

# Dimensions of culture in intra-cultural comparisons

## *Individualism/collectivism and family-related values in three generations<sup>1</sup>*

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The goal of the present study is to supplement inter-cultural comparison of values as a cultural dimension by intra-cultural comparisons, and to go beyond comparisons of single values representing cultural dimensions by studying value patterns on the individual level. Therefore, relationships among general (individualism, collectivism) and domain-specific (family- and child-related) values and the transmission of values in three generations of one family were analyzed. The sample consisted of 100 complete triads of three generations (grandmothers, mothers, and adolescents). The results showed that the individual value orientations of these three generations differed in the expected direction. Individualistic values were more supported by the younger and less by the older generation. While individualism did not show significant relations to other specific values, collectivism was the most powerful dimension to predict family- and child-related values. Individualism and collectivism clearly turned out as separate dimensions with different functions for the individual value system. The value structure of grandmothers as compared to the younger generations showed more internal consistency. A relative transmission of values was obvious for the adjacent generations. The results are discussed from the perspective of cultural change and stability, and the relation among cultural dimensions and individual value orientations.

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## The study of values in social sciences and psychology: an overview

The study of values has since long been an important topic in social sciences. In contrast, in psychology, the study of values which goes back to the work of Lewin (1936) has for a long time lost much of its previous relevance. Studies on attitudes, intentions, goal setting, or future orientation do not explicitly deal with values; also they usually ignore Lewin's culture-psychological implications. Only recently, the concept of value has gained new interest due to the studies by Hofstede, Triandis, Schwartz, and Inglehart (see this volume). These studies are explicitly based on cross-cultural comparisons and suggest perceiving values as part of cultural dimensions. These studies underline that values such as individualism and collectivism represent *cultural dimensions*. The question, however, is what the function of these cultural values is for social and psychological phenomena on the *individual* level.

The concept of values can be used to describe and compare cultures, nations, social groups, and individual persons. Values can also be analyzed as relevant factors explaining social and psychological phenomena, e.g., social change and individual behavior. Values as *explanatory variables* have contributed to sociological and psychological research. An example from sociology is the explanation of the late, but rapid, and successful industrialization of Japan by referring to traditional Confucian values reactivated during the Meiji revolution (and sometimes regarded as functional equivalent to the Protestant ethics and its impact on the early industrialization in Germany) (Bendix, 1965/66). Another example from psychology is the motivation theory by McClelland (1985) explaining differences in the economic success and productivity of various nations on the basis of achievement motivation and related individual values (McClelland, Atkinson, Clark, & Lowell, 1953). The study of values as *explanandum* is the focus of Inglehart's theory (1997) who links economic development to changes in values.

Values can also be studied as *modifying* and *moderating* variables. An example is the 'Value of Children (VOC)' study in the 70's (Arnold et al., 1975; Fawcett, 1974, 1976). This study was initiated by demographers and economists who attempted to explain the overpopulation in various countries, and more specifically, to explain differences in fertility on the basis of economic conditions. This approach was followed by a more differentiated model focusing on family-related values, especially the value of children, as mediating links between economic conditions and fertility. Results from this study have shown, e.g., that *low economic* development is related to *high* socio-economic and *low* emotional *value of children* and this in turn predicts high fertility and furthermore, preference of obedience as a child-rearing goal (e.g., Kağıtçıbaşı, 1982; Hoffman & Hoffman, 1973).

The present study is based on a larger cross-cultural project attempting a partial replication and substantial modification of the original VOC study (Value of Children and Intergenerational Relationships, VOC/IGR) (Nauck, 2001; Trommsdorff, 2001, 2003; Trommsdorff & Nauck, 2001; Trommsdorff, Zheng & Tardif, 2002) which is based on an eco-cultural framework explaining individual behavior on the basis of eco-cultural conditions (e.g., Berry, Poortinga, Segall & Dasen, 2002; Trommsdorff & Dasen, 2001). The starting point of this study (VOC/IGR) was the observation of dramatic demographic changes (partly due to longevity and decreasing fertility) all over the world; one question was whether related changes on the macro- and micro-level of societies are related to value changes on the individual level. The present study deals with individualism/collectivism as a basic *individual value orientation*. We attempt to expand the study of values as a *cultural dimension* and as an *individual phenomenon* by intra-cultural comparisons of generations from the same family, thus attempting to supplement cross-cultural studies by intra-cultural comparisons.

The goal of the present study is to understand the social and psychological processes which link culture and individual behavior. We will first present a theoretical framework for the study of general values of individualism and collectivism and their respective (and possible different) relations to more specific individual values which are seen as especially relevant for questions of socio-cultural, demographic, and value change: values of family, children and child-rearing. In the second part, we will present empirical data from the ongoing VOC/IGR study.

### **Theoretical framework for the study of individual values in different generations of one culture**

First, we will discuss similarities and differences of individual value orientations among different generations. Second, our focus is on the internal structure of the individual value system. Third, the question of cultural stability and change will be dealt with by studying the transmission of values.

#### *Values as a cultural dimension and as an individual orientation: a developmental culture-psychological approach*

Hofstede, Triandis, Schwartz, and Inglehart (this volume) have stimulated a rich body of value research which has its roots in systematic cross-cultural and cross-national comparisons fostering an interdisciplinary perspective. Hofstede's work suggests that certain values are closely connected to cultures and nations as a whole thus representing a cultural dimension. This idea may have contributed to the recent rise of cross-cultural studies in psycholo-

gy. Descriptions of cultures in terms of value dimensions refer to psychologically relevant variables. The explanation of differences and similarities of behavior among various cultures is certainly not easy since the complex construct of culture has to be dealt with theoretically. Moreover, reference to cultural values is necessary when selecting culturally appropriate measurements or when interpreting the results. However, this does not mean that cultures can be reduced to value dimensions.

Instead, cultural and individual values have to be regarded as *conceptually and methodologically different*. Thus, the unit of analyses is different: cultural values comprise *aggregate* data; individual values are based on *individual* data. Usually, values are measured on the individual level and then aggregated for social groups, nations, or cultures. 'Cultural values' are conceptually not the same as values held by the individual person. Cultural values are part of a complex system of ecological, demographic, and economic conditions and related social institutions. Even though overlapping with certain values of social groups and individual persons from the specific culture, cultural values function on a different level than individual values.

Starting from a conceptual differentiation, the question is what the *relation between cultural and individual values* is like. In line with the ecological model by Bronfenbrenner (1977), one may assume that the three levels, the macro-level, the level of sub-cultures, and the individual level are interconnected. The cultural values constitute the conditions under which individual and also social development takes place. Individual values and behavior set the conditions for cultural change and continuity mediated by intergenerational relations. From a psychological perspective, the interesting question is how cultural values are linked to individual value orientations.

Here, we follow a developmental-psychological perspective and more specifically, a motivation-theoretical approach. *Individual values* are conceptualized here as part of the self-concept and identity of the person, including individual beliefs, wishes, expectations, and goal setting, and guiding the person's decision making, planning, and goal-directed behavior. This conceptualization assumes that values are dynamic systems, structured in certain ways and influenced by individual experience during individual development in a socio-cultural context. The relation between cultural and individual values is regarded here to be based on life-long development and social interaction processes.

*Cultural values* are conceived of as part of the developmental niche (Super & Harkness, 1997) in which social interactions and individual development takes place; cultural values affect the child's socialization conditions by, e.g., shaping the caretakers' subjective theories, child-rearing goals and behavior (Schwarz, Schäfermeier & Trommsdorff, in press; Trommsdorff &

Friedlmeier, in press). It is assumed here that individual values develop in interaction with the person's environment, and thus are a product of bi-directional processes, not only being influenced by others but also affecting the social interaction partners and the wider socio-cultural context (Trommsdorff & Kornadt, 2003).

The expected close relations among cultural values and individual values may vary according to the cultural context and the prevailing norms and values. Thus, the study of values should allow a better understanding of the interplay between culture and the individual person. However, an interdisciplinary perspective is needed when dealing with values on the cultural and individual level.

*Individualism and collectivism as a cultural dimension and as an individual value orientation in culture-informed research*

The concept of a cultural dimension describes cultures and at the same time introduces a psychologically valid reason for comparing psychological phenomena in different cultures (Hofstede, 1980a, 2001, in press; Triandis, 1995; Triandis, McCusker & Hui, 1990). Hofstede has studied values of large samples (of experts) in various nations in order to describe cultures on a global level. He focused on whole cultural entities representing specific economic, religious, social characteristics which can empirically be assessed on the basis of five cultural dimensions. The concept of individualism/collectivism is only one — but the most prominent — of the five cultural dimensions originally conceptualized by Hofstede. Shalom Schwartz' (Schwartz, 1992; Schwartz & Bilsky, 1990) universalistic approach to cultural differences in values demonstrates a multidimensional structure of a 'universal' value system consisting of seven (mutually adjacent and contrasting) dimensions; this was replicated in numerous cross-cultural studies. Cross-cultural studies show that socio-structural conditions are related to the preference of specific dimensions, e.g., individualism is linked to economic well-being, and availability of higher education. Here, similarities to Inglehart's (1997) theory of economic well-being and the preference of 'postmaterialist' values become obvious.

While the concept of individualism and collectivism has stimulated much research in cross-cultural psychology, it also met much criticism which, however, partly is based on a misinterpretation of Hofstede's work and the neglect to distinguish between the *cultural and individual level of values*. Several studies view individualism/collectivism as a cultural dimension and at the same time as an individual orientation assuming that 'individualistic' values represent 'modern' or 'western' values while 'collectivistic' values represent more 'traditional' and also Asian values. However, ignoring

intra-cultural and inter-individual differences, and equating the cultural and individual dimension of values is misleading. Another problem is that cross-cultural studies using the concept of individualism/collectivism often fail to empirically investigate whether their choice of cultures really is valid to represent this cultural dimension; often it is simply assumed that the Western and the Eastern world, and industrialized and modern versus agrarian and traditional societies differ on this cultural dimension.

In order to separately assess the cultural and the individual level of values Triandis (1995) has suggested measuring the individual values of individualism and collectivism on the basis of the concepts of 'idiocentrism' and 'allocentrism'. This conceptual bridge between the global 'cultural' and the 'individual' approach has proved useful to assess cross-cultural and intra-cultural differences (e.g., Hui, 1988; Hui & Triandis, 1985). This also allows testing hypotheses on the universal relationships between the specific value orientations and other psychological phenomena by disregarding formal cultural membership (Trommsdorff & Friedlmeier, in press). Individual values differing on cultural dimensions have also been related to the self-concept (or self-other relation) as described by the concept of *independence* versus *interdependence* (Markus & Kitayama, 1991, 1994). Some authors explicitly refrain from differentiating between individualism / independence and collectivism / interdependence (cf. Greenfield, 1994) assuming that both concepts imply similar patterns of psychological phenomena. These seem to represent opposite poles of one dimension (the Western and non-Western mind). However, the meaning of these values can vary in different cultures. Thus, a conceptualization of individualism/collectivism as representing a bipolarity of values has been widely criticized (e.g., Kâğıtçibâsi, 1996). In an attempt to take into account culture-specificities, Triandis (1995) has differentiated between horizontal and vertical individualism/collectivism.

Individualism usually refers to an individualistic orientation with preference of own independence, autonomy, self-actualization, rationality, and abstract rules. In contrast, collectivism usually refers to a social orientation, especially relatedness to the family and in-group, acceptance of duties, context-related rules, and obligations for the group (see Triandis, 1995; Kim, Triandis, Kâğıtçibâsi, Choi & Yoon, 1994). In line with most of the literature we understand individualism as the preference for independence and self-determination; in reference to Schwartz's analyses of values, we understand collectivism as a preference for more conservative and traditional values. Our goal is to get a better understanding of the possible relations between individualism and collectivism and their respective relation to other more specific values, beliefs, and goals. Do people either hold individualistic or collectivistic values, and is their value system structured in a dichotomous

way? Or can both value orientations co-exist on the individual level? Empirical studies on this question are inconsistent. Watson and Morris (2002) have shown for a North-American sample of men and women that individualistic and collectivistic values are compatible and positively correlated. Other studies on Chinese and American samples have shown negative correlations between individualistic and collectivistic values (Chan, 1994). These results underline the necessity to study whether individualism and collectivism constitute two separate dimensions with different functions, and whether individual differences have to be taken into account.

The present study will therefore deal with the questions a) in how far the person can identify with both, individualistic and collectivistic values, and b) what the relative importance of these values in the individual value system is like.

### *Intra-cultural differences in values related to individualism and collectivism*

Comparisons of whole cultures have to be supplemented by comparisons of relevant sub-groups with respect to their value preferences. Intra-cultural studies are needed to deal with the problem of wrongly assumed homogeneity of cultures. In western industrialized societies, homogeneity of values does not exist, while more homogeneity of values can be assumed for traditional cultures characterized by collectivistic values. Heterogeneity of values may be a consequence and a precondition of social change which affects different social groups in different ways. For studies on social change the question is which social groups should best be selected for the assessment of their values.

*Social class* has traditionally been focused upon for studies on values (cf. Kohn, 1969); other approaches are *cohort studies* (Inglehart, 1990, 1997), or studies on *regional differences* taking into account economic conditions, as e. g., the study on value differences in *urban* and *rural* samples in Turkey as part of the 'Value of Children Study' (Kağıtçıbaşı, 1982, 1996): in rural areas the economic value of the child (child is expected to support aged parents) and fertility was higher than in urban areas. Studies on acculturating groups may be very useful to analyze how social and value change are dealt with and how values are transmitted. As an example for social and value change after the German unification some studies have shown that value differences between East and West Germany partly decreased especially in the younger generation giving rise to more 'individualistic' values in the East German population (e.g., Trommsdorff, 1996; Hormuth, Heinz, Kornadt, Sydow & Trommsdorff, 1996; Meulemann, 1998) while at the same time some continuity of 'conservative' values such as family orientation occurred (Trommsdorff & Chakkarath, 1996).

Even though more complicated processes in East Germany (e.g., breakdown of the life-long secure employment; acculturation effects) have to be taken into account, some of these value changes seem to be in line with Inglehart's (1990, 1997) theory on changes to post-materialistic values in Western industrialized societies due to economic development. This theory explains changes towards post-materialism (rationality, tolerance, trust, participation) in Western industrialized societies on the basis of increasing economic development and related socialization of the young generation (scarcity and socialization thesis). The younger as compared to the older generation has been brought up in economic security (lack of scarcity). The related preference of post-materialistic and individualistic values is expected to stimulate an overall change (a 'silent revolution') towards post-modern values.

The predicted value changes towards postmaterialism, e.g., less authoritarian and less religious orientation, and declining closeness of parent-child relationships, were only partly supported by empirical studies. Hellevik (2002) reports a preoccupation with material possessions and consumption patterns rather than post-materialist values for Norwegian samples. Inglehart (1997) reports on several changes in the expected direction while the expected decline of the parent-child relationship could not be shown. Primary bonds of family members seem not to lose their importance in spite of the ongoing changes in the family structure. This is in line with results on the presently still relatively high importance of family values in East Germany beside otherwise significant changes towards individualism (Mayer & Trommsdorff, 2003). This is also in line with other studies in family sociology which empirically demonstrate a stable pattern of family solidarity in spite of changing family structures (cf. Bengtson, 2001).

The present study thus will deal with the question whether the younger and the older generation can be differentiated according to their preference of individualistic and collectivistic values with more individualistic and less traditional values held by the younger generation and vice versa for the older generation.

On the basis of the above-mentioned theoretical and empirical studies, we will test the following hypotheses: (1) Individualism is expected to be more preferred by the younger than by the older cohorts, and vice versa for collectivism/traditionalism. (2) In line with results from the original VOC study we expect differences in individualism and collectivism to be related to specific values such as an emotional versus socio-economic value of the child, and child-rearing goals of independence versus obedience. (3) In line with findings on the stability of family values it is expected that the different cohorts do not differ with respect to family-related values.

*Multidimensionality of value orientations: individualism and collectivism as part of a broader value system*

The above stated questions and hypotheses underline the necessity to go beyond the study of single values and rather look for patterns of values. A major criticism on former studies on individualism and collectivism has been that these concepts suggest opposite poles of one dimension (e.g., Kâğıtçibâsi, 1996). Cross-cultural studies investigating the diverse functions (and combinations) of individualism and collectivism and its related values such as autonomy (individualism) and relatedness (collectivism) point out to the culture-specific meaning of such values in the specific cultural contexts (Rothbaum & Trommsdorff, 2003). In the same line of reasoning, Tripathi and Leviathan (2003) have warned against focusing primarily on universal attributes of individualism/collectivism. Specific cultural processes give a specific meaning to these concepts and, moreover, to the related respective values.

To give an example, 'independence' and 'autonomy' can be highly preferred parental values in an individualistic and a collectivistic cultural context. These constructs are an abstract description of a certain cultural model including a complex of values and beliefs. Values which are presented on a general, abstract level allow for a wide variety of interpretations which are consistent with the respondent's preferences and the specific cultural model. The general cultural model is organized around general belief patterns and stereotypes shared in the respective culture and social group. Thus, depending on the cultural context and the membership of a certain group, the meaning of global values is different. In a collectivist context, children are expected to pursue collective duties 'independently'; they are expected to fulfill their obligations properly starting early in their development. On the other hand, children can expect to be taken care of by their in-group. Thus, children's obedience to social norms is at the same time compensated by parental warmth and acceptance (e.g., Rothbaum & Trommsdorff, 2003; Trommsdorff & Kornadt, 2003). Empirical results from cross-cultural studies are in line with these notions (e.g., Leyendecker, Harwood, Lamb, & Schoelmerich, 2002; Schwarz, Schäfermeier, & Trommsdorff, in press; Trommsdorff, 1995). To summarize, the meaning of values has to be studied in the broader cultural context and with respect to the individual value system focusing especially on the relation among general and specific values.

Therefore we attempt here to focus on the different functions of individualism and collectivism as global value orientations for more domain-specific values, in order to analyze the internal structure of individual value orientations in different social groups. E.g., that certain global values may serve different goals for the individual person: e.g., family values can be in line as

well with an individualistic as with a collectivistic value orientation. This approach would allow specifying the quality of inter-individual differences in values, the structure of values and the function of values for psychological phenomena.

These notions underline that not only *heterogeneity of cultures* (differences between sub-groups and inter-individual differences) but also *multidimensionality of values* should be taken into account for the study of individualism/collectivism. Here we expect that general individualistic and collectivistic-traditional values (which may be endorsed to a different extent by different cohorts) are differentially related to more specific values. In line with the 'cultural model' of a progressive industrialized society, individualism is assumed to constitute the dominant value orientation in Germany. Accordingly, endorsement of this value is not necessarily based on an individual commitment and therefore may not allow gaining insight in the specific individual value structure of a person. In contrast, endorsement of the non-dominant collectivistic-traditional value orientation would allow predicting individual differences in values.

More specifically, it is expected that in all cohorts, general collectivistic values are positively related to family and child-related values as well as to conservative child rearing goals (e.g., obedience). Furthermore, probably partly due to their different developmental age, we expect a clearer pattern of the value structure in older than in the younger cohort. Adolescents, who are in a developmental stage of establishing an identity, might well have a less clear value structure as compared to older age groups.

#### *Continuity and change of values: the perspective of transmission of values*

While the 'dimensionalists' of cultural studies search for a systemic whole and a meaningful set of values to explain the variety of beliefs, life styles, and actual behavior by disregarding the active role of the individual person in the construction and change of culture (see Vinken, Soeters, & Ester, Chapter 1, this volume), the present study starts from the assumption that individual persons construct culture by transmitting cultural and individual values through processes of social interactions.

Cohort studies can differentiate among various age groups of a society with respect to value preferences. Many of those studies and one-shot survey studies in particular, however, give only limited information on social change even though they imply a diachronic perspective. In that case it remains difficult to discern cohort from age and period effects. As an alternative it is fruitful to compare cohorts as *generations belonging to the same family* in order to study whether and in how far value preferences are transmitted from one generation to the next. The extent of such transmission is an

interesting indicator of the stability or change in a culture's value system. We recognize that using time series data and combining genealogical and sociological generation perspectives — i.e., surveying generational issues within same families and across cohorts that express ideas of sharing similar formative experiences — might give a more definite clue about stability or change (see, e.g., Diepstraten *et al.*, 1999b; see also Vierzigmann & Kreher, 1998).

The previous discussion on the cultural and individual level of values, the possible changes on both levels, and the multidimensionality of values all are related to the question whether and how cultural values are transformed into individual values, and how individual values are transmitted from one generation to the next. Transmission of values can be conceived of as a necessary condition for the continuity of a society and a cultural system. This question has been especially prominent in acculturation research in order to predict the value orientation of the younger generation and their integration into the new culture. So far, only relatively few studies have been carried out on this topic (e.g., Schönpflug, 2001; Boehnke *et al.*, 2002).

The transmission of values will be examined here with respect to individualism/collectivism and other family related value orientations. Our study will focus on three different generations of the same family who all have been socialized in a cultural context where the cultural value of individualism is very dominant. Therefore, we expect the transmission of individualistic values to be most visible, while we also expect considerable transmission of other values from one generation to the next.

### *Summary of research questions*

First, it is attempted to study individual differences among value orientations and individual goals of three generations, starting from the assumption that developmental age and related experience throughout the life span affect the individual's value and belief systems. Partly in line with Inglehart (1990, 1997) it is assumed that the older differ from younger age cohorts preferring less individualistic and more conservative values.

Differences and similarities of single values, however, do not give a clear picture of the subjective (or cultural) meaning of these values since each value is a part in a complex belief system consisting of several levels and elements. The more abstract values may have a different meaning depending on the more concrete values, and vice versa. Thus, the meaning of items representing 'individualism' and 'collectivism' may differ.

Second, it is therefore attempted to describe the pattern (internal structure) of individual value orientations, focusing on relations among abstract and more concrete values and goals with a focus on individualism/collectivism, and on

family-, and child-related values. It is assumed that individualism and collectivism each have a different relationship with more specific values.

Third, with respect to the general question of cultural stability and change, it is asked whether a transmission of values can be observed in the different generations of the same family. Thus, the present study goes beyond the study of intra-cultural similarities and differences of values.

## **Empirical study: value orientations of three generations**

### *Background of the study*

The present study is part of the modified and extended cross-cultural study on 'Value of Children and Intergenerational Relations (VOC-IGR)'. This study attempts to test whether individual behavior and intergenerational relations can be predicted on the basis of socio-structural data, cultural, and individual values, and how the macro-, meso- and individual level are related. The cultural dimensions were identified on the national level, taking into account beside ecological, economic and socio-structural characteristics the general cultural values of individualism and collectivism. Altogether, six cultures were included (Germany, Israel, Turkey, Republic of Korea, People's Republic of China, and Indonesia). A specific design of multi-generation samples from one family is needed to empirically test questions on intergenerational relations and transmission processes and effects. This is the methodological starting point of the present study.

### *Method*

**Sample.** The present study focuses on three-generation triads (N = 100 in each cohort) from the same families: grandmothers, mothers, and their adolescent sons and daughters. Data derive from families in the German cities of Konstanz, Chemnitz, and Essen in 2002.

**Instruments.** A standardized questionnaire was used where all items had to be rated on five-point scales (1 = 'not important at all' to 5 = 'very important'). *Individualism/Collectivism* was assessed through the short version of the Schwartz & Bilsky (1990) instrument developed by Chan (1994) as part of the COLINDEX; it consisted of 7 items to measure individualism [e.g. 'an exciting life (stimulating experiences)'] and 6 items to measure collectivism [e.g. 'honor of your parents and elders (showing respect)']. *Family values* were assessed through 6 items selected from the Georgas' (1991) Family Values Scale measuring responsibilities of parents and children toward each other and the family in general (e.g. 'One should maintain good relationships

with one's relatives'). *Values of children* were assessed through a selection of original items from the VOC study of the 70's (e.g. Arnold et al., 1975) as well as newly developed items and some items from the Family and Fertility Survey (FFS). In all three samples exploratory factor analyses showed that items related to the emotional benefits of children loaded on one factor and that items concerning the practical, economic, and social benefits loaded on a second factor. Confirmatory factor analyses to confirm the factorial structure showed that two items regarding old-age security ('Because people with children are less likely to be lonely in old age' and 'Your children can help when you're old') should be treated as a separate factor. The final models showed satisfying fit criteria in all three samples. Three positive VOC-dimensions emerged: VOC Economic-Social, including 5 items (e.g., 'To have one more person to help your family economically'), VOC Emotional including 5 items (e.g., 'Because of the pleasure you get from watching your children grow'), and VOC Old-Age Security consisting of the two items mentioned above. In the mothers' and in the grandmothers' questionnaire additional items regarding the value of children for the benefit of the family were assessed. Exploratory and confirmatory factor analyses showed an additional VOC Family factor for both samples, comprising 4 items (e.g., 'Because any new family member makes your family more important'). Furthermore, the importance of the parenting goals *obedience*, *independence*, and *academic achievement* was assessed. Grandmothers were asked with respect to the target grandchild. Adolescents did not have to answer these questions. Reliabilities for the *Individualism/Collectivism* scales, the *Family Value* scale, and the *VOC* scales were all satisfactory.

## *Results*

### Comparisons among the three generations

Analyses of variance for dependent measures showed a significant generation effect on individualism with adolescents scoring higher on individualism than both their grandmothers and mothers (see Table 1). No difference between mothers and grandmothers occurred for individualism. All three generations scored significantly different from each other on collectivism with grandmothers being highest, adolescents lowest, and mothers taking a middle position. On family values, differences occurred between grandmothers and mothers, and between mothers and adolescents with grandmothers and adolescents scoring equally high and mothers lowest. Furthermore, t tests for dependent measures showed that for grandmothers,  $T(99) = -12.13$ ,  $p < .01$ , and mothers,  $T(99) = -6.04$ ,  $p < .01$ , collectivism was more important than individualism while for adolescents individualism was more important than collectivism,  $T(99) = 4.92$ ,  $p < .01$ .

Table 1: *One-way ANOVAs for dependent measures in three generations: general values, family values, value of children dimensions, and parenting goals*

	Grandmothers (n = 100)		Mothers (n = 100)		Adolescents (n = 100)		F	df	Comparisons		
	M	(SD)	M	(SD)	M	(SD)			1/2	1/3	2/3
<b>General Values</b>											
Individualism	3.69	(.59)	3.79	(.44)	4.09	(.51)	17.78**	2/175		**	**
Collectivism	4.40	(.39)	4.09	(.46)	3.74	(.67)	43.60**	2/174	**	**	**
Family Values	4.00	(.47)	3.71	(.46)	3.99	(.47)	16.28**	2/198	**		**
<b>Value of Children</b>											
Economic-Social	2.27	(.78)	1.61	(.64)	1.86	(.64)	26.47**	2/172	**	**	**
Emotional	4.04	(.64)	4.01	(.67)	3.82	(.73)	3.07*	2/196			
Old-Age Security	3.14	(1.02)	2.80	(.95)	2.80	(.88)	4.50*	2/196	*		
Family	3.05	(.94)	2.64	(.80)	—	—	15.19**	1/99	**	—	—
<b>Parenting Goals</b>											
Obedience	4.13	(.75)	3.49	(.71)	—	—	46.27**	1/98	**	—	—
Independence	4.25	(.66)	4.43	(.56)	—	—	5.46*	1/98	*	—	—
Achievement	4.33	(.67)	3.89	(.68)	—	—	29.74**	1/98	**	—	—

Note. Degrees of freedom adjusted for sphericity. \*p < .05. \*\* p < .01.

As for the value of children (VOC) dimensions, grandmothers were significantly higher on VOC Economic-Social than both mothers and adolescents. Adolescents were significantly higher on VOC Economic-Social than their mothers. Grandmothers scored higher than mothers on VOC Old-Age Security and on VOC Family. Despite significant mean differences on VOC dimensions there was a similar pattern regarding the relative importance of specific values of children in all generations: VOC Economic-Social was considered unimportant, VOC Emotional was considered important, and VOC Old-Age Security as well as VOC Family were of medium importance.

Regarding parenting goals, grandmothers scored higher on the goals of obedience and academic achievement than their adult daughters (mothers), while mothers scored higher on independence. Regardless of these differences grandmothers and mothers considered all three parenting goals as important (see Table 1).

### *Value Patterns in the Three Generations*

Correlations. For *grandmothers*, a significantly positive correlation occurred between individualism and collectivism. Collectivism was also positively related to family values and all VOC dimensions. Family values were positively related to all VOC dimensions as well. The parenting goal of obedience was positively correlated with collectivism, family values, and all positive VOC dimensions. Independence was positively correlated only to VOC Old-Age Security, and achievement was positively correlated to collectivism, family values, VOC Emotional, VOC Old-Age Security, and VOC Family (see Table 2).

For *mothers*, individualism also correlated positively with collectivism as well as with VOC Economic-Social and VOC Emotional. Collectivism was positively related to family values and all VOC dimensions. Family values were also positively related to all VOC dimensions. Obedience was positively related to collectivism and family values. Independence was positively related only to VOC Emotional (see Table 2).

In the *adolescent* sample individualism was positively correlated with collectivism ( $r = .31, p < .01$ ) and negatively with VOC Old-Age Security ( $r = -.20, p < .05$ ). Collectivism was positively related to family values ( $r = .30, p < .01$ ) and to VOC Emotional ( $r = .25, p < .05$ ). Family values were positively related only to VOC Emotional ( $r = .28, p < .01$ ).

Prediction of VOC. Hierarchical multiple regression were used to test the relative influence of general and family specific value orientations on the VOC dimensions. Respondents' demographics (age, number of children — number of siblings for adolescents —, education and socioeconomic status) were

Table 2: Correlation analysis for grandmothers' and mothers' general values, family values, value of children dimensions, and parenting goals

	1	2	3	4	5	6	7	8	9	10
1	—	.40**	.14	.20*	.23*	.18	.11	.14	.18	.06
2	.34**	—	.52**	.33**	.24*	.43**	.39**	.28**	.19	.12
3	.07	.45**	—	.37**	.21*	.47**	.32**	.32**	.08	.08
4	.08	.25*	.46**	—	.27**	.45**	.55**	.19	-.04	.00
5	.14	.51**	.43**	.36**	—	.51**	.37**	-.03	.34**	-.05
6	.02	.39**	.57**	.61**	.48**	—	.55**	.12	.09	.11
7	.14	.35**	.38**	.55**	.61**	.49**	—	.19	.14	-.07
8	.10	.38**	.53**	.46**	.37**	.41**	.37**	—	.22*	-.01
9	.17	.16	.18	.13	.19	.30**	.14	.24*	—	.01
10	.01	.39**	.35**	.17	.32**	.28**	.24*	.46**	.20*	—

Note. Grandmothers' correlations are reported in the lower left triangle, mothers' correlations in the upper right triangle. Variable labels: 1 = Individualism, 2 = Collectivism, 3 = Family Values, 4 = VOC Economic-Social, 5 = VOC Emotional, 6 = VOC Old-Age Security, 7 = VOC Family, 8 = Obedience, 9 = Independence, 10 = Achievement. Both samples N = 100. \*p < .05. \*\*p < .01.

entered in the first step. The general values individualism and collectivism were entered in the second, and the more specific family values were entered in the third step.

For the *grandmothers'* sample, the full regression equation with control variables, general values, and family values was significant on all four dependent variables: VOC Economic-Social,  $F(7, 85) = 5.42$ ,  $p < .01$ ; VOC Emotional,  $F(7, 85) = 6.46$ ,  $p < .01$ ; VOC Old-Age Security,  $F(7, 85) = 7.54$ ,  $p < .01$ ; and VOC Family,  $F(7, 85) = 4.46$ ,  $p < .01$ . The full model explained a rather large amount of variance: 31%, 35%, 38%, and 27%, respectively. The results identified two variables as predictors for all four VOC scales in the grandmothers' sample: collectivism and family values. Both were significantly positively related to all positive VOC scales. Individualism had no predictive value for any of the scales. When family values were entered into the equation in the third step, collectivism was no longer significant for VOC Economic-Social ( $\beta = .05$ , ns). This suggests a mediating effect of family values between grandmothers' collectivistic values and their economic-social VOC. The same was found for the dependent variable VOC Old-Age Security where collectivism was no longer significant when family values were entered in the third step ( $\beta = .18$ , ns). Regarding demographic control variables, a significant effect of age on VOC Economic-Social occurred: for older grandmothers economic and social reasons to have children were more important (see Table 3).

Table 3: Hierarchical regressions of value of children dimensions on demographical variables, general values, and family values for three generations

	Value of Children							
	Economic		Emotional		Old-Age		Family	
Grandmothers (n = 93)	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Step 1 Demographics		.09		.05		.06		.07
Age	.25*		-.09		.12		.13	
Number of children	.08		-.19+		-.02		-.17	
Years of schooling	-.19+		.04		-.18+		-.12	
Socioeconomic status	-.03		-.03		-.15		-.10	
Step 2 General Values		.08		.25		.16		.15
Individualism	.10		-.04		.00		.07	
Collectivism	.24*		.52**		.40**		.36**	
Step 3 Family Values	.41**	.14	.26*	.05	.46**	.16	.25*	.05
Mothers (n = 94)	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Step 1 Demographics		.10		.03		.02		.07
Age	.24*		-.12		-.10		.17	
Number of children	-.07		-.05		.09		-.19+	
Years of schooling	-.20+		.07		-.01		.05	
Socioeconomic status	-.16		-.08		.00		-.10	
Step 2 General Values		.08		.10		.22		.14
Individualism	.13		.19+		.00		-.10	
Collectivism	.21+		.21+		.48**		.41**	
Step 3 Family Values	.19	.02	.15	.02	.36**	.09	.15	.01
Adolescents (n = 89)	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$		
Step 1 Demographics		.04		.07		.04		
Age	-.07		.13		.07			
Number of siblings	.02		-.15		.07			
Years of schooling	-.18		.07		-.16			
Socioeconomic status	-.06		.16		-.06			
Step 2 General Values		.00		.05		.04		
Individualism	-.07		.13		-.20+			
Collectivism	.02		.14		.10			
Step 3 Family Values	.21+	.04	.26*	.06	.04	.00		

Note. +p < .10. \*p < .05. \*\*p < .01. N < 100 due to missing data in the demographic variables.

For the *mothers'* sample as well, the full regression equation was significant on all four dependent variables: VOC Economic-Social,  $F(7, 86) = 3.16$ ,  $p < .01$ ; VOC Emotional,  $F(7, 86) = 2.14$ ,  $p < .05$ ; VOC Old-Age Security,  $F(7, 86) = 5.96$ ,  $p < .001$ ; and VOC Family,  $F(7, 86) = 3.49$ ,  $p < .01$ . The full model explained considerable variance in these variables: 20%, 15%, 33%, and 22%, respectively. For VOC Economic-Social only the demographic control variable age was significant (see Table 3). Similar to grandmothers, the older mothers valued economic and social reasons for having a child more. Regarding VOC Emotional, none of the predictor variables was significant. For VOC Old-Age Security, collectivism and family values emerged as significant positive predictors. With regard to VOC Family, only collectivism was significantly related to this variable. The more collectivistic values mothers preferred the more they valued family-related reasons for having children.

For the *adolescent* sample, the full regression equation was significant only for VOC Emotional,  $F(7, 81) = 2.49$ ,  $p < .05$ . Explained variance was 18% and family values were the only significant positive predictor of VOC Emotional (see Table 3).

Prediction of parenting goals. In the next step, the relative influence of general values, family values, and the VOC dimensions on the parenting goals of obedience, independence, and achievement was tested through hierarchical multiple regression analyses in the grandmothers' and mothers' samples.

For the *grandmothers'* sample, the full regression equation with demographic control variables, general values, family values, and VOC dimensions was significant on the parenting goals of obedience,  $F(11, 81) = 4.60$ ,  $p < .01$ ; and achievement,  $F(11, 81) = 2.82$ ,  $p < .01$ . The full model explained 38% of the variance of obedience and 28% of the variance of achievement. Collectivism and family values were significant predictors of obedience. The higher grandmothers' collectivism and family-related values the more they valued obedience. When family values were entered in the analysis, collectivism was no longer significant ( $\beta = .17$ , ns). Thus, family values mediated the effect of collectivism on obedience. Collectivism and family values emerged as significant positive predictors for achievement goals (as for obedience) (see Table 4).

For the *mothers'* sample, the full regression equation was only significant for obedience,  $F(11, 82) = 2.02$ ,  $p < .05$ ; and independence,  $F(11, 82) = 2.01$ ,  $p < .05$ . The full model explained 21% of the variance of obedience as well as of independence. For obedience, collectivism was the only significant predictor (see Table 4). The more collectivistic mothers' values were, the more they

Table 4: Hierarchical regressions of parenting goals on demographic variables, general values, family values, and value of children dimensions for grandmothers and mothers

	Obedience		Independence		Achievement	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
<b>Grandmothers (n = 93)</b>						
Step 1 Demographics		.01		.04		.08
Age	.03		-.18		-.13	
Number of children	-.03		.10		.05	
Years of schooling	-.09		.04		-.09	
Socioeconomic status	.08		-.03		-.20+	
Step 2 General Values		.15		.05		.15
Individualism	-.02		.20+		-.09	
Collectivism	.39**		.05		.42**	
Step 3 Family Values	.47**	.17	.14	.01	.23*	.04
Step 4 Value of Children		.05		.08		.01
VOC Economic-Social	.23+		-.09		-.04	
VOC Emotional	.01		-.01		.05	
VOC Old-Age Security	-.02		.38*		-.01	
VOC Family	.09		.01		.09	
<b>Mothers (n = 94)</b>						
Step 1 Demographics		.03		.03		.03
Age	-.04		-.04		.08	
Number of children	-.16		-.16		.13	
Years of schooling	-.03		.04		-.04	
Socioeconomic status	-.05		.06		-.10	
Step 2 General Values		.09		.07		.01
Individualism	.06		.12		.02	
Collectivism	.27*		.19		.10	
Step 3 Family Values	.23+	.03	-.01	.00	-.02	.01
Step 4 Value of Children		.06		.11		.04
VOC Economic-Social	.06		-.18		.01	
VOC Emotional	-.21+		.37**		-.12	
VOC Old-Age Security	-.15		-.21		.25	
VOC Family	.19		.12		-.24	

Note. +p < .10. \*p < .05. \*\*p < .01. N < 100 due to missing data in the demographic variables.

valued obedience in their children. Also, the more mothers valued emotional reasons for having children the more important was independence as a parenting goal.

### *Transmission of values*

In order to address the issue of transmission of values we used correlational analysis. This analysis will give a first insight in the relationships between values of the different generations in the same family. Since we expected *positive* correlations between the values held by different generations, one-tailed tests of significance were used. Regarding most values, transmission mainly occurred between adjacent generations. For individualism, transmission was significant between mothers and adolescents ( $r = .23, p < .01$ ). For collectivism, transmission was significant between mothers and adolescents ( $r = .16, p = .05$ ). With regard to family values, transmission was significant for all three pairs (GM — M:  $r = .24, p < .05$ ; M — A:  $r = .27, p < .01$ ; GM — A:  $r = .17, p < .05$ ). With regard to VOC dimensions, significant transmissions mainly occurred between grandmothers and mothers: VOC Emotional ( $r = .17, p < .05$ ), VOC Old-Age Security ( $r = .25, p < .01$ ), and VOC Family ( $r = .25, p < .01$ ). Between mothers and adolescents, only the transmission of VOC Economic-Social was significant ( $r = .35, p < .01$ ), and between grandmothers and adolescents no significant transmission occurred. Additionally, there was significant transmission for all three parenting goals from grandmothers to mothers: obedience ( $r = .18, p < .05$ ); independence ( $r = .20, p < .05$ ); and academic achievement ( $r = .28, p < .01$ ).

### *Discussion and outlook*

The present study has analyzed whether the value orientations of three generations differ in the importance of single values and in the patterns of values. Furthermore, the question of cultural transmission of values from one generation to the next has been studied. The underlying assumption of this study was that general value orientations are related to more specific values which are transmitted to the next generation and thereby affect the cultural system either by stabilization or change. From a developmental perspective, the primary context for social interactions and for socialization of cultural values is the family. Therefore, the present study deals with the question of how abstract values like individualism and collectivism are related to more specific values and attitudes related to the family and to parenting, and how these value orientations (and their respective patterns) are represented in different generations of a family.

We *first* have dealt with the question of *cohort related value differences*. The results supported our hypothesis and showed that the older as compared

to the younger generations preferred less individualistic and more collectivistic, more family oriented, and more conservative values of children and of parenting. Furthermore, grandmothers and mothers showed a higher preference of collectivistic as compared to individualistic values while for adolescents the reverse preference was found. Grandmothers were also highest in those values of children which have been preferred in more traditional samples in the previous VOC study (Hoffman, 1988; Kâgitçibâsi, 1982) such as old-age support, family and socio-economic value. Grandmothers also preferred conservative parenting goals (obedience and academic achievement) more and independence as goal less than mothers. With respect to family values, only slight differences among the generations occurred (no differences between grandmothers and adolescents).

*Second*, we have studied the *patterns of value orientations* in the three age groups. Our hypothesis that individualism and collectivism each are related in different ways to the more specific values was supported by the results. While individualism was not related to the specific values, collectivism was highly related to the specific values and it predicted (together with family values) the value of children on all dimensions. Family values mediated the effects of collectivism for old-age and socio-economic value of children for grandmothers. For grandmothers, the old-age security value of children, and for mothers, the emotional value of children was related to child-rearing goals of independence demonstrating different subjective meaning of independence. In general, grandmothers had a more coherent value pattern as compared to the other age groups; adolescents showed the least coherent pattern.

*Third*, our hypothesis that values are transmitted from one generation to the next was partly supported by our results. Not all but some values were transmitted. *Transmission* of individualism, collectivism, and family values occurred in adjacent generations.

### **Individualism and collectivism as bi-polar or multi-level values**

The question whether individualism and collectivism constitute opposite poles of one dimension has often been debated in cross-cultural studies. Kâgitçibâsi (1996) who has criticized the assumption of bipolarity has suggested that social change can induce a transition from one value structure to another, combining and integrating aspects of independence and interdependence in a 'third' model. This thesis (which is going to be tested in our cross-cultural Value of Children Study, cf. Nauck, 2001; Trommsdorff, 2001, 2003; Trommsdorff & Nauck, 2001; Trommsdorff, Zheng & Tardif, 2002) receives some support from our present intra-cultural comparative study of

an urban sample from an industrialized Western society. First, individualistic and collectivistic values are positively related in all three generations; furthermore, different from collectivistic values, no relationships among individualism and several family related values occurred. The preference of collectivistic values (which in our study mainly meant traditional and conservative values) can best explain attitudes toward having and rearing children. In all cohorts, collectivistic values are most powerful to predict domain specific values such as a preference for family values and an emotional value of children.

Thus, the pattern of thematic contents of value orientations was similar in all three generations. However, differences in value structure occurred with grandmothers showing the highest and adolescents the lowest coherence. So far, value studies did not look for developmental changes in structure. It thus has to be studied in future research whether developmental age or the preference for traditional as compared to individualistic values (or possibly both) contribute to the degree of coherence and consistency of the individual value system.

To summarize, our results have shown that individualism and collectivism do not represent opposite poles of one dimension at least on the individual level; they constitute separate dimensions, and they have different functions for the individual value system with traditional collectivistic values turning out to be the most powerful predictor for domain-specific values.

### **Transmission of values as linking culture and the individual person**

The present study has started from the notion that individualism/collectivism as a cultural dimension and an individual value orientation are linked. From a culture-psychological perspective, the mediating link can be seen in the transmission of values which is part of the socialization process. The stability and change of cultural values depend to some degree on the transmission of individual values in the families. Cultural values are transmitted by parents' values, theories, goals and behavior, and through parent-child relationships (Albert & Trommsdorff, 2003; Goodnow & Collins, 1990; Schwarz, Schäfermeier, & Trommsdorff, in press; Trommsdorff & Friedlmeier, in press). Rothbaum, Pott, Azuma, Miyake and Weisz (2000) have shown how culture-specific pathways of individual development can be characterized. Furthermore, the transmission of values can go both ways: from the parents to the children, and from the children to the parents; these bi-directional influences differ in various cultures, and may even change in direction and impact during the life span (Trommsdorff & Kornadt, 2003).

Since parents are not the only influential factors in development, differ-

ences between the value orientations of parents and their children, partly depending on the cultural context and its changes, can arise during life-span development. Our results showed a considerable degree of relative transmission of values from one generation to the next, including individualism, collectivism, and family orientation. This indicates some stability in cultural values.

Our results on the preference for family values in all cohorts who at the same time supported individualistic values is in line with other studies referring to the importance of the family in times of social change (e.g., Bengtson, 2001; Inglehart, 1997; Mayer & Trommsdorff, 2003; Trommsdorff & Chakkarath, 1996).

While Inglehart has predicted a change to post-materialist values in Western societies as a result of economic improvement, a question for future research is whether another kind of value change will take place as a result of economic decline. Will there be a shift towards materialist and traditional values on the part of the young generation while their parents (still) prefer post-materialistic and individualistic values?

The results from our study underline the need that further research also has to deal with questions on individual and cultural values in the context of intergenerational relations and as part of the demographic and related socio-economic changes (Trommsdorff, 2003). This is even more obvious when comparing our results from the German sample with our data from three-generation families in India (unpublished data) which demonstrate an even higher value of the family, a higher economic value of the child as predicted by the eco-cultural approach of the Value of Children Study, and a higher importance of collectivistic-traditional values which are more directly transmitted from one generation to the next. This indicates cultural continuity in India but also some change towards individualistic values in the younger generation. These results from a cross-cultural study underline the importance of the cultural dimension for the explanation of individual values.