A social change and human development perspective on the value of children¹

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For many years, Çiğdem Kağıtçıbaşı has played a prominent role in cross-cultural developmental psychology; she has influenced my own research in this field through her writings and presentations, and by personal exchange. During various meetings she contributed to our joint efforts to make the ongoing Value of Children study possible, and her commitment to cross-cultural research was always a model and an intellectual and motivational encouragement.

Introduction

The Value of Children study continues to be Kağıtçıbaşı's most valued contribution and has recently gained significant new relevance. At present, we can observe a worldwide sociodemographic change that is leading to a reduction in fertility and an increase in longevity in most parts of the world, while the world population is still rising. This phenomenon has,

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among other questions, stimulated debates about problems of inter-generational relations. One consequence of interest for developmental psychologists is that parents will share an increasing lifetime with their children; related effects on the quality of parent-child relationships over the lifespan are not yet known.

In the 1970s, fear of overpopulation prevailed due to high fertility rates in the poorest countries of the world. This stimulated research on antecedents of demographic changes, such as the famous Value of Children study (Arnold et al. 1975; Fawcett 1972). The original Value of Children study in the 1970s was initiated by the concern of demographers and economists about overpopulation in several parts of the world. Since economic explanations turned out to have limited power, the psychological concept of value of children was introduced (Hoffman 1987: 159; Hoffman and Manis 1982: 143). Çiğdem Kağıtçıbaşı contributed to this international comparative study with theoretical innovations that had a long-term impact on psychological studies on social change and human development.

First, she made clear that the traditional approach by economists assuming direct links between economic productivity and individual behavior (fertility) does not hold; mediating factors such as value orientations should not be ignored. The positive or negative value of children was assumed to affect fertility. Second, Kağıtçıbaşı promoted research on the value of children by differentiating among different aspects – the economic, the social, and the psychological/emotional value of children. This allowed researchers to specify in which way socio-economic changes were related to different values and behavior. Third, she contributed to the still ongoing debate on the concept of culture by studying intra-societal differences in Turkey. The combination of inter- and intra-cultural comparisons allowed her to empirically investigate ongoing changes in Turkey (Kağıtçıbaşı 1982, 1996). Thereby, she underlined the necessity to differentiate between rural and urban areas as contexts for human development. Fourth, she went beyond the traditional approach of demographic research by focusing on processes beyond fertility: she included a human development perspective by studying parenting behavior. Beyond giving birth to a child, parents are involved in caretaking behavior to promote desirable developmental outcomes in the child.

Consequently, a fifth contribution of Kağıtçıbaşı is her studying social change by focusing on the relations among different macro- and micro-level systems and their impacts on individual developmental outcomes. This theoretical approach is in line with the famous ecological theoretical framework of Whiting and Whiting (1975), Bronfenbrenner (1979), and the more recent theoretical approaches by Segall et al.

(1990) and Trommsdorff (2007a). Accordingly, the wider economic system is studied in relation to the micro-system of the family, the proximate developmental conditions such as parenting styles, and developmental outcomes such as the individual value orientations. Kağıtçıbaşı's specific contribution to this complex approach is a revised theoretical framework as part of her Model of Family Change (MFC), attempting to integrate perspectives on socio-economic change and human development (1996). This model has served as a theoretical guideline for cross-cultural empirical studies on the value of children (e.g., Ataca et al. 2005: 91; Georgas et al. 2006; Kağıtçıbaşı and Ataca 2005: 317).

Cross-cultural studies on demographic changes and the changing value of children

Demographers differentiate among several periods of demographic transition but usually do not take into account implications for individual development. A major problem in the study of both social and demographic changes and human development is that methodologically different levels for analyses of data have to be dealt with (Trommsdorff and Nauck 2006: 343). Variables from the macro-level of society such as economic productivity (e.g., Gross Domestic Product, GDP) or fertility rates may be indicative of changes that do not necessarily match changes in individual development, such as changing parenting and changing developmental outcomes. Demographic changes describe changes in fertility and mortality rates – changes that occur on the societal macro-level, consisting of observed changes in highly aggregated measures. However, intra- and inter-societal variations in fertility and life expectancy have to be taken into account in order to adequately study societies in transition, such as India, Turkey, Indonesia, or China, where the considerable variations in reproductive behavior are to some degree related to urbanization.

Another question is whether changes on the macro level such as demographic changes are reflected in changes on the micro-level. This is related to the question of how changes on the micro-level, e.g., of individual families which constitute the context for individual development, affect individual behavior and development. One approach is to study cultural differences in child-related value orientations and behavior, such as parenting, assuming that the value of children is related to reproductive behavior and parenting. This approach guided the original Value of Children study (Arnold et al. 1975) and the recent partial replication and extension of the Value of Children and Intergenerational Relations study (Trommsdorff and Nauck 2006: 343; Trommsdorff et al. 2005).

Goals of the original and extended value of children studies

The main question of the original Value of Children study, undertaken by demographers and economists, was to determine how changes in fertility could be explained in an interdisciplinary theoretical framework (Arnold et al. 1975; Fawcett 1972, 1983: 429). The goal was to explain the high fertility in most countries in the world. One significant finding of this study was that individual values, especially the value of children, can partly explain fertility behavior. This widened the perspective beyond a purely economic approach to fertility by taking into account psychological factors such as the motivations, needs, and values of people (Bulatao 1979a, 1979b; Hoffman and Hoffman 1973: 19). This approach resulted in a large international comparative study including more than 20,000 married respondents from nine countries (including Indonesia, Korea, the Philippines, Singapore, Taiwan, Thailand, Turkey, the United States, and a women's sample from Germany). The focus was on explaining differences in fertility by taking cultural and psychological factors into account (e.g., Fawcett 1983: 429; Hoffman 1987: 159; Kağıtçıbaşı 1982: 29). The motive to have children – the “value of children” – was conceptualized as based on economic/utilitarian, emotional and social/normative values (Kağıtçıbaşı 1996).

The authors empirically demonstrated that, in poor countries, the economic value of children was higher than in economically advanced countries, while the reverse picture occurred for the emotional value of children. Recent surveys (e.g., World Bank 2003) are in line with this result: the highest economic and lowest emotional value of children were reported for Peru, Costa Rica, and Colombia; the highest emotional and lowest economic value of children were reported for Korea, Taiwan, Japan, the US, and Australia.

In poor countries, the economic value of children is based on the parents' realistic expectation that children will help in the economic survival of the family and later will take care of the elderly parents. Therefore, low economic resources seem to motivate parents to have more children. From this point of view, the value of children and the family is related to the economic situation of a country. Furthermore, the value of children is also related to the country's welfare system: when the state does not take responsibility for the survival of families and of the elderly, the economic value of children is high. This relationship can be observed in traditional countries where extended family is the rule, such as in most African and many traditional countries (e.g., Sam et al. 2005: 355). Parents expect that their children will take care of the family and the aging parents.

Accordingly, the *economic value* of children is closely related to the *social value* of children. This is especially the case in traditional societies where the social norm to have children is part of the general cultural beliefs that maturity and adulthood are only achieved through parenthood, or when the wife is only respected and given status in the family when she bears children. Here, to have many children is regarded as an indicator of economic and social status.

However, since low economic status is related to high socio-economic and low emotional value of children and to high fertility, the question then arises as to whether the opposite relation can be assumed: is high economic status related to low socio-economic and high emotional value of children and to low fertility? This association implies that the decline in fertility presently observed all over the world is related to the specific psychological function of the socio-economic and emotional values of children. A second question is whether different values of children are related to differences in parenting and individual development, and whether these relations vary with socio-cultural change and respective cultural differences in these variables. These questions directly confront the issues of socio-cultural change and the transmission of values from parents to the next generation.

The value of children in times of socio-economic changes

In order to explain possible changes in the value of children and fertility, a theoretical framework is needed that takes into account socio-cultural and individual factors. This has been the starting point for our revised international comparative Value of Children (VOC) study, which goes beyond the prediction of fertility and also studies intergenerational relations and social change (Trommsdorff and Nauck 2005). Both are possible by partially replicating the original VOC study (several instruments from the original VOC study were used in the present VOC study), and by extending the study design to include three interconnected generations of families in ten countries, plus samples of young mothers (comparable in age to the samples from the original VOC study). The *replication* of the study allows for studying socio-cultural changes in the respective variables; while the extension of the study also allows for studying implications for parenting and intergenerational relationships. In the following, we will discuss some results and implications of our international and multi-generation Value of Children study (ibid.).

On the basis of the revised sociological rational choice model by Nauck (this volume), it is predicted that in countries with high economic

status, the economic and social value of children will be less important and the emotional value will be more important. This should also be related to low reproductive behavior. The emotional value of children can be satisfied by having only one or a few children, while the economic costs (negative value) of having children in modern societies are rising.

Our study clearly supports this assumed relationship between economic status and the value of children (e.g., Nauck 2005: 183; Trommsdorff and Nauck 2005; Trommsdorff et al. 2002: 581): fertility rates and the economic value of children are higher in poorer countries (Trommsdorff 2007b).

Furthermore, results from our intra-societal comparisons of countries in transition, such as the People's Republic of China, show intra-societal differences in the value of children. In China, the economic value of children differs between rural and urban areas. Here, urbanization and related aspects of modernization such as school education, and increasing alternatives like having a career, contribute to changes in the value of children. This is in line with the model of family systems and social change by Kağıtçıbaşı (1996).

Furthermore, Kağıtçıbaşı and Ataca (2005: 317) and Kim and Park (2005: 209) not only confirmed that the value of children is affected by socio-economic change but also demonstrated significant changes in the value of children during the last three decades. Their studies are based on direct comparisons between the data from the original and the present VOC study. The social-economic value of children has been declining whereas the emotional value of children has been increasing during the last few decades. These studies support the hypothesis that higher economic status is associated with higher emotional and lower socio-economic value of children. This result holds for different cultures and also in different historical periods. However, such intra-cultural comparisons need to be complemented by inter-cultural comparisons including several countries.

*Value of children in relation to macro-level variables:
cross-cultural studies on economic development, fertility rate,
and value orientations*

In order to test associations between economic factors and the value of children, cross-cultural analyses including several countries are reported in the following. This approach allows us to analyze whether predictions on the basis of the family model of change by Kağıtçıbaşı (1996) can be empirically validated. The family model differentiates between different types of family system and related value orientations. Therefore,

culture-specificities are expected with regard to relations between macro-variables of a country (e.g., socio-economic development) and the value of children. Macro-level variables constitute the wider context for individual behavior and development. In line with Kağıtçıbaşı's model on social change and the family, we caution against direct associations among macro- and individual-level variables; mediating factors such as the family system have to be taken into account. On the basis of her model, different "types" of family system, including value orientations, are assumed to be related to different "stages" of socio-economic change.

Systematic comparisons involve including different countries with different levels of socio-economic development in order to test whether differences in the socio-economic value of children occur. In the following analyses, Gross Domestic Product (GDP) is selected as the indicator for economic development; the Total Fertility Rate (TFR) is chosen as the indicator for socio-demographic change; and the degree of expressed postmodern values and attendance at religious services are selected as indicators for socio-cultural changes toward modernity. These variables were highly correlated with the socio-economic value of children in ten countries (Trommsdorff 2007b).

In the following, I will first report correlations between the GDP and the socio-economic value of children in ten countries. The overall correlation was highly significant ($r = -0.81$). A closer look at the correlations for each country shows four groups of countries with similar correlations: (1) Germany, France, and Japan were highest in GDP and lowest in socio-economic value of children, in contrast to (2) South Africa, India, and Indonesia, who were lowest in GDP and highest in socio-economic value of children. The two other groups were (3) Israel and Korea, which were close to group (1), and (4) Turkey and China, which grouped between groups (2) and (3) (see Figure 6.1).

These results can be interpreted in line with the basic assumption of Kağıtçıbaşı (1996) regarding the relations among social change, family systems, and value orientations. Kağıtçıbaşı differentiates among three types of family system: one type favoring values of *independence* and high *emotional value* of children, a second type favoring values of *interdependence* and high *economic value* of children, and a possibly newly emerging type favoring a symbiosis of *independence* and *interdependence*.

A similar result was obtained by correlating the Total Fertility Rate (TFR; Population Reference Bureau 2005) macro-level indicator and socio-economic values of children as assessed in our ten-country study. Again, countries grouped in a similar way to that described above (total significant correlation: $r = 0.73$). France and Germany belonged to

Figure 6.1 Scatter plot of the cross-culture correlation between GDP and socio-economic VOC. Values on the axis for socio-economic VOC are ipsatized and are part of the VOC study.

Source: GDP per capita is based on the World Bank's purchasing power parity (PPP) estimates as of 2002, in US dollars (World Bank 2003).

a group with a low TFR and a low socio-economic value of children, and, in contrast, South Africa, India, and Indonesia belonged to a group with a high TFR and high socio-economic value of children (the other countries grouped in-between) (see Figure 6.2).

The question arises whether these groups also represent cultural differences with respect to values of modernization. According to Inglehart's (2001) theory of modernization, a shift in value orientations occurs from materialistic values in traditional societies to postmaterialistic values in modern, urbanized, and secularized societies (Inglehart and Baker 2000: 19).

Data from the World Value Survey (1990–92) on the percentage of postmaterialistic values were significantly correlated with our data on the value of children in ten countries (total correlation: $r = -0.76$). The pattern of results was clearly in line with the above reported results. Germany and France showed the highest negative correlations: they were highest in the percentage of postmaterialist values and lowest in

Figure 6.2 Scatter plot of the cross-culture correlation between fertility and socio-economic VOC. Values on the axis for socio-economic VOC are ipsatized and are part of the VOC study. The total fertility rate (TFR) measures the total number of children a woman would have given current birth rates.

Source: Fertility rates are from Population Reference Bureau (2005).

the socio-economic value of children. Both South Africa and India showed high positive correlations, and the correlations of the other countries were in between these two extremes (see Trommsdorff 2007b).

A further analysis based on the Index of Dynamic Externality (Bond et al. 2004: 548), which measures traditional values at the cultural level, showed highly significant overall correlations ($r = -0.86$). The pattern of results again showed three groups of countries with similar correlations, with Germany and France at one extreme, Indonesia, India, and South Africa at the other extreme, and Turkey, Korea, China, Israel, and Japan in the middle group (see Trommsdorff 2007b).

Finally, correlations between religiosity (attending religious services; World Value Survey 1995–1998) and the socio-economic value of children were highly significant (total correlation: $r = -0.86$). The same pattern of results occurred as reported above: Germany and France formed one group, South Africa and India grouped together at the

Figure 6.3 Dendrogram of clusters of cultures. The horizontal axis represents the squared Euclidean distance between clusters; cultures linked nearer the left side show closer similitude on the values investigated in the VOC study.

opposite end, and Turkey and Korea were grouped in the middle (Trommsdorff 2007b).

In a next step, similarities between cultures were summarized through cluster analysis. The analysis was conducted for five values (Socio-economic VOC, Emotional VOC, Individualism, Interdependence, and Family Values) across the ten VOC cultures based on Ward's hierarchical clustering method. A three-cluster solution was most convincing and clear; it is portrayed as a tree diagram in Figure 6.3 (first cluster: France, Germany, and Japan; second cluster: Turkey, China, Israel, and Korea; third cluster: Indonesia, India, and South Africa). A closer look at the means show significant differences among the three cultural groups for socio-economic VOC and for family values (see Figure 6.4). These results are in line with our theoretical assumptions.

Discussion

The question remains as to whether this pattern of results indicates a pattern of socio-economic and value change as part of modernization, and whether the three country groups represent societies with different levels of social change. According to the model of social change and family systems by Kağıtçıbaşı (1996), differentiation among a modern, a traditional, and a third group was expected and our country groupings support this expectation. However, our data do not allow us to interpret these results as indicating *effects* of socio-economic change. In order to study effects of socio-economic change on the value of children, longitudinal studies are needed in several countries. Only a combination of

Figure 6.4 Means of selected values for the three-cluster solution.

inter- and intra-societal comparisons over time will allow for testing of the assumed relations.

Another assumption underlying the family model of Kağıtçıbaşı (1996) is that in the process of social change, differences between societies will be reduced due to an increase of values of interdependence in modern societies, and an increase of values of independence in traditional societies, thus giving rise to a third family model combining values of independence and interdependence. Inglehart and Baker (2000: 19) deal with the question of whether a convergence of values due to modernization is taking place all over the world or whether a persistence of traditional values can be observed in spite of economic and political changes. The authors refute the convergence thesis on the basis of data from the Value Survey.

As for the value of children, the question regarding possible convergence of values over time in different countries has not yet been empirically tested; it can only be answered by inter- and intra-societal comparisons. Also, the psychological processes underlying the change to a predominance of emotional as compared to economic values are not yet clarified.

Value of children and parenting

The original Value of Children study (Arnold et al. 1975; Fawcett 1972) was primarily concerned with explaining fertility. However, in order to investigate reproductive behavior more fully, both childbearing and

child rearing need to be examined. Therefore, in our extension of the VOC study, we introduced a multi-generational design in order to analyze possible effects of cultural variables and values on parenting, parent-child relationships, and the transmission of values from parents to the next generation (Trommsdorff 2001: 36).

In the following, I report results from our cross-cultural studies, which are guided by the model of socio-economic change and family systems by Kağıtçıbaşı (1996). These results may be relevant beyond the Value of Children study in light of ongoing discussions about “optimal” parenting and “optimal child development.” Since mainstream discussions on this topic tend to ignore phenomena from the “majority” world, cross-cultural studies are needed, which deal with culture-specificities and go beyond western theorizing. Kağıtçıbaşı’s (ibid.) family model is an example of an approach that attempts to broaden the western perspective, as it seems to be applicable to (or even typical for) different cultures and ongoing social changes.

Parenting goals and the value of children

Following Kağıtçıbaşı’s (1996) model of family systems and social change, we attempted to specify the kind of relations among economic status and child-related values and parenting. According to the model and in line with earlier theorizing (e.g., Berry 1993: 361; Whiting and Whiting 1975), a relation between the traditional socio-economic value of children and obedience can be expected. This association was found frequently in rural areas (Hoffman and Hoffman 1973: 19; Kağıtçıbaşı 1982: 29; 1996).

In line with most studies on culture and parenting, obedience (as compared to independence) was more highly valued in rural as compared to urban areas (in those countries for which such intra-societal comparisons were possible due to regional differences in modernization) (Hoffman and Hoffman 1973: 19).

Our analyses of the associations between the value of children and parenting goals in two regions of Indonesia, a traditional society, revealed not only differences between rural and urban areas in the preference of traditional socio-economic and old-age security values of children but also different associations between VOC and parenting goals. When controlling for socio-demographic variables, regression analyses for mothers from rural areas showed that higher old-age security VOC predicted the importance of the parenting goals of obedience and “being a good person.” In contrast, for mothers from urban areas, higher old-age security VOC predicted the importance of the parenting goal of

independence and of being popular. Mothers from urban areas who more highly valued the emotional VOC preferred the parental goal of "being a good person" (Albert et al. 2005: 171).

These studies are in line with the hypothesis that in rural as compared to urban areas of a traditional society, more traditional values and parenting practices are preferred. The results on the associations between VOC and parenting goals in rural and urban areas also may indicate the direction of value change in transitional societies: for urban but not for rural Indonesian mothers, the traditional old-age security VOC is related to parenting goals of independence. The ecological context of urbanization seems to give a different meaning to the dimensions of VOC: no real inconsistency seems to be experienced between traditional VOC and the "modern" parenting goal of independence. On the contrary, the transition to modernity may be smoother when such combinations of traditional and modern values are possible.

The question arises here of what the relations between VOC and parenting are like in an industrialized modern society such as Germany. Our analyses showed that amongst German mothers, the higher the preference for traditional socio-economic VOC, the more the parenting goal of obedience was preferred. The mothers' emotional value of children was (significantly but less strongly) related to the parenting goal of independence. Furthermore, the mothers' traditional old-age security VOC was related to a higher evaluation of their children's academic achievement (Mayer et al. 2005: 43).

More detailed analyses for German mothers and grandmothers revealed significant associations between collectivistic (in contrast to individualistic) value orientations and parenting goals of obedience (Trommsdorff et al. 2004: 157).

Cultural differences in parenting behavior: control and acceptance

In the following, cross-cultural comparisons of parenting behavior as perceived by adolescents are reported. The focus is on the three dimensions of parenting, which have been studied by Rohner (2005) in numerous cultural comparisons: acceptance, control, and rejection.

A comparison among all cultures included in our VOC study showed that 16 percent of the variance for acceptance was explained by culture (gender only explains 1 percent of the variance). Most cultures ranged between 3.0 and 3.5 on a scale measuring acceptance from 1 to 4.

The explained variance by culture is much higher for control (30 percent). The traditional societies (especially South Africa) scored higher in control than the more economically developed societies.

Furthermore, an interaction between culture and gender occurred, with more control reported by girls in all cultures except for France and China, where boys reported more parental control. In all countries except South Africa and India, very low values for rejection occurred, with the values being lowest for Swiss and German adolescents. Twenty-four percent of the variance was explained by culture.

These overall analyses of cultural differences in perceived parenting (after having carried out various procedures to ascertain comparability of data, etc.) can be interpreted as roughly indicating different groups of cultures representing more modern and more traditional types of parenting styles.

However, these descriptive results on mean differences do not allow for a culture-informed interpretation. Therefore, the next question is whether these parenting variables have a different meaning in the different cultures. This question is even more relevant since most western research points to undesirable effects of controlling parenting and desirable development outcomes in the case of accepting parenting (Rothbaum and Trommsdorff 2006).

Cultural meaning of acceptance and control

A first approach was to test whether acceptance and control are related or whether they represent independent factors. Therefore, factor analyses were carried out for two countries selected on account of their difference in economic development and socio-cultural variables, Germany and India (Mayer et al. 2006). Factor analyses showed that in Germany, the factors acceptance and control were clearly differentiated. In India, only one factor was revealed (acceptance-control). No mean differences occurred with respect to acceptance (high values for both countries). Significant differences occurred for control: Indian adolescents reported high control and high acceptance, while German adolescents reported significantly lower control (ibid.). The same pattern of results also occurred in comparisons between Korean and German adolescents, where a negative association occurred for acceptance and control for German adolescents, and a positive association occurred for acceptance and control for Korean adolescents (Wieder, unpublished thesis 2004).

Furthermore, analyses of the associations between perceived parenting and parent-child relationships in all three countries revealed interesting patterns. In all three countries, acceptance was negatively correlated with conflicts in the parent-child relationship. In Germany and Korea, control was positively correlated with parent-child conflict,

whereas in India, control was negatively correlated with parent-child conflict.

These results alone indicate cultural differences in the *cultural meaning* of acceptance and control in perceived parenting. The similar pattern for German and Korean adolescents' experience of parenting is in contrast to the Indian results. The culture-specific pattern of results indicate that German adolescents conform to the characteristics of the western individualistic family model, while Indian adolescents instead conform to the traditional model, and Korean adolescents can be grouped in-between as part of a society in transition.

More detailed analyses of Korean adolescents revealed that values of interdependence were a significant moderator. In the case of high values of interdependence, the relation between acceptance and control was significantly positive (it was no more significant in case of low interdependence). Also, interdependence did not moderate the strong positive association between control and conflict (Wieder, unpublished thesis 2004). In Germany, no such associations occurred. This confirms the importance of taking into account multiple indicators of social change and family systems.

Finally, data from a recent analysis of parenting reported by Turkish adolescents from rural and urban areas and from different socio-demographic backgrounds are reported, to discuss Kağıtçıbaşı's (1982: 29; 1996) research on socio-cultural changes in Turkey and the methodological advantages of intra-cultural comparisons.²

The data analyses showed that positive associations between acceptance and control occurred for adolescents from rural areas and negative associations occurred for adolescents in the urban sample (Wind et al. in preparation). Furthermore, in the urban sample, control correlated positively with experienced rejection. Significantly less parental control, less rejection, more parental acceptance, but also more conflict with parents was experienced by urban as compared to rural adolescents (and less control was experienced by boys as compared to girls). Socio-economic status also had a significant effect on experienced parenting, with less control for higher socio-economic status. Furthermore, the variance was explained to a large degree by the mothers' level of education.

These results are especially important when explaining family change in accordance with Kağıtçıbaşı's model. Economic change and changes in education are important variables which, as can be seen here, affect parenting and parent-child relationships. Within the same country,

² The Turkish data were collected by Bilge Ataca and Çiğdem Kağıtçıbaşı (urban area) and Bernhard Nauck (rural area).

parental control and acceptance were associated in reverse directions depending on the ecological and economic conditions and the educational status of the mothers.

The above pattern of results again underlines the assumptions in the Model of Family Change by Kağıtçıbaşı (1996). A closer look at parenting styles allows us to go beyond a simple differentiation between modern and traditional cultures and to study changes in socialization conditions in transitional societies.

Finally, the question of how perceived parenting is related to developmental outcome has to be addressed. Comparisons of French and German adolescents showed that perceived parental acceptance was positively associated with life satisfaction (in general, and more specifically with peers, friends, and family) and also with optimism and perceived acceptance by peers. In contrast, no significant associations occurred for perceived control and these outcome variables, except for German boys, who were less satisfied with friendships when experiencing high parental control (Albert et al. 2005). No specific cultural differences occurred.

A different picture emerged in our comparison between German and Indian adolescents (Mayer et al. 2006). In Germany, parental acceptance was associated positively with life satisfaction of adolescents. For Indian adolescents, both parental acceptance *and* control were correlated positively with life satisfaction. These results demonstrate a different cultural meaning of parenting and the different functions of parental control for developmental outcomes.

Summary and conclusion

The results of our cross-cultural studies clearly reveal significant differences in the value of children. Furthermore, these studies show differences in the associations between the socio-economic value of children and several country-level indicators such as Gross Domestic Product, fertility rate, postmodern values, and religious practices. Furthermore, cultural differences in parenting, and, more interestingly, in the associations between the socio-economic value of children and parental goals (obedience, independence), occurred. Finally, cross-cultural differences in parenting (acceptance, control, rejection) as perceived by adolescents and in the interrelations of the parenting dimensions were reported.

One main result was that most differences in the value of children and parenting occurred for comparisons between "traditional" and "modern industrialized" societies. However, in line with Triandis (1995), we

caution against naïve use of these labels due to problems of ethnocentric bias and related misinterpretations. The dichotomy of tradition and modernity turned out to be too simple. Our results suggest that a third “type” of society emerges. This interpretation is supported by intra-societal comparisons of VOC and parenting in those countries with a still large agrarian population and an increasing urban population. Countries in which urban and rural areas represent differences in modernization (e.g., in the level of women’s education) may be seen as societies in transition (Turkey, Indonesia, and the People’s Republic of China). These three types of society are expected to differ with respect to economic development, fertility, value orientations, and family systems (Kağıtçıbaşı 1996).

To summarize, the results from our cross-cultural studies on the value of children and intergenerational relationships give empirical support to the need to further study the implications of the Model of Family Change by Kağıtçıbaşı (1996, 2005: 403) with respect to questions of social and demographic changes and its relevance for human development.

Economic and demographic changes typically do not directly influence individual behavior – they are related to socio-economic changes, to changes in the opportunity structures for individual choices, and to general value orientations in the society. In their overview, Trommsdorff and Nauck (2006: 343) analyzed various direct and indirect consequences of sociodemographic changes for developmental conditions of the individual. These changes can affect the developmental niche (e.g., family system) and thereby influence developmental outcomes (Trommsdorff 2007a). This view is in line with Bronfenbrenner’s (1979) ecological model of development and multi-level model of development-in-culture. Therefore, we are interested in parenting and intergenerational relationships as elements of the micro-level of individual families, which constitute the context for individual development in changing contexts.

This line of reasoning also underlies the Model of Family Change by Kağıtçıbaşı (1996). According to this model, three types of stages in social change are related to different family systems, including different combinations of value orientation and parenting. The results from our various cross- and intra-societal analyses are in line with the assumptions from this model. While this model assumes possible changes of the traditional and modern societies in the direction of the emergence of a third family model (combining values of independence and interdependence), our data cannot test this assumption due to the cross-sectional nature of our design.

However, an approach to predict possible changes of values is the study of intergenerational transmission of values. This is a further goal of our study. We attempt to analyze the transmission of values from parents to the next generation by studying intergenerational relations. Our multi-generation design allows us to analyze similarities in value orientations between three generations in a single family. One interesting finding of these analyses is that German grandmothers and mothers share certain values (e.g., regression analyses revealed that grandmothers transfer values of obedience, and school achievement) (Trommsdorff et al. 2004: 157) and the grandmothers and their grandchildren share values which are not shared with the mothers (Albert 2007). Differences between grandmothers and mothers with respect to parenting goals of obedience and independence may indicate social change and processes of transition. Here, the problem of confounding cohort and developmental effects has to be taken into account.

However, solely focusing on similarities of values without taking into account how these similarities can be explained does not allow us to draw conclusions about value transmission (Albert 2007; Trommsdorff in press). Therefore, the processes of transmission have to be studied. According to a culture-informed model of transmission of values, we have already carried out several analyses demonstrating the relevance of the quality of the parent-child relationship as a transmission belt. More specifically, the degree of intimacy in the mother-child relationship and certain parenting practices have proved to function as successful transmission belts for values, as well as for the quality of attachment (Albert 2007; Albert and Trommsdorff 2003; Albert et al. 2005, in press; Trommsdorff in press). Albert (2007) showed that the transmission of certain values (especially of group-oriented, collectivistic values) can be predicted by the quality of parent-child relationships (with intimacy and admiration being important aspects) in Germany and in France. As far as the transmission of attachment is concerned, parental control can have different functions depending on the culture (Albert et al. in press).

To summarize, these studies provide insight into processes of social change by focusing on intergenerational relationships and the transmission of values as elements of these processes. Kağıtçıbaşı's model (1996) should form the foundation for future research on this question, as it allows for theoretical organization and integration of results on cultural factors, the value of children, and parenting. Further research is needed to specify and expand a theoretical framework of social change, value of children, and intergenerational relationships in order to continue studies from a social change and a human development perspective.

REFERENCES

- I. Albert and G. Trommsdorff, "Intergenerational transmission of family values," poster presented at the Eleventh European Conference on Developmental Psychology in Milan, Italy, 2003.
- I. Albert, *Intergenerationale Transmission von Werten in Deutschland und Frankreich [Intergenerational Transmission of Values in Germany and France]* (Lengerich: Pabst Science, 2007).
- I. Albert, G. Trommsdorff, and R. C. Mishra, "Parenting and adolescent attachment in India and Germany," in G. Zheng, K. Leung, and J. Adair (eds.), *Perspectives and Progress in Contemporary Cross-cultural Psychology* (Beijing: China Light Industry Press, in press).
- I. Albert, G. Trommsdorff, B. Mayer, and B. Schwarz, "Value of children in urban and rural Indonesia: Socio-demographic indicators, cultural aspects and empirical findings," in G. Trommsdorff and B. Nauck (eds.), *The Value of Children in Cross-cultural Perspective. Case Studies from Eight Societies* (Lengerich: Pabst Science, 2005), pp. 171–207.
- I. Albert, G. Trommsdorff, and C. Sabatier, "Parenting and intergenerational transmission of values in Germany and France," paper presented at the Seventh European Regional Congress of the International Association for Cross-Cultural Psychology, San Sebastian, Spain, 2005.
- F. Arnold, R. A. Bulatao, C. Buripakdi, B. J. Chung, J. T. Fawcett, and T. Iritani, *The Value of Children: A Cross-national Study. Volume 2. Introduction and Comparative Analysis* (Honolulu, HI: East-West Population Institute, 1975).
- B. Ataca, B., Ç. Kağıtçıbaşı, and A. Diri, "The Turkish family and the value of children: Trends over time," in G. Trommsdorff and B. Nauck (eds.), *The Value of Children in Cross Cultural Perspectives: Case Studies from Eight Societies* (Lengerich: Pabst Science Publishers, 2005), pp. 91–120.
- J. W. Berry, "An ecological approach to understanding cognition across cultures," in J. Altarriba (ed.), *Cognition and Culture: A Cross-cultural Approach To Cognitive Psychology. Advances in Psychology, Volume 103* (Amsterdam: North-Holland/Elsevier Science, 1993), pp. 361–75.
- M. H. Bond, K. Leung, A. Au, K. K. Tong, S. R. De Carrasquel, F. Murakami, S. Yamaguchi, G. Bierbrauer, et al., "Culture-level dimensions of social axioms and their correlates across 41 cultures," *Journal of Cross-Cultural Psychology*, 35 (2004), 548–70.
- U. Bronfenbrenner, *The Ecology of Human Development: Experiments by Nature and Design* (Cambridge, MA: Harvard University Press, 1979).
- R. A. Bulatao, *On the Nature of the Transition in the Value of Children* (Honolulu, HI: East-West Center, 1979a).
- R. A. Bulatao, *Further Evidence of the Transition in the Value of Children* (Honolulu, HI: East-West Center, 1979b).
- J. T. Fawcett (ed.), *The Satisfaction and Costs of Children: Theory, Concepts, Methods* (Honolulu, HI: East-West Center, 1972).
- J. T. Fawcett, "Perceptions of the value of children: Satisfaction and costs," in R. A. Bulatao and R. D. Lee (eds.), *Determinants of Fertility in Developing Countries, Volume 1* (New York: Academic Press, 1983), pp. 429–57.

- J. Georgas, J. W. Berry, F. J. R. Van de Vijver, Ç. Kağıtçıbaşı, and Y. H. Poortinga (eds.), *Families across Cultures: A 30-nation Psychological Study* (Cambridge, MA: Cambridge University Press, 2006).
- L. W. Hoffman, "The value of children to parents and child-rearing patterns," in Ç. Kağıtçıbaşı (ed.), *Growth and Progress in Cross-cultural Psychology* (Berwyn and Lisse: Swets and Zeitinger, 1987), pp. 159–70.
- L. W. Hoffman and M. L. Hoffman, "The value of children to parents," in J. T. Fawcett (ed.), *Psychological Perspectives on Population* (New York: Basic Books, 1973), pp. 19–77.
- L. W. Hoffman and J. D. Manis, "The value of children in the United States," in F. I. Nye (ed.), *Family Relationships* (Beverly Hills and London: Sage, 1982), pp. 143–70.
- R. F. Inglehart, "Sociological theories of modernization," in N. J. Smelser and P. B. Baltes (eds.), *International Encyclopedia of the Social and Behavioral Sciences* (Amsterdam and New York: Elsevier, 2001), pp. 9965–71.
- R. Inglehart and W. E. Baker, "Modernization, cultural change, and the persistence of traditional values," *American Sociological Review*, 65 (2000), 19–51.
- Ç. Kağıtçıbaşı, "Old-age security value of children: Cross-national socioeconomic evidence," *Journal of Cross-Cultural Psychology*, 13 (1982), 29–42.
- Ç. Kağıtçıbaşı, *Family and Human Development across Cultures: A View from the Other Side* (Mahwah, NJ: Lawrence Erlbaum, 1996).
- Ç. Kağıtçıbaşı, "Autonomy and relatedness in cultural context: Implications for self and family," *Journal of Cross-Cultural Psychology*, 36 (2005), 403–22.
- Ç. Kağıtçıbaşı and B. Ataca, "Value of children and family change: A three decade portrait from Turkey," *Applied Psychology: An International Review, Special Issue: Value of Children in Socio-cultural Contexts*, 54 (2005), 317–37.
- U. Kim and Y. S. Park, "Family, parent-child relationships, fertility rates, and value of children in Korea: Indigenous, psychological, and cultural analysis," in G. Trommsdorff and B. Nauck (eds.), *The Value of Children in Cross-cultural Perspective. Case Studies from Eight Societies* (Lengerich: Pabst Science Publishers, 2005), pp. 209–37.
- B. Mayer, I. Albert, G. Trommsdorff, and B. Schwarz, "Value of children in Germany: Dimensions, comparison of generations, and relevance for parenting," in G. Trommsdorff and B. Nauck (eds.), *The Value of Children in Cross-cultural Perspective. Case Studies from Eight Societies* (Lengerich: Pabst Science Publishers, 2005), pp. 43–65.
- B. Mayer, G. Trommsdorff, and R. Mishra, "Parenting, parent-child-relationship, and life satisfaction in German and Indian adolescents," paper presented at the Eighteenth International Congress of the International Association for Cross-Cultural Psychology (IACCP), Spetses, Greece, 2006).
- B. Nauck, "Changing value of children: An action theory of fertility behaviour and intergenerational relationships in cross-cultural comparison," in W. Friedlmeier, P. Chakkarath, and B. Schwarz (eds.), *Culture and Human Development. The Importance of Cross-cultural Research for The Social Sciences* (Hove, UK: Psychology Press, 2005), pp. 183–202.
- Population Reference Bureau, *US Bureau of the Census and the World Population Data Sheet of the Population Reference Bureau*, 2005 (www.prb.org).

- F. Rothbaum and G. Trommsdorff, "Do roots and wings complement or oppose one another? The socialization of relatedness and autonomy in cultural context," in J. E. Grusec and P. Hastings (eds.), *The Handbook of Socialization* (New York: Guilford Press, 2006), pp. 461–89.
- R. P. Rohner (ed.), *Handbook for the Study of Parental Acceptance and Rejection*, Fourth edition (Storrs, CT: Rohner Research Publications, 2005).
- D. L. Sam, K. Peltzer, and B. Mayer, "The changing values of children and preferences regarding family size in South Africa," *Applied Psychology: An International Review. Special Issue: Value of Children in Socio-cultural Contexts*, 54 (2005), 355–77.
- M. H. Segall, P. R. Dasen, J. W. Berry, and Y. H. Poortinga, *Human Behavior in Global Perspective: An Introduction to Cross-cultural Psychology* (New York: Pergamon, 1990).
- H. C. Triandis, *Individualism and Collectivism* (Boulder, CO: Westview Press, 1995).
- G. Trommsdorff, "Value of children and intergenerational relations: A cross-cultural psychological study," in S. Walper and R. Pekrun (eds.), *Familie und Entwicklung: Aktuelle Perspektiven der Familienpsychologie* (Göttingen: Hogrefe, 2001), pp. 36–62.
- G. Trommsdorff, "Entwicklung im kulturellen Kontext [Development in cultural context]," in G. Trommsdorff and H.-J. Kornadt (eds.), *Enzyklopädie der Psychologie: Themenbereich C Theorie und Forschung, Serie VII Kulturvergleichende Psychologie. Band: Kulturelle Determinanten des Erlebens und Verhaltens* (Göttingen: Hogrefe, 2007a), pp. 435–519.
- G. Trommsdorff, "Socio-demographic changes and its social and psychological consequences in different cultures," in S. Kusune, Y. Nishijima, and H. Adachi (eds.), *Socio-cultural Transformation in the 21st Century? Risks and Challenges of Social Changes* ((Kanazawa, Japan: Kanazawa Electric Publishing Company, 2007b), pp. 243–65.
- G. Trommsdorff, "Cultural transmission: Developmental, psychological, social and methodological perspectives," in U. Schönplflug (ed.), *Perspectives on Cultural Transmission* (Cambridge: Cambridge University Press, in press).
- G. Trommsdorff and B. Nauck (eds.), *The Value of Children in Cross-cultural Perspective. Case Studies from Eight Societies* (Lengerich: Pabst Science, 2005).
- G. Trommsdorff and B. Nauck, "Demographic changes and parent–child relationship," *Parenting: Science and Practice*, 6 (2006), 343–60.
- G. Trommsdorff, U. Kim, and B. Nauck (eds.), "Factors influencing value of children and intergenerational relations in times of social change: Analyses from psychological and socio-cultural perspectives," *Applied Psychology: An International Review*, 54 (2005), 313–16.
- G. Trommsdorff, B. Mayer, and I. Albert, "Dimensions of culture in intra-cultural comparisons: Individualism/collectivism and family-related values in three generations," in H. Vinken, J. Soeters, and P. Ester (eds.), *Comparing Cultures: Dimensions of Culture in a Comparative Perspective* (Leiden, The Netherlands: Brill, 2004), pp. 157–79.
- G. Trommsdorff, G. Zheng, and T. Tardif, "Value of children and intergenerational relations in cultural context," in P. Boski, F. J. R. Van de Vijver, and

- A. M. Chodyncka (eds.), *New directions in Cross-cultural Psychology. Selected Papers from the Fifteenth International Conference of the International Association for Cross-Cultural Psychology* (Warsaw, Poland: Polish Psychological Association, 2002), pp. 581–601.
- B. B. Whiting and J. W. M. Whiting, *Children of Six Cultures: A Psycho-cultural Analysis* (Cambridge, MA: Harvard University Press, 1975).
- World Bank, *World Development Indicators 2003*. 2003 (<http://web.worldbank.org>).