede Cultural Dimensions Formulae: Using Ghana's National Score as Constants

Power Distance Index (PDI)	35(m07 - m02) + 25(m20 - m23) + 80(pdi)
Individualism Index (IDV)	35(m04 - m01) + 35(m09 - m06) + 15(idv)
Masculinity Index (MAS)	35(m05 - m03) + 35(m08 - m10) + 40(mas)
Uncertainty Avoidance (UAI)	40(m18 - m14) + 25(m21 - m24) + 65(uai)
Long Term Orientation Index (LTO)	40(m13 - m14*) + 25(m19*-m22) + 4(lto)
Indulgence Index (IVR)	35(m12 - m11) + 25(m17 - m22) + 72(ivr)

 $A dapted \ from \ Hofstede \ (2013) \ and \ Nouri \ and \ Traum \ (2013): \ Items \ marked \ * \ adapted \ from \ Nouri \ \& \ Traum \ (2013) \ and \ Nouri \ & \ Traum \ (2013) \ and \ (2013) \ and \ & \ Traum \ (2013) \ and \ & \ Traum \ (2013) \ and \ & \ Tr$

Data Cleaning

A preliminary screening to check for errors like normality, outliers, and missing numbers was conducted. The statistical technique selected to analyze missing data was Rubin's (1987) Multiple Imputation (MI). Multiple Imputation was derived from the Bayesian probability theorem, a framework that uses prior knowledge of events to predict future events by factoring in additional data (Olshausen, 2004). This option was chosen over conventional methods (e.g., listwise or pairwise deletion) to analyze incomplete data sets due to MI's statistical properties. For example, the tendency of a sample statistic to be over or underestimated when the sample size largely increases is nil (White, Royston & Wood, 2011). Graham and Schafer (1999) state that MI also works well with small sample sizes (n= 50). Furthermore, MI has proven to be successful with complicated models such as the proposed conceptual models (see, Figures 1 & 2) and flexible because it can be used in combination with other models or methods (Allison, 2003).

Data were cleaned not by discarding missing cases but rather, by retaining cases for values to be imputed. MI steps employed include three steps as outlined by White et al., (2011) – imputation (replacing missing numbers with substituted values), analysis (making meaning of a complex idea), and pooling (integration of the analysis into a final result). Graham, Olchowski, and Gilreath (2007) suggested that at least three sets of values should be imputed (m = 3) and

Allison (2003) suggested five (m=5) if missing numbers are "small to moderate" (p.551). For this study, five data sets were generated. Based on Allison's work, missing values were "imputed by regressing X on Y for complete cases" and then using the formula (a + bY) "to generate predicted values of X, where X and Y are both variables and X are missing" and then a "random variation" ($a + bY + S_{xy}E$) was introduced into the imputation, "where E is a random draw from a standard normal distribution, and S_{xy} is the estimated standard deviation of the error term" "which is the root mean squared error" (Allison, 2003, p. 550). The pooling process followed the analysis of the data sets and it entailed combining all five sets into one data set.

Analytical Strategy

To determine the nature of the parenting typologies in Ghanaian families, Latent Profile

Analyses (LPA) was conducted separately on adolescent reports of fathers' and mothers'

parenting styles. The Latent Profile Analysis approach examines the relationship between

continuous indicators (items measured on a Likert scale format) and underlying latent constructs.

In contrast, the Latent Class Analysis (LCA) is a latent modeling approach that examines the

relationship between dichotomous (yes vs. no or presence vs. absence) variables and underlying

latent constructs. The terms LPA and LCA have been used interchangeably in the literature.

Latent Profile Analysis is a continuous latent modeling approach that classifies individuals into homogenous classes or subgroups based on their response configurations.

Individuals with similar response patterns were placed in distinctive classes and these classes differed solely by their means and mode of distribution (Tein, Coxe & Cham, 2013). Latent Profile Analysis was conducted using Mplus Version 7.4 software package (Muthén & Muthén, 1998-2015). The first step in this process was to estimate a series of models through an iterative modeling process using the expectation-maximization (EM) algorithm. The analysis was

conducted beginning with a one-profile model (separately for fathers and mothers) and ending with a model that estimated five parenting profiles each for fathers and mothers. The decision to estimate up to five latent profiles for mothers and fathers was based on information drawn from the existing literature on Ghanaian parenting typologies (see, e.g., Bofah & Hannula, 2017).

To assess the model fit for each model, information from several fit indices was used. This included the Bayesian Information Criterion (BIC), Sample-Size Adjusted BIC (BIC_{ssa}) or Sample-Adjusted BIC (SABIC), Akaike's Information Criterion (AIC), Lo-Mendell-Rubin likelihood ratio test (LMR) or the Vong-Lo-Mendell-Rubin (VLMR) test, and the Adjusted Lo-Mendell-Rubin likelihood ratio test of model fit (Lo, Mendell, & Rubin, 2001) (VLMR-LRT) (Ferguson, Moore & Hull, 2020; Saunders, Cape, Fearon, & Pilling, 2016). According to Ferguson et al., (2020, p. 6.) information from the BIC, BIC_{ssa}, and AIC are usually used for "model retention". Tein, Coxe, and Cham (2013, p.3), indicated that AIC and BIC fit indices are the "two original and most commonly" used fit indices for model retention. The model with the lowest BIC, BIC_{ssa} and AIC values are usually selected. The adjusted Lo-Mendell-Rubin likelihood ratio was examined for each model. The VLMR-LRT values with p values < .05 indicated that the model fit of a specific latent class solution was better than the model fit of the prior latent class solution (i.e., a significant p-value of a VLMR-LRT statistic associated with a 3- latent class solution indicated that the fit of the 3-latent class model was an improvement to the earlier 2-latent class solution). In addition to the above fit indices, entropy values associated with each latent model solution was also ascertained. Entropy values are "a measure of classification uncertainty" (Ferguson et al., 2020, p. 460) and values range from 0 to 1. The "higher the entropy value, the higher the accuracy" in model classification (Saunders et al., 2020, p. 109). Entropy values greater than .80 indicate exactness, separation, and precision of each

identified latent class solution (Ramaswamy et al., 1993). Thus, the decision-making approach to decide on the best fitting latent model was based on information from the model fit indices and the four-step decision-making approach suggested by Ram and Grimm (2009, p.567). The steps entail (a) examining the output to ascertain whether *parameter estimates* are within range and if each model makes mathematical sense, (b) comparing the model fit statistics of each model and across models, (c) inspecting entropy values, and (d) examining the various fit indices.

To test the association between various sociodemographic predictors and the parenting typologies for fathers and mothers, multinomial logistic regression approaches were used because the dependent variable (adolescent outcomes) had 3 or more categories (Greene, 1992). This statistical approach was appropriate to identify the sociodemographic characteristics that may be predictive of parenting typologies (or cluster membership) for fathers and mothers. Further, to examine the relationship between parenting typologies and various adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, prosocial behaviors, and academic outcomes), Multivariate Analysis of Variance (MANOVA) approaches were used. Finally, to ascertain the relationship between parenting typologies across various Ghanaian regional cultural values, chi-square statistics were used. To compare adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, prosocial behaviors, and academic outcomes) across various Ghanaian regional cultural values, Analysis of Variance (ANOVA) was used.

Results

Hypothesis 1. It is hypothesized that adolescent reports of fathers' and mothers' parenting behaviors (adolescent reports) of warmth and support, autonomy granting, verbal and physical

punishment, and inductive reasoning, will generate between 2 and 5 parenting typologies. It is expected that at least two of the latent parenting classes for fathers and mothers parenting typologies will be authoritative and authoritarian.

Fathers

The model fit statistics for the one- to five LPA solutions are indicated in Table 7. A visual scan of the table revealed that as the number of class solutions increased the loglikelihood value decreased significantly as did the AIC, BIC and BIC_{ssa} values. The VLMR-LRT values that compared the model fit at that level to the model fit of the prior class solution were also examined at each level. The VLMR-LRT value for the five-class model did not indicate any improvement to the four-class model. As such, the four-class solution was considered the best fit for the data. The entropy value for the four-latent class model was .84. Spurk et al., (2020, p. 10), suggest that in addition to the information from the various fit indices (information criteria, entropy, & likelihood ratio tests), it is also important to scrutinize how well models stand distinct from each other ("content decision criteria") before making a final decision on model retention. The idea is not to violate the concept of parsimony or Occams razor which discourages the use of a countless number of concepts and relationships with minimum significance. Thus, after reviewing the fifth model, it was clear that it had no "theoretical interest" and it did not add any "meaningful new insights" (p.13) to the current study. Class membership size ranged from 51 to 390 in the four-latent class typology. Over 15% of studies reviewed by Spurk et al., (2020) retained profiles with a minimum of 1% of the total sample size and over 30% of the studies had a maximum of 25 cases per latent class. A minimum of 51 cases which exceeded the minimum 25 cases rule was obtained in the profile of adolescent report of fathers. Consequently, a model four-class solution was retained for this study.

Table 6

Model Fit Indices for Latent Profile Analyses Solutions of Parenting Typologies for Fathers

Solution	Loglikelihood	AIC	BIC	BICssa	Entropy	VLMR-	VLMR p-
						LRT	value
1	-4231.86	8479.72	8517.19	8491.79			
2	-3815.51	7657.019	7717.919	7676.637	0.89	808.506	0.000
3	-3670.764	7377.528	7461.851	7404.691	0.83	281.081	0.000
4	-3620.743	7287.486	7395.232	7322.194	0.84	97.136	0.0025
5	-3584.585	7225.171	7356.340	7267.424	0.78	83.299	0.1970

Note. n = 800 AIC: Akaike Information Criterion; BIC: Bayesian Information Criterion; BICssa: Sample-size Adjusted BIC; VLMR= Lo-Mendell-Rubin Adjusted LRT Test.

The conditional response means of each parenting behavior was examined to ascertain their substantive meaning of membership within the 4-latent class typology (see Table 7 and Figure 5).

Table 7

Latent Class Typologies of Ghanaian Fathers with Conditional Response Means and Numbers in each Latent Class N (%)

	Good Enough	Moderately Authoritarian	Neglectful	Authoritative
Warmth or Support	2.394	3.542	1.377	4.547
Autonomy- Democratic Participation	2.572	3.208	1.853	4.192
Physical & Verbal Punishment	2.522	2.491	1.885	2.364
Inductive Reasoning	3.113	3.739	1.665	4.313
N (%)	100 (12.50%)	259 (32.38%)	51 (6.38%)	390 (48.75%)

In Figure 5, latent class 1 labeled as *Good Enough*, is marked by a solid line. Fathers in the Good Enough category were low on warmth or support, moderate on autonomy-democratic

participation and physical and verbal punishment, and moderately high on inductive reasoning. About a quarter (12.50%) of the fathers were members of this latent class. Fathers in this group were moderately responsive, demanding and autonomy supportive (Baumrind, Larzelere & Owens, 2010). Latent class 2, labeled as *Moderately Authoritarian* was marked by broken lines in Figure 4. About 32.38% of fathers were members of this latent class. These fathers were moderately high on different parenting behaviors. Latent class 3, labeled as *Neglectful*, is marked by a dash and a dot in Figure 5. About 6.38% of the fathers were members of this latent class. Fathers in this category were low on warmth or support, autonomy granting, physical and verbal punishment, and inductive reasoning. Latent class 4, labeled as *Authoritative*, is marked by dots in Figure 5. About 48.75% of fathers were members of this latent class. These fathers were very high on warmth or support, autonomy democratic participation, inductive reasoning, and low on physical and verbal punishment.

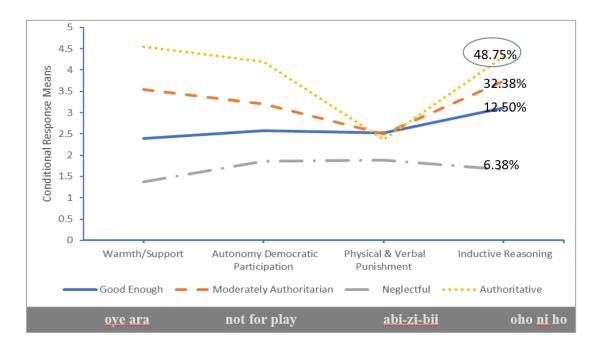


Figure 5: Conditional response means of the four latent class typologies of fathers parenting behaviors

Mothers

The model fit statistics for the one- to five LPA solutions are indicated in Table 8. A visual scan of the table revealed that as the number of class solutions increased, the AIC, BIC, and BIC_{ssa}, values declined. The VLMR-LRT values that compare the model fit at that level to the model fit of the prior class solution were also examined. The VLMR-LRT value for the five-class model did not indicate any improvement to the four-class model. As such, the four-class solution was considered the best fit for the data. The entropy value for the four-latent class model was .84.

Class membership size ranged from 39 to 454 in the four-class model. A minimum of 39 cases which exceeded the minimum 25 cases rule was obtained in the profile of adolescent report on mothers. A model four-class solution was retained as the best model fit for mothers. Table 8 describes the profile structure for a one to five LPA solution conducted on adolescent reports of their mothers' parenting styles.

Table 8

Model Fit Indices for Latent Profile Analyses Solutions of Parenting Typologies for Mothers

Solution	Loglikelihood	AIC	BIC	BICssa	Entropy	VLMR - LRT	VLMR p-value
1	-3948.593	7913.186	7950.663	7925.259			
2	-3548.728	7123.455	7184.355	7143.073	0.89	776.498	0.000
3	-3405.459	6846.919	6931.242	6874.082	0.84	278.212	0.022
4	-3346.698	6739.396	6847.143	6774.105	0.85	114.108	0.003
5	-3313.770	6683.539	6814.709	6725.793	0.82	63.944	0.06

Note. n = 800 AIC: Akaike Information Criterion; BIC: Bayesian Information Criterion; BICssa: Sample-size Adjusted BIC; VLMR= Lo-Mendell-Rubin Adjusted LRT Test.

The conditional response means of each parenting behavior was examined to ascertain the examine the substantive meaning of their membership within the 4-latent class typology (see Table 9 and Figure 6).

Table 9

Latent Class Typologies of Ghanaian Mothers with Conditional Response Means and Numbers in each Latent Class N (%)

	Good Enough	Moderately Authoritarian	Neglectful	Authoritative
Warmth or	2.714	3.852	1.881	4.651
Support				
Autonomy-	2.440	3.158	1.701	4.300
Democratic				
Participation				
Physical &	2.831	2.546	2.135	2.486
Verbal				
Punishment				
Inductive	3.466	3.762	1.975	4.377
Reasoning				
N (%)	71 (8.88%)	236 (29.50%)	39 (4.9%)	454(56.75%)

In Figure 9, latent class 1 labeled as *Good Enough*, is marked by a solid line. Mothers in the *Good Enough* category were low on warmth or support, moderate on autonomy-democratic participation and physical and verbal punishment, and moderately high on inductive reasoning. About a quarter (8.88%) of the mothers were members of this latent class. Latent class 2, labeled as *Moderately Authoritarian* was marked by broken lines in Figure 6. About 29.50% of mothers were members of this latent class. These mothers were moderately high on different parenting behaviors. Latent class 3, labeled as *Neglectful*, is marked by a dash and a dot in Figure 6. About 4.90% of the mothers were members of this latent class. Mothers in this category were low on warmth or support, autonomy granting, physical and verbal punishment, and inductive reasoning. Latent class 4, labeled as *Authoritative*, is marked by dots in Figure 6. About 56.75% of mothers were members of this latent class. These mothers were very high on warmth or support, autonomy democratic participation, inductive reasoning, and low on physical and verbal punishment.

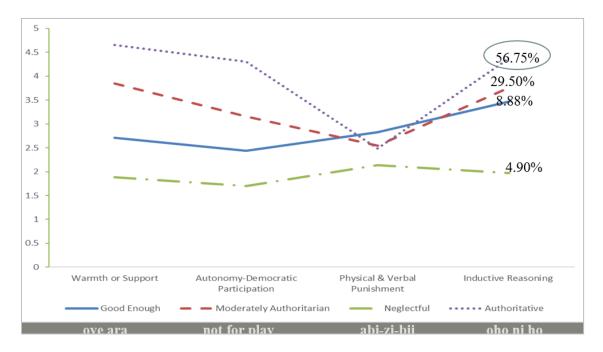


Figure 6: Conditional response means of the four latent class typologies of mothers parenting behaviors

Hypothesis 1 was supported for both mothers and fathers. Fathers and mothers' parenting behaviors were clustered into four groups (*Good Enough* (*oye ara*); *Moderately Authoritarian* (*not for play*); *Neglectful* (*abi-zi-bii*); *Authoritative* (*oho ni ho*)ⁱ.

Hypothesis 2. It is hypothesized that sociodemographic characteristics (family social organization, marital status, English language spoken at home, parent age, employment status, financial strain, and Ghanaian regions) will be associated with different parenting clusters (adolescent reports). It is hypothesized that patriarchal social organization and financial strain will be associated with authoritarian parenting style whereas matriarchal and English language spoken at home will be associated with the authoritative parenting style. The nature of the associations between other sociodemographic characteristics and parenting clusters are less established.

Multinomial Logistic Regression was conducted to determine the associations among the various covariates and the four identified Ghanaian parenting typologies (*Moderating Authoritarian, Neglectful, Good Enough & Authoritative*). The analysis was conducted first for fathers parenting typologies followed by mothers parenting typologies. *Neglectful* parenting typology was the reference category for both analyses (see Tables 10 and 11).

Fathers

There were relatively few significant predictors of different parenting typologies for fathers and mothers. As seen in Table 10, families with a more matriarchal social organization were less likely to be in the *Neglectful* parenting typology than in the *Good Enough* parenting typology; families, where at least one parent was employed, were more likely to be in the *Good Enough* parenting typology than in the *Neglectful* parenting typology. Families where English was spoken at home and where at least one parent was employed were more likely to be in the *Moderately Authoritarian* parenting typology compared to being in the *Neglectful* parenting typology. Families, where at least one parent was employed and experienced greater financial strain, were more likely to be in the *Authoritative* parenting typology compared to being in the *Neglectful* parenting typology.

Table 10

Multinomial Logit Model Predicting Father Parenting Typologies

							95% Confidence	
			Std.					Upper
		В	Error	Wald	Sig.	Exp(B)	Lower Bound	Bound
1 Good Enough								
	Matriarchal	-1.063	.486	4.776	.029	.346	.133	.896

	Marital status (1=	.585	.375	2.436	.119	1.795	.861	3.741
	Married)							
	English Language	645	.464	1.928	.165	.525	.211	1.304
	Spoken at Home							
	Parent age	.024	.020	1.387	.239	1.024	.985	1.065
	Employed	.978	.420	5.408	.020	2.658	1.166	6.060
	Financial Strain	.262	.211	1.538	.215	1.299	.859	1.964
	Eastern Region	.832	.628	1.755	.185	2.299	.671	7.879
	Ashanti and Brong	.309	.730	.179	.672	1.362	.326	5.695
	Ahafo Region							
	Central Region	.182	.690	.070	.791	1.200	.311	4.637
	Volta Region	.094	.569	.027	.869	1.098	.360	3.350
	(Northern Regions	.388	.811	.229	.632	1.475	.301	7.229
	(Northern, Upper							
	East, and Upper							
	West)							
2 Moderately								
Authoritarian	Matriarchal	439	.433	1.027	.311	.645	.276	1.507
	Marital status (1=	.528	.327	2.603	.107	1.695	.893	3.219
	Married)							
	English Language	878	.421	4.345	.037	.415	.182	.949
	Spoken at Home							
	Parent age	.024	.017	1.825	.177	1.024	.989	1.060
	Employed	.845	.356	5.636	.018	2.328	1.159	4.677
	Financial Strain	.252	.189	1.779	.182	1.287	.888	1.863
	Eastern Region	.067	.553	.015	.904	1.069	.362	3.162
	Ashanti and Brong	307	.620	.245	.621	.736	.218	2.482
	Ahafo Region							
	Central Region	-1.003	.610	2.703	.100	.367	.111	1.212
	Volta Region	677	.512	1.750	.186	.508	.186	1.386
	(Northern Regions	685	.758	.817	.366	.504	.114	2.227
	(Northern, Upper							
	East, and Upper							
	West)							
4 Authoritative								
	Matriarchal	441	.425	1.076	.300	.643	.280	1.481
	Marital status (1=	.503	.319	2.483	.115	1.654	.885	3.092
	Married)							

English Language Spoken at Home	772	.417	3.432	.064	.462	.204	1.046
Parent age	.031	.017	3.329	.068	1.032	.998	1.067
Employed	.728	.346	4.432	.035	2.071	1.052	4.079
Financial Strain	.643	.186	11.913	.001	1.901	1.320	2.738
Eastern Region	.048	.550	.008	.931	1.049	.357	3.084
Ashanti and Brong	.070	.608	.013	.909	1.072	.325	3.534
Ahafo Region							
Central Region	135	.584	.053	.818	.874	.278	2.748
Volta Region	373	.504	.547	.460	.689	.256	1.850
(Northern Regions	.028	.732	.001	.969	1.029	.245	4.315
(Northern, Upper							
East, and Upper							
West)							

Mothers

There were relatively few significant predictors of different parenting typologies for mothers. As seen in Table 11, families with greater financial strain were more likely to be in the *Authoritative* parenting typology compared to being in the *Neglectful* parenting typology. Families in Central region instead of the Volta region were more likely to use harsh punishment in the *Moderately Authoritarian* typology compared to the *Neglectful* parenting typology.

Table 11

Multinomial Logit Model Predicting Mother Parenting Typologies

							95% Co	onfidence
							Interval f	for Exp(B)
			Std.				Lower	Upper
		В	Error	Wald	Sig.	Exp(B)	Bound	Bound
1 Good Enough								
	Matriarchal	249	.546	.207	.649	.780	.268	2.274

	Marital status	200	.464	.187	.666	.818	.330	2.030
	(1= Married)							
	English	.285	.460	.383	.536	1.330	.540	3.275
	Language							
	Spoken at Home							
	Parent age	009	.023	.134	.714	.992	.947	1.038
	Employed	.215	.482	.200	.655	1.240	.482	3.189
	Financial Strain	176	.235	.557	.455	.839	.529	1.331
	Eastern Region	096	.741	.017	.896	.908	.213	3.879
	Ashanti and	.074	.871	.007	.932	1.077	.195	5.940
	Brong Ahafo							
	Region							
	Central Region	385	.717	.289	.591	.680	.167	2.771
	Volta Region	454	.629	.520	.471	.635	.185	2.181
	(Northern	.519	.930	.311	.577	1.681	.271	10.404
	Regions							
	(Northern,							
	Upper East, and							
	Upper West)							
3 Authoritative								
	Matriarchal	.371	.467	.631	.427	1.449	.580	3.618
	Marital status	454	.395	1.317	.251	.635	.293	1.379
	(1= Married)							
	English	.113	.382	.087	.768	1.119	.529	2.368
	Language							
	Spoken at Home							
	Parent age	.004	.020	.039	.844	1.004	.966	1.043
	Employed	.187	.408	.210	.646	1.206	.542	2.680
	Financial Strain	.540	.200	7.278	.007	1.717	1.159	2.542
	Eastern Region	097	.631	.023	.878	.908	.263	3.129
	Ashanti and	130	.741	.031	.860	.878	.205	3.749
	Brong Ahafo							
	Region							
	Central Region	-1.140	.610	3.490	.062	.320	.097	1.058
	Volta Region	435	.533	.669	.414	.647	.228	1.838

	(Northern	020	.839	.001	.981	.981	.189	5.075
	Regions							
	(Northern,							
	Upper East, and							
	Upper West)							
4 Moderately								
Authoritarian	Matriarchal	023	.482	.002	.962	.977	.380	2.512
	Marital status	221	.409	.291	.589	.802	.360	1.787
	(1= Married)							
	English	.061	.395	.024	.877	1.063	.490	2.305
	Language							
	Spoken at Home							
	Parent age	.003	.020	.016	.901	1.003	.964	1.043
	Employed	.406	.425	.914	.339	1.501	.653	3.454
	Financial Strain	.232	.206	1.264	.261	1.261	.841	1.891
	Eastern Region	.260	.645	.163	.687	1.297	.366	4.596
	Ashanti and	.103	.761	.018	.893	1.108	.250	4.921
	Brong Ahafo							
	Region							
	Central Region	-1.263	.642	3.874	.049	.283	.080	.995
	Volta Region	669	.552	1.469	.226	.512	.173	1.512
	(Northern	.196	.853	.053	.818	1.217	.229	6.471
	Regions							
	(Northern,							
	Upper East, and							
	Upper West)							

Predictors for fathers' parenting typologies are matriarchal social organization, English language spoken at home, employment, and financial strain. Only financial strain predicted mothers' parenting behavior. With relatively few background correlates of parenting typologies for both mothers and fathers, hypothesis 2 was minimally supported.

Hypothesis 3. It is hypothesized that there will be differences in academic (English, Mathematics, Integrated Science, and Social Studies) and behavioral (internalizing and externalizing)

outcomes across different parenting typologies. Mothers and fathers who engage in

Authoritative parenting styles will experience the most positive behavioral and academic

outcomes compared to those in other parenting typologies.

A one-way Multivariate Analysis of Variance (MANOVA) was conducted to assess differences between four parenting typologies (fathers) and three adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, and prosocial behaviors).

Fathers

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was a statistically significant difference between different fathers parenting typologies on the combined dependent variables (externalizing problem behaviors, internalizing problem behaviors, and prosocial behaviors), F (9, 1932.54) = 8.164, p < .001; Wilks' Lamda = .91; partial eta squared = .03. When the dependent variables were considered separately, using a Bonferroni adjusted alpha level of .017, included externalizing problem behaviors, F (3, 796) = 992, p < .001; partial eta squared = .04; internalizing problem behaviors, F (3, 796) = 12.75, p < .001; partial eta squared = .05; and prosocial behaviors, F (3, 796) = 9.893, p < .001; partial eta squared = .04.

Table 12

Means and Standard Deviations of Adolescent Outcomes by Fathers Parenting Typologies

	Externalizing Problem Behaviors	Internalizing Problem Behaviors	Prosocial Behaviors
1 Good Enough	4.75 (2.41)	7.36 (3.39)	8.00 (1.81)
2 Moderately Authoritarian	4.46 (2.26)	6.47 (3.16)	8.09 (1.63)
3 Neglectful	5.19 (3.25)	8.95 (3.27)	7.97 (2.39)

An inspection of the mean scores indicated that adolescents whose fathers were in the Good Enough typology indicated significantly higher levels of externalizing problem behaviors (M = 4.75, SD = 2.41) than adolescents whose fathers were in the Authoritative parenting typology (M = 3.74, SD = 2.48); adolescents whose fathers were in the Moderately Authoritarian typology indicated significantly higher levels of externalizing problem behaviors (M = 4.46, SD = 2.26) than adolescents whose fathers were in the Authoritative parenting typology (M = 3.74, SD = 2.48); adolescents whose fathers were in the Neglectful typology indicated significantly higher levels of externalizing problem behaviors (M = 5.19, SD = 3.25) than adolescents whose fathers were in the Authoritative parenting typology (M = 3.74, SD = 2.48).

6.13 (3.47)

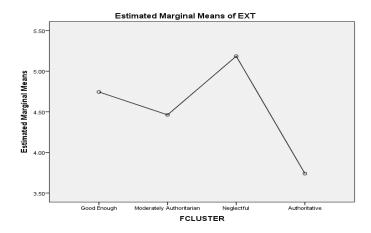


Figure 7: Father cluster: means scores of adolescent's externalizing problem behaviors

An inspection of the mean scores indicated that adolescents whose fathers were in the *Neglectful* typology indicated significantly higher levels of internalizing problem behaviors (M = 8.95, SD = 3.27) than adolescents whose fathers were in the *Authoritative* typology (M = 6.13, SD = 3.47); adolescents whose fathers were in the *Neglectful* typology indicated significantly higher levels of

internalizing problem behaviors (M = 8.95, SD = 3.27) than adolescents whose fathers were in the *Moderately Authoritarian* typology (M = 6.47, SD = 3.16); adolescents whose fathers were in the *Neglectful* typology indicated significantly higher levels of internalizing problem behaviors (M = 8.95, SD = 3.27) than adolescents whose fathers were in the *Authoritative* typology (M = 6.13, SD = 3.47).

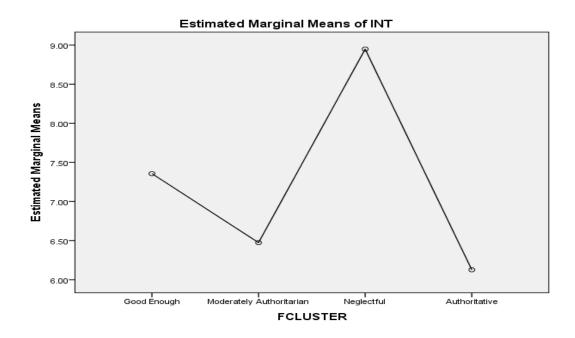


Figure 8: Father cluster: means scores of adolescent's internalizing problem behaviors

An inspection of the marginal mean scores for prosocial behaviors indicated that adolescents whose fathers were in the *Authoritative* typology were higher on prosocial behaviors (M = 8.70, SD = 1.57) than adolescents whose fathers were in the *Good Enough* typology (M = 8.00, SD = 1.81); adolescents whose fathers were in the *Authoritative* typology were higher on prosocial behaviors (M = 8.70, SD = 1.57) than adolescents whose fathers were in the *Moderately Authoritation* typology (M = 8.09, SD = 1.63).

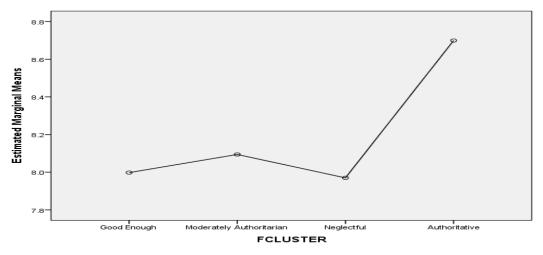


Figure 9: Father cluster: means scores of adolescent's prosocial behaviors

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was no statistically significant difference between different fathers parenting typologies on the combined dependent variables (English, Mathematics, Integrated Science, Social Studies), F (12, 2098.372) = 1.29, p = ns; Wilks' Lamda = .98; partial eta squared = .01. As such no further examination for differences was conducted. Table of means and standard deviations are presented in Table 13.

Table 13

Means and Standard Deviations of Academic Achievement by Fathers Parenting Typologies

	English	Mathematics	Integrated Science	Social Studies
1 Good Enough	58.01 (13.52)	55.38 (16.02)	58.83 (15.80)	66.84 (16.05)
2 Moderately Authoritarian	57.44 (11.98)	54.37 (16.41)	55.00 (15.76)	66.54 (13.73)
3 Neglectful	58.01 (11.98)	53.55 (17.13)	53.01 (17.58)	62.03 (16.67)
4 Authoritative	59.01(12.32)	55.68 (17.05)	57.35 (14.59)	66.89 (13.82)

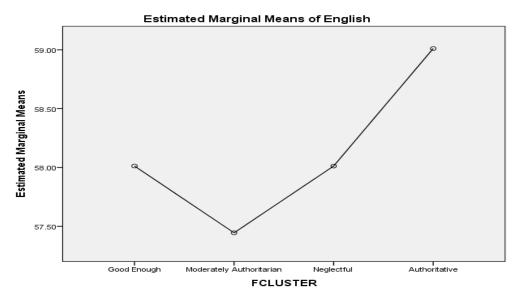


Figure 10: Father cluster: means scores of academic outcomes – English

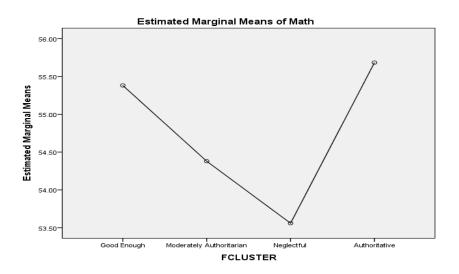


Figure 11: Father cluster: means scores of academic outcomes – Math

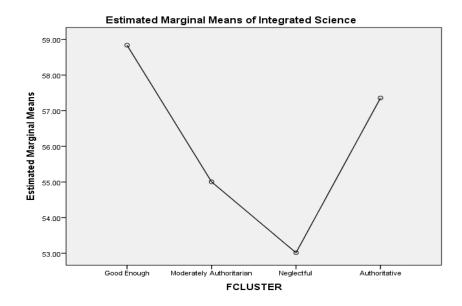


Figure 12: Father cluster: means scores of academic outcomes – Integrated Science

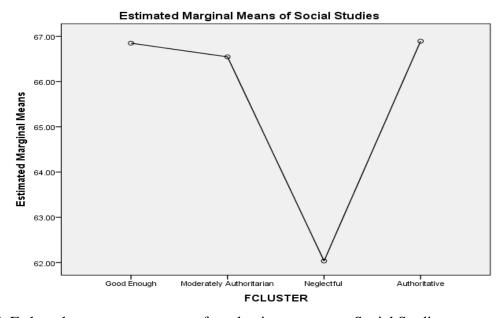


Figure 13: Father cluster: means scores of academic outcomes – Social Studies

Mothers

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was a statistically significant difference between different mothers parenting typologies on the combined dependent variables (externalizing problem behaviors, internalizing problem behaviors, and prosocial behaviors), F(9, 1932.54) = 8.16, p < .001; Wilks' Lamda = .91; partial eta squared = .03. When the dependent variables were considered separately, using a Bonferroni adjusted alpha level of .017, included externalizing problem behaviors F(3, 796) = 13.72, p < .001; partial eta squared = .05; internalizing problem behaviors F(3, 796) = 10.368, p < .001; partial eta squared = .04; and prosocial behaviors F(3, 796) = 8.907, p < .001; partial eta squared = .03.

Table 14

Means and Standard Deviations of Mother's Parenting Typologies and Adolescent's Problem and Prosocial Behaviors

	Externalizing Problem Behaviors	Internalizing Problem Behaviors	Prosocial Behaviors
1 Good Enough	4.87 (2.31)	8.17 (3.66)	7.75 (1.89)
2 Neglectful	5.45 (3.03)	8.09 (3.23)	7.86(2.02)
3 Authoritative	3.73(2.44)	6.15 (3.40)	8.62(1.66)
4 Moderately Authoritarian	4.67 (2.38)	6.65 (3.22)	8.16 (1.61)

An inspection of the mean scores indicated that adolescents whose mothers were in the *Good Enough* typology indicated significantly higher levels of externalizing problem behaviors (M = 4.87, SD = 2.31) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 3.73, SD = 2.44); adolescents whose mothers were in the *Neglectful* typology was significantly higher on externalizing problem behaviors (M = 5.45; SD = 3.03) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 3.73; SD = 2.44); adolescents whose mothers were in the *Neglectful* typology was significantly higher on externalizing problem behaviors (M = 5.45; SD = 3.03) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 3.73; SD = 2.44); adolescents whose mothers were in the *Moderately Authoritarian* typology were significantly higher on externalizing problem behaviors (M = 4.67; SD = 2.38) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 3.73; SD = 2.44).

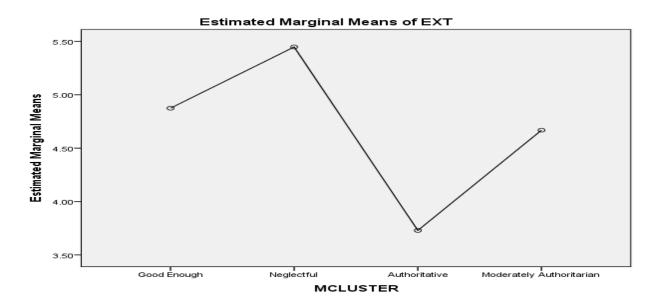


Figure 14: Mother cluster: adolescent's externalizing problem behaviors

An inspection of the mean scores indicated that adolescents whose mothers were in the *Good Enough* typology indicated significantly higher levels of internalizing problem behaviors (M = 8.17, SD = 3.66) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 6.15, SD = 3.40); adolescents whose mothers were in the *Good Enough* typology indicated significantly higher levels of internalizing problem behaviors (M = 8.17, SD = 3.66) than adolescents whose mothers were in the *Moderately Authoritarian* parenting typology (M = 6.65, SD = 3.22); adolescents whose mothers were in the *Neglectful* typology indicated significantly higher levels of internalizing problem behaviors (M = 8.09, SD = 3.23) than adolescents whose mothers were in the *Authoritative* parenting typology (M = 6.15, SD = 3.40).

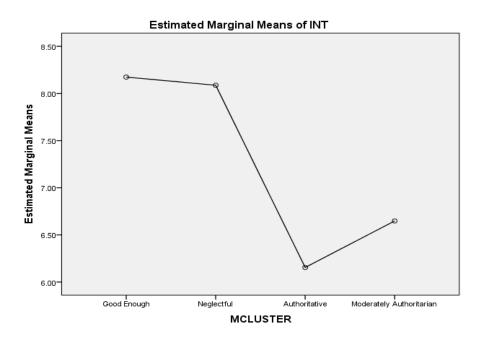


Figure 15: Mother cluster: adolescent's internalizing problem behaviors

An inspection of the mean scores indicated that adolescents whose mothers were in the *Authoritative* typology indicated significantly higher levels of prosocial behaviors (M = 8.62, SD = 1.66) than adolescents whose mothers were in the *Good Enough* parenting typology (M = 7.75, SD = 1.89); adolescents whose mothers were in the *Authoritative* typology indicated a significantly higher level of prosocial behaviors (M = 8.62, SD = 1.66) than adolescents whose mothers were in the *Moderately Authoritarian* typology (M = 8.16, SD = 1.61).

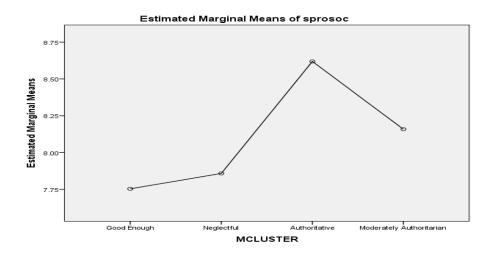


Figure 16: Mother cluster: adolescent's marginal mean scores of prosocial behaviors

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was no statistically significant difference between different mothers parenting typologies on the combined dependent variables (English, Mathematics, Integrated Science, Social Studies), F (12, 2098.37) = 1.66, p = ns; Wilks' Lamda = .98; partial eta squared = .01. As such no further

examination for differences was conducted. The table of means and standard deviations are presented.

Table 15

Means and Standard Deviations of Academic Achievement by Mothers Parenting Typologies

	English	Mathematics	Integrated Science	Social Studies
1 Good Enough	55.53 (11.95)	55.82 (16.60)	58.47 (18.16)	64.01(16.74)
2 Neglectful	58.95 (14.81)	55.17 (17.55)	53.53 (18.16)	64.86 (16.99)
3 Authoritative	59.29 (12.15)	55.32 (16.59)	57.25 (14.47)	67.03 (14.03)
4 Moderately Authoritarian	57.16 (12.25)	57.16 (16.92)	54.95 (16.24)	66.37 (13.53)

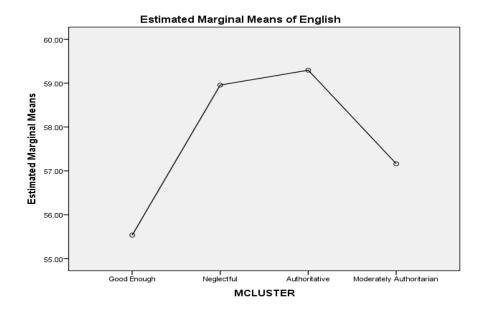


Figure 17: Mother cluster: means scores of academic outcomes – English

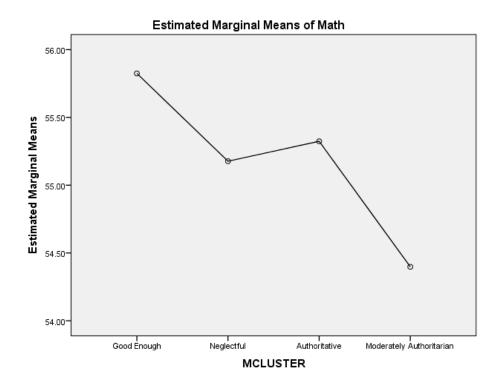


Figure 18: Mother cluster: means scores of academic outcomes – Math

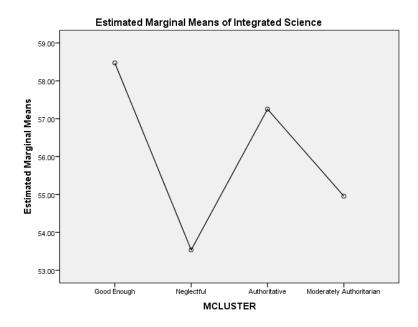


Figure 19: Mother cluster: means scores of academic outcomes – Integrated Science

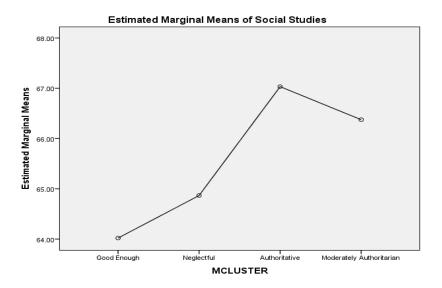


Figure 20: Mother cluster: means scores of academic outcomes – Social Studies

Hypothesis 3 was partially supported. Adolescents whose mothers and fathers engaged in *Authoritative* parenting styles indicated positive behavioral outcomes compared to adolescents whose parents engaged in neglectful parenting styles. No significant differences were found between academic subject scores across different parenting styles.

Hypothesis 4. There are likely to be variations in the levels of different cultural variables (Power Distance (PDI), Uncertainty Avoidance (UAI), Individualism-Collectivism (IND), Masculinity-Femininity (MAS), Indulgence vs. Restraint (IVR) and Long-Term vs. Short-Term Orientation (LTO) (adolescent reports) across six Ghana regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern).

Calculations were undertaken to determine the levels of cultural values across different Ghanaian regions. First, Hofstede's Ghana scores on different cultural values were compared to the US scores on the cultural values (see Table 16). This information was drawn from Hofstede's website (https://www.hofstede-insights.com/country-comparison/the-usa/). A higher PDI score concerning the US means rankings and positions within the family are more acceptable in Ghana than the US and that power may be unequally distributed in Ghana than the US. Thus, US parents are more likely to discuss the rationale behind rules, orders, or instructions than Ghanaian parents. Ghana's national MAS score of 40 is lower than the US score of 62. There were significant differences between males and females' roles in Ghana than in the US or egalitarian societies. A national UAI score of 65 for Ghanaians and 46 for the US suggests that Ghanaians families may be resistant to change and they have more rigid rules and beliefs when compared to Americans. With an LTO score of 4 Ghanaians is seven times more likely than Americans to rigidly respect traditions and norms and resist change. Ghana's IVR score is 72 and the US IVR score is 68. The difference is only 4 points. A high IVR score for both countries indicate that both Ghanaians and Americans have positive and optimistic attitudes as well as the tendency to satisfy needs immediately without much delay.

Table 16

Hofstede's Ghana Scores vs. Ghana Regional Scores

Dimensions	PDI	IDV	MAS	UAI	LTO	IVR
Hofstede's US Scores	40	91	62	46	29	68
Hofstede's Ghana Score	80	15	40	65	4	72
Initial Calculated Greater Accra score	32	-20.3	21.35	-29.9	-1.65	21.2
Constants using GH baseline for Greater	48	35.3	18.65	94.9	5.65	50.8
Accra						
Initial Calculated Eastern score	30.05	-23.45	28.35	-29.25	-8.25	15.3
Constants using GH baseline for Eastern	49.95	38.45	11.65	94.25	12.25	56.7
Initial Calculated Ashanti & Brong Ahafo	28.35	-15.75	22.75	-28.55	4.2	23.75
scores						
Constants using GH baseline for Ashanti	51.65	30.75	17.25	93.55	20	48.25
& Brong Ahafo						

Initial Calculated Central & Western	35.0	-28.70	28.70	-25.70	-4.30	19.95
scores	22.0	20.70	20.70	20.70		17.70
Constants using GH baseline for Central	45	43.7	11.65	94.25	12.25	56.70
& Western						
Initial Calculated Volta score	41.2	-17.5	25.2	-32.75	1.05	10.1
Constants using GH baseline for Volta	38.8	32.5	14.8	97.75	2.95	61.9
Initial Calculated Northern score	31.05	-11.55	-3.86	-22.7	-7.25	46.05
Constants using GH baseline for Northern	48.95	26.55	43.85	87.70	11.25	25.95

Note: Constants between 0 and 100 but could also go below 0. GH: Ghana

The regional cultural dimensions scores differ from the national scores; however, the scores are within the means and standard deviations. To compare Ghana's regional scores to Hofstede's Ghana's scores (within-group comparison), the constant was not included in the calculation (see e.g., Nauri & Traum, 2013, p. 6). The score of 32 for Greater Accra (Initial Calculated Greater Accra score) was calculated based on the formula indicated earlier in this dissertation. A higher PDI score means Ghanaian adolescents accept rankings within the family and their positions as being at the bottom of the hierarchy ladder and that power within family and school is unequally distributed. A high PDI also suggests that there is not much discussion about the rationale behind rules, orders, or instructions. Volta region scored highest on PDI (41.2) while Ashanti and Brong Ahafo regions scored the lowest (28.35).

To obtain constants for PDI for each of the six regions in Ghana, the initial calculated score was deducted from Ghana's PDI score. For example, the Greater Accra regions' PDI score was calculated as follows: (80 - 32 = 48), where 80 is Hofstede's Ghana PDI score, 32 is Greater Accra' regional PDI score and 48 is the constant for Greater Accra. In terms of Individualism, the Northern region scored lowest on IDV (26.55) while Central and Western regions scored the highest (43.70) (see Table 17). In terms of MAS, the Central and Western regions and Eastern regions scored lowest (11.65) while Northern regions scored the highest (43.85). In terms of UAI, the Northern regions scored highest (87.70) while the lowest was in Volta (43.85). In

terms of LTO, the Ashanti and Brong Ahafo regions scored lowest (-.20) while the highest was in the Eastern and Central and Western regions (12.25). In terms of IVR, the Northern regions scored lowest (25.95) while the highest was in Eastern and Central and Western regions (56.70).

Hypothesis 4 was minimally supported. Although there were differences in the levels of Hofstede's cultural variables across the six cultural regions, variations were marginal.

Hypothesis 5. There are likely to be differences in the prevalence of fathers' and mothers' parenting typologies across various Ghanaian regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern).

Table 17

An Exploration of Fathers Parenting Typologies per Ghanaian Regions

Good Enough	Moderately Authoritarian	Neglectful	Authoritative
18 (9.8%)	71 (38.6%)	9 (4.9%)	86 (46.7%)
27 (13.6%)	76 (38.2%)	12 (6.0%)	84 (42.2%)
10 (8.8%)	35 (31.0%)	8 (7.1%)	60 (53.1%)
12 (11.3%)	22 (20.8%)	9 (8.5%)	63 (59.4%)
24 (16.9%)	42 (29.6%)	10 (7.0%)	66 (46.5%)
9 (16.1%)	13 (23.2%)	3 (5.4%)	31 (55.4%)
	Enough 18 (9.8%) 27 (13.6%) 10 (8.8%) 12 (11.3%) 24 (16.9%)	Enough Authoritarian 18 (9.8%) 71 (38.6%) 27 (13.6%) 76 (38.2%) 10 (8.8%) 35 (31.0%) 12 (11.3%) 22 (20.8%) 24 (16.9%) 42 (29.6%)	Enough Authoritarian 18 (9.8%) 71 (38.6%) 9 (4.9%) 27 (13.6%) 76 (38.2%) 12 (6.0%) 10 (8.8%) 35 (31.0%) 8 (7.1%) 12 (11.3%) 22 (20.8%) 9 (8.5%) 24 (16.9%) 42 (29.6%) 10 (7.0%)

A chi-square test for independence indicated no significant association in the prevalence of fathers parenting typologies across different Ghanaian regions, χ^2 (15, N = 800) = 23.09, p = ns.

Table 18

An Exploration of Mothers Parenting Typologies and Ghanaian Regions

	Good Enough	Neglectful	Authoritative	Moderately Authoritarian
Greater Accra	16 (8.7%)	7 (3.8%)	105 (57.1%)	56 (30.4%)
Eastern	13 (6.5%)	7 (3.5%)	111 (55.8%)	68 (34.2%)
Ashanti and Brong Ahafo	8 (7.1%)	4 (3.5%)	67 (59.3%)	34 (30.1%)
Central and Western	13 (12.3%)	10 (9.4%)	61 (57.5%)	22 (20.8%)
Volta	14 (9.9%)	9 (6.3%)	82 (57.7%)	37 (26.1%)
Northern	7 (12.5%)	2 (3.6%)	28 (50%)	19 (33.9%)

A chi-square test for independence indicated no significant association in the prevalence of mothers parenting typologies and different Ghanaians regions, $\chi^2(15, N = 800) = 16.82$, p = ns. Based on the results from the chi-square test for independence for both fathers and mothers in the various regions of Ghana, Hypothesis 5 was not supported.

Hypothesis 6. There are likely to be mean differences in adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, prosocial behaviors, and academic outcomes) across various Ghanaian regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern).

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was no statistically significant difference between Ghanaian regions on the combined dependent variables (externalizing problem behaviors, internalizing problem behaviors, and prosocial behaviors), F(15, 2186.77) = 1.505, p = ns; Wilks' Lamda = .97; partial eta squared = .01. Given

the non-significant F value, no further analyses were conducted. Table of means and standard deviations are presented in Table 20.

Table 19

Behavioral Outcomes per Regions

	Externalizing Problem Behaviors	Internalizing Problem Behaviors	Prosocial Behaviors
Greater Accra	4.29 (2.84)	6.33 (3.24)	7.95 (1.83)
Eastern	4.20 (2.33)	6.62 (3.49)	8.48 (1.55)
Ashanti and Brong Ahafo	4.03 (2.41)	6.80 (3.40)	8.61 (1.57)
Central and Western	4.06 (2.60)	6.28 (3.56)	8.54 (1.79)
Volta	4.44 (2.38)	6.87 (3.67)	8.44 (1.71)
Northern	3.80 (2.13)	6.55 (2.92)	8.38 (1.83)

Preliminary assumption testing for multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity were met, no serious violations were noted. There was no statistically significant difference between Ghanaian regions on the combined dependent variables (externalizing problem behaviors, internalizing problem behaviors, and prosocial behaviors), F(20, 2624.40) = .700, p = ns; Wilks' Lamda = .98; partial eta squared = .00. Given the non-significant F value, no further analyses were conducted. The table of means and standard deviations are presented in Table 20.

Table 20

Means of Academic Outcomes by Ghanaian Regions

	English	Math	Integrated Science	Social Science
Greater Accra	58.17 (12.45)	56.45 (16.65)	55.69 (15.61)	66.08 (14.54)
Eastern	57.26 (12.77)	55.43 (16.42)	57.04 (14.49)	65.64 (14.04)
Ashanti and Brong Ahafo	58.37 (12.50)	54.14 (17.38)	56.26 (17.29)	66.44 (14.72)
Central and Western	58.00 (12.27)	53.28 (17.38)	56.62 (15.81)	66.57 (14.60)
Volta	59.58 (12.25)	54.62 (16.88)	56.26 (15.57)	67.85 (14.60)
Northern	59.85(10.48)	55.93 (15.87)	58.16 (12.53)	67.03 (16.38)

There were no significant mean differences in adolescent outcomes (externalizing problem behaviors, internalizing problem behaviors, prosocial behaviors, and academic outcomes) across various Ghanaian regions (Greater Accra, Eastern, Ashanti & Brong Ahafo, Central & Western, Volta, and Northern). Hypothesis 6 was not supported.

Discussion

Grounded in Cultural Ecological Framework, Interpersonal Acceptance-Rejection and Social Learning theories, and guided by Hofstede's Cultural Dimensions framework, this study sought to test the applicability of parenting typologies within the Ghanaian context. In addition to ascertaining maternal and paternal culturally specific parenting typologies, the associations among parenting typologies, and sociodemographic correlates, adolescents' academic and behavioral outcomes were also determined. Further, this investigation also examined the cultural dimensions characteristic of different cultural regions in Ghana and the prevalence of parenting typologies in these cultural regions. This section discusses the major findings of this study in relation to the theories selected for this research and the extant literature on parenting typologies, and concludes with a discussion of limitations, implications, and future directions.

Central to this dissertation and findings is the Cultural Ecological Framework which indicates that the environment in which people live in and their beliefs impact how they behave. Also, IPARTheory's (Rohner, 2016) main premise that everyone experiences varying degrees of warmth from the people they deem important in their lives also informed this study. The absence of warmth is neglect. Irrespective of the hypotheses or findings of this study, the question that remains to be answered is: To what extent was warmth displayed to important persons in people's lives and what were the resulting outcomes when warmth or the absence thereof was experienced? A latent profile analysis (LPA) for mothers and fathers revealed four distinct parenting typologies: *Moderately Authoritarian (not for play)*; *Neglectful (abi-zi-bii)*;

Good Enough (oye ara); and Authoritative (oho ni ho) parenting typologies. Adolescents whose parents were authoritative in their parenting style indicated lower externalizing and internalizing problem behaviors and higher prosocial behaviors compared to adolescents whose parents engaged in other parenting typologies. Three of Baumrind's parenting typologies (Authoritative, Neglectful and Good Enough [first identified in the Ghanaian context]) were supported. A culturally unique parenting typology Moderately Authoritarian emerged from the latent profile analysis. Fathers and mothers who engage in Moderately Authoritarian parenting style engage in moderate levels of warmth/support, autonomy democratic participation, physical and verbal punishment, and inductive reasoning. Adolescents whose parents engaged in an authoritative parenting style were less likely to engage in externalizing problem behaviors and experience fewer internalizing problem behaviors. These findings are similar to findings in the US and other countries. These findings varied subtly per the six Ghanaian cultural regions in the prevalence of parenting styles, behavioral and academic outcomes. Findings are discussed in detail in the sections that follow.

Of the four clusters of parenting typologies obtained for fathers and mothers: (a) moderately authoritarian (32% of fathers and 30% of mothers); (b) authoritative (49% fathers and 57% mothers); (c) good enough (13% fathers and 9% mothers); and (d) neglectful group (6% fathers and 5% mothers), at least two typologies were authoritarian and authoritative. The extant literature indicates that the two most prevalent parenting styles utilized by Ghanaian parents were authoritarian and authoritative parenting styles (Akinsola, 2013, Nyarko, 2014b; Nyarko, 2014c; Ofosu-Asiamah, 2013; UNICEF report, 2014). Findings of this current study indicate that authoritarian and authoritative parenting styles are the two dominant parenting styles employed by Ghanaian parents. Comparatively, most Ghanaian parents employ

authoritarian parenting style (Akinsola, 2013, Boateng et al., 2020; Marbell & Grolnick, 2013; Nyarko, 2014b). Fewer studies however indicate that the most utilized parenting style by Ghanaian parents is the authoritative parenting style (Ofosu-Asiamah, 2013; Romans et al., 2016). This study found more Ghanaian parents (48.75% fathers and 56.75% mothers) employed the authoritative parenting style than authoritarian parenting style (32.37% fathers and 29.5% mothers). However, the expectation for this study was that authoritarian parenting style would be the most utilized parenting style for two reasons. Firstly, even within the school setting, corporal punishment is utilized for disciplining purposes, and secondly, the postulate that a child may also be disciplined by members of the Ghanaian community irrespective of their relation to the child (UNICEF report, 2014). These two reasons show that authoritarian parenting style may be rampantly utilized within the Ghanaian culture and that fewer Ghanaian parents employ authoritative parenting style than authoritarian parenting style. A more plausible explanation is the social desirability bias whereby participants choose responses that are less humiliating and unreflective of their true thoughts. The assumption is that adolescents (15-18year-olds), would not want to admit that their parents physically coerce them. It is also unclear if parents utilized the hybrid parenting (Akinsola, 2013) technique, a Sub-Saharan African practice whereby more than one parenting style (e.g., authoritarian & permissive) is used simultaneously, usually earlier in adolescent years. Ghanaian parents may employ the authoritarian parenting style decreasingly or increasingly with age. Re-wording questions carefully might help reduce the social desirability bias. Questions should be able to capture the complexities of Sub-Saharan African parenting in cases where authoritarian and authoritative have been utilized simultaneously or concurrently. This would have practical implications on how researchers could accurately determine the effectiveness of specific interventions targeting parent-adolescent

relationships. The current study did not measure hybrid parenting even though there is the possibility that some of the responses by adolescent participants were geared toward this form of parenting technique.

Although the current study established that authoritarian and authoritative parenting styles are commonly employed by Ghanaian parents, it did not ascertain the claim that authoritarian parenting style negatively impacts adolescents' academic outcomes (Chowa et al., 2013; Hyojung et al., 2012). Instead, although not significant, it supports Nyarko's (2011) postulation that authoritarian parenting style produced positive academic outcomes as well as Darling's (1999) claim that adolescents whose parents used the authoritarian parenting style performed moderately well (Darling, 1999) as did Ghanaian adolescents in all four core classes (Math, English, Integrated Science & Social Science). Thus, unlike studies in Western countries, there was no association between parenting styles and academic achievement. This lack of association may be due to the poor education system which results in poor outcomes. The multitrack system (similar to the "no child left behind' policy in the US), allows for students to be in school all year round. While students attend school in batches and throughout the year with little breaks, teachers do not have breaks or replacements and teach all year-round. The educational policies have not been effective and declining standards of the education system, may be one of the reasons why there was no variability in students' scores in the four core classes (English, Math, Integrated Science & Social Science). There were no mean differences in students' grades and the reason was not because all adolescents were doing exceptionally well academically. These students are also in boarding school and teachers may not be marking or grading papers with variation between students. Boarding school education is very common in Ghana and it is not privy to very bright or wealthy families. The Ministry of Education (MOE, 2014-15) report

indicates that of the 981 public senior high schools in Ghana, over 60% are boarding schools. Parents may also view the school as more responsible for academic achievement and not their investment in the adolescent. In another vein, the expectation of a relationship between parenting styles and academic achievement is western and so there is also the need to focus on context instead of stretching the data to fit western expectations. Wolf and McCoy (2019) found a negative relationship between reports of caregivers' of at-home stimulation and numeracy skills, social emotional scores, and execution function (e.g., working memory, flexible thinking, and self-control) of third graders in Ghana. In the same study, marginally significant results were realized when caregivers' school participation, maternal education and socio-emotional skills were considered.

A common assertion in the extant literature on parenting indicate that in the Ghanaian culture, more fathers than mothers utilize authoritarian parenting style because fathers exert the power in the home (Akinsola, 2013; Babatunde & Setiloane, 2014; Oto, 2012). In line with Akinsola's study, this study found that more fathers (32.38%) than mothers (29.5%) utilized the authoritarian parenting style. This result was expected because hierarchy and patriarchy systems are popular in Ghana than the matriarchy system. Additionally, most people in the southern sector and the northern parts of Ghana are patriarchal, and because these systems denote power, it is more likely that more fathers than mothers would utilize the authoritarian parenting style. When family structure and composition were considered, variations of parenting were realized. For example, Nyarko (2014b) reported that some mothers appeared authoritarian while some fathers appeared permissive indicating that not all fathers employ the authoritarian parenting style. Generally, single parents employ authoritative and permissive (Grove & Naude, 2016; Nyarko, 2014) parenting styles. In this study, permissive parenting style was not determined

even though single parents (excluding all married persons) made up 30.5% of the total sample. Instead, the four clusters of parenting typologies obtained for fathers and mothers shared similar characteristics with Baumrind's parenting typologies but differed sharply. For example, Ghanaian fathers and mothers labeled as moderately authoritarian (32% of fathers and 30% of mothers) shared characteristics similar to as well as different from Baumrind's authoritarian parenting style (Dixon et al., 2008, Marbell & Grolnick, 2013; Ofosu-Asiamah, 2013; Owusu-Kwarteng, 2015). While Baumrind's authoritarian typology is characterized by low responsiveness and high control, moderately authoritarian typology is characterized by moderate levels of responsiveness, autonomy-democratic participation, physical and verbal punishment, and inductive reasoning. Although, Ghanaian parents in the *moderately authoritarian* typology did not use physical punishment to the extent that was characteristic of parents in Baumrind's authoritarian typology. The *moderately authoritarian* typology was also typified by reasons for rules, encouragement to talk about consequences of their action on others (inductive reasoning), and an emphasis on why rules need to be obeyed. Even though both Baumrind's authoritarian parenting style and *moderately authoritarian* typology were typified by higher levels of parental control, Ghanaian parents' reasons for exerting control over their children's lives include their expectations for children and adolescents to respect others (especially elders and those in authority) and to behave appropriately in the home and larger social settings. In both Baumrind's authoritarian and *moderately authoritarian* typologies, there is no room for bargaining or explanation for a parent's actions towards the child. Most Ghanaian families are traditional with the fathers as the family breadwinner. In this study, more fathers than mothers were employed and over 75% (80.8%) had second jobs. Fewer mothers in the Northern part of Ghana were *moderately authoritarian*. The northern parts of Ghana are patriarchal and as such

mothers may hold less disciplinary power. This finding is like that stated in the UNICEF (2014) report which indicated that Ghanaian parents in the Northern part of Ghana used lesser physical punishment compared to parents in other regions of Ghana.

About 13% of fathers and 9% of mothers were labeled as being in the *good enough* (*oye ara*) typology. This group of Ghanaian parents was low on warmth and support, autonomy granting, physical and verbal punishment, and were moderate on the levels of inductive reasoning. Coined by Donald Winnicott in 1995, the phrase "good enough mother" described a situation whereby it was beneficial for children when mothers failed them in regulated ways. Baumrind (2013) labeled parents who were moderately responsive and demanding of their children as good-enough. Adolescents of fathers in the *good enough* typology scored highest in Social Studies and lowest in Math whereas adolescents of mothers in the same typology scored highest in Social Studies but lowest in English. Mothers (8.7%) in the *good enough* typology were most likely to be from the Greater Accra region while fathers (13.6%) in the same typology were most likely to be from the Eastern region. Fathers and mothers in the *good enough* typology were least likely to originate from the northern regions of Ghana. Due to the disparities between the northern and southern sectors of Ghana, it is almost impossible for people in the northern regions of Ghana to travel down to the southern sector or vice versa.

Authoritative parenting typology (oho ni ho) which was the most prevalent among parents (49% fathers and 57% mothers) in this study shared similar characteristics with Baumrind's authoritative parenting style. Two descriptors of Baumrind's (2013) authoritative typology are high-demandingness and high-responsiveness. Similar to Baumrind's authoritative typology, this group of parents were high on warmth or support, autonomy democratic participation, and inductive reasoning and low on physical and verbal punishment. Baumrind

(2013) noted that spanking is not a significant characteristic of authoritative parenting, however, all the children were spanked. Similarly, Ghanaian parents (fathers and mothers) in the *authoritative* typology were also low on physical and verbal punishment. According to Baumrind (1967; 1971; 2013), authoritative parenting yields optimal adolescent outcomes. Adolescents of fathers in the *authoritative* typology scored the highest in English, Math, and Social Studies, while adolescents of mothers in the same typology scored highest in English and Social Studies. However, the association between parenting styles and academic achievement was not significant. This is similar to findings in Wolf and McCoy (2019). In the *authoritative* typology, fathers were most likely from Greater Accra region and least likely from the Northern regions of Ghana. Like Baumrind's typology, adolescents with parents from the authoritative group had optimal behavioral outcomes.

The Ghanaian parents (6% fathers and 5% mothers) in the *neglectful* (*abi-zi-bii*) typology bear similar characteristics to Baumrind's neglectful parenting typology and were characterized by low levels of warmth, autonomy-democratic participation, physical and verbal punishment, and inductive reasoning. *Neglectful* parenting typology utilized by Ghanaian parents share similar characteristics with Baumrind's "rejecting-neglecting" (Power, 2013 p. S-17) typology and tend to have the worst adolescents' outcomes. Fathers in *neglectful* typology were most likely to be from Eastern region whereas mothers in the same typology were most likely to be from Central and Western regions. Adolescents of mothers and fathers in the *neglectful* typology scored highest in Social Studies and lowest in Integrated Science. It was unanticipated for adolescents with parents in the *neglectful* typology with low responsiveness and low demandingness to obtain the highest score in Social Studies. In terms of behavioral outcomes across regions, the lowest scores were recorded for the northern region in externalizing problem

behavior; Central and Western regions in internalizing problem behaviors; and Greater Accra in prosocial behaviors. The northern regions of Ghana are riddled with ongoing chieftaincy disputes and as a result, children and adolescents' behaviors are usually impacted. This finding was unexpected. However, due to migration to the southern parts of Ghana, it is possible that these adolescents did not witness much of the conflict in the northern regions and therefore were not negatively impacted. The associations among parenting typologies, sociodemographic correlates, and adolescents' academic and behavioral outcomes will be discussed below.

The sociodemographic predictors of the four parenting clusters (moderately authoritarian, authoritative, good enough & neglectful) selected for this study include family patriarchy & matriarchy social organization, marital status, English language spoken at home, parent age, employment status, financial strain, and Ghanaian cultural regions. There were fewer significant predictors of different parenting typologies for fathers and mothers. Financial strain and employment were important predictors of parenting behavior. For example, families in which at least one parent was employed and experienced greater financial strain, were less likely to be in the *neglectful* parenting typology than the *authoritative* typology. This is contrary to hypothesis 2. If parents experience financial strain, then they are more likely to be authoritarians. This is also contrary to studies in western cultures. These findings are unique to Ghanaian cultures. There may be other predictors like crime and neighborhood risk factors, which were not selected. Wolf and McCoy (2019) selected predictors like parent-child interaction quality. Consequently, parents in the *neglectful* typology, may be less motivated to seek employment than those in the authoritarian or authoritative typology. Parents in a more matriarchal social organization were less likely to be in the neglectful parenting typology than those in the Good Enough parenting typology. It is expected that due to a parents' responsibility

to transfer property to a nephew in a matriarchal social organization, it may be less likely for parents to be *neglectful* because matriarchal mothers or fathers wield the power in the home (Nyarko,2014). This is contrary to the UNICEF (2014) baseline report, in which predictors of children and adolescent behavioral outcomes including poverty, parental neglect and gender, negatively impact adolescent outcomes.

The current study found a statistically significant difference between the four Ghanaian parenting typologies for both fathers and mothers and adolescent problem and prosocial behaviors. A vast majority of studies (see, e.g., Baumrind, 1967;19790; Finkenauer, Engels, Rutger & Baumeister, 2016) have documented the associations between parenting typologies and adolescent problem and prosocial behaviors and have indicated that adolescents whose parents belong to the moderately authoritarian typology exhibited significantly higher levels of externalizing problem behaviors than those in the *good enough* typology. Like Baumrind's typology, authoritative parenting yielded optimal adolescents' outcomes while neglectful parenting yielded the worst outcomes. Also, findings of the current study indicate that parenting behaviors, for example, neglectful parenting behavior, will increase the likelihood for detrimental adolescent outcomes. Consequently, adolescents whose parents were in the neglectful typology indicated significantly higher levels of externalizing problem behaviors than adolescents whose fathers were in the *authoritative* parenting typology. Authoritative parenting yielded the best adolescent outcomes and therefore, adolescents exhibited significantly higher levels of prosocial behaviors. This finding is similar to studies that have indicated that adolescents with uninvolved parents were more likely to exhibit higher levels of internalizing and externalizing problem behaviors compared to adolescents with authoritative parents (see, e.g., Bolkan, Sano, De Costa, Acock, & Day, 2010; Carlo, White, Streit, Knight & Zeiders,

2018; Lorence et al., 2019). Similarly, Maccoby and Martin (1983) found that neglectful parenting is most detrimental to adolescents' developmental outcomes. Contrary to the hypothesized association between parenting styles lacking warmth and adolescents' behavioral outcomes, this study found that adolescents whose fathers were in the *good-enough* typology indicated significantly lower scores on externalizing problem behaviors than adolescents whose fathers were *neglectful*. A possible explanation is resiliency or risk-buffering effect (Sentse, Lindenberg, Omvlee, Ormel & Veenstra, 2009), especially when contextual factors like high-risk neighborhoods are considered and the idea that behavior can be learned.

According to Bandura (1978) aggression entails observational learning, physical threats, and verbal insults as well as regulators (e.g., punishment or rewards). To better understand why adolescents whose fathers were in the good-enough typology (which debuted in the Ghanaian culture) indicated significantly lower scores on externalizing problem behaviors than adolescents whose fathers were neglectful, may be due adolescents' observational learning on dealing with issues and the reinforcement provided by important people in their lives. This also considers structural determinants (e.g., contextual factors). Another explanation for the unexpected finding is based on IPARTheory. The personality subtheory of IPARTheory (Rohner, 2016), indicates that adolescents would respond in similar ways when they are rejected. It follows that adolescents whose parents were neglectful should exhibit higher levels of problem behaviors because people respond in similar ways when they are rejected. It is also possible that adolescents whose parents employed the good-enough typology relatively had better coping skills. This is in line with the coping sub-theory which postulates that some individuals cope better or are resilient than others.

Although there were statistically significant differences between fathers' and mothers' parenting typologies and adolescents' problem and prosocial behaviors, only subtle differences were found between parenting behaviors and academic outcomes since scores on all the four core class subjects were within the means and standard deviations. These results contradict Ofosu-Asiamah's (2013) claim on the positive association between neglectful parenting and low academic outcomes, but signifies that the current educational system has declining standards (McCarthy, McCarthy, Gyan & Baah-Korang, 2015; Ofusu-Asiamah, 2013) and is failing (Ansong, Ansong, Amopomah, & Adjabeng, 2015; Dei, 2005; Jones & Chant, 2009) all across the six Ghanaian cultural regions.

Hofstede's framework will be used to discuss regional differences in comparison to Ghana's national scores. Also, differences between groups will be discussed below. While stark differences were apparent between the Northern and Southern sectors of Ghana, subtle differences persisted among southern sector regions. Adolescents answered questions on their cultural values. Findings varied across the six Ghanaian cultural regions of adolescents' belonginess. Re-stating Ghana's national scores: (Power Distance (PDI) = 80; Individualism (IDV) = 15; Masculinity (MAS) = 40; Uncertainty Avoidance (UAI) = 65; Long Term Orientation (LTO) = 4 & Indulgence (IVR) = 72).

With a low score of 15, Ghana is a collectivist culture because the higher the IDV score the more individualistic the culture. A high PDI score means power is unequally distributed in Ghana. Ghana's score of 40 is low. This means that values related to nurturing is of greater importance to Ghanaians than competition. In contrast, a high MAS score indicates significant differences between males' and females' roles. A high IVR score of 72 is indicative of Ghanaians hopeful attitudes, and how they are unable to delay gratification. Ghana's high UAI

score of 65 suggests that due to rigid and strict rules, Ghanaians may be resistant to change. Ghana's low LTO score of 4 is indicative of Ghanaians' need to maintain links to their past because of their respect for traditions and norms.

Although Ghana's regional scores differed from the national scores, the scores were within the means and standard deviations. Northern region scored highest on IDV (26.55) while Central and Western regions as well as Eastern regions scored the lowest (11.65). The northern regions of Ghana for over six decades have been impacted by land and chieftaincy disputes (UNICEF, 2014). Children and adolescents growing up in these regions are usually subjected to violence and death. The high PDI score for the northern region is indicative of the civil unrest in the region because of their belief that power is unequally distributed in their region. The southern sector regions which include Central and Western, and Eastern regions are void of land litigations. The Northern regions also scored the highest on UAI (87.70) but lowest in IVR. Since a high UAI score is indicative of the maintenance of rigid rules, it explains why northern region scored the highest on PDI. Volta region scored the lowest on UAI (43.85) which indicates their unwillingness to change. The Eastern and Central regions scored the highest levels on IVR (56.7) and these findings indicate their inability to delay gratification. Central and Western regions scored the lowest (11.65) in MAS while Northern regions scored highest. Low scores on MAS is indicative of insignificant differences between males' and females' roles.

Regional scores across all six Ghanaian cultural values were between 0-100 but some scores went below zero. As indicated by Hofstede et al., (2010) scores could go below zero. In this current study, some of the constants went below zero. Although results were not significant, there were some variations. The marginal differences might suggest that adolescents were not a true representation of their cultural regions due to internal migration and acculturation. The

same explanation applies to why there were no differences in the prevalence of fathers' and mothers' parenting typologies across the six Ghanaian cultural regions. In the UNICEF (2014) baseline report, sample characteristics and percentages were reported. No mean differences or standard deviations were reported but made claims of differences across all Ghanaian regions.

Limitations and Future Directions

Although these study findings have made contributions to the parenting research literature within the Ghanaian context, this investigation is not without its limitations. Based on guidelines set forth by Ross & Bibler Zaidi's (2019), some of the limitations of the study are discussed below.

Pertaining to the study design, delimitations for the study included adolescents' age (15-18-years old), sex and grade. Another delimitation utilized was ethnicity. Although adolescents attended school in the Greater Accra and Eastern regions, they also indicated their region of belongingness which were grouped into six Ghanaian cultural regions. The prevalence of the parenting typologies, academic and behavior outcomes were investigated in these cultural regions. Based on UNICEF's (2014, p. 10) baseline report, 15% of the children and adolescents (0-17 years) were "separated from both biological parents". Separation from biological parents does not preclude child labor, and as early as age five, about a quarter of these children are engaged in child labor. Also, the "mpraba system", a traditional kinship care system which fosters children and adolescents to relatives, was not considered. In the future, inclusion of open-ended questions in the survey questionnaire could give a better understanding of adolescents' perception of belonginess to the six Ghanaian cultural regions. Hofstede's (2011) cultural dimensions is aggregated at the regional level and the author discouraged calculating the

scores at the individual level. A multilevel analysis on cultural values dimensions in the future could be useful in estimating adolescent outcomes.

In this study adolescents answered questions on their cultural values and their perceptions of parenting styles employed by their parents. Although parent reports often gain information about their parenting typologies, the degree to which their reports vary is unclear. Adolescents are the true recipient of the parenting styles employed by their parents. The current study used adolescents' perceptions of parenting styles instead of parent reports. It was expected that these adolescents would be free of any parental influence since they are in the boarding school and will be able to report correctly on their perceptions of the parenting styles employed by their parents. Although there is the possibility that Ghanaian parents may employ more than one parenting style (hybrid parenting), it was hoped that the parenting style which stands out more to the adolescent is what would be reported. Adolescents who perceived their parents of using authoritarian parenting style may not want to label their parents as highly authoritarian. This may be because they may not want to report that they are treated badly by their parents. Social desirability may play a role in how adolescents respond to questions asked in relation to harsh punishment. The results demonstrate the importance of using adolescent report of their perceptions of the parenting style employed by both parents for adolescents between ages 15-18. In any case, adolescents 18 years of age did not need parental consent to take the survey.

The extended family system in Ghana is important in rearing children and adolescents in Ghana. Although the extended family system is on the decrease in Ghana while nuclear families [two-parent, single-parent & polygynous union] are on the increase (Kpoor, 2015), the impact of the extended family on adolescent outcomes could not be measured. This was because most participants skipped the household membership questions and did not provide demographic

information on the people living in the home which could possibly impact child outcomes. In the future, creative ways to obtain this information will be devised.

Pertaining to data collection, letters were sent out to 10 schools but only two schools from the Eastern and Greater Accra Ghanaian regions expressed interest in participating in the research study. Referred to as self-selection bias (Ross & Bibler Zaidi, 2019), future investigations should include schools from other Ghanaian cultural regions for a comprehensive understanding of parenting typologies in different Ghanaian cultural regions and cultural communities. Future studies on parenting typologies and adolescent outcomes in the Ghanaian context should consider the role of the Ghanaian extended family system and different subtypes of single-parents (e.g., never-married, widowed). Divorce is steadily increasing in Sub-Saharan African countries like Ghana and according to a 2006 report by the Accra Metropolitan Assembly (AMA), the highest rate of divorce was between 2008 and 2014, with the highest rate at almost 16% and the lowest 12%. These rates are considered high for a country that has generally held on to traditional notions of marriage and have utilized elders in families to settle marital disputes instead of going to the courts for arbitration. Status disclosure is important for two reasons: First, change in status can be determined and measured. Second, it helps make distinctions between subtypes of single-parents other than death and gives a better understanding of the nature of parenting styles in different family configurations.

In terms of data analysis, this study made a distinction between mothers' and fathers' parenting styles but did not determine if adolescents fared better if they were raised by a same-gendered parent as suggested by Baharudin et al., (2010). Studies on this subject should be considered in Ghana given the increasing rates of divorce and the rising possibility that children may be raised in single-parent homes. Future studies should include the use of longitudinal data

and latent transition analysis techniques to assess parents' consistency in the use of specific parenting styles or if parents changed parenting styles throughout the child's development. For example, did parents use a moderately authoritarian parenting style with their young children and shifted to using an authoritative parenting style as their children moved into adolescence?

There were concerns with one question from the 32-item Parenting Style and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Oslen, & Hart, 2001). The item, "my mother/father is not responsive to my feelings and needs" had to be dropped from the factor analysis because of poor factor loading for both mothers and fathers. Upon further examination of the question, it was determined that Ghanaian families in this study may have misunderstood this question. Future studies using this questionnaire in the Ghanaian context should carefully consider this item with possible rewording. Additionally, future studies should include parents as respondents of parenting behaviors to understand if the parenting typologies found in this study would hold with parents reports of parenting behaviors. Finally, more sophisticated measures and culturally sensitive tools need to be developed particularly for Sub-Saharan cultures as indicated by Masse and Watts (2013) to better understand the nature of parenting typologies and adolescent outcomes.

Conclusions

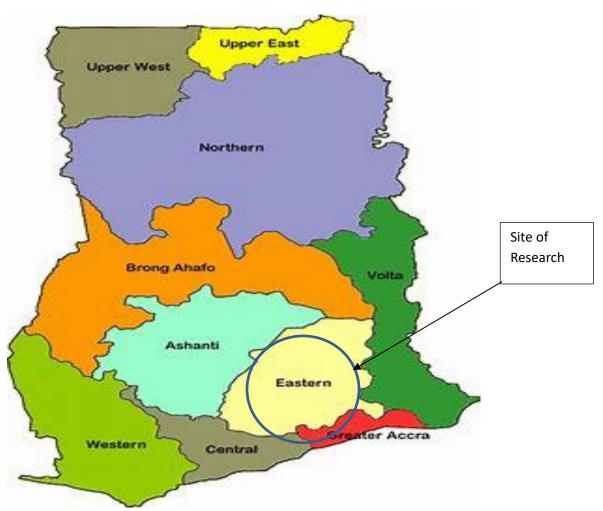
This study provides support that the meanings of parenting styles could subtly vary across cultures and within and between ethnic groups. These subtle differences may be overlooked especially in collectivist cultures where norms and values are strictly maintained. This study has generated new knowledge of culturally specific parenting styles in Ghana by using sophisticated methods for analyzing parenting styles and cultural values. This is one of the first studies to use all Hofstede's cultural values to understand the variations in cultural values in

six Ghanaian cultural regions. While studies in Ghana have used Baumrind's parenting typologies using variable-centered approaches (factor analysis), this study is among the first that has uncovered the nature and characteristics of parenting typologies used by Ghanaian parents using a person-centered (Latent Profile Analysis) approach. The most widely used parenting style in Ghana was an *authoritative* (*oho ni ho*) parenting style which also had the outmost positive adolescent outcomes.

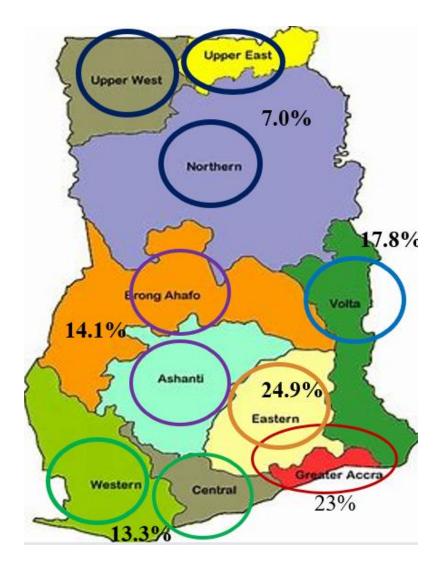
Implications of this study were three-fold. First, to generate new knowledge and understanding of culturally specific parenting strategies of an under-studied non-western culture – Ghana. Secondly, results of this study may foster new hope and direction to fund programs and services that would maximize the beneficial impact of health interventions for both parents and adolescents, since there are few to none of such interventions in Ghana. Third, awareness will be raised on the quality of the parent-child relationship which is otherwise not a topic for discussion in Ghanaian homes.

In conclusion, this study provides evidence that across cultures parenting typologies may have both universals and differences. The differences are an indication that ethnic variations within and between groups exist. The *good enough* typology is one of the first to be discovered within the Ghanaian context. This is because of the limited parenting research using Ghanaian samples focused mainly on studying parenting styles instead of parenting behaviors. Also, cultures, particularly those that have been understudied, will require a more sophisticated methodology like latent profile analysis.

Appendix



Map 1: Site of research



Map 2: Marginal variations in Hofstede scores across regions

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Vita

Odetta Odartey Addo was born in Ghana, West Africa and resided in Elmira NY, where she completed her undergraduate study at Elmira College in Elmira NY. At Elmira College, Odetta obtained the Elmira College Transfer Honor Scholarship from 2003-2006. Odetta earned a B.S., in Criminal Justice and Human Services in 2006 with honors. Odetta was inducted in 2006 to the Alpha Phi Sigma, National Criminal Justice Honor Society in 2006. After gaining admission to Syracuse University in 2006, Odetta moved to Jamesville, NY with her elementary school-age daughters. Odetta was awarded the Syracuse University Honor Scholarship from 2006 to 2008 and inducted into the Golden Key honor Society in 2007. In 2008, Odetta earned an MSW from Syracuse University. After working for a few years, Odetta decided to pursue a Ph.D. in Human Development and Family Science at Syracuse University. Odetta was awarded the Departments Teaching Assistance Award in 2011 and the Edith Endowment Dissertation Grant in 2018. In 2020, Odetta earned the Syracuse University Outstanding Teaching Award.

¹Italicized descriptors were coined by this researcher. These are everyday self-explanatory terms that are used for the first time in relation to parenting typologies. Two terms, "oye ara" and "oho ni ho" are in a Ghanaian dialect (Twi); "not for play" is verbiage of "Broken English"; and "abi-zi-bii", is a slang term. The purpose of using these terms is to create some familiarity among Ghanaians.