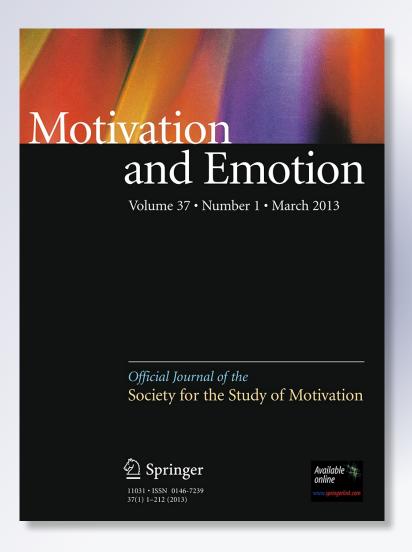
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ORIGINAL PAPER

Correlates of parental control and autonomy support in an interdependent culture: A look at Ghana

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Abstract It is unclear whether, similar to research findings in Western societies, autonomy support is associated with positive child outcomes, and forceful control with negative outcomes in collectivist societies. A two-part study (N = 190 Ghanaian sixth graders) examined the relations of parental structure, control, and autonomy support in Ghana with child outcomes, and whether autonomy support was at odds with Ghanaian children's values of interdependence and respect for elders. Results showed that structure was related to cognitive perceived competence, parental control was related to controlled regulation around school work and decreased academic engagement, and autonomy support was negatively related to depression and positively related to autonomous forms of motivation, engagement in school, and interestingly, children's endorsement of collectivist cultural values. The importance of distinguishing between parental control and provision of structure, and the implication of the findings for understanding the role of parental autonomy support in diverse cultures, are discussed.

Keywords Parental control · Autonomy support · Culture · Collectivist culture · Self-determination theory

Introduction

The question of whether parental control is linked to negative outcomes in children across cultures is a controversial one. While some researchers have found that parental

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control, characterized by parents being forceful, intrusive and dominating, is related to negative child outcomes such as decreased autonomous motivation to learn, lower academic achievement and poorer emotional well-being across several cultures (Barber et al. 2005; Chirkov and Ryan 2001; Saavedra 1980; Wang et al. 2007) other researchers have argued that the negative impact of controlling parenting is evident only in Western societies where independence and self-reliance are valued (Chao 1994; Dwairy et al. 2006; Iyengar and DeVoe 2003; Leung et al. 1998; Markus and Kitayama 1991). These researchers assert that in societies that value interdependence and deference to authority, having one's behavior dictated by someone other than the self, such as the community or a parent, is built into the social norms and cultural values of that society. Thus parental control in these societies would not be related to negative child outcomes as it is in Western societies, and may instead be related to positive adjustment.

To address these issues, in this study we focused on early adolescents in Ghana, a West African country that has been described as collectivist and hierarchical, with a strong emphasis on family connectedness and deference to elders (Hofstede 2001; Hofstede and Minkov 2010; McGadney-Douglass and Douglass 2008; Salm and Falola 2002; Schwartz 2006). Drawing on Self-Determination Theory (SDT; Deci and Ryan 1985), we examined how parental control and its opposing pole, parental autonomy support, are related to early adolescents' psychological outcomes and cultural values. We addressed the question, in this society would controlling parenting be related to negative psychosocial outcomes? Would parents' support of their children's autonomy be related to positive outcomes despite participants' valuing of interdependence?

SDT is a theory of motivation that asserts that humans have three basic needs: a need to feel autonomous, a need



to feel competent, and a need to feel connected to others (Ryan and Deci 2000). These needs are innate, regardless of one's cultural or social background, and when satisfied are associated with autonomous engagement in the environment, and optimal social and emotional functioning.

With regard to autonomy, SDT postulates that humans have an innate need to experience their behaviors as volitional rather than coerced. Deci and Ryan (1987, p. 1025) described autonomy as "an inner endorsement of one's actions, the sense that they emanate from oneself and are one's own." It should be noted that autonomy in SDT is not synonymous with independence, which refers to a lack of reliance on others, but rather denotes volition and willingness in one's actions (Ryan and Deci 2000). Given that individuals need to feel autonomous, environments that thwart this need should undermine psychological well-being.

Parental control, which refers to the degree to which parents pressure children to meet demands, solve problems for them, and take a parental, rather than a child perspective (Grolnick 2003), violates children's basic need to feel autonomous, thus creating an environment in which children are more likely to be distressed. Parental control has been operationalized as controlling practices (e.g., use of rewards, pressure, and harsh punishments) as well as psychological control, including the use of such intrusive practices as guilt induction and love withdrawal (Barber 1996; Schaefer 1965). Several studies in the United States (US) suggest that parental control is related to poorer social functioning, decreased autonomous motivation, and decreased emotional well-being (Barber et al. 2005; Grolnick and Ryan 1989; Wang et al. 2007).

At the opposite pole, parental autonomy support has been defined as the degree to which parents encourage children to take initiative, allow them to be active in solving problems, and take a child, rather than parent perspective (Grolnick 2003). Several researchers have delineated key components of autonomy support. For example, Grolnick and Ryan (1989) highlighted the parent's orientation toward the child in their concept of valuing autonomy, which involves valuing the child's own thoughts and feelings. This more psychological component is related to the notion of autonomy support as parental empathy and acknowledgement of children's feelings (Koestner et al. 1984; Reeve 2006). Several autonomy supportive parental practices have been examined, including provision of choice, which has been related to enhanced interest, enjoyment of tasks and perceived autonomy in the US (e.g., Cordova and Lepper 1996; Zuckerman et al. 1978). While provision of choice may seem an obviously autonomy supportive practice since it facilitates a sense of choice or volition, it has evidenced some controversial findings in that, in some cultures, it has not been found to affect children's outcomes (Assor et al. 2002; Iyengar and Lepper 1999). Participation in decisions, sometimes referred to as joint decision-making (Dornbusch et al. 1990; Fletcher et al. 2004), should also facilitate a sense of volition. Finally, Assor et al. (2002) discussed the importance of allowing criticism and encouraging independent thinking and Grolnick et al. (2012) similarly examined encouragement of open exchange so that children can express their opinions and feel heard. Given that children in different cultures might interpret various practices differently, it was important to include multiple components in our study.

Importantly, Soenens et al. (2007)recently differentiated the promotion of independence (parents' encouragement of children to be self-reliant and not dependent on parents), and promotion of volitional functioning (parents' allowance of children to feel agentic in their decisions and actions). They found that these two types of support could be differentiated and that promotion of volitional functioning was related to more autonomous self-regulation while promotion of independence was not.

With regard to the basic need to feel competent, SDT postulates that individuals need to know how their actions affect outcomes around them. Accordingly, children are more likely to feel competent in a structured environment with clear rules and guidelines and predictable consequences for their behavior. In contrast, children who experience environments that are unpredictable are less likely to feel competent. Studies conducted in the US suggest that parental provision of structure in the home is linked to higher levels of academic achievement and social and behavioral competence (Farkas and Grolnick 2010; Grolnick and Ryan 1989; Wang et al. 2007).

Controversy over the effect of parental control on children may be partly due to the conflation of the two parenting dimensions described above: controlling parenting, i.e. the opposite of autonomy supportive parenting, characterized by intrusive, dictatorial behavior, and structure, characterized by the provision of clear and consistent rules in the home with predictable consequences (see Grolnick and Pomerantz 2009). According to SDT, the former is likely to be associated with negative outcomes because it stifles children's autonomy, whereas the latter is likely to be associated with positive social functioning by increasing competence.

The lack of a clearly defined construct of control in previous research is likely to have contributed to findings suggesting no or positive effects of control in some cultures (Chao 1994; Chao 2001; Dwairy et al. 2006). 'Control' in these studies has often referred to the provision of structure rather than controllingness, or to parenting dimensions that conflate structure and controllingness, e.g. 'strict' and 'authoritarian' parenting. For instance, in Chao's (1994)



study, measures of parental control taken from Block's (1980) Child Rearing Practices Report included items such as "I have strict, well-established rules for my child," which referred to having a structured (and perhaps controlling) environment, as well as "I believe that scolding and criticism help my child," which referred to domineering and controlling parenting. Similarly in a study by Rohner and Pettengill (1985) in which parental control was associated with positive parental characteristics like warmth and involvement, some control items assessed the clarity of guidelines in addition to possibly assessing parents' controllingness, e.g., "My mother sees to it that I know exactly what I may or may not do," and "My mother is always checking on what I've been doing at school or at play."

This study, unlike previous ones, differentiates the concepts of control and structure and examines each one's relation to early adolescents' psychosocial well-being in a hierarchical and interdependent cultural context.

The current study

The current study was conducted in Ghana, a developing country in West Africa. Both Hofstede (2001) and Schwartz (2006) classify Ghana as a highly collectivist and hierarchical society. In individualistic or independent societies members highly value self-reliance while in collectivist or interdependent societies members highly encourage reliance and dependence on others (see Oyserman et al. 2002 for a review). Hofstede (2001) characterized cultures along two dimensions: power distance index (i.e., the extent to which less powerful members, organizations, and institutions accept that power is distributed unequally) and individualism versus collectivism (i.e., whether ties are loose or people are integrated into strong cohesive groups). Hofstede found that Ghana, one of three West African countries he assessed, the others being Nigeria and Sierra Leone, had a high power distance index (77 on a scale of 1-100), and a low individualism index (20 on a scale of 1-100). Similarly, Schwartz (2006) evaluated cultures' value emphasis on dimensions of autonomy versus embeddedness (a valuing of in-group solidarity), and egalitarianism versus hierarchy. A co-plot of these dimensions characterized Ghana as high in embeddedness and hierarchy.

As an embedded or collectivist society, Ghanaians value community and family relationships. The traditional family unit includes the extended family, and many extended families live close together, sometimes sharing a residential compound. From childhood, Ghanaians are socialized to promote the well-being of the family and the community. For instance, it is considered a moral obligation for working members of the family to financially support the elderly and unemployed. People close in age call each other "brother" and "sister," regardless of relational ties,

and people are expected to greet those they pass on the streets in order to maintain healthy relations (Danquah and Miller 2007; Salm and Falola 2002).

Hierarchical roles based on age and status determine individual responsibilities in the community. Elders are highly respected by younger people and viewed as reservoirs of cultural knowledge and social wisdom. They are greeted with terms of respect such as "auntie" or "grandfather," and at social gatherings, are seated and served first. Children, in contrast, hold the least power, and though appreciated, are expected to perform their duties without objecting. In contrast to Western society, it is a sign of respect, not of shyness or unease, for a child to look at the ground while talking to an elder; making eye contact can be construed as challenging their status and authority (Gyekye 1996).

Although Ghana is an interdependent and hierarchical society, increased access to foreign media and visitors to the country have resulted in Ghanaians' greater exposure to foreign ideas in the last 20 years. For example, there was a 104.1 % increase in tourists visiting the country between 1994 and 2004 (Ghana Statistical Service 2006). While there was access to only one local television station in 1991, there is currently access to several foreign television stations based in the United States, the United Kingdom, and South Africa. Further, percentage of Ghanaians using the internet increased from .03 to 4.27 % between 1998 and 2008 (World Bank 2010). While value orientation of a culture has been characterized as highly stable (Schwartz 2006), it is important to note that the labeling of Ghana as an interdependent and hierarchical country comes with the qualification of this label as dynamic.

Ghana's collectivist and hierarchical orientation raises relevant questions in SDT. Would parental control in a society that endorses deference to authority relate to decreased emotional well-being or better social adjustment for children? In accordance with SDT, supporting the need for autonomy is not at odds with a value for interdependence since individuals can feel more or less autonomous about more individualistic or interdependent behaviors within any cultural context. Importantly, Chirkov et al. (2003) found that across Russian, South Korean, Turkish and US students, the greater the experienced autonomy for the cultural practices, the more well-being was reported. Accordingly, when environments support autonomy, greater adjustment and well-being should result. Consistent with this notion, Chirkov and Ryan (2001) reported that, despite mean differences, there were similar positive effects of perceived parent and teacher autonomy support on well-being and motivation in both U S and Russian high school students. We hypothesized, in line with SDT and these findings, that parental support of autonomy would be related to positive outcomes of autonomous motivation and emotional well-being while parental control would be



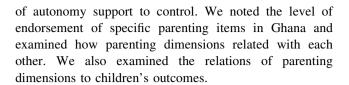
related to negative outcomes of controlled motivation, and emotional ill-being.

Another question is what practices would facilitate the endorsement of cultural values in Ghana? Shweder et al. (1987), for instance, argued that in interdependent cultures it is important to adhere to the social hierarchy and defer to elders in order to maintain social harmony. Hence, supporting children's sense of autonomy may clash with cultural values of obedience and respect (Hofstede 1983; Markus and Kitayama 1991; Schwartz 1994; Shweder et al. 1987). However, within SDT, environments that facilitate autonomy should not be conflated with those that encourage independence (Chirkov and Ryan 2001; Ryan and Deci 2006). Promoting children's autonomy does not have to imply separation-individuation from the family (Kagitcibasi 2005) and it is possible to support autonomy without contradicting collectivist values. Further, within SDT, extant cultural values will be most likely to be internalized when environments support children's autonomy. Consistent with this, parental autonomy support has been shown to promote internalization of hierarchical values and predict greater identification with these cultural values in Brazil (Chirkov et al. 2005). Thus, we hypothesized that forms of autonomy support that did not simultaneously encourage independence would be positively correlated with children's endorsement of the interdependent values characteristic of Ghanaian culture (Ryan and Deci 2006).

In this study, we first examined the above issues using measures of parental control versus autonomy support, and provision of structure that had been primarily used and validated with US samples. Following this, we examined relations between controlling versus autonomy supportive parenting (based on self-reports by Ghanaian adolescents) and psychological and behavioral outcomes. In line with SDT, we predicted that intrusive, pressuring control would be related to negative outcomes such as controlled motivation, decreased engagement, and depression, while structure would be related to higher competence. We also predicted that similar to previous studies conducted in collectivist and hierarchical cultures (Chirkov 2007; Chirkov and Ryan 2001; Downie et al. 2007; Hayamizu 1997; Kim 2004; Wang et al. 2007; Yamauchi and Tanaka 1998; Zhou et al. 2009), parental support of autonomy would be related to higher levels of autonomous motivation, increased academic engagement, decreased depression, and greater endorsement of interdependent family values.

Study 1

Two studies were conducted. Since the parenting measures had not been used in Ghana prior to this, the first study was designed as an exploratory study with an existing measure



Method

Participants

Participants were recruited from an elementary school in the capital city of Ghana, Accra. The official language in Ghana is English and currently 89 % of all elementary school children are enrolled in school (Ghana Ministry of Education 2009), thus it was acceptable to use a schoolbased sample and English questionnaires. Participants were 95 early adolescents (38 boys (40 %) and 57 girls (60 %)) from three sixth grade classrooms in an elementary school in Accra, Ghana. The average age for sixth grade in Ghana is 12 years. We measured parents' highest level of education as our demographic index. Level of education is a key indicator of socioeconomic status and more easily measured than income, which is prone to inaccuracy and non-response (Entwistle and Astone 1994). Further, Ghanaian grade levels are comparable to those in the US and Europe and thus more easily compared to other study populations than other demographic indices.

With regard to mothers' maximum attained education level, one (1.1 %) finished elementary school, 31 (32.6 %) finished high school, 34 (35.8 %) finished university, and 18 (18.9 %) had a graduate degree. Eleven of the mothers (11.6 %) did not report their level of education. With regard to fathers' education, all fathers reported having an education level beyond elementary school. In addition, 16 (16.8 %) finished high school, 41 (43.2 %) finished university and 30 (31.6 %) had a graduate degree. Eight of the fathers (8.4 %) did not report their level of education. Compared to the country's educational attainment levels (5 % of Ghanaian adults finished elementary school, 18 % finished high school, 1 % finished university; World Bank 2010), this sample can be considered privileged.

Procedure

Students from the three sixth grade classrooms brought home a letter describing the study and asking for parents' permission to have their child participate. Parents were also given the option of contacting the principal investigator for a verbal explanation of the study in one of two local languages, Ga and Twi, however, no parents did. Parents indicated their level of education on the consent form after consenting to have their children participate in the study. Of 117 students, 115 returned the letters, and of these, 95



families consented to have their children take part. Since Ghana is a former British colony and English is the official language used in schools, all participants were fluent in English and the questionnaires were administered in English. Participants filled out questionnaires during school hours in a classroom under the supervision of the principal investigator and a sixth grade teacher. Questionnaires were administered in groups of twenty and took approximately 30 min to complete. Students were given a small gift of stationery and candy to thank them for their participation.

Measures

Parenting Context Questionnaire (Grolnick and Wellborn 1988) This questionnaire assesses children's perceptions of parents on the dimension of control to autonomy support and provision of structure, in general as well as in relation to schoolwork. Responses were coded on 4-point scales ranging from 'not true at all' to 'very true.' Seven items were used from the parental control to autonomy support subscale to measure the extent to which parents were forceful and dominating or allowed their children autonomy. Examples of items were "My parents expect too much of me in school," "My parents are always telling me what to do" (parental control), and "My parents let me do school things my own way," "My parents allow me to decide things for myself" (autonomy support). Cronbach's Alpha for autonomy support measures when used in previous US studies have ranged from .70 to .91.

The structure subscale consists of six items that assess the extent to which the home environment includes clear and consistent guidelines and predictable consequences. Items include "When I don't do well in school, I never know how my parents will act (reverse coded)" and "A lot of times I don't know what my parents want me to do (reverse coded)." These six items were averaged into a single score with higher scores indicating higher levels of structure. Cronbach's Alphas from previous studies have ranged from .80 to .90.

Academic Self-Regulation Questionnaire (Ryan and Connell 1989) This questionnaire assesses the degree to which children's motivation for engaging in school behaviors (such as doing homework) is autonomous or controlled. The questionnaire presents reasons why children might engage in school-related behaviors, and children endorse the reasons on Likert-type scales from 1 (not at all true) to 4 (very true). Four subscales vary in their level of autonomy. The external subscale (six items), e.g., "because I'd get in trouble if I didn't" and the introjected subscale (five items), e.g., "because I'd feel ashamed if I didn't" are the more controlled forms of motivation. The identified subscale (five items), e.g., "because doing school

work is important to me" and the intrinsic subscale (seven items), e.g., "Because I enjoy doing schoolwork well" are the more autonomous forms of motivation. This questionnaire has been validated in other cultures including China (Vansteenkiste et al. 2005), Japan (Tanaka and Yamauchi 2000), Russia (Chirkov and Ryan 2001), Germany (Levesque et al. 2004), and Belgium (Vansteenkiste et al. 2004). Items on each subscale were averaged to form subscale scores. Cronbach's Alphas were .72 (external), .53 (introjected), .54 (identified) and .79 (intrinsic). Since the measure was designed based on theoretical underpinnings to have two autonomous subscales and two controlled subscales, and because of the somewhat low alphas, consistent with other studies (e.g., Vansteenkiste et al. 2004, 2005) we combined the two controlled subscales (external and introjected— $\alpha = .61$) and the two autonomous subscales (identified and intrinsic— $\alpha = .79$). We also computed the Relative Autonomy Index (RAI), which weights more controlled motivation negatively and more autonomous regulation positively to form one index of the degree of autonomous motivation.

Self-perception profile for children (Harter 1982) Five items from the cognitive subscale and four items from the general subscale were used to assess children's perceptions of their cognitive and general competence. Items present children with two types of behaviors and ask them to identify which statement is most like themselves, and the extent to which the statement is true for them (really true = 1/4; sort of true = 2/3), e.g., "Some kids are often unhappy with themselves; other kids are pretty pleased with themselves." This questionnaire has been widely used, including in collectivist cultures like Greece and the United Arab Emirates (Eapen et al. 2000; Makris-Botsaris and Robinson 1991; Van Dongen-Melman et al. 1993). Items on each subscale were averaged to form subscale scores. Cronbach's Alphas were .68 and .45 for the cognitive and general subscales, respectively. The general subscale was not used in further analysis due to its low reliability.

Child depression inventory, shortened version (CDI, Kovacs 1992) Participants' level of depression was assessed using the ten item shortened version of the CDI. Each item consists of three statements and participants select the statement that best describes their feelings for the past 2 weeks, e.g., "I'm sad once in a while; I'm sad many times; I'm sad all the time." Items are averaged to form a single score with higher scores indicating higher levels of depression. The CDI has been used in a variety of countries including Puerto Rico (Molina et al. 2009), Australia (Spence et al. 1987), and in collectivist Tanzania (Traube et al. 2010). Cronbach's Alpha was .78.



Academic Engagement Scale (Wellborn 1991) Ten items assessed children's engagement in school, e.g., "I try hard to do well in school," "I participate in class discussions." Children indicate how true each item is for them on a 4-point scale (1 = not true at all, 4 = very true). Items can been categorized into two subscales, a behavioral engagement subscale and a behavioral disaffection subscale (Skinner et al. 2009). Behavioral disaffection subscale items were reverse coded and the mean of the ten items was taken, with higher numbers indicating greater academic engagement. This scale has been found to be valid with Taiwanese students (Lin 2010). Cronbach's Alpha was .62.

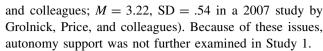
Results

Missing data

Before proceeding with data analysis we screened the data for missing values and found that 5.3 % of values were missing. Little's MCAR test indicated that data was missing completely at random, $\chi=1463.62$ (df=1490; p=.68). We then used a multiple imputation method, which has been recommended over other methods of dealing with missing data (Graham 2009) to replace missing values. Correlations reported are pooled summary estimates from five imputations of the data set.

Exploration of parenting measures

The Parenting Context Questionnaire is a validated scale in the US and was used to measure the parental control to autonomy support and structure dimensions. Since autonomy support is conceptualized as the opposite pole of parental control, autonomy support items can be reverse coded and combined with control items to form a single subscale. In doing so, we found a low reliability (Cronbach's Alpha = .52) relative to US samples. To explore this, the control and autonomy support items were examined separately. Autonomy support items evidenced low internal consistency (Cronbach's Alpha = .41), while the parental control items were higher (Cronbach's Alpha = .66). Moreover the autonomy support items were not negatively correlated with the parental control items (r(93) = -.02, p > .05). (All correlations were one-tailed given our directional hypotheses). Means for structure and control (see Table 1) were examined in relation to those from samples in the US. Though these comparisons are tentative given that the samples are not matched on demographics, they provide a general context from which to interpret the Ghanaian results. The means of the autonomy support items was considerably low (M = 1.93,SD = .76), compared to means usually seen in US samples (M = 2.97, SD = .75 in a 2007 study by Grolnick, Farkas)



We predicted high mean levels of parental control since Ghana has been described as a hierarchical society. As expected, parental control reported by Ghanaian sixth graders (M = 2.76, SD = .69) was higher than has been reported by US adolescents using the same questionnaire (M = 1.93, SD = .54 in a 2007 study by Grolnick, Price)et al.; M = 2.29, SD = .60 in a 2007 study by Grolnick, Farkas, and colleagues). Structure items had an internal consistency of .68. The mean level of structure provided by Ghanaian parents was M = 2.74, SD = .70. In previous US studies using the same questionnaire, the mean level of structure was M = 2.29, SD = .64 (Grolnick and Price et al. 2007) and M = 2.87, SD = .60 (Grolnick Farkas et al. 2007). Provision of structure was negatively correlated with parental control, r(93) = -.26, p < .01 suggesting that young adolescents who perceived their parents as higher in structure were less likely to perceive them as controlling.

Demographics

ANOVA's indicated no effects of parent education on level of structure or parental control. T tests indicated that there were also no differences in the level of structure or parental control reported by girls compared to boys. There were also no significant gender differences in adolescents' outcomes with the exception of self-reported levels of depression. Girls reported significantly higher levels of depression than boys, t (91) = -2.44, p < .05.

Table 1 Means (and SD) of parenting dimensions and child outcomes in studies 1 and 2

	Study 1	Study 2
	M (SD)	M (SD)
Parenting dimensions		
Structure	2.74 (.70)	_
Parental control	2.86 (.70)	2.61 (.61)
Child outcomes		
Autonomous motivation	3.33 (.45)	3.15 (.73)
Controlled motivation	3.60 (.36)	3.15 (.68)
General perceived competence	3.05 (.77)	2.76 (.97)
Cognitive perceived competence	2.88 (.71)	2.75 (.78)
Engagement	3.45 (.51)	3.47 (.39)
Depression	2.88 (.67)	2.74 (.72)
Family values	_	3.94 (.60)

Items were measured on a 4-point scale, except for family values, which was assessed on a 5-point scale



Table 2 Correlations of parenting dimensions and child outcomes in study 1

	Str	Cn	AutM	CnM	RAI	CogPC	Eng	Dep
Parenting dimensions								
Structure (Str)	_	26**	08	13	02	.26**	.17*	36***
Parental control (Cn)		_	16^{+}	.23*	01	.00	04	.09
Child outcomes								
Motivation								
Autonomous (AutM)			_	.20*	.75***	.41***	.36***	35***
Controlled (CnM)				_	45***	.05	.07	03
Relative autonomy index (RAI)					_	.32**	.27**	27***
Cognitive perceived competence (CogPC)						_	.59***	50***
Engagement (Eng)							_	59***
Depression (Dep)								-

p < .1, *p < .05, **p < .01, ***p < .001, one-tailed

Relations of parental control and structure to child outcomes

With regard to our primary question of whether parental control was correlated with negative outcomes in Ghana, we found that, as predicted, parental control was positively correlated with the controlled motivation subscale, r(93) = .23, p < .05. The more controlling parents were, the more likely children were to do school work because they had to or because they would feel guilty and not because they wanted to. Control was also marginally significantly negatively associated with autonomous regulation. However, control was not significantly related to academic engagement, cognitive perceived competence, or depression. Parents' provision of structure was positively associated with cognitive perceived competence, r(93) = .26, p < .01 and children's engagement in school, r(93) = .17, p < .05, and negatively related to depression, r(93) = -.36, p < .001 (See Table 2).

Discussion

The first study sought to explore the dimension of parental control to autonomy support and structure in a Ghanaian population. This was the first time these measures were used with a sample of Ghanaian adolescents and thus, the study aimed to provide insight into the level of parents' use of control, autonomy support, and structure in a hierarchical and collectivist African society as well as the relation of these parenting dimensions to adolescents' psychological outcomes.

The scale used to assess parental autonomy support to control was not reliable. When autonomy support and control were examined separately, it was the autonomy support items that were most problematic, with low means, a lack of reliability and a non-significant relation to parental control. Given this pattern of findings, one

possibility is that some participants might have interpreted these items (e.g. "my parents allow me to decide things for myself," "my parents let me do school things my own way") as support of independence. In Ghana, supporting children's activities and behaviors in ways that may be interpreted as encouraging independence is likely to be viewed negatively because it is not in harmony with cultural values of interdependence. A more differentiated measure of autonomy support containing items that promote volitional functioning separate from independence (Soenens et al. 2007) is necessary in such a culture.

Unlike previous studies, this study separated out the two different dimensions of parenting often labeled control: provision of structure and forceful and pressuring controllingness, to systematically investigate the controversial issue of whether control has a negative or positive impact on children in collectivist cultures. The subscale of parental control showed adequate reliability although it was likely limited by the low number of items. Results showed that parental control was related to more controlled motivation and marginally negatively correlated with autonomous motivation, though it was unrelated to engagement and depression. These results would tentatively suggest that control has similar negative effects in Ghana as in Western countries. To evaluate this it would be important to have a broader and more reliable set of control items.

Interestingly, there were stronger results for structure. Provision of structure was positively related to children's perceptions of cognitive competence and school engagement, and negatively related to depression. In line with SDT, these findings suggest that structure may be important for children's competence beyond Western cultures and suggest the need for more work on this parenting dimension.

Some child outcome measures also had low reliabilities, indicating that in addition to parenting dimensions, the validity and reliability of child outcome constructs need to



be examined more thoroughly since these measures are also being used for the first time with this sample. In future studies, more items should be used to aid the process of finding a reliable set of items that measure each construct.

In order to further explore parental control and autonomy support in Ghana, a second study was conducted using a more comprehensive set of items for assessing key constructs.

Study 2

In Study 1, the measure of autonomy support to control was problematic. In the second study we used a more comprehensive set of items to assess autonomy support and control and ones that had been used with non-Western samples. Consistent with the literature, sets of items addressing different aspects of autonomy support—in particular, parental allowance of opinion exchange, parental allowance of choice, and parents' acknowledgement of child, were included. We also examined a fourth set of items labeled 'independence', which included the items used in Study 1.

Using an expanded set of items, we examined whether parental autonomy support was related to positive outcomes in Ghanaian adolescents. In line with SDT, we predicted that encouraging children's willingness and volition in their activities would be linked to positive outcomes even in an interdependent society.

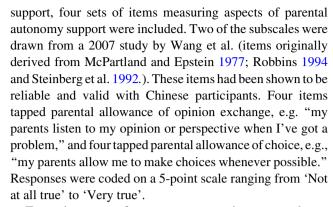
We also examined whether autonomy supportive parenting was at odds with Ghanaian children's values of familism and respect. We predicted that autonomy supportive parenting would be positively correlated with children's endorsement of these cultural values.

Method

The procedure for Study 2 was identical to that of Study 1. Of 117 students, 103 students returned parent letters, and of these, 95 families consented to have their children take part in the study. The sample consisted of 95 participants, 45 boys (47.4 %) and 50 girls (52.6 %). Similar to Study 1, participants filled out questionnaires during school hours in a classroom under the supervision of the principal investigator and a sixth grade teacher. This time, at the teachers' request, questionnaires were administered in class groups rather than in groups of 20. Participants took approximately 40 min to fill out the questionnaires. They were given a small gift of stationery and candy to thank them for their participation.

Measures

Parental support of autonomy To examine more thoroughly Ghanaian sixth graders' perceptions of autonomy



Two other types of autonomy support items were drawn from existing scales (Grolnick and Wellborn 1988; Skinner et al. 1986; Steinberg et al. 1992). One subscale consisting of four items tapped parents' acknowledgment of their child's feelings and uniqueness (e.g., "my parents accept me for myself," "My parents care about how I feel and what I think" and was labeled acknowledgement of the child. The fourth set consisted of the original two autonomy support items and two more, written for this study, that were conceptually similar. This subscale was labeled 'independence' and tapped into autonomy support that encouraged children to determine their own actions, e.g., "My parents let me decide things for myself."

In addition, to investigate how children had interpreted the original autonomy support items used in Study 1, two open-ended questions were included at the end of the battery of questionnaires asking children to explain in their own words how they interpreted the two items from the first study. Interpretations were classified into two categories: promotion of volition and encouragement of independence. Interpretations that could not be coded into either category (e.g. the participant simply reiterated the questionnaire item) were classified as 'uncodable'. The principal investigator and a trained research assistant independently coded the responses and discussed incongruent codings to reach a consensus. Inter-rater reliability for independent codings, measured by Cohen's Kappa, was .75.

Parental control With regard to our measures of parental control, we used the same five items from the Parenting Context Questionnaire (Grolnick and Wellborn 1988), four items measuring parental coercion from the Parent as a Social Context Questionnaire (Skinner et al. 1986), e.g., "My parents are always telling me what to do," and five items that index psychological control from the Children's Report of Parent Behavior Inventory (CRPBI; Barber 1996), e.g., "My parents are less friendly with me if I do not see things their way."

Family values The Fuligni Family Values Scale (Fuligni et al. 1999) measures children's values of familism and



respect on a 5-point likert-type response scale ranging from 1 (not important at all/almost never) to 5 (very important/ almost always). Its three subscales are respect (seven items), e.g., "In general how important is it to you that you treat your parents with great respect?" and "How important is it to you that you follow your parents' advice about choosing friends?", family assistance (12 items), e.g., "How often do you think you should run errands that the family needs done?" "How often do you think you should help take care of your brothers and sisters?" and family future support (six items), e.g., "How important is it to you that in the future you help your parents financially?" and "How important is it to you that you live at home with your parents until you are married?" The internal consistencies of these three subscales have ranged from the high .70's to the high .80's. In this study Cronbach's Alpha was .44 for the respect subscale, .78 for the family assistance subscale, and .58 for the future family support subscale. Combined alpha of all three subscales was high, .79 and was thus used in all analyses.

Child outcomes Child outcomes assessed were similar to the first study. Academic self-regulation was measured using the Academic Self-Regulation Questionnaire (Ryan and Connell 1989). In this study Cronbach's Alphas for the subscales were .80 (external), .74 (introjected), .51 (identified) and .84 (intrinsic). We combined the two controlled subscales (external and introjected— $\alpha = .81$) and the two autonomous subscales (identified and intrinsic— $\alpha = .82$). Depression was measured with the Child Depression Inventory (Kovacs 1992), Cronbach's Alpha for this scale was .70. Academic engagement was measured with the Engagement Scale (Wellborn 1991), the Cronbach's Alpha was .69. Perceptions of competence were assessed using the same items from the Self-Perception Profile for Children (Harter 1982) that were used in Study 1. Cronbach's Alphas were .70 and .71 for the general and cognitive subscales, respectively.

Results

Missing data

As in Study 1, we screened the data for missing values and found that 2.7 % of values were missing. Little's MCAR test indicated that data was missing completely at random, $\chi = 2750.34$ (df = 2915; p = .99). We then used a multiple imputation method to replace missing values. Correlations reported are pooled summary estimates from five imputations of the data set.

Preliminary findings

Due to different response scales for the autonomy support items, these items were first standardized. The 12

autonomy support items (from the opinion exchange, choice, and acknowledgement of child subscales) showed an alpha of .78. The independence items, calculated separately, were, as in Study 1, again not reliable (Cronbach's alpha = .48) and were thus not further analyzed. Internal consistency of the parental control items (consisting of Skinner's coercion items, parental control from the PCQ and psychological control from the CRPBI) was .74. There was a negative correlation between parental autonomy support, measured with the new items, and parental control, r(93) = -.34, p < .001.

Mean level of parental control was similar to Study 1 (See Table 1). Ghanaian sixth graders reported their parents as being relatively controlling (M = 2.61, SD = .61; 4 point scale) and highly endorsed values of familism and respect for elders (M = 3.94, SD = .60; 5 point scale).

Relations of parenting dimensions with child outcomes

Parental control was negatively associated with the RAI, r(93) = -.18, p < .04, and marginally positively associated with controlled regulation, r(93) = .15, p < .08, indicating that Ghanaian early adolescents who reported that their parents were controlling were also more likely to engage in academic work because they had to. Parental control was also negatively correlated with children's academic engagement, r(93) = -.22, p < .02 and positively correlated with depression, r(93) = .24 p < .01. Parental autonomy support was positively correlated with autonomous motivation, r(93) = .35, p < .001, and children's engagement in school, r(93) = .34, p < .001, and was negatively correlated with depression, r(93) = -.32, p < .001.

With regard to whether parents' support of children's autonomy would conflict with children's endorsement of cultural values of respecting elders and familism, results indicated that children's reports of parental autonomy support were positively associated with their endorsement of values of respect and familism, r(93) = .40, p < .001 (See Table 3).

Ghanaians' conceptualizations of autonomy support

Participants' written interpretations of the original two autonomy support items used in Study 1 revealed that some Ghanaian adolescents interpreted these items as parents' respect and trust and allowance of decision making, suggesting that a volitional concept of autonomy does exist in this culture even while independence is viewed negatively. The item, "My parents let me do school things my own way," was interpreted 24 out of 95 times (25.3 %) as volitional functioning: "His parents trust him and know that he is going to make the right decision," "Her parents



Table 3 Correlations of parenting dimensions with child outcomes in study 2

	Aut	Cn	AutM	CnM	RAI	GenPC	CogPC	Eng	Dep	Fam
Parenting Dimensions										
Autonomy support (Aut)	_	34***	.35***	.08	$.17^{+}$.01	00	.34***	32***	.40***
Parental control (Cn)		_	07	$.15^{+}$	18*	17^{+}	16^{+}	22*	.24**	09
Child outcomes										
Motivation										
Autonomous (AutM)			_	.19*	.60***	.20*	.01	.45***	17^{+}	.46***
Controlled (CnM)				_	66***	02	01	04	.04	.11
Relative autonomy Index (RAI)					_	$.16^{+}$.04	.35***	11	.26**
General perceived competence (GenPC)						_	.31**	.23*	37***	.16+
Cognitive perceived competence (CogPC)							_	.31**	15^{+}	.01
Engagement (Eng)								_	32***	.38***
Depression (Dep)									_	22*
Family values (Fam)										_

p < .1, *p < .05, **p < .01, ***p < .001, one-tailed

do not force her in doing things," "His parents respect his way of seeing things and try to let him make his own decisions," "When he has homework, projects or holiday assignments his parents allow him to take control of designing the research and presentation," "His parents believe him and they know he is responsible." The item "My parents allow me to decide things for myself" was interpreted similarly 31 out of 95 times (32.6 %).

Some participants however, interpreted these items as parental allowance of independence. For the item, "My parents let me do school things my own way," 30 out of 95 (31.6 %) interpreted this as independence, which in this collectivist culture was often portrayed as negative. Their explanations included: "He is allowed to do his own things in school, so he does whatever pleases him, whether bad or good," "His parents do not discipline him," "He is spoiled," "His guardians or parents allow him to do school things his own way. But that is a little bad, this is because your parents have experienced what you are about to experience so they must give a little advice."

The item, "my parents allow me to decide things for myself" was interpreted similarly 17 out of 95 times (17.9%): "Her parents allow her to make her own choices. And she does or tries anything at all, good or bad." "Her guardian or parents allow her to take decision[s] for herself. This is not good at all because your parents have experienced how life is so they must give you a little advice to make your life bright and better in future," "Her parents allow her to make her own choices, even if it is good or bad and do things which are wrong," "They do not really like her." This supported our speculation that some items that tapped into children's experience of autonomy support in the US were interpreted as independence and perceived negatively by some Ghanaian adolescents. This has

important implications for how autonomy supportive parenting is practiced in an interdependent culture such as Ghana.

A portion of participants' responses (39 and 44 for the two questions, respectively) were not codable. In these cases, responses were reiterations of the original questionnaire item e.g., *His parents agree with him to do school things his own way*, ambiguous, e.g., *My parents allow me to do any school things my own way because they think it is right for me*, or the result of the participants' misunderstanding of the exercise e.g. *His parents do not allow him to do most things his own way* (an opposite statement).

General discussion

This study examined correlates of parental control and autonomy support in Ghana, a hierarchical and interdependent society. Ghana was of particular interest because of the question of whether parental control and autonomy support would relate to outcomes in Ghanaian adolescents in the same way they have been found to do in Western adolescents despite dissimilar cultural values around adult-child interactions and individuality. Our findings suggest that, within this culture, autonomy support is positively related to adjustment and well-being and control negatively related, though there are complexities in the way this is so.

We have suggested that one of the sources of conflict in the field about the relations of control to child outcomes is the conflation of structure and control in various studies. In Study 1, we utilized both measures of structure and control. We found that structure and control were negatively correlated. In addition, structure related to adjustment outcomes of perceived competence, engagement, and depression though interestingly not to self-regulation. On



the other hand, control related to controlled motivation. These findings suggest that when structure is assessed separately from control, it has positive effects. Clearly there is a need for more data on this parenting dimension in other cultures.

In Study 2, we utilized a broader set of measures of parental control to determine whether the limited effects found in Study 1 were due to the low number of items. Using a broad set of items, the measure of parental control was reliable. There were also stronger correlations between parental control and outcomes in this study. Parental control was negatively related to autonomous self-regulation, cognitive and general perceived competence, and academic engagement and positively associated with depression. Thus, there was more evidence that pressuring, intrusive control is experienced negatively in this culture.

The autonomy support measure showed reliability and had the expected negative relation with parental control when a broader set of items was used which excluded items that measured allowing children to do things on their own. Autonomy support was related in hypothesized ways to child outcomes, it was associated with autonomous motivation and academic engagement and negatively related to adolescents' depression. Thus, even in this interdependent society, when parents take children's perspectives, allow them to voice their opinions, and provide choice, it is associated with positive outcomes.

Interestingly, when additional items were added to "independence" items from Study 1 they still evidenced low reliability. An examination of participants' written interpretations of the 'independence' measures sheds light on this in that while some adolescents viewed these items negatively, as parents' lack of support and ability to be depended upon, others viewed them positively, as allowance of volitional functioning due to parents' respect and trust. This finding supports Soenens et al.'s differentiation between promoting independence and promoting volitional functioning. Given this, it is not surprising that the scale was not reliable nor that it did not relate negatively to control in Study 1. Since items may hold different meanings in different cultural contexts, future studies in interdependent cultures should be mindful of this and include a broad set of behaviors to index autonomy support.

The possibility that autonomy supportive items were sometimes interpreted negatively, as promotion of independence has important implications for how autonomy supportive parenting is practiced in an interdependent culture such as Ghana. There is a need for cultural sensitivity when promoting this dimension of parenting. The idea of allowing children to make their own decisions or do things on their own is likely to be ill-received by parents in this culture since it undermines important cultural values of respect. Moreover, due to children's internalization of

interdependent values, these behaviors are likely to function differently in this culture and may result in outcomes opposite to their intended effect such as children feeling neglected rather than supported. This study, however, discovered that autonomy supportive behaviors that are likely to be most effective in interdependent cultures are ones that do not simultaneously encourage independence.

We also found that parents' support of children's autonomy was not in conflict with cultural values of respect and interdependence, and was rather positively associated with children's endorsement of these values. This might seem counter-intuitive, however, it is in harmony with SDT, which suggests that children are more likely to internalize cultural values when these values are presented in a manner that allows children to think through them and decide for themselves whether they will adhere to them. This allows them to own the values and endorse them even in the absence of an adult. This finding is also in harmony with Kagitcibasi's (2005) family model of psychological interdependence, in which parents promote children's autonomy within an interdependent cultural context. The finding nevertheless raises interesting questions about how autonomy supportive parents in Ghana encourage children's deference to authority in a manner that still allows for children's voicing of their opinions and making choices. One would imagine that allowing children to express conflicting opinions would counter the very goal of teaching them to defer to authority. However it is possible to voice one's opinion or to ask questions in a respectful manner; these are not mutually exclusive. Moreover, open discussions within the context of close family interconnectedness, characteristic of collectivist cultures, may involve less negative affect than is usually assumed in individualist cultures. Interestingly, according to Kagitcibasi, collectivist families with higher rather than lower socioeconomic status are more likely to encourage children's agency because they are less dependent on children for future support. Future studies should investigate whether autonomy support is negatively associated with cultural values in less affluent families in Ghana.

Limitations and future directions

The study had some limitations. One limitation was that the sample consisted of sixth graders from urban elementary schools in the capital city, Accra. These children were clearly exposed to western ideologies through media, including TV shows from the US, England, and South Africa. Had the sample included children from rural areas in Ghana, the results may have looked different. Further, parents of participants were highly educated. It will be important to include a more representative sample of the Ghanaian population in future studies.



Second, the study was not a comparative study. Although we referenced previous findings from US studies, we were unable to compare our results with a fully matched sample from a more individualistic society such as Germany or the US. Further, as it was a correlational study, we were unable to establish the direction of causal relations between parenting dimensions and child outcomes. It is certainly possible that children's behavior influences how controlling or autonomy supportive parents are and the results likely indicate bidirectional influences. For instance, children who are more competent are likely to have less intrusive parents (Pomerantz and Eaton 2001). Specific to this interdependent culture, it is possible that children who have already internalized values of respect and familism are seen as needing less coercion, and so have parents who may be more autonomy supportive.

A third limitation was that the study used measures that were first developed in Western cultures. Such a strategy can prevent researchers from identifying the constructs most relevant to a culture. Given that some theorists advocate a more "emic" approach to research (see Van de Vijver 2001), it will be important to pursue such a strategy in future research. Qualitative interviews could be conducted with Ghanaian parents and children to understand how they conceptualize already-established autonomy support constructs. Studies could also be conducted to further understand how parents practice autonomy support while maintaining cultural values of interdependence. For instance, since questioning parents' instruction may be considered disrespectful, how can parents maintain healthy open exchange with their children in ways that complement hierarchical values of respect? It is possible that parents in interdependent and hierarchical communities have ways of showing autonomy support that are as yet undocumented. Researchers can also develop culturally-valid measures based on these qualitative interviews.

Nevertheless, by separating the often conflated constructs of parental control and structure, this study sheds light on previously contested effects of control on adolescents in an interdependent society. The results also provide new insight into the complexities of autonomy supportive parenting in a society that values interdependence, and evidenced that autonomy supportive parenting is associated with positive outcomes even in such a society.

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