Journal of Adolescence 35 (2012) 289–298

Contents lists available at SciVerse ScienceDirect

Journal of Adolescence

journal homepage: www.elsevier.com/locate/jado

Documenting different domains of promotion of autonomy in families

Claudia Manzi [a,*], Camillo Regalia [a], Sara Pelucchi [a], Frank D. Fincham [b]

[a] Center for Family and Research, Catholic University of Milan, Milan, Italy
[b] Florida State University, Family Institute, USA

Keywords:
Promotion of autonomy
Parenting
Adjustment
Cross-cultural
Family process

A B S T R A C T

Parental promotion of autonomy for offspring well-being has been widely recognized in developmental psychology. Recent studies, however, show that this association varies across cultures. Such variation may reflect inappropriate measurement of this dimension of parenting. Therefore, three existing measures of promotion of autonomy were used to derive different dimensions related to the promotion of autonomy in three different domains – promotion of autonomous thought, promotion of autonomous decision-making, and promotion of physical separation. The cross-cultural significance of this three-component model was tested in samples of late adolescents ($n = 1361$) from four nations- the US, Belgium, Italy and China. Data from all four countries best fit a *three* dimensional model but the covariance between the three dimensions was moderated by culture. Culture also moderated the impact of promotion of autonomy on offspring well-being.
© 2011 The Foundation for Professionals in Services for Adolescents. Published by Elsevier Ltd. All rights reserved.

Autonomy has been conceptualized as a basic and universal human need (e.g., Deci & Ryan, 2000; Ryan, Sheldon, Kasser, & Deci, 1996), and many developmental theories (Hill & Holmbeck, 1986; McElhaney, Allen, Stephenson, & Hare, 2009; Ryan, 1993; Steinberg, 1989) consider its achievement a critical developmental outcome in adolescence. Thus, parental encouragement of offspring autonomy has been viewed as a central task for parents of adolescents, whereas parental control over their life has been seen as detrimental. Empirical studies show that parents who support offspring autonomy promote the development of volitional or self-governing functioning in adolescents (Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005), which, in turn, leads to better adjustment and higher levels of psychosocial functioning (Deci & Ryan, 2000). However, some scholars view autonomy as a culturally specific value, pertinent only to Western cultures (Markus & Kitayama, 1991). Consequently, it has been argued that in non-Western cultural contexts which do not value and promote individual autonomy, the development of an autonomous identity is not a developmental goal, and, consequently, parental promotion of autonomy vs parental control should not be considered a significant predictor of adolescents' adjustment (e.g. Roland, 1987).

Contemporary cross-cultural research in this field attempts to assess the universal validity of autonomy and to test the likely influence of parental promotion of autonomy vs parental control on adolescent psychosocial adjustment (for a general review of the literature regarding the cultural value systems of individualism and collectivism, and the associated developmental goals of autonomy and relatedness, see Tamis-Le Monda et al., 2008). Many studies have been carried out on different cultural groups, yet contradictory findings have confounded this field of research and called into question some empirically informed theoretical analyses.

Helwig's (2006) review clearly shows that the developmental pathway toward autonomy is consistent across diverse cultures. Throughout childhood and into adolescence, children show a progressive extension of their personal sphere of

* Corresponding author. Department of Psychology, Catholic University of Milan, L.go Gemelli, 1, 20123 Milan, Italy. Tel.: +39 272342686.
E-mail address: claudia.manzi@unicatt.it (C. Manzi).

0140-1971/$ – see front matter © 2011 The Foundation for Professionals in Services for Adolescents. Published by Elsevier Ltd. All rights reserved.
doi:10.1016/j.adolescence.2011.10.011

decision-making. In addition, his review asserts that parental over-restriction of personal autonomy has negative outcomes for children in both individualistic and collectivistic cultures. Rogoff (2003) shows that in several interdependent cultures parental child-rearing practices support children's autonomous decision making and behavior. Notably, the goal of autonomy was in line with these cultural contexts, which value interdependence, and autonomy promotion was primarily designed to promote empathy and harmony.

Nevertheless, in other studies, the relationship between autonomy and adaptive child outcomes has been either negative or insignificant. Specifically, parenting styles that control and limit the autonomy of children were found to have no negative influence on children's psychological adjustment in several non-Western cultural groups, such as Chinese (Chao, 2001; Leung, Lau, & Lam, 1998), African American (McWayne, Owsianik, Green, & Fantuzzo, 2008; Randolph, 1995), Korean (Rohner & Pettengill, 1985) Turkish (Kagitcibasi, 2005), Pakistani (Stewart, Bond, Kennard, Ho, & Zaman, 2002), Algerian, and Saudi Arabian (Dwairi & Achoui, 2010) groups. Thus, the positive effects of parental promotion of autonomy on development have been empirically questioned. Consequently, some scholars have concluded that in specific cultural contexts, parenting that fails to promote autonomy does not represent a risk factor for anxiety, depression and other problems (e.g. Trommsdorff, 2005).

Within self-determination theory this position has been challenged by distinguishing, both theoretically and empirically, the concepts of autonomy and independence (Ryan, 1993; Soenens et al., 2007). Thus, one can be autonomously collectivistic or autonomously individualistic according to cultural practices internalized by the individual (Chirkov, Ryan, & Willness, 2005; Rudy, Sheldon, Awong, & Tan, 2007). This idea has been further developed and supported by recent frameworks that provide more culturally oriented definitions of autonomy, such as the dual model of autonomy (Yeh & Yang, 2006) and, more recently, the domain specific approach (Luciano, 2010).

This culturally sensitive view of autonomy makes it possible to understand the contradictions found in empirical data. If autonomy takes different forms according to cultural context, then parental behaviors that promote autonomy may also take different forms according to the culture in which they occur. In other words, autonomy can be considered a basic human need, although the kinds of behaviors that frustrate or satisfy this need may vary considerably across cultures (Sheldon, Ryan, Deci, & Kasser, 2004). If parental behavior supporting autonomy takes different forms in different cultures, then the instruments scholars use to assess these behaviors should be sensitive to these different forms. But this is not the case for most of the research on this topic (an exception is Barber, in this issue). Thus, insignificant or contradictory results in the research on parental autonomy granting and adolescent adjustment likely stem from use of measures that fail to tap cultural variations in parental behaviors associated with autonomy support. A greater awareness of the cultural contents and limits of these measures used to investigate the promotion of autonomy would shed light on the links between autonomy and adolescents' adjustment across cultures.

This study, therefore, investigates different measures of promotion of autonomy and assesses their impact on adolescent well-being in different cultural contexts. Following the domain specific approach three existing measures of promotion of autonomy will be analyzed. We will attempt to show that these three measures are related to different aspects of promotion of autonomy within the family context.

Promotion of autonomy and culture: the domain specific approach

There is consistent debate over the cross-cultural generalization of the need for autonomy and the positive effects of promotion of autonomy on individual well-being (see Soenens et al. 2012 and Regalia, Manzi, & Scabini, in press).

Among the differing perspectives on this topic, an interesting explanation of how culture influences the need for autonomy, is, what we call in line with Luciano (2010), the domain-specific approach (Regalia et al., in press). This approach does not ask *if* autonomy exists as a universal human need, but *how* it exists in differing cultural contexts, specifically what kind of culturally specific forms it takes. Collectivistic cultures view communality and interdependence as the ultimate goal of individual development. This does not mean that an individual's need to develop his or her own individuality is not present in such cultures. Rather, it means that the culture likely affects the content of autonomy, and how it can be revealed, in other words, its phenomenology.

Typically, the domain specific approach states that *cultural context defines the specific domain in which the individual expects to act in an autonomous way*. According to Luciano (2010), the need for autonomy describes the extent to which one functions with autonomous choice and "Choice can be viewed as the process of choosing – but choosing *what*?" (Luciano, 2010, p. 499). Culture deeply influences this "what." That is, culture narrows the choices that are considered viable (Larson & Wilson, 2004).

If culture influences the domain in which autonomy can be expressed, then parenting is the first, and probably the most important, means through which the cultural meaning of autonomy is reproduced. For example, in a study on Indian families, Tuli and Chaudhari (2010) show that even though autonomy was accorded by mothers in some domains, such as TV watching and choosing one's clothes, heteronomy was the mode adopted in others, such as food and behavior towards elders.

In sum, if culture influences the specific domain in which an individual expects to act autonomously, culture also affects the interpretation of what constitutes promotion of autonomy or a threat to autonomy (i.e. control). As a consequence, scholars should differentiate between parental behaviors that promote autonomy versus controlling parental behaviors according to the specific domain of child life to which they are related. In fact, a parenting style that controls a child's particular domain of choice may lead one young person to feel controlled or manipulated in one cultural context, but may be associated with feelings of love and concern in a different culture (Mason, Walker-Barnes, Tu, Simons, & Martinez-Arrue, 2004). This is what was found, for example, by Manzi, Vignoles, Regalia, and Scabini (2006) in a study comparing Italian

and British participants facing the transition from school to university. In this study, adolescents' perceptions of family control over the organization of their free time and personal privacy was perceived by British participants as a negative family pattern and was positively and significantly related to identity threat. In contrast, Italian adolescents perceived this same family pattern as a positive aspect of family functioning that lead indirectly to a decrease of identity threat. This last finding did not mean that Italians' need for autonomy was not valued, but that the domain in which the adolescents expected to act autonomously was likely to vary according to cultural context.

Distinguishing different domains of parental promotion of autonomy

A factor that has contributed to the contrasting results found across studies of parental promotion of autonomy in diverse cultural contexts is the way this concept has been defined and operationalized. Clearer conceptualization of the underlying dimensions of parental promotion of autonomy measures has the potential to advance understanding in this literature.

In a recent study, Soenens et al. (2007) distinguished empirically two measures of parental promotion of autonomy: the Autonomy Granting Scale (Silk, Morris, Kanaya, & Steinberg, 2003) and the Parent Autonomy Support subscale of the Perception of Parents Scale (Grolnick, Deci, & Ryan, 1997). In a series of studies, they found that these two measures were conceptually and empirically distinguishable. According to Soenens et al. (2007), the first measure defines parental promotion of autonomy as parental encouragement of independence, which, in their view should promote separation. On the other hand, the Grolnick and collegues' scale was meant as a set of parents' behaviors that allow adolescents to experience themselves as the origin or initiator of their behavior.

Building on these findings, we focus on three measures of promotion of autonomy (see Table 1): the Autonomy Granting Scale by Silk et al. (2003), the Parent Autonomy Support subscale of the Perception of Parents Scale by Grolnick et al. (1997) and the enmeshment/separation scale by Manzi et al. (2006) which is a modified version of Bloom's (1985) enmeshment subscale. Using the theoretical framework of the domain specific approach, content analysis of these measures revealed that they relate to the promotion of autonomy in different domains of adolescent autonomous functioning. Consequently, we provide different theoretical definitions of the dimensions underlying these measures as follows:

Promotion of autonomous thought (from the Silk et al. (2003) scale): this dimension refers to the degree to which families promote autonomy in the domain of children's *thinking*, or, conversely, intrude on the cognitive sphere of its members by imposing contents, values and worldviews.

Promotion of autonomous decision-making (from the Grolnick et al., scale 1997): this dimension refers to the degree to which the family allows children autonomy in the domain of *decisions about their lives*. This dimension of parenting relates to the individual's *decision-making process*.

Promotion of physical separation (from Manzi et al. (2006)'s scale): this dimension pertains to the degree to which the family allows individual members autonomy in the domain of *their free time and space* or, conversely, imposes limits on family members having time on their own or managing their time freely.

Note that the first two dimensions come from the same scales used in Soenens et al. study (2007). However, we conceptualize and investigate these scales in a slightly different manner compared to Soenens and colleagues. Specifically, we do not interpret Silk and colleagues' scale as a measure of promotion of independence, but rather we consider it a measure of

Table 1
Items used in the study to assess the dimensions of parenting.

Promotion of autonomous thought
6 items used in the study by Silk, Morris, Kanaya, & Steinberg, 2003
My parents emphasize that it is important to get my ideas across even if others don't like it
My parents push me to think independently
My parents talk at home about things like politics or religion, taking a different side from others
My parents admit that I know more about some things than adults do
My parents say that you should always look at both sides of the issue
My parents emphasize that every family member should have some say in family decisions
Promotion of autonomous decision-making
5 items from the 'Autonomy Support' scale of the Perceptions of Parents Scale; Grolnick, Ryan, & Deci, 1997
My parents, whenever possible, allow me to choose what to do
My parents allow me to decide things for myself
My parents allow to choose my own direction in life
My parents let me make my own plans for things I want to do
My parents are usually willing to consider things from my point of view
Promotion of physical separation
6 items adapted from the enmeshment scale of the Colorado Self-Report of Family Functioning Inventory; Bloom, 1985
Family members feel pressured to spend most free time together
Family members feel guilty if they want to spend some time alone
Family members find it hard to get away from each other
It is difficult for family members to take time away from the family
In our family, everyone expects to know each other's business
Family members tend to assume they know what each other is thinking without asking

parental encouragement of child autonomous thinking (see items in Table 1). Thus, to have a clearer operationalization of the dimension, we decided not to use one item in the original scale ("My parent encourages me to be independent from him/her"); we use only the 6 items related to the promotion of autonomous thought (see Table 1). As for the Parent Autonomy Support scale, we have interpreted it as a measure of a specific dimension of Promotion of Volitional Functioning, (i.e. the promotion of autonomous decision-making). In fact Parental Promotion of Volitional Functioning has been defined as parental support for children's sense of initiative, choice, and self-endorsement. The definition of this construct leads to the conclusion that promotion of volitional functioning can be manifest in different domains, including thoughts, feelings, decisions, and physical distance. Thus, from our perspective the Parent Autonomy Support scale, and the three measures considered in this study, reflect the Promotion of Volitional Functioning in different domains.

In sum, we argue that the three dimensions of parental promotion of autonomy vs parental control, operationalized in the scale shown in Table 1, refer to different domains of adolescent autonomous functioning and each dimension conveys a specific message to the child; for example, "it is important for you to think autonomously" (promotion of autonomous thought), "it is important for you to decide autonomously" (promotion of autonomous decision-making), and "it is important for you to have your space and spend your time autonomously" (promotion of physical separation).

The present study attempts to disentangle these three dimensions. In particular we assert that even if each of these dimensions fall under a common umbrella construct, each may represent a different domain of promotion of autonomy with distinct consequences for children's functioning. Lastly, in accordance with the domain specific approach, we also hypothesize that these three dimensions may have different effects on individual well-being in different cultural contexts.

The present study

This study examines four different cultural contexts: China, the USA, Belgium and Italy. Diener, Gohm, Suh, and Oishi (2000) and Hofstede (2001) reported indices of collectivism-individualism in over 40 societies across the globe. In both of these studies, China scored below average, indicating a collectivistic society, with the US, Italy and Belgium scoring well above average, indicating individualistic societies.

China has been widely recognized as a collectivistic culture (Triandis, 1995) that abides by the basic tenets of Confucianism, which emphasize common good and social harmony over individual interests. The extent to which this assumption is valid in contemporary China leaves room for discussion. As Chuang and Moreno (2008) assert, China has undergone significant social and cultural changes which have altered China's cultural context and, consequently, have also altered parenting beliefs and values. As some researchers have noted, the one-child policy may have created a more child-centered "Westernized" parenting approach, especially among the urban and well-educated population (Chang, Schwartz, Dodge, & McBride-Chang, 2003). These changes are likely to affect the Chinese family experience, but do not necessarily entail a reversal of educational goals or lead to thinking that Chinese families now aspire to the independence of Western families. In particular youth in more collectivistic societies internalize values regarding filial piety, and in particular are socialized to demonstrate respect toward parents in public and reverence of family values and traditions (Wang, 2008).

The US is the archetype of a society that stresses values of independence and self-orientation. Socially-speaking this assumption is widely shared, although the degree to which it is valued depends on context. Within the parent–child relationship, contemporary research increasingly emphasizes autonomy development less in terms of adolescent movement away from parental influence and more in terms of enhanced development where parents allow and encourage age-appropriate autonomy while continuing to provide love, support, and empathy (Supple, Ghazarian, Peterson, & Bush, 2009).

Although the distinction between individualistic and collective cultures provides a useful orientation to cultural differences, finer distinctions are also required. Thus, even though Italy and Belgium belong to the same political area and are both considered "individualistic", they are marked by deep cultural differences.

According to Iacovu (2002), it is possible to distinguish different groups of European countries in relation to specific family processes (Regalia, Lanz, Tagliabue, & Manzi, 2011). The first group is the "northern cluster", which includes Belgium and is characterized by children leaving home early and by several transitions until they marry and become parents. The second group is the "southern cluster", which includes Italy and is characterized by children leaving home later in life, only when they get married. Van de Velde (2002) characterizes the prevailing cultural model in the northern cluster as one of *autonomy as individual responsibility*. This individual responsibility is mainly represented by economic independence, which is considered the main social marker for young adults achieving autonomy. In this process, leaving the parental home (physical separation from the family of origin) has a particular symbolic meaning and is a rite of passage to individualization. In Mediterranean countries, however, the prevailing cultural model is one of *autonomy as identity individuation within the family of origin*. The cultural norm in Italy does not lead young adults towards economic and residential independence. There is an implicit intergenerational pact, however, usually set at the end of adolescence, which guarantees a substantial amount of autonomy and independence for the young adult through freedom of choice in their studies, job, leisure time, affective relationships, and so on. Individuation is achieved *within* the family, whose relationships are renegotiated with greater egalitarianism.

To summarize, these four countries represent four different ideas of individual development within the family context. We hypothesize that the three dimensions of family promotion of autonomy may have a different meaning in each context. One expectation is that Promotion of Autonomous Thought is culturally more specific to individualistic countries, and that Promotion of Physical Separation may be less valued in the Italian family context as was previously found by Manzi et al. (2006).

Aims and hypotheses

Our first objective was to disambiguate three different measures of promotion of autonomy within the family context and show that they are related to different dimensions of parental promotion of autonomy: promotion of autonomous thought, promotion of autonomous decision-making and promotion of physical separation. In particular, we sought to determine whether the same aspects of promotion of autonomy cluster together into these three dimensions. Our second objective was to analyze the pattern of relationships between the three dimensions of promotion of autonomy and adolescent depression. We expected culture to have a moderating effect, producing different relationships with depression in each of the different contexts.

Method

Participants

Participants were first year university students in the US, Belgium, Italy and China. A total of 1361 students provided data; 658 were residents in the US, 378 in Belgium, 189 in Italy and 136 in China. The samples for this study were selected on the basis of having somewhat similar experiences. Thus, each sample included participants from metropolitan areas who were currently enrolled in universities. Questionnaires were distributed through university classes. Participants in the US and Belgium gained credits for participating in the study. Demographic information assessing age, gender, and living conditions are presented in Table 2, which reveals a difference in living conditions for Italian participants. The majority of the Italians sampled were still living with their family of origin, whereas the majority of the US, Belgian and Chinese participants lived away from their families, at least during the week.

Measures

The questionnaire was translated by research team members using a 'cultural decentering' approach (Werner & Campbell, 1973). In particular a draft version of the questionnaire in English was translated into Belgian, Chinese and Italian. Changes were permitted in the four versions where we encountered ambiguities in reaching a translation.

Promotion of autonomy

Details about the measurement of the three dimensions of promotion of autonomy are provided in Table 1. Scales' means, standard deviations for each sample are reported in Table 3. Note that the Manzi et al. scale was reverse coded to provide a measure of promotion of physical separation. Cronbach alphas were acceptable for each scale in each sample ranging as following: Promotion of Autonomous Thought (form .67 to .72), Promotion of Autonomous Decision-Making (from .83 to .90), Promotion of Physical Separation (from .68 to .75).

Depression

As an outcome measurement for promotion of autonomy, we used 12 items from the Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977). Participants rated how often they experienced the feelings or behaviors described in the 12 items in the past week on a scale of 0 (*less than 1 day*) to 3 (*5–7 days*). Scale means and standard deviations are reported in Table 3. Cronbach alphas ranged between .85 and .93.

Results

Our initial analyses examined whether the hypothesized dimensions of parental promotion of autonomy, that is Promotion of Autonomous Thought, Promotion of Autonomous Decision-Making, And Promotion of Physical Separation, were best represented as a single latent construct or multiple latent constructs. Using confirmatory factor analysis (Byrne, 1994) we

Table 2
Descriptive statistics by sample.

	United States			Belgium			Italy			China		
	M	SD	%	*M*	SD	%	*M*	SD	%	*M*	SD	%
Age	19.23	1.16		18.68	.94		19.86	1.03		20.19	.87	
Female			78.7			78.9			66.1			78.1
Living with parent during the weekends			55.3			92.6			81.0			76.3
Living with parents during the week			3.2			22.2			85.3			39.0

Table 3
Fit Indices for Confirmatory Factor Analyses of parenting scales.

Models	χ^2	d*f*	RMSEA	CFI	$\Delta\chi^2$
		USA sample (n = 658)			
Unique model	574.403	131	.10	.80	270.718***
Orthogonal model	573.559	131	.10	.80	269.874***
Oblique four dimensional model	303.685	128	.06	.92	
		Belgian sample (n = 378)			
Unique model	736.650	134	.11	.65	431.862***
Orthogonal model	414.769	134	.08	.84	109.801***
Oblique three dimensional model	304.968	131	.06	.90	
		Italian sample (n = 189)			
Unique model	431.446	134	.11	.68	252.606***
Orthogonal model	262.511	134	.07	.86	83.671***
Oblique three dimensional model	178.840	131	.04	.95	
		Chinese sample (n = 136)			
Unique model	238.472	133	.08	.84	67.402***
Orthogonal model	281.522	133	.09	.78	10.452***
Oblique three dimensional model	171.070	130	.05	.94	

Note. RMSEA = Root Means Square Error of Approximation; CFI = Comparative Fit Index.
***$p < .001$.

compared alternative theoretical models of the clustering of items in order to establish which structure best fit the data. Initially, we conducted separate analyses in the US, Belgian, Italian and Chinese samples. First, we screened the data for univariate and multivariate outliers and checked the variable distributions for normality. We found no problems of skew or kurtosis and normalized estimates of Mardia's coefficient for multivariate kurtosis were acceptable in the four samples. We then computed a model in which there were three distinct, but related, dimensions (the *oblique three dimensional model*). We performed covariance structure analyses using EQS (Bentler, 1995). These analyses showed areas of local strain in the model and hence we added a covariance path between the errors of two Promotion of Physical Separation items in the four samples, another covariance among two errors of the Promotion of Physical Separation scale only for the US and Belgium samples, and one among two errors of Promotion of Autonomous Decision-Making for the US, China and Belgium samples. Goodness of fit was evaluated using the χ^2 statistic, the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA). Table 3 shows these fit indices, which were acceptable for each of the four samples.

This initial, oblique, three dimensional model was then compared with two nested models, retaining the additional error covariances of each sample. In the *one dimensional model* the items of these three dimensions were examined as indicators of a single underlying construct (factor loadings and error variances were estimated with the correlations between the three factors fixed at 1). In the *orthogonal three dimensional model* the items were examined as indicators of three wholly independent dimensions (factor loadings and error variances were estimated with the correlations of the factors fixed at 0). Table 3 shows the fit indices of each model for each of the four samples. The fit indices of the one dimensional model and the orthogonal model were unacceptable in every sample. The fit indices of the oblique model, instead, were acceptable; the χ^2 difference test revealed significant differences between the oblique model and the other two models, further suggesting that the oblique model fit the data best. To further test that the three dimensions were indeed perceived as different, a series of models were calculated whereby each single correlation path between the dimensions was set at 1. These models aimed to falsify three hypotheses: that items of Promotion of Autonomous Thought and Promotion of Autonomous Decision-Making converge in the same latent factor, that items of the Promotion of Autonomous Thought and Promotion of Physical Separation converge on the same latent construct and finally that items of Promotion of Physical Separation and Promotion of Autonomous Decision-Making lay in the same latent dimension. The χ^2 differences tests were significant for each sample, confirming that the three latent factors were perceived as three different dimensions by each sample. Note that in every case of these two factor models in each sample one or more factor loadings were below .20 or non significant, whereas estimation of standardized factorial loadings was statistically significant in every case of the oblique three dimension model. λ_{ij} values varied for the Promotion of Autonomous Thought scale between .41 and .72 in the US sample; between .31 and .62 for the Belgian sample; between .44 and .80 for the Chinese sample and between .25 and .80 for the Italian sample ($p < .001$). λ_{ij} values for the Promotion of Autonomous Decision-Making scale were estimated between .70 and .83 for the US sample; between .57 and .83 for the Belgian sample; between .57 and .83 for the Chinese sample; and between .60 and .82 for the Italian sample. As for the Promotion of Physical Separation scale, λ_{ij} values ranged between .29 and .75 for the US sample; between .31 and .76 for the Belgian sample; between .26 and .69 for the Chinese sample; and between .22 and .77 for the Italian sample.

A more important test of the cross-cultural equivalence of a measure is to compare the factor loadings on each item in a multisample analysis (Van de Vijver & Leung, 1997). We wanted to find out if each scale item shows the same relationship with the dimension it is measuring in each country. Hence, we tested for invariance of factor loadings in a multisample analysis. We tested a model constraining all of the factor loadings to be equal across the groups, but retaining the additional error covariances of each sample (after Byrne, 1994). This model was acceptable, showing good fit indices: χ^2 (574, $N = 1362$) = 1178.228; CFI = .89; RMSEA = .03 (90% confidence interval: .03–.03). These results were interpreted as showing

full measurement invariance (Byrne, 1994) between the samples, meaning that the items clustered together similarly and with the same emphasis given to the three factors.

Our second set of analyses was designed to test the association of the three dimensions of parental promotion of autonomy with depression. We used multisample structural equation modeling in order to test the equivalence of relationships among variables in the four samples. Constructs were modeled as single-indicator latent variables (Bollen, 1989) in order to account for measurement error and, thus, obtain more precise estimates of structural parameters. Table 4 depicts descriptive statistics and correlations among the variables in each sample. As before, we screened the data for univariate and multivariate outliers and checked the variable distributions for normality. There were no problems of non-normality. Skew, kurtosis and normalized estimates of Mardia's coefficient for multivariate kurtosis were acceptable in all samples. Based on Bollen's (1989) recommendations, error variance estimates for each variable were fixed within each sample at $(1-\alpha)^*\sigma^2$, where α was the variable's reliability coefficient and σ^2 was the variance. First we analyzed a model without constraints. In this model, a single equality constraint was imposed between the samples (the covariance between promotion of volitional functioning and depressive symptoms), so as to identify the model. The model showed excellent goodness of fit indices: χ^2 (3, $N = 1361$) = 3.477; CFI = 1.00; TLI = 1.00; RMSEA = .01 (90% confidence interval: .00–.05).

We then wanted to test whether the strengths of any of the paths differed significantly across samples, and, if so, which ones. We started by computing a fully constrained model, considering all factor covariance estimates and all structural paths between the factors to be equal for the four samples. As expected, this model showed a significant decrease in the fit indices, indicating that a single identical model did not fit the four samples. In the Italian sample, modification indices revealed that the covariance paths between Promotion of Physical Separation and the other two dimensions and the structural path between Promotion of Physical Separation and depression were significantly different. Finally for the US sample the structural path between PAT and depression was significantly different from the other samples. Constraints on these paths were relaxed and the model was re-estimated. All fit indices were now excellent: χ^2 (14, $N = 1361$) = 34.387; CFI = .98; TLI = .96; RMSEA = .03 (90% confidence interval: .02–.04). Table 5 summarizes the estimation of covariance between the three promotion of autonomy dimensions. The covariance between Promotion of Physical Separation and the other two dimensions move in the opposite direction in Italy compared to the US, Belgium and China. With regards to the relationship between the three dimensions and depression (see Fig. 1), for the US sample all the three dimension were negative and significant predictors of depression. For Belgian, and Chinese participants only Promotion of Autonomous Decision-Making and Promotion of Physical Separation were negative and significant predictors of depression, whereas for the Italians the only dimension that proved to be significant was Promotion of Autonomous Decision-Making.

Discussion

The aim of this study was to distinguish three different dimensions of promotion of autonomy. In particular, we set out to determine (a) whether three existing measures of promotion of autonomy were perceived as assessing three different domains in which autonomy can be granted by parents, (b) the pattern of relationships between these three dimensions of promotion of autonomy, and (c) the pattern of correlations between these dimensions and well-being. In accordance with the domain specific approach, we expected the links between participants' perception of promotion of autonomy and their well-being to vary across different cultural contexts.

The data analysis showed an interesting pattern of results. In each group, participants' reports of parental behaviors clearly distinguished the three constructs of Promotion of Autonomous Thought, Promotion of Autonomous Decision-Making and Promotion of Physical Separation, providing empirical evidence for the theoretical distinctions drawn among these dimensions of promotion of autonomy. As expected, the data analysis also revealed the impact that culture has on the relationship

Table 4
Means, Standard Deviations, and Correlation Matrix of the study variables.

	Us sample ($n = 658$)				Belgian sample ($n = 378$)			
	1	2	4	5	1	2	4	5
1. Depression								
2. PAT	−.29				−.11			
4. PADM	−.31	.62			−.17	.47		
5. PPS	.19	.03	.25		−.06	.03	.26	
Mean	1.88	3.52	4.00	3.47	1.81	3.13	4.09	3.63
SD	.51	.69	.77	.71	.49	.63	.64	.75
	Italian sample ($n = 179$)				China sample ($n = 136$)			
1. Depression								
2. PAT	−.20				−.21			
4. PADM	−.29	.51			−.28	.69		
5. PPS	.13	−.39	−.19		−.18	.11	.05	
Mean	1.85	3.37	3.81	2.85	1.80	3.47	3.65	2.42
SD	.46	.67	.78	.91	.48	.68	.83	.76

Note. PAT = Promotion of Autonomous Thought; PADM = Promotion of Autonomous Decision-Making; PPS = Promotion of Physical Separation.

Table 5
Covariances estimated between the parenting dimensions in the final Multi-group Structural Equation Model.

Covariance estimated between	US	Belgium	Italy	China
PAT, PADM	.73	.79	.73	.78
PPS, PAT	n.s.	n.s.	−.51	n.s.
PPS, PADM	.28	.27	−.25	.27

Note. PAT = Promotion of Autonomous Thought; PADM = Promotion of Autonomous Decision-Making; PPS = Promotion of Physical Separation.

between these dimensions. In particular, for the covariation between the dimensions, only the significant and positive correlation between Promotion of Autonomous Thought and Promotion of Autonomous Decision-Making was invariant across the four countries. The Italian sample was different from the US, Belgian and Chinese ones in the covariance paths between Promotion of Physical Separation and the other three dimensions of promotion of autonomy. Whereas the US, Belgium and Chinese data showed a significant and positive correlation between Promotion of Physical Separation and Promotion of Autonomous Decision-Making and non significant correlation between Promotion of Physical Separation and Promotion of Autonomous Thought, the Italian data revealed *significant, but negative* correlation paths.

To better understand these patterns, we also explored how the three dimensions were related to individual adjustment as measured by depressive symptoms. We found that Promotion of Autonomous Decision-Making was the most important and negative predictor of an individual's level of depressive symptoms in all four countries. Only in the US sample was there a significant direct relation between Promotion of Autonomous Thought and depression. However, the pattern of results also suggests a significant indirect effect of Promotion of Autonomous Thought on depression through Promotion of Autonomous Decision-Making in all four groups. Finally, Promotion of Physical Separation had a negative direct impact on depression in the Belgian, Chinese and US samples. In contrast, for Italians Promotion of Physical Separation seemed to have a positive relationship with depressive symptoms. In other words, higher levels of Promotion of Physical Separation in the Italian sample were associated indirectly with higher levels of depression.

In summary, this study shows that we can meaningfully distinguish three dimensions of promotion of autonomy, each defined by a specific content: promotion of autonomous thought, promotion of volitional functioning, and promotion of physical separation. The second important result is the impact of culture on the interpretation of these dimensions. In particular, perception of parents' promotion of volitional functioning seem to be "universally" valued and perceived as equally important for the individual and his or her well-being. In contrast, the other dimensions of promotion of physical separation and promotion of autonomous thought are likely to be culturally sensitive.

Drawing from the domain specific approach (Luciano, 2010), which envisions the autonomy experience in relation to the specific domain to which it is related, we propose that these three dimensions refers to different autonomy domains. As such, Promotion of Autonomous Thought concerns the cognitive sphere, Promotion of Autonomous Decision-Making relates to decisions about life domain, Promotion of Physical Separation references the domain of time and space. Along these lines, we

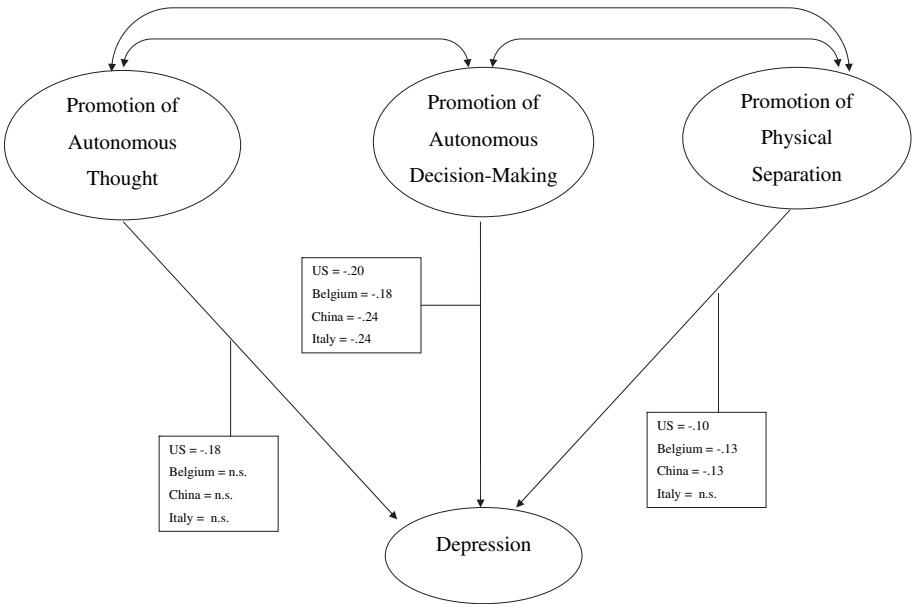

Fig. 1. Results of the multisample structural equation model showing the impact of the three dimensions of parental promotion of autonomy on depression. The covariances between the three predictors are not reported here (see Table 5). Numbers are standardized regression weights ($p < .01$).

argue that the perception of control regarding decisions about one's own life may universally be considered negative. On the other hand, the perception of control over time and space and cognition may not be negative at all nor perceived by the young adult as an intrusion. As previously mentioned, culture impacts the meaning children attribute to parental behavior. Mason et al. (2004) have shown that youth from different cultural backgrounds ascribe different affective meanings to parental behavior. In the Italian context, it is most probable that a lack of Promotion of Physical Separation is perceived as a positive indicator of family functioning. Consequently, one can hypothesize that the domain of autonomy concerning time and space is relatively unimportant for Italians, and therefore is unlikely to have an impact on their individual development. Alternatively, a parent's attempt to impose values and worldviews in the US seems to be of great importance for the individual, while it has relatively less impact for Belgian Italians and Chinese.

These data have important implications for clinicians. Practitioners need to be aware that parental behavior that may appear dysfunctional in some contexts may not be in other contexts where greater value is put on proximity and cognitive interdependence (see Manzi et al., 2006; Markus & Kitayama, 1991). However there is a potential danger here; clinicians should not adopt a completely relativistic view of parenting practices. Our data do not support such a view because some of the dimensions under study seem to have the same meaning in the four different cultural contexts studied.

In conclusion, this study lends some support to the idea that the perception of some parental behaviors or parenting styles may be considered universally negative, whereas others are more likely to be influenced by cultural context. Such a claim, however, must obviously be further investigated through a consistent plan of cross-cultural research studies, with a greater number of representative samples from each culture. Another important question remaining is to determine the extent to which youth perceptions reflect *real* parental behavior. Because we only obtained information from young adults in our study, this issue could not be addressed, but it is an interesting topic for further investigation. Notwithstanding such limitations, this study represents an interesting step towards a better understanding of the moderating effect of the culture on the relationship between perceptions of parenting perception and offspring well-being.

References

Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software.

Bloom, B. L. (1985). A factor analysis of self-report measures of family functioning. *Family Process, 24*, 225–239.

Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.

Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage.

Chang, L., Schwartz, D., Dodge, K., & McBride-Chang, C. (2003). Harsh parenting in relation to child emotion regulation and aggression. *Journal of Family Psychology, 17*, 598–606.

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*, 1832–1843.

Chirkov, V. I., Ryan, R. M., & Willness, C. (2005). Cultural context and psychological needs in Canada and Brazil: testing a self-determination approach to the internalization of cultural practices, identity, and well-being. *Journal of Cross-Cultural Psychology, 36*, 423–443.

Chuang, S. S., & Moreno, R. P. (2008). *On new shores: understanding immigrant fathers in North America*. Lanham, MD: Lexington Books.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology, 31*, 419–436.

Dwairi, M., & Achoui, M. (2010). Parental control: a second cross-cultural research on parenting and psychological adjustment of children. *Journal of Child and Family Studies, 19*, 16–22.

Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: the self-determination theory perspective. In J. E. Grusec, & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135–161). New York: Wiley.

Helwig, C. C. (2006). The development of personal autonomy throughout cultures. *Cognitive Development, 21*, 458–473.

Hill, J. P., & Holmbeck, G. N. (1986). Attachment and autonomy during adolescence. *Annals of Child Development, 3*, 145–189.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Iacovu, M. (2002). Regional differences in the transition to adulthood. *Annals of the America Academy of Political and Social Science, 580*, 40–69.

Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: implications for self and family. *Journal of Cross-Cultural Psychology, 36*, 403–422.

Larson, R. W., & Wilson, S. (2004). Adolescence across space and time: globalization and the changing pathways to adulthood. In R. Lerner, & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed.). (pp. 299–311) Hoboken, NJ: John Wiley & Sons, Inc.

Leung, K., Lau, S., & Lam, W. (1998). Parenting styles and academic achievement: a cross-cultural study. *Merrill-Palmer Quarterly: Journal of Developmental Psychology, 44*, 157–172.

Luciano, M. M. (2010). Commentary: autonomy and relatedness reconsidered: learning from Indian families. *Culture Psychology, 16*, 497–505.

Manzi, C., Vignoles, V. L., Regalia, C., & Scabini, E. (2006). Cohesion and enmeshment revisited: differentiation, identity, and well-being in two European cultures. *Journal of Marriage and Family, 68*, 673–689.

Markus, H. R., & Kitayama, S. (1991). Culture and self: implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.

Mason, C. A., Walker-Barnes, C. J., Tu, S., Simons, J., & Martinez-Arrue, R. (2004). Ethnic differences in the affective meaning of parental control behaviors. *The Journal of Primary Prevention, 25*, 59–79.

McElhaney, K. B., Allen, J. P., Stephenson, J. C., & Hare, A. L. (2009). Attachment and autonomy during adolescence. In R. Lerner, & L. Steinberg (Eds.) (3rd ed.).. *Handbook of adolescent psychology, Vol. 1* (pp. 358–403) Hoboken, NJ: John Wiley & Sons, Inc.

McWayne, C. M., Owsianik, M., Green, L. E., & Fantuzzo, J. W. (2008). Parenting behaviors and preschool children's social and emotional skills: a question of the consequential validity of traditional parenting constructs for low-income African Americans. *Early Childhood Research Quarterly, 23*, 173–192.

Radloff, L. S. (1977). The CES-D Scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.

Randolph, S. M. (1995). African American children in single-mother families. In B. J. Dickerson (Ed.), *African American single mothers: Understanding their lives and families* (pp. 117–145). Thousand Oaks, CA: Sage Publications, Inc.

Regalia, C., Lanz, M., Tagliabue, S., & Manzi, C. (2011). Family differentiation in emerging adulthood: the role of romantic relationships. In F. D. Fincham, & M. Cui (Eds.), *Romantic relationships in emerging adulthood* (pp. 142–166). Cambridge University Press.

Regalia, C., Manzi, C., & Scabini, E. (in press). Individuation and differentiation across culture. In M.A. Fine & F.F. Fincham (Eds). Family theories: A Content-based approach. New York: Taylor and Francis/Routledge. Individuation and differentiation across culture.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Rohner, R. P., & Pettengill, S. M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. *Child Development. Special Issue: Family Development, 56*, 524–528.
Roland, A. (1987). The familial self, the individualized self and the transcendent self. *Psychoanalytic Review, 74*, 237–250.
Rudy, D., Sheldon, K. M., Awong, T., & Tan, H. H. (2007). Autonomy, culture, and well-being: the benefits of inclusive autonomy. *Journal of Research in Personality, 41*, 983–1007.
Ryan, R. M. (1993). Agency and organization: intrinsic motivation, autonomy, and the self in psychological development. In J. E. Jacobs (Ed.), *Nebraska symposium on motivation: Developmental perspectives on motivation, Vol. 40* (pp. 1–56). Lincoln: University of Nebraska Press.
Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: an organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer, & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 7–26). New York: Guilford.
Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: it's both what you pursue and why you pursue it. *Personality and Social Psychology Bulletin, 30*, 475–486.
Silk, J. S., Morris, A. S., Kanaya, T., & Steinberg, L. (2003). Psychological control and autonomy granting: opposite ends of a continuum or distinct constructs? *Journal of Research on Adolescence, 13*, 113–128.
Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Beyers, W., & Goossens, L. (2005). Identity styles and causality orientations: in search of the motivational underpinnings of the identity exploration process. *European Journal of Personality, 19*, 427–442.
Soenens, B., Park, S. Y., Vansteenkiste, M., & Mouratidis, A. (2012). Perceived parental psychological control and adolescent depressive experiences: a cross-cultural study with Belgian and South-Korean adolescents. *Journal of Adolescence, 35*, 261–272.
Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Beyers, W., Goossens, L., et al. (2007). Conceptualizing parental autonomy support: adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology, 43*, 633–646.
Steinberg, L. (1989). *Adolescence* (2nd ed.). New York: Alfred A. Knopf.
Stewart, S. M., Bond, M. H., Kennard, B. D., Ho, L. M., & Zaman, R. M. (2002). Does the Chinese construct of guan export to the West? *International Journal of Psychology, 37*, 74–82.
Supple, A. J., Ghazarian, S. R., Peterson, G. W., & Bush, K. R. (2009). Assessing the cross-cultural validity of a parental autonomy granting measure: comparing adolescents in the United States, China, Mexico, and India. *Journal of Cross-Cultural Psychology, 40*, 816–833.
Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kahana-Kalman, R., & Niwa, E. (2008). Parents' goals for children: the dynamic co-existence of collectivism and individualism. *Social Development, 17*, 183–209.
Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
Trommsdorff, G. (2005). Parent-child relations over the lifespan: a cross-cultural perspective. In K. H. Rubin, & O. B. Chung (Eds.), *Parenting beliefs, behaviors, and parent-child relations: A cross-cultural perspective* (pp. 143–183). New York: Psychology Press.
Tuli, M., & Chaudhari, N. (2010). Elective interdependence: understanding individual agency and interpersonal relationships in Indian families. *Culture Psychology, 16*, 477–496.
Van de Velde, C. (2002). La dependance familiale des jeunes adultes dans l'Union Europeénne [Family dependence of young adults in the European Union]. *Les Politiques Sociales, 61*, 54–67.
Van de Vijver, F., & Leung, K. (1997). Methods and data analysis of comparative research. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology* (2nd ed.).. *Theory and method, Vol. 1* (pp. 257–300) Needham Heights, MA: Allyn & Bacon.
Wang, A. (2008). Chinese family developments and change. In C. B. Hennon, & S. M. Wilson (Eds.), *Families in a global context* (pp. 325–352). New York: Routledge/Taylor & Francis Group.
Werner, O., & Campbell, D. T. (1973). Translating, working through interpreters, and the problem of decentering. In R. Naroll, & R. Cohen (Eds.), *A handbook of method in cultural anthropology* (pp. 398–420). New York: Columbia University Press.
Yeh, K., & Yang, Y. (2006). Construct validation of individuating and relating autonomy orientations in culturally Chinese adolescents. *Asian Journal of Social Psychology, 9*, 79–106.