European Psychologist, Volume 18, Issue No. 1, © 2013 by Hogrefe

DOI: 10.1027/1016-9040/a000125

Running head: INTERGENERATIONAL FAMILY RELATIONS IN LUXEMBOURG

Intergenerational Family Relations in Luxembourg: Family Values and Intergenerational Solidarity in Portuguese Immigrant and Luxembourgish Families

Isabelle Albert, Dieter Ferring, & Tom Michels
University of Luxembourg, Luxembourg

Author's post-print

This article may not exactly replicate the final version published in European Psychologist. It is not the version of record and is therefore not suitable for citation.

Correspondence should be addressed to:

Dr. Isabelle Albert, University of Luxembourg, Route de Diekirch, B.P.2,

L-7250 Walferdange, Luxembourg; Tel. 00352/466644 9542; isabelle.albert@uni.lu

Acknowledgments

This study is part of the project "Intergenerational Relations in Luxembourg: Solidarity, Ambivalence, Conflict?" and was supported by a grant from the Fonds National de la Recherche (FNR) Luxembourg to the second author (FNR/06/02/11).

We thank Dipl.-Psych. Elisabeth Ketter and Dipl.-Psych. Isabelle Wolff for their valuable work in collecting the data of this study. We thank Dipl.-Psych. Lisa Trierweiler for her editorial help and we thank two anonymous reviewers for their helpful comments on an earlier version of the manuscript.

Abstract

According to the intergenerational solidarity model, family members who share similar values about family obligations should have a closer relationship and support each other more than families with a lower value consensus. The present study first describes similarities and differences between two family generations (mothers and daughters) with respect to their adherence to family values and second examines patterns of relations between intergenerational consensus on family values, affectual solidarity, and functional solidarity in a sample of 51 mother-daughter dyads comprising N = 102 participants from Luxembourgish and Portuguese immigrant families living in the Grand Duchy of Luxembourg. Results showed a small generation gap in values of hierarchical gender roles, but an acculturation gap was found in Portuguese mother-daughter dyads regarding obligations towards the family. A higher motherdaughter value consensus was related to higher affectual solidarity of daughters towards their mothers but not vice versa. Whereas affection and value consensus both predicted support provided by daughters to their mothers, affection mediated the relationship between consensual solidarity and received maternal support. With regard to mothers, only affection predicted provided support for daughters, whereas mothers' perception of received support from their daughters was predicted by value consensus and, in the case of Luxembourgish mothers, by affection towards daughters.

Keywords: family values, Luxembourg, Portuguese immigrants, intergenerational transmission, intergenerational solidarity

Intergenerational Family Relations in Luxembourg: Family Values and Intergenerational Solidarity in Portuguese Immigrant and Luxembourgish Families

Intergenerational relations in Europe have undergone unprecedented changes in structure and quality due to the sociodemographic developments during the last decades. A longer shared lifetime and lower fertility rates have led to an increase in the importance of solidarity between family members of different generations. Yet the family patterns and role norms associated with responsibilities between family members have changed considerably. Some authors have claimed that this is due to a falling solidarity between generations together with a decline in traditional values and normative family obligations whereas others state that solidarity between the generations in the family remains high (see Daatland, Slagsvold, & Lima, 2009, for an overview). In the current research, therefore, we incorporate the concept of intergenerational solidarity as suggested by Bengtson (e.g., Bengtson & Roberts, 1991) that describes the cohesion of families and the strength of their bonds on six dimensions (i.e., associational, structural, affectual, normative, consensual, and functional solidarity). This concept takes the role of norms and values about the family-and intergenerational consensus regarding these values (i.e., agreement in values and opinions between family members)-for other aspects of solidarity explicitly into account. This conceptual background was used to answer the following two questions: First, do similarities or differences in their adherence to family values describe mother-daughter dyads living in the Grand Duchy of Luxembourg, and second, what are the consequences of consensus (or lack of consensus) regarding these family values for affectual and functional aspects of intergenerational solidarity from the perspectives of mothers and daughters?

A key issue in many societies today is the acculturation of immigrants (UNFPA, 2006), entailing processes of cultural and psychological change of individuals or groups from different cultural origins (Berry, 1997). As immigrants become older the intergenerational solidarity issue gains importance also concerning acculturation: The question of how far cultural values and norms are retained by first and second generation immigrants and how a gap in values affects other aspects of intergenerational solidarity is thus particularly interesting in the context of acculturation. As Luxembourg, due to its small size and high rate of foreigners, can be taken as an example case for immigration in Europe, we concentrated here on a comparison between Luxembourgish and Portuguese families, the latter being the largest immigrant group in Luxembourg.

Intergenerational Transmission of Family Values and Value Change

If one assumes that values and value consensus are essential for other aspects of solidarity, the issues of value transmission and value change become pertinent. Transmission of values occurs to a large part in the family as primary socialization agent. Parents have a particular interest in transmitting family loyalty and traditional family values to their children, because (a) these values serve the community in providing rules and guidelines for living together, being thus a basis for intergenerational solidarity, and (b) they constitute an essential part of family identity (Cigoli & Scabini, 2006; Kagitcibasi, 2006; Trommsdorff, 2009).

In the context of acculturation families are, however, confronted with a special task when trying to transfer value orientations between generations. The acculturation situation may, on the one hand, result in an increased need for intergenerational solidarity within immigrant families due to a reduced social network in the host country. However, the offspring of immigrant families, on the other hand, are often exposed to dissimilar values within the family and the host culture context which makes intrafamilial value transmission more difficult (Schönpflug & Bilz,

2009). If the parent generation retains expectations and aspirations that were common in the country of origin whereas their children adopt their ideas about family relations from the host society, this acculturation gap (i.e., the different actual or perceived levels of acculturation of children and their parents with regard to the new culture) may result in a lower consensus and reduced solidarity between parents and their offspring (Birman, 2006). Several studies comprising immigrant families in different Western countries (Merz, Özeke-Kocabas, Oort, & Schuengel, 2009; Phinney & Vedder, 2006) demonstrated intergenerational discrepancies between immigrant parents and adolescents regarding their ideas about family obligations and solidarity, however, both immigrant generations still rated family obligations higher than host nationals. Other studies have rather provided evidence for a generation gap (i.e., differences in values between one generation and the next due to a generational shift) instead of an acculturation gap: These studies obtained comparable value discrepancies between parents and adolescents in both immigrant and nonimmigrant families (e.g., Sam & Virta, 2003). Taken together, differences in value importance ratings between younger and older generations, describing a shift from more collectivistic to more individualistic values, are a common finding in many value studies (e.g., Grob, Weisheit, & Gomez, 2009; Inglehart, 1997). Accordingly, intergenerational differences in the mean levels of value orientations may indicate a necessary adaptation of younger generations to changed living conditions, be it due to migration to another country or to social change within a given society. In this regard, Boehnke (2001) depicted value change and value transmission as different processes. A generational shift in value orientations does not necessarily mean that value orientations of parents and children are unrelated-there might be a relative (in contrast to an absolute) transmission (Vermulst, De Brock, & Van Zutphen, 1991).

1 _

¹ Relative transmission might, for instance, be indicated when correlations between characteristics of parents and

Links between Dimensions of Intergenerational Solidarity

What are the consequences of intergenerational consensus in family values for other aspects of solidarity? The concept of intergenerational solidarity proposed by Bengtson (e.g., Bengtson, & Roberts, 1991) supposes that the six dimensions of intergenerational solidarityconsensual, affectual, structural, associational, normative, and functional—are mutually related. One might thus assume that the success of value transmission resulting in value consensus between generations is important for other aspects of solidarity. Empirically, links between consensus regarding normative value orientations prescribing filial and parental obligations and other aspects of intergenerational solidarity are not always found (e.g., Bengtson & Roberts, 1991). Hammarström (2005) explains the occasional missing connection between value consensus and other dimensions of solidarity by pointing to the importance of generational position: In a Swedish three-generation study, aspects of solidarity towards children were unrelated in the parent generation (i.e., down the lineage), but substantial correlations were found for solidarity of the child generation towards parents (i.e., up the lineage). Regarding the solidarity of the child generation towards the parents, value consensus was highly correlated with affectual, associational, and functional solidarity in line with the intergenerational solidarity paradigm. In fact, intergenerational solidarity may be regarded from two directions: From the older to the younger generation and vice versa as these views may differ considerably (Daatland et al., 2009). As formulated in the intergenerational stake hypothesis, parents' evaluations of affection and consensus towards their children are often positively biased, whereas the child generation generally appraises the relationship to the parent generation in a more censorious way,

their children coexist with generational differences in mean levels regarding the same variables, whereas absolute transmission would be indicated in the absence of generational differences at the mean level.

a finding that has been reported for parents and children at different stages of their lives (Giarrusso, Stallings, & Bengtson, 1995; see also Winkeler, Filipp, & Boll, 2000).

Transmission and aspects of solidarity may be affected by cultural values and by the acculturation process per se, in other words, we might encounter a situation of potentially rapid value change on the one hand but a context of enhanced need for solidarity on the other hand. This leads us to the interesting research question of whether the same results will be found in immigrant families compared to host country (i.e., nonimmigrant) families (Giarrusso, Feng, Silverstein, & Bengtson, 2001; see also Trommsdorff & Schwarz, 2007).

Portuguese Immigrants in Luxembourg

About 43.2% of the 511,800 inhabitants of the Grand Duchy of Luxembourg are foreigners (Statec, 2011); Luxembourg thus provides a particular acculturation context due to its small size, high rate of foreigners, and multilingualism (Fehlen, 2008). The largest immigrant group consists of 81,300 residents with Portuguese nationality (Statec, 2011). Large-scale immigration of Portuguese migrants to Luxembourg started in the late 1960s due to the increased demand for workers in the industrial sector (Willems & Milmeister, 2008). Due to current sociodemographic developments such as falling fertility rates and increasing longevity, immigration will continue to be essential in order to retain the high level of economic growth and to preserve the pension and healthcare system (Ferring, Thill, & Leners, 2008). As the first generation of Portuguese immigrants is approaching retirement age, a question of prime importance for social policy is to what extent will the older immigrants count on support and care from their families and/or make use of assistance offers from the public sector. To provide an initial answer to this question, in the present study we focused on aspects of intergenerational solidarity in Portuguese immigrant compared to host country (i.e., nonimmigrant) families living in Luxembourg.

Research Questions

According to the intergenerational solidarity paradigm, family members who share similar values and norms about family relations should have a closer relationship and support each other more than families with a lower value consensus. Our first aim was, therefore, to describe intergenerational similarities and differences in values about family relations by examining whether these values differ between generations in immigrant and nonimmigrant families.

Second, we focused on the question of whether families who share similar values display higher intergenerational solidarity by examining the patterns of relations between consensual (i.e., agreement about family values between family members), affectual (i.e., emotional quality of intergenerational relationships), normative (i.e., obligations toward family), and functional (i.e., the degree of support that family members provide for each other) aspects of solidarity from both generational perspectives. In contrast to earlier studies which directly assessed perceived value consensus, here we concentrated on the difference or convergence of the actual value ratings of both mothers and their adolescent/young adult daughters. Drawing on the findings by Hammarström (2005) and in line with the intergenerational stake hypothesis (e.g., Giarrusso et al., 1995), we reasoned that different patterns of associations between the solidarity dimensions can be expected depending on generational position: We expected consensual solidarity to be positively related to affectual and functional solidarity for the generation of daughters but not for that of the mothers.

Methods

Participants

A two-generation sample of N = 102 participants belonging to n = 31 mother-daughter dyads of Luxembourgish origin and n = 20 mother-daughter dyads of Portuguese origin living in the Grand Duchy of Luxembourg took part in the study. Participants were recruited in a high school (lycée technique) and via personal networks. We chose the female family line for three reasons. First, some studies have described stronger transmission of values within same gender dyads (e.g., Grob et al., 2009); second, female family members are often primary care givers, regarding both care for children and care for elderly family members, thus family values may be specifically salient for them (Poortinga & Georgas, 2006); third, relations between daughters and mothers have been described as particularly close and intimate (Rossi & Rossi, 1990).

Luxembourgish daughters were between 12 and 32 years old (M = 19.90; SD = 5.24), their mothers were between 41 and 58 (M = 48.61, SD = 4.95). Portuguese daughters were between 14 and 28 years old (M = 18.10; SD = 4.00), their mothers were between 36 and 62 (M = 18.10), their mothers were between 36 and 62 (M = 18.10). 45.50, SD = 7.39). Age differences between the two national groups were not significant (t (49) = 1.31 for daughters, n.s., and t (49) = 1.80 for mothers, n.s.). In both subsamples, most daughters were single; only five participants were already married or lived with a partner. Most daughters lived in the same household as their mothers (71.0% of Luxembourgish and 85.0% of Portuguese participants) and had daily contact with their mothers (87.1% of Luxembourgish and 95.0% of Portuguese). Twenty-nine% of the Luxembourgish and 26.3% of the Portuguese daughters were already working, most of them full-time, the remainder was still in high school or attending university. The majority of mothers in both samples were married, seven Luxembourgish mothers and five Portuguese mothers were divorced or widowed. Luxembourgish mothers had between one and three children (M = 2.22; SD = 0.76), Portuguese between one and five (M = 2.65; SD =1.18; t (49) = 1.56, n.s.). Most of the mothers in both samples were gainfully employed (67.7% of Luxembourgish; 60.0% of Portuguese). While only 29.2% of the Luxembourgish mothers were

employed full-time, this was the case for most of the Portuguese employed mothers (76.9%; χ^2 (1) = 7.74, p < .01). Portuguese mothers were mostly employed in the lower skilled service sector while Luxembourgish participants were mostly working in jobs that require formal training. Characteristics of Portuguese and Luxembourgish participants were in line with official statistics for the population in Luxembourg (Berger, 2008; Statec, 2011).

Measures

Daughters and mothers filled out a standardized self-report questionnaire. To account for the particular language situation in Luxembourg with three official languages (across the entire country, independent of region), the questionnaire was distributed in two versions: A German version was given to the Luxembourgish families as they are familiar with reading and writing in German; a French version was given to the Portuguese immigrant families who are generally more familiar with French as the spoken and written language used most frequently at work and for official matters (Dickes & Berzosa, 2010). The choice of using French (instead of Portuguese) questionnaires was rooted in the fact that Portuguese daughters have passed through the Luxembourgish school system and are, therefore, less familiar with written Portuguese. All Portuguese participants were able to complete the questionnaire in French. The questionnaire was first developed in a German version and then translated to French. Translations were crosschecked by a team of bilingual psychologists and by a certified translator. As reported below the psychometric properties of the main instruments used in both versions were found to be equivalent.

Family values. Family values were assessed using a questionnaire developed by Georgas and colleagues (see Georgas, Berry, Van de Vijver, Kagitcibasi, & Poortinga, 2006). Originally, 18 items had to be rated on a 6-point Likert scale ranging from 1 (*do not agree at all*) to 6 (*fully*)

agree). In accordance with Georgas et al. (2006), the present study applied an *orthogonal two-factorial structure*, with a first factor named "Hierarchical roles of mother and father" and a second factor named "Obligations towards family and kin"². To test the applicability of this factorial structure to the present data, confirmatory factor analyses were performed using two parallel test halves for each of the assumed latent factors (Brown, 2006)³. As indicated in Table 1, the tested orthogonal two-factorial structure with parallel indicators reached a good model fit (Hu & Bentler, 1999), pointing out the factorial validity of the instruments in the total sample. As the present study compared two populations using French and German versions of the questionnaire, analyses on the measurement equivalence between groups were carried out. In particular, a restrictive model was tested that assumes that the described factorial structure holds in both samples and that the variance/covariance matrix of latent indicators (Φ) and the matrix of error variances (Φ - Δ) do not vary across groups. Analyses revealed a good fit of the model to the data (see Table 1) indicating measurement equivalence and thus confirming the usability of the instruments for comparing both samples.

_

² In line with the reports by Georgas and colleagues (2006), four items were eliminated as they did not show loadings on the specific dimensions. An additional item was deleted after carrying out reliability analyses due to low reliabilities in the Luxembourgish mothers group.

In the present case of a relatively low sample size, this procedure was preferred over the use of single items as manifest indicators. The use of parallel indicators includes two measurement assumptions: (1) the factor loadings of the test halves are fixed to one, thus assuming the latent variables are measured in the same way by both indicators and (2) the variances of measurement errors of the two test halves are set equal for each factor. In the case of parallel indicators, both test halves are thus psychometrically equivalent and can be used interchangeably. The test halves for both factors were constructed in two steps: First, by listing the items in accordance to descending item-test score correlations (r_{tt}), and second, by assigning the items to the test halves following an odd-even procedure.

The scale measuring *hierarchical roles of mother and father* contained six items (e.g., "The mother's place is in the home", "The father should be the breadwinner"). Cronbach's alpha was calculated for all four subsamples (Luxembourgish daughters: $\alpha = .82$; Portuguese daughters: $\alpha = .75$; Luxembourgish mothers: $\alpha = .69$; Portuguese mothers: $\alpha = .85$). Seven items were used to measure the *obligations towards family and kin* (e.g., "One should maintain good relationships with one's relatives"; "Children should obey their parents"). Cronbach's alpha showed sufficient internal consistencies (Luxembourgish daughters: $\alpha = .78$; Portuguese daughters: $\alpha = .85$; Luxembourgish mothers: $\alpha = .63$; Portuguese mothers: $\alpha = .75$)⁴.

Emotional relationship quality. To assess *affection* of daughters towards their mothers and vice versa, a scale containing seven items referring to positive emotions (e.g., close, secure, proud) was used. These items stem from a list of 26 positive and negative statements about emotions that daughters feel when they think about their mothers and vice versa, and have already been applied in several earlier studies (e.g., Boll, Ferring, & Filipp, 2003; Ferring, Michels, Boll, & Filipp, 2009). Items were rated on scales ranging from 1 (*never*) to 5 (*always*). Scale properties were very satisfactory for all four subsamples (Luxembourgish daughters: $\alpha = .88$, M = 3.72, SD = 0.73; Portuguese daughters: $\alpha = .89$, M = 3.73, SD = 0.89; Luxembourgish mothers: $\alpha = .88$, M = 4.04, SD = 0.79; Portuguese mothers: $\alpha = .86$, M = 3.82, SD = 0.79). Mothers rated their affection/closeness to daughters slightly higher than daughters their relation to mothers (F(1, 49) = 5.28, P < .05; $\eta = 2.10$).

_

⁴ Reliabilities for the two family value scales were lower in the Luxembourgish mother sample. They differed significantly from the Portuguese mother sample with F(29, 19) = 2.06, p < .05 for *hierarchical roles*, but not for *relationships with family* with F(29, 19) = 1.48, n.s. (for the test of differences in reliabilities, cf. Van de Vijver & Leung, 1997).

Intergenerational support. Daughters and mothers were asked about *provided and* received social support as indicators of functional solidarity, using an adapted version of the Berlin Social Support Scale (Schulz & Schwarzer, 2003). Items were rated on a 6-point Likert scale (ranging from 1 = does not apply at all to <math>6 = fully applies). Received support by daughters/mothers was measured by 25 items which covered several aspects (emotional, practical, and financial support). Eleven items were retained to measure received social support (e.g., "My mother/daughter handles many things for me that I cannot do on my own", "My mother/daughter helps me with decisions"), not including financial support, and the scale reached high reliabilities in all subsamples (Luxembourgish daughters: $\alpha = .91$, M = 5.04, SD = 0.75; Portuguese daughters: $\alpha = .90$, M = 4.19, SD = 1.04; Luxembourgish mothers: $\alpha = .96$, M = 4.27, SD = 1.21; Portuguese mothers: $\alpha = .87$, M = 4.60, SD = 0.88). A comparison between received social support for the daughter and mother subsamples provided evidence for an interaction effect between national group and generation: Whereas Portuguese daughters reported receiving less support than Luxembourgish daughters, for the mothers the reverse pattern was found (F(1, 49)) $= 14.57, p < .01; \eta 2 = .23).$

Finally, provided support by daughters and mothers was measured by 12 items assessing how much support (emotional, practical, and financial support) they provide for each other or are willing to give in case of need (Schulz & Schwarzer, 2003). Six items were retained to measure given social support (e.g., "I handle many things for my mother/daughter", "I help my mother/daughter with decisions"), without considering financial support, and the computed score demonstrated high reliabilities in all subsamples (Luxembourgish daughters: $\alpha = .84$, M = 4.22, SD = 0.92; Portuguese daughters: $\alpha = .86$, M = 4.60, SD = 0.98; Luxembourgish mothers: $\alpha = .83$, M = 5.01, SD = 0.73; Portuguese mothers: $\alpha = .82$, M = 4.81, SD = 0.95). Findings at the mean level showed that daughters provided less support than mothers $(F(1, 49) = 11.98, p < .01, \eta 2)$ 14

= .20), and an interaction effect between national group and generation indicated that Luxembourgish daughters gave less support than Portuguese daughters (F(1, 49) = 4.04, p = .05; $\eta 2 = .08$).

Results

Similarities and Differences in Values between National Groups and Generations

Two-factorial ANOVAs (national group and generation) with repeated measures on the second factor revealed no differences between the two national groups concerning *values about hierarchical gender roles*. However, there was a significant generation effect (F (1, 49) = 5.33; p < .05; η 2 = .10): Daughters from both groups agreed less (Portuguese daughters: M = 2.72, SD = 0.93; Luxembourgish daughters: M = 2.90, SD = 1.04) to values of hierarchical gender roles in the family than their mothers (Portuguese mothers: M = 3.13, SD = 1.32; Luxembourgish mothers: M = 3.10, SD = 0.91). Concerning *obligations towards family and kin*, which showed high means in all four subsamples, a significant interaction effect between national group and generation was found (F (1, 49) = 4.18; p < .05; η 2 = .08). According to this interaction, Portuguese mothers (M = 5.53, SD = 0.46) reported a significantly higher obligation to family and kin than all other three subsamples (Portuguese daughters: M = 5.06, SD = 0.70; Luxembourgish mothers: M = 5.02, SD = 0.46; Luxembourgish daughters: M = 4.96, SD = 0.61).

Correlations between Indicators of Intergenerational Solidarity

In the next step, dyadic correlations were computed across all items of the two family value dimensions for each mother-daughter dyad to obtain an indicator of mother-daughter consensus with respect to value preferences (see Bernieri, Zuckerman, Koestner, & Rosenthal, 1994). Thus, mother and daughter ratings on the six items measuring *hierarchical gender roles* and the seven items measuring *obligations towards family and kin* were correlated resulting in a 15

total of 51 correlations. To use the dyadic correlation indicator in further analyses, Fisher's *Z*-transformation was applied. For Luxembourgish mother-daughter dyads, the dyadic correlations ranged between $-.28 \le r \le .93$ with an average dyadic correlation of .66. For the Portuguese mother-daughter sample, dyadic correlations ranged between $-.17 \le r \le .95$ with an average of .76. The dyadic correlations did not differ significantly between the national groups (t (47) = 1.35, n.s.).

Pearson correlations between the indicators of intergenerational solidarity were then inspected for both generational perspectives. As expected, the indicator of value consensus was positively related to affection in the relationship of daughters to their mothers (see Table 2). Moreover, the higher the mother-daughter value consensus, the more social support did daughters provide to their mothers. In contrast to this, (a) affection of mothers towards their daughters did not correlate with value consensus, and (b) no significant correlations were found between value consensus with daughters and provided maternal support.

Interestingly, both daughters' and mothers' perception of received maternal/filial support was positively related to value consensus in both samples. Normative solidarity was described by reported obligations towards the family, and this indicator was related to all other aspects of solidarity in the daughters', but not in the mothers' sample. Further, in both generational samples, affection was related to provided and received support. To account for effects of age in the sensibility for transmission as well as for influences of other sociodemographic characteristics (Schönpflug & Bilz, 2009), analyses were controlled for several sociodemographic indicators, which are described in the following section.

Testing Models to Predict Functional Solidarity

Next we carried out hierarchical regression analyses to predict provided and received support from both generational perspectives—mothers and daughters. In the first step,

sociodemographic variables were introduced (age of daughters, age of mothers, marital status of daughters, job situation of mothers, living in the same household, and nationality), in the second step, affection, obligations towards family and kin, and value consensus were introduced. In the third step, in order to test for differences between the Portuguese and Luxembourgish participants, we introduced interaction terms for affection, obligations towards the family and kin, and value consensus with nationality. Indicators of affection, family obligations, and consensus were standardized prior to inclusion in the interaction term⁵.

Both affection and value consensus predicted provided support by daughters for their mothers, whereas obligations towards families had no effect; with regard to received support, only affection proofed to be a significant predictor in the daughters' sample (see Table 3).

Since value consensus was closely related to filial affection for their mothers, we were able to test whether the impact of value consensus on functional solidarity is mediated by affection or if it has a proper effect on functional solidarity (see Baron & Kenny, 1986). Tests showed that affection towards mothers partially explained the effect of value consensus on *provided* support (Sobel Test Statistic: z = 2.27, p < .05); regarding *received* support, the impact of value consensus was fully mediated by affection towards mothers (Sobel Test Statistic: z = 3.02, p < .01; see Frazier, Tix, & Barron, 2004). Furthermore, we tested for an interaction between national group and the three solidarity aspects (affectual, normative, and consensual) in predicting functional solidarity, and these tests did not render any significant interaction effect. Interestingly, national group had a direct effect on the amount of support exchange: Compared to Portuguese daughters, Luxembourgish daughters reported receiving more support from their mothers, whereas they tended to support their mothers less (p < .10).

⁵ Separate tests of each interaction effect yielded the same results as the combined test.

With regard to the mothers' perspective, results of regression analyses showed—in line with the correlation analyses—that only affection towards daughters was a predictor for provided social support (see Table 4). A significant interaction effect indicated that affection was also an important predictor for received support, but only for Luxembourgish, not for Portuguese mothers. Value consensus did not significantly (although a tendency was revealed) predict mothers' perception of received support.

Discussion

The present study started from the assumption that intergenerational consensus about family values is an essential premise for intergenerational solidarity within families. Since these questions are particularly pertinent for immigrant families, and to account for possible effects of acculturation on solidarity issues in Luxembourg, Portuguese immigrant families (as the largest immigrant group) were compared to families of Luxembourgish origin.

Regarding the first research question of whether intergenerational relations are described by value similarities or differences, results indicated a small generation gap: Daughters of both national groups disagreed more than their mothers about values of the *hierarchical roles of mother and father*. The rather medium to low adherence to traditional gender role orientations of all participants may reflect changed power structures, responsibilities, and task patterns within and outside the family, in line with earlier findings in Europe (Baltes-Löhr, 2006; Poortinga & Georgas, 2006).

An acculturation gap can be seen with respect to the values of *obligations towards family* and kin in Portuguese dyads: Mothers agreed highest with these values, whereas their daughters' ratings were comparable to the–still relatively high–ratings of Luxembourgish participants. One may suppose that mothers of the first immigrant generation have retained the high collectivistic

value orientations typical for Portugal (Hofstede, 2001). Portuguese mothers may also attribute high importance to family coherence due to a reduced support network in the host country (cf. Merz et al., 2009). In contrast, Portuguese daughters have apparently become more familiar with relationship patterns of their Luxembourgish peers. These intergenerational differences in ideas about family obligations were not reflected, however, in the actual support patterns between Portuguese daughters and their mothers: They reported providing more support for their mothers and receiving less support from them than did Luxembourgish daughters. Apart from culture-specific solidarity norms, this result could also indicate that Portuguese daughters have taken over the role of "cultural brokers" for their mothers (Birman, 2006).

This brings us to the second research question of whether value consensus is related to other aspects of solidarity, and most importantly, the determinants of intergenerational support provision.

Evidence was provided here for a generation specific link: From the daughters' perspective, stronger value consensus between mothers and daughters is found together with (a) a positive relationship quality (affectual solidarity) and (b) mutual support provision (functional solidarity). These results are in line with earlier studies that relate value consensus between the generations to a positive relationship climate in the family (Grusec & Goodnow, 1994; Schönpflug & Bilz, 2009).

From the mothers' perspective these findings were not repeated. Instead, reported maternal affection towards daughters seemed to be independent from value consensus, and mothers were still willing to support their daughters even if they differed in their family values. These findings are in line with the above-mentioned three-generation study carried out by Hammarström (2005). Findings also fit into the framework of the intergenerational stake phenomenon stating that members of the parent generation are generally rather positive when

rating their relationships towards children, whereas children tend to view their relationship to parents in an often more critical way (Giarrusso et al., 1995; see also Winkeler et al., 2000).

In contrast to many other studies addressing the intergenerational solidarity approach, value consensus was measured here by taking into account the actual value ratings of mothers and daughters; thus, mothers' and daughters' *feelings* of sharing similar values were not assessed. According to the intergenerational stake phenomenon, mothers—but not daughters—may "overestimate" the consensus with their daughters. Consequently, even if they differ in their actual value ratings, this seems to be less important for other kinds of solidarity mothers may feel towards their daughters. These differences between perceived and actual value similarity should be considered in future studies that deal with consensual solidarity.

Results of regression analyses further indicated that for daughters, consensual and affectual aspects of solidarity were both independently predicting provided filial support. It seems thus that mother-daughter value consensus is not just a sign of intergenerational understanding and closeness of daughters towards their mothers, but sharing of mutual expectations enhances also daughters' readiness to provide support for their mothers. Instead, daughters' perceptions to receive support from their mothers were only predicted by affection towards mothers, whereas the effect of value consensus on received support was mediated by affectual solidarity.

The result that value consensus predicted mothers' perception of received support was parallel to the views of daughters regarding their provided support for mothers and may thus be a sign for veridicality, a concept introduced by Antonucci and Israel (1986): As the reception (in contrast to the provision) of support is less controllable by mothers, their perception of received support may be more accurate compared to other aspects of solidarity, hence the relation to value consensus in the mothers sample.

An interesting culture-specific pattern was found with regard to affection: Affection correlated higher with perceived filial support in the Luxembourgish than in the Portuguese sample. As mentioned earlier, the higher provision of support by Portuguese daughters for their mothers may be a matter of need as result of the acculturation situation (Merz et al., 2009), whereas for Luxembourgish mothers, receiving support from daughters might be a mere sign of affection.

Limitations of the Present Study

The sample was rather small and included only mother-daughter dyads with a high level of structural and associational solidarity; most of the daughters still lived at home together with their mothers and had daily contact. Therefore, it was not possible to analyze the links of value consensus with associational and structural aspects of solidarity here. Furthermore, the rather large age range of the participants did not allow for the study of aspects of transmission and solidarity in specific developmental phases (see Roest, Dubas, & Gerris, 2010). In the present study, we were more interested in the effect of generational position than in effects of age, and controlling for age of daughters did not provide any different results, yet future studies should address these issues in more detail.

We also excluded the question of whether value consensus is due to transmission or whether other factors such as *Zeitgeist* are involved. Regarding the adherence to obligations towards family and kin, Luxembourgish mothers and their daughters did not differ from each other, and this might also be due to a shared societal value climate. The Zeitgeist issue was purposely excluded here as we were more interested in the consequences of value consensus than in the process of transmission. However, if Zeitgeist plays a major role for intergenerational similarities in family values, the mother-daughter consensus in nonimmigrant and immigrant families might have been expected to differ, which was not the case in this study. Results might

thus hint at a relative (not absolute) intergenerational transmission in both types of families that live in a continuous and in a discontinuous cultural context (see also Vedder, Berry, Sabatier, & Sam, 2009). It has to be noted that in the current sample design culture and immigration state were confounded, as a sample of immigrant families was compared to a sample of native families, thus not permitting for further interpretations of effects due to immigration status or due to previous cultural differences. Finally, as transmission is a bidirectional process, daughters may also influence their mothers' value orientations, especially if these values are highly relevant for daughters (Pinquart & Silbereisen, 2004), but questions such as these may only be answered in longitudinal studies.

Conclusions and Future Prospects

In spite of the often claimed decrease in family values, intergenerational solidarity remains high. Even if there is value change on the mean level, values are transmitted between generations, and the relative similarity in value profiles may be more important for intergenerational solidarity than absolute transmission. Our results showed that value consensus seems to be especially important for affectual and functional solidarity of daughters towards their mothers. In contrast, for mothers we demonstrated a rather *unconditional* solidarity towards their daughters, based on affection towards them. Moreover, an acculturation gap does not necessarily imply an inferior relationship quality or lower solidarity within the family—in contrast, due to special needs, intergenerational solidarity might be especially high in the acculturation situation. It seems that the second generation of immigrants experience faster changes in their value orientations than their actual behavior: Daughters might thus act in line with the expectations of their mothers rather than according to their own wishes and needs. However, the open question remains whether support patterns specific to acculturation have different consequences for relationship quality: For instance, ambivalences might arise from different roles and expectations

within the family context and outside the family, especially in situations of limited choice (cf. Van Gaalen, Dykstra, & Komter, 2010). Thus, the findings reported here also provide interesting insights for policy and practice, and are a starting point for future research regarding how Portuguese immigrant families in comparison to the host country Luxembourgish families organize their intergenerational relations. Given that the migration process considered here is very similar to the migration processes in other European countries, the tackled questions become relevant on the European level.

References

- Antonucci, T. C., & Israel, B. A. (1986). Veridicality of social support: A comparison of principal and network members' responses. *Journal of Consulting and Clinical Psychology*, 54, 432-437.
- Baltes-Löhr, C. (2006). *Migration und Identität. Portugiesische Frauen in Luxemburg* [Migration and identity. Portuguese women in Luxembourg]. Frankfurt a. M.: IKO.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Bengtson, V. L., & Roberts, R. E. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family*, *53*, 856-870.
- Berger, F. (2008). Zoom sur les primo-arrivants portugais et leurs descendants [Zoom on the Portuguese first arrivals and their descendants]. *Vivre au Luxembourg. Croniques de l'Enquête PSELL-3/2006*, 49, 1-2.
- Bernieri, F., Zuckerman, M., Koestner, R., & Rosenthal, R. (1994). Measuring person perception accuracy: Another look at self-other agreement. *Personality and Social Psychology Bulletin*, 20, 367-378.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46(1), 5-34.

- Birman, D. (2006). Measurement of the "acculturation gap" in immigrant families and implications for parent-child relationships. In M. H. Bornstein & L. R. Cote (Eds.),

 Acculturation and parent-child relationships: Measurement and development (pp. 113-134).

 Mahwah, NJ: Lawrence Erlbaum Associates.
- Boehnke, K. (2001). Parent-offspring value transmission in a societal context: Suggestions for a utopian research design with empirical underpinnings. *Journal of Cross-Cultural Psychology*, 32, 241-255.
- Boll, T., Ferring, D., & Filipp, S.-H. (2003). Perceived parental differential treatment in middle adulthood: Curvilinear relations with relationship quality to sibling and parents. *Journal of Family Psychology*, *17*, 472-487.
- Brown, T.A. (2006). *Confirmatory factor analysis for applied research*. New York: The Guilford Press.
- Cigoli, V., & Scabini, E. (2006). *Family identity: Ties, symbols, and transitions*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Daatland, S. O., Slagsvold, B., & Lima, I. A. (2009). Population ageing, intergenerational solidarity and the family-welfare state balance: A comparative exploration. In United Nations Economic Commission for Europe (Ed.), *How generations and gender shape demographic change. Towards policies based on better knowledge* (pp. 127-138). Geneva: United Nations.
- Dickes, P., & Berzosa, G. (2010). Pays multiculturel, pays multilingue? Un modèle pragmatique pour l'analyse des relations langagières au Luxembourg [Multicultural country,

- multilingual country? A pragmatic model for the analysis of language relations in Luxembourg]. Les Cahiers du CEPS/INSTEAD. Population & Emploi, 2010-16, 1-17.
- Fehlen, F. (2008). Multilingualismus und Sprachenpolitik [Multilingualism and language policy].

 In W. H. Loris & M. Hirsch (Hrsg.), *Das politische System Luxemburgs* (S. 45-61).

 Wiesbaden: VS Verlag für Sozialwissenschaften.
- Ferring, D., Michels, T., Boll, T., & Filipp, S.-H. (2009). Relationship quality with ageing parents: On solidarity, conflicts, and ambivalence. *European Journal of Ageing*, 6, 253-265.
- Ferring, D., Thill, J., & Leners, J.-P. (2008). *Ist Altern noch bezahlbar? Perspektiven für Luxemburg [Is ageing still affordable? Perspectives for Luxembourg*]. Reports from the Research Unit INSIDE, No 1, University of Luxembourg.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, *51*, 115-134.
- Georgas, J., Berry, J. W., Van de Vijver, F. J. R., Kagitcibasi, C., & Poortinga, Y. H. (Eds.).

 (2006). *Families across cultures. A 30-nation psychological study*. Cambridge: University Press.
- Giarrusso, R., Feng, D., Silverstein, M., & Bengtson, V. L. (2001). Grandparent-adult grandchild affection and consensus: Cross-generational and cross-ethnic comparisons. *Journal of Family Issues*, 22, 456-477.
- Giarrusso, R., Stallings, M., & Bengtson, V. L. (1995). The "intergenerational stake" hypothesis revisited: Parent-child differences in perceptions of relationships 20 years later. In V. L.

- Bengtson, K. W. Schaie, & L. Burton (Eds.), *Intergenerational issues in aging* (pp. 227-263). New York: Plenum.
- Grob, A., Weisheit, W., & Gomez, V. (2009). Similarity of life goals in the family: A three-generation study. In U. Schönpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 338-369). New York: Cambridge University Press.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology*, *30*, 4-19.
- Hammarström, G. (2005). The construct of intergenerational solidarity in a lineage perspective: A discussion on underlying theoretical assumptions. *Journal of Aging Studies*, 19, 33-51.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd edition). Thousand Oaks, CA: Sage Publications.
- Hu, L.-T. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis:

 Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6 (1), 1-55.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic, and political change in 43 societies*. Princeton, NJ: Princeton University Press.
- Kagitcibasi, C. (2006). Theoretical perspectives on family change. In J. Georgas, J. W. Berry, F. J. R. Van de Vijver, C. Kagitcibasi, & Y. H. Poortinga (Eds.), *Families across cultures* (pp. 72-89). Cambridge: University Press.

- Merz, E.-M., Özeke-Kocabas, E., Oort, F., & Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology*, 23, 291-300.
- Phinney, J. S., & Vedder, P. (2006). Family relationship values of adolescents and parents:

 Intergenerational discrepancies and adaptation. In J. W. Berry, J. S. Phinney, D. L. Sam, & P. Vedder (Eds.), *Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts* (pp. 167-184). Mahwah, NJ: Lawrence Erlbaum Associates.
- Pinquart, M., & Silbereisen, R. K. (2004). Transmission of values from adolescents to their parents: The role of value content and authoritative parenting. *Adolescence*, *39*, 83-100.
- Poortinga, Y. H., & Georgas, J. (2006). Family portraits from 30 countries: An overview. In J. Georgas, J. W. Berry, F. J. R. Van de Vijver, C. Kagitcibasi, & Y. H. Poortinga (Eds.), *Families across cultures* (pp. 90-99). Cambridge: University Press.
- Roest, A. M. C., Dubas, J. S., & Gerris, J. R. M. (2010). Value transmissions between parents and children: Gender and developmental phase as transmission belts. *Journal of Adolescence*, *33*, 21-31.
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: de Gruyter.
- Sam, D. L., & Virta, E. (2003). Intergenerational value discrepancies in immigrant and host national families and their impact on psychological adaptation. *Journal of Adolescence*, 26, 213-231.

- Schönpflug, U., & Bilz, L. (2009). The transmission process: Mechanisms and contexts. In U. Schönpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 212-239). New York: Cambridge University Press.
- Schulz, U., & Schwarzer, R. (2003). Soziale Unterstützung bei der Krankheitsbewältigung. Die Berliner Social Support Skalen (BSSS) [Social support in coping with illness: The Berlin Social Support Scales (BSSS)]. *Diagnostica*. 49, 73-82.
- Statec (2011). *Etat de la population* [State of the population]. Retrieved from http://www.statistiques.public.lu/stat/TableViewer/tableView.aspx?ReportId=384&IF_Lan guage=fra&MainTheme=2&FldrName=1&RFPath=68
- Trommsdorff, G. (2009). Intergenerational relations and cultural transmission. In U. Schönpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 126-160). New York: Cambridge University Press.
- Trommsdorff, G., & Schwarz, B. (2007). The "intergenerational stake hypothesis" in Indonesia and Germany. Adult daughters' and their mothers' perception of their relationship. *Current Sociology*, 55(4), 599-620.
- UNFPA (2006). *State of world population*. Retrieved from http://www.unfpa.org/swp/2006/english/introduction.html
- Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.

- Van Gaalen, R. I., Dykstra, P. A., & Komter, A. E. (2010). Where is the exit? Intergenerational ambivalence and relationship quality in high contact ties. *Journal of Aging Studies*, 24, 105-114.
- Vedder, P., Berry, J., Sabatier, C., & Sam, D. (2009). The intergenerational transmission of values in national and immigrant families: The role of Zeitgeist. *Journal of Youth and Adolescence*, 38, 642-653.
- Vermulst, A. A., De Brock, A. J. L. L., & Van Zutphen, R. A. H. (1991). Transmission of parenting across generations. In P. K. Smith (Ed.), *The psychology of grandparenthood* (pp. 100-122). London: Routledge.
- Willems, H., & Milmeister, P. (2008). Migration und Integration [Migration and integration]. InW. H. Loris & M. Hirsch (Hrsg.), *Das politische System Luxemburgs* (S. 62-91).Wiesbaden: VS Verlag für Sozialwissenschaften.
- Winkeler, M., Filipp, S.-H., & Boll, T. (2000). Positivity in the aged's perceptions of intergenerational relationships: A "stake" or "leniency" effect? *International Journal of Behavioral Development*, 24, 173-182.

Table 1

Confirmatory Factor Analyses and Measurement Equivalence with Regard to Family Values across Groups of Portuguese and Luxembourgish Respondents

	χ^2	df	CFI	RMSEA
Orthogonal two-factorial model ^a	8.62	6	.98	.07
Measurement equivalence across groups ^b	21.05	16	.96	.06

Notes. ^a Two factorial model with independent factors where the latent variables are estimated by parallel indicators. ^b Two factorial model with independent factors and parallel manifest indicators where Φ (variance/covariance matrix of latent variables) and Θ - Δ (error variances of manifest indicators) are restricted to be equal across groups. CFI = Comparative Fit Index. RMSEA = Root Mean Square Error of Approximation.

Table 2

Correlations between Indicators of Intergenerational Solidarity between Daughters and Mothers

(Upper Triangle: Up the Lineage – Daughter to Mother; Lower Triangle: Down the Lineage –

Mother to Daughter)

	1	2	3	4	5
1 Affection	-	.48**	.44**	.55**	.84**
2 Family Obligations	.21+	-	.58**	.31*	.47**
3 Mother-Daughter Value Consensus	.15	.14	-	.48**	.43**
4 Given Support	.61**	.25	.02	-	.54**
5 Received Support	.54**	.25	.34*	.49**	-

Note. **p < .01, *p < .05, +p < .10, two-tailed.

Analyses are controlled for age of daughters, age of mothers, marital status of daughters, job situation of mothers, living in the same household, and nationality

Table 3

Prediction of Daughters' Given and Received Support (Hierarchical Regression Analysis)

Up the lineage	Daughters' Given Support to			Daughters' Received			
	Mothers			Support from Mothers			
Predictor	В	SEB	β	В	SEB	β	
Step 1 ΔR^2	.28*			.21			
Daughters' Age	03	.05	14	.03	.05	.18	
Mothers' Age	.02	.03	.14	.01	.03	.09	
Daughters' Marital Status ¹	1.17	.58	.35+	.22	.58	.07	
Mothers' Job Situation ²	.68	.28	.35*	.26	.28	.14	
Living in the Same Household ³	51	.41	24	47	.41	22	
Nationality ⁴	48	.26	26+	.63	.26	.35*	
Step 2 ΔR^2	.28**			.57**			
Daughters' Affection towards	.42	.14	.43**	.75	.09	.79**	
Mothers							
Daughters' Family Obligations	08	.14	09	.04	.09	.05	
Mother-Daughter Value Consensus	.28	.13	.31*	.05	.09	.06	
Step 3 ΔR^2	.05			.01			
Affection x Nationality	.21	.26	.17	13	.19	11	
Family Obligations x Nationality	09	.25	08	19	.19	17	
Value Consensus x Nationality	.38	.27	.34	.26	.20	.23	

Note. **p < .01, *p < .05, +p < .10.

 1 0 = not married, 1 = married/living with a partner; 2 0 = gainfully employed, 1 = not gainfully employed; 3 0 = yes, 1 = no, 4 0 = Portuguese, 1 = Luxembourgish

Table 4

Prediction of Mothers' Given and Received Support (Hierarchical Regression Analysis)

Down the lineage	Mothers' Given Support to Daughters			Mothers' Received Support from Daughters			
Predictor	В	SEB	β	В	SEB	β	
Step 1 ΔR^2	.17						
Daughters' Age	05	.05	30	.02	.05	.09	
Mothers' Age	01	.03	07	.06	.03	.35+	
Daughters' Marital Status ¹	.31	.60	.10	.43	.65	.12	
Mothers' Job Situation ²	.14	.28	.08	.11	.31	.05	
Living in the Same Household ³	38	.42	18	46	.46	20	
Nationality ⁴	.19	.27	.10	55	.29	27+	
Step 2 ΔR^2	.33**						
Mothers' Affection towards	.54	.12	.60**	.47	.13	.47**	
Daughters							
Mothers' Family Obligations	.14	.13	.15	.13	.15	.12	
Mother-Daughter Value Consensus	07	.11	08	.24	.12	.25+	
Step 3 ΔR^2	.03						
Affection x Nationality	.11	.23	.10	.68	.24	.55**	
Family Obligations x Nationality	29	.39	24	.03	.40	.02	
Value Consensus x Nationality	.23	.25	.21	01	.26	.00	

Note **p < .01, *p < .05, +p < .10.

 1 0 = not married, 1 = married/living with a partner; 2 0 = gainfully employed, 1 = not gainfully employed; 3 0 = yes, 1 = no, 4 0 = Portuguese, 1 = Luxembourgish