ORIGINAL INVESTIGATION

The balance of intergenerational exchange: correlates of net transfers in Germany and Israel

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Abstract The aim of this study was to examine the net balance of transfers between persons aged 50 and older and their family, taking into account both the exchange of money and the exchange of practical assistance (time). Toward this end, a unique net balance outcome measure was computed by costing the value of time transfers into wage equivalents. The study made use of data from the first wave of the Survey of Health, Ageing and Retirement in Europe (SHARE), and focused upon intergenerational exchange in two specific countries: Germany and Israel. The descriptive findings show that—up to an age of about 80 years—the elderly are net providers of help. The outcome variable was next regressed on a set of relevant predictors identified in the literature on intergenerational transfers and support—among them, sociodemographic background, health, social policy, social network and motivation variables. Holding these variables constant, the balance pattern by age remains valid: respondents aged 50–79 in both settings contributed to their family more than they received. These trends in net transfer exchanges were largely similar across both countries and across regions or population groups within both countries. Women were more likely to have a positive net exchange balance and poorer health was associated with net receiving. However, differences also emerged: social capital was more clearly associated with a positive exchange balance in Israel, transfer motivations shaped transfer behaviors in Germany but not in Israel, and socioeconomic variables seemed to work in opposite directions in the two countries. In sum, the results underscore the generally positive contribution of older people to intergenerational exchange in the family. This outcome holds for both Germany and Israel despite their very different conditions of context.

Keywords Intergenerational exchange · Time transfers · Financial transfers · 50+ · Germany · Israel · SHARE

Introduction

A topic of major contemporary concern in gerontology and social policy is the exchange of resources between adult family generations. The rising interest in the nature, extent and dynamics of intergenerational exchange stems mainly from a growing concern as to the viability of public social security systems. As populations age, due to reduced fertility and increased longevity, nations find it more and more difficult to fund the income transfers and health services of new generations of retirees and to provide for younger adults with insufficient means as well. Consequently, some policymakers now turn to the family in the hope of an alternative source of support. The family, together with the state and the market, remains indeed one of the pillars of contemporary welfare (Esping-Andersen 1999), even though a closer examination reveals that it depends for its accomplishments not only on market incomes but also on public transfer incomes (Attias-Donfut 1995; Kohli 1999).

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The realm of intergenerational exchange includes the transfer of financial resources and the provision of practical assistance (often termed as time transfer). While several studies have separately examined time and money transfers across family generations (e.g., Attias-Donfut et al. 2005), it has been difficult to simultaneously address both types of exchange within a single measure. The study reported here represents a new approach in this respect. Using data from the unique Survey of Health, Ageing and Retirement in Europe (SHARE), the analysis examines the net transfer balance of persons aged 50 and older by taking into account both financial and time transfers. The calculation of net transfers by costing the value of time transfers into wage equivalents, as was done in this inquiry, provides the methodological means for doing so. Furthermore, the intergenerational exchange balance and its correlates in two different countries are compared: Germany and Israel. Given the differences between the welfare regimes of these two societies, as well as between their kinship and population structures, such a comparative analysis allows for the examination of selected aspects of the social embeddedness of intergenerational exchange.

Overview

Originally it had been taken for granted that modernization had resulted in a loss of social and economic functions of older people (for example, Burgess 1960), the nuclearization of the family and a structural isolation of the elderly after the exit of their adult children from their household. This yielded a prediction of the elderly as dependent and in need of support. While many of these assumptions have in the meantime been refuted, the idea that the elderly are at the receiving end of intergenerational support is still broadly held. It is against this backdrop that the study of the intergenerational exchange balance gains its importance.

The literature on intergenerational transfers tends to look separately at the exchange of money and the exchange of time. Some studies consider the balance of exchange, but within each sphere of exchange separately. There has been no inquiry that combines all four components of intergenerational exchange—the giving and receiving of time and money—into a single scale that measures not only their prevalence but also their extent. This is largely because the realms of financial and time transfers are governed by different "currencies," the former by money and the latter by effort as measured by forgone time.

Research in France and Germany (Attias-Donfut 1995; Kohli et al. 2000) has consistently shown that the net flow of monetary transfers is downwards, from parents to children. This is also true for time transfers if all forms of assistance (especially grand parenting) are included,

although with advancing age the parents become more frequently net receivers of help (Künemund and Motel 2000: 128). A recent British study confirms the downward flow in the support exchanges between parents aged 55–75 and their adult children (Grundy 2005). It shows that up to three quarters of the parents were involved in some kind of exchange with their children, and that the parents were providers of support more frequently than they were recipients. However, this picture may change in advanced age, so that it is still an open question whether the elderly in general are net receivers of support within the family. Since giving and receiving financial transfers and social support depends on needs, resources, opportunities, and preferences or motives in various combinations, we will first provide a literature overview with a focus on such correlates, in order to construct a model which controls for these effects.

A first component of interest is the motivation behind exchange behavior (Lillard and Willis 1997; Schokkaert 2006). It is usually conceptualized in terms of a contrast between altruism and exchange motivation (Cox and Rank 1992). Altruistic transfer behavior stems from a sense of family solidarity that extends beyond purely personal utilitarian concerns. Exchange motivations, on the other hand, suggest that parents giving transfers are led by old-age-security considerations (Henretta et al. 1997). Silverstein et al. (1995) maintained that intergenerational affection was what most motivated daughters to provide support, while filial obligation and legitimization of inheritance were among the factors that most motivated sons. Kohli and Künemund (2003) analyzed the empirical structure of motives, and show that it is less a split between altruistic and exchange orientations than between unconditional and conditional giving. The former comprises altruistic motives but also feelings of moral obligation. The authors also demonstrate an overlap between different motives and stress that motives need to be measured directly through verbal statements rather than indirectly inferred from behavior.

A second predictor of intergenerational exchange balance is socio-demographic variables that indicate resources or needs. Income and wealth are possibly the most important factors because those who can better afford to give do indeed give more often, and those who are in situations of need are more likely to receive help. An analysis of the American Health and Retirement Survey data, for example, found that parents gave greater financial assistance to their less well-off children (McGarry 1999; McGarry and Schoeni 1995), a pattern that shows up in Germany as well (Motel and Szydlik 1999; Kohli 1999; Künemund et al. 2005).

As a third dimension, intergenerational exchange and the resulting exchange balance may also be affected by

family norms and culture, as has especially been shown with respect to ethnicity and migrant status (Kalaycioglu and Rittersberger-Tilic 2000; Raijman and Semyonov 1997). The combination of both may produce different family regime types with concomitant differences in transfer traditions. This may also occur through regional variation, as is the case in Germany where—even today— East and West Germans show remarkably contrasting interpretations and behavior due to their experiences in two very different societies before 1990. Thus, for example, monetary intergenerational transfers by the elderly in East Germany were more frequent than in West Germany despite the better financial situation of the latter (Kohli et al. 2000). This finding may also be explained by the greater needs in the East-German children's generation after the unification. Gender may also play a role, although its impact has decreased over recent decades (Kohli 2004).

A fourth area of inquiry that frames intergenerational transfer giving is the health and functional status of the participants, although the effect of these variables may be mediated by other factors. Data from the National Survey of Families and Households in the United States provided evidence that parents with poor health are assisted more often (Hogan et al. 1993). Data from the University of Southern California's Longitudinal Study of Generations showed that functional impairment operated alongside early affection to produce greater levels of social support in late life (Silverstein et al. 2002).

Intergenerational transfers are also shaped by a fifth source of variation, namely the nature of income security policy for the aged. Private intergenerational transfers from the elderly to their children depend largely on the extent of public pensions. Many authors in the economic literature argue that this creates an economically inefficient "backflow of public transfers" (Reil-Held 2006, p. 277). By contrast, the sociological literature underscores the positive effects of public transfers to the elderly in terms of such factors as social integration, participation and the quality of intergenerational relationships (Kohli 1999; Künemund and Rein 1999; Lowenstein and Ogg 2003). Of special importance here is the notion that public transfers do not "crowd out" family solidarity in general, but enable the family to provide more intergenerational support and transfers.

A sixth and final area of influence on intergenerational transfers and their balance is the character of intergenerational relations (Cremer et al. 1992), or social networks (Litwin 1996). Several studies indicate that the giving of assistance across generations is associated with frequency of contact and the quality of the ties. Motel and Szydlik (1999) highlighted emotional closeness between the family generations as one of three main predictors of private intergenerational transfers. Other network correlates of giving and receiving transfers include marital status,

particularly divorce (Furstenberg et al. 1995; Pezzin and Schone 1999). Divorce is usually associated with a fall in economic resources. Middle aged children who are separated or divorced have higher probabilities of receiving financial transfers from parents, as mentioned above, indicating a need-directed (altruistic) family transfer process (Künemund et al. 2005). This is important because parental transfers have become increasingly salient for younger birth cohorts in Germany due to a decline in real wages and a growth of unemployment since the 1980s (Kurz 2004).

The present study examines intergenerational exchange balance in two different countries: Germany and Israel. It allows assessing the contextual effects of welfare state institutions as well as socio-demographic structures and cultural traditions—an assessment that is not easily possible if a larger number of countries are included.[1] The goal is not only to compare the levels of giving and receiving in the two countries (and their regional or ethnic subunits) but also the patterns of contextual predictors (Kohli and Albertini 2007). The comparison between Germany and Israel—in addition to its obvious descriptive interest—is especially promising in this respect because the two countries differ not only in their public welfare arrangements but also comprise systematic socio-demographic and socio-cultural differences among their population groups.

Our contextual comparison shows that Germany has a somewhat stronger welfare state. This is reflected in that country's higher public social expenditure as a percentage of Gross Domestic Product (GDP) and the lower percentage of its population below the relative poverty line (in terms of post-tax post-transfer equivalence income). Israel, in turn, has a younger population and larger family networks. The macro-level measures regarding public welfare expenditures and relative poverty rates suggest, on the one hand, that there may be a better institutionally based opportunity structure for intergenerational exchange in Germany. This might result in a larger extent of intergenerational financial and time transfers in German society. On the other hand, the better population-based opportunity structure for intergenerational exchange in Israel suggests a greater potential for exchange. As to the pattern of predictors, the stronger welfare state in Germany means that transfers should depend less on the needs of the receivers (which are better provided for by the welfare state) as well as on the resources of the givers (who need to save less in view of future risks as those will be better provided for by public sources), so that Germans should have more discretionary room for transfers.

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[1] There are several comparative studies of intergenerational transfers and support across Western Europe (e.g., Attias-Donfut et al. 2005; Albertini et al. 2007) but only one—the OASIS study—that includes Israel (Lowenstein and Daatland 2006). The latter, however, does not allow quantifying social support in monetary terms.

Taken together, there is no single robust explanation of intergenerational exchange balance. Our literature review yields a multidimensional conceptual model of the predictors of intergenerational exchange. The main components to be addressed in the inquiry that is spelled out in the following sections include: (1) motivations for exchange, (2) sociodemographic background, (3) social norms and family cultures, (4) health and functional status of the participants, (5) social policy arrangements related to intergenerational exchange, and (6) social network ties.

Our aim is not to provide a comprehensive explanation of intergenerational exchange. This would require an analysis of dyadic relationships (e.g., between a parent and a specific child), taking into account the resources and motivations of the giver, the needs and ability to reciprocate of the receiver, and the quality of the relationship itself (see Kohli and Albertini 2007). The scope of our paper is more modest. We will explore which groups of the elderly have which net exchange balance, and whether this holds after controlling for the most relevant predictors identified in the literature. We will also investigate some aspects of the predictive framework, and whether it varies between the countries.

We hypothesize that:

1. The intergenerational exchange balance will be positive in both countries but decrease by age (as people have fewer resources for giving, and become more vulnerable and thus more in need of receiving).
2. Health and functional status will be positively associated with the exchange balance.
3. Germany and Israel will have different predictors of intergenerational exchange, with resources and needs less associated with the exchange balance in Germany.

Data and methods

The analyses were based on the first wave of the SHARE.[2] The SHARE enterprise is unique in its international and interdisciplinary approach. Based upon household samples, the SHARE questionnaire solicits information from

persons aged 50 and older, and their spouses regardless of age, using computer-assisted personal interviews and supplementary self administered questionnaires ("drop-off"). The German data were collected in 2004 and included 3,020 personal interviews, of which 2,935 were from respondents aged 50 and above (Table 1). Among them, 1,879 filled in the drop-offs. The Israeli data were collected in 2005–2006. The current analysis utilizes a preliminary sample of 1,813 interviews collected through March 2006. Respondents aged 50 and over accounted for 1,732 of the individual interviews. Among them, 1,292 persons filled in the drop-off questionnaires. The analyses in this paper are mainly based on this sub-sample since the drop-off includes key variables addressed in the model. Descriptive results, however, are based on the full sample wherever possible. Sample weights for Germany were used according to Klevmarken et al. (2005), for Israel we calculated design weights on the individual level to account for the sample stratification by population group, age, and sex.

Variables

The analysis addressed the balance of private intergenerational exchange of money and instrumental support between respondents aged 50 and older and persons from outside their households, mostly their children. Information concerning financial transfers was provided by a designated household financial respondent (in couples with separate finances both partners were interviewed). For the individual level inquiry, we created a working data file in which the answers from the financial respondent were assigned to his or her partner living in the same household. The amounts given and received in such cases were divided by two, to avoid overestimation.

Respondents were asked if they gave a financial or material gift amounting to 250 € or more in the last 12 months. In addition, the value of the transfer was recorded for up to three beneficiaries. For the few cases with missing information about the extent of the financial transfer, the corresponding age group average was imputed. Respondents were also queried about receipt of financial transfers during the previous twelve months and the amount received, in Euros. Missing responses were replaced by mean value imputation here as well. The currency values in the Israeli data were translated into Euros using the average exchange rate of 1 New Israel Shekel equal to 0.1796 €.

The SHARE questionnaire also asked whether respondents helped others outside the household in the last 12 months, by giving personal care, practical household help, administrative paperwork or looking after grandchildren. For those who gave support, the extent of help was measured as the number of hours given. Receipt of social support was solicited from one member of the household—

Table 1 Sample distributions in Germany and Israel by age group, gender and region or population group

	50–59			60–69			70–79			80+			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
	n														
Germany															
West Germany	349	418	767	434	433	867	233	234	467	49	117	166	1,065	1,202	2,267
East Germany[a]	85	105	190	115	120	235	56	69	125	9	28	37	265	322	587
Total	452	545	997	564	565	1,129	293	310	603	58	148	206	1,367	1,568	2,935
Israel															
Veteran-Jewish Israelis[b]	192	280	472	175	190	365	141	148	289	68	56	124	576	674	1,250
Arab-Israelis	73	81	154	72	61	133	36	24	60	8	2	10	189	168	357
Russian immigrants[c]	14	23	37	21	25	46	11	20	31	4	7	11	50	75	125
Total	279	384	663	268	276	544	188	192	380	80	65	145	815	917	1,732

Source: Survey of Health, Ageing, and Retirement in Europe 2004 (Germany, Release 1) and 2006 (Israel, Release 0). FALL: own calculations, unweighted

[a] Persons who lived in the GDR before 1989

[b] Excluding persons who immigrated to Israel from the FSU after 1989

[c] Persons who immigrated to Israel from the FSU after 1989

the family respondent. To allow data analysis on the individual level, we again copied the information of the family respondent to the partner. As for the extent of social support, the hours were divided by each partner in the couple, even though this may modify possible gender differences. Again, in the few cases where individuals received or gave support but information on the amounts was missing, the means of the corresponding age groups were imputed.

The outcome variable—balance of intergenerational exchange—was calculated as the individual difference between transfers given and received. In order to address the exchange of both time and money, it was necessary to "cost" the value of social support. Toward this end, we calculated the value of hours of instrumental help with a wage rate of five Euros per hour in Israel and ten Euros per hour in Germany. This gross hourly rate is the boundary between low and regular income in each setting (Brenke 2006; Central Bureau of Statistics 2007), and reflects the relative costs of purchasing social services. Thus, for example, provision of 100 h of help to a grandchild was equivalent to a transfer of 1,000 € in Germany. As for the balance of exchange, we calculated for every respondent the total amounts given minus the total amounts received (in Euros). The outcome score was positive for respondents who gave more money or material gifts than they themselves received, and negative for those who received more than they gave.

Socio-demographic background

"Age group" was organized in decades from 50–59 years old to 80 and above. The variable "population group"

reflects the most important social divisions in each of the two countries. Thus, population groups were addressed by region in Germany at the time of reunification (East–West) and by "ethnicity" in Israel (veteran-Jewish-Israelis, Arab-Israelis, and new Russian immigrants who arrived in Israel after 1989). Region and ethnicity are in that sense indicators of different family norms and cultures. In order to address education in a comparable manner, we combined school and further education, including university and occupational training, into three broad educational levels: low (low school and low further education), middle (low school and high further education or vice versa) and high (high school and high further education). Financial status was considered by means of two indicators. First was net equivalent household wealth in quintiles, adjusted by the number of household members according to the OECD equivalent scale (first individual counts 1, second individual and above 0.5). Second was a subjective assessment of financial situation. The household respondent was asked if the household is able to make ends meet with great difficulty, some difficulty, fairly easily or easily. For individual level analysis, the household respondent's answer was assigned to every household member.

Health and functional status

Mental health was measured by "cognitive functioning", calculated on a scale of orientation to time and place (0–4) and "depressive symptoms" (counted on the Euro-D Depression Scale). "Self-perceived health" ranged from 1 (very bad) to 5 (very good), and "chronic diseases" indicated the presence (1) or absence (0) of such. Finally,

functional status was measured as the number of difficulties in instrumental activities of daily living ("IADL limitations").

Social policy

The variable "pension dependency" is based on the share of income from pension in relation to income from other sources such as employment or private transfers. We consider high pension dependency to exist when 80% or more of total individual income is provided by public or private pension income. The variable "health insurance" indicates public versus private coverage (the latter including both, private supplement and private only insurance).

Social networks

A wide range of kinship variables was employed, including "marital status" (0–1), "number of children," "number of grandchildren" and "great-grandchildren" (0–1). We also included a count of living parents and parents-in-law (0–4), and the number of siblings alive."Geographic proximity" to the closest child reflected four values: distant proximity (more than 100 km away), medium proximity (between 1 and 100 km), close proximity (less than 1 km or same building) and same household. "Frequency of contact" with the most contacted child ranged from 1 (never, including those without children) to 5 (daily).

Motivation

Two motivation measures were employed. First was a mean scale "family duties" in which higher scores reflected greater unconditional motivation towards intergenerational transfers (1–5). The scale included statements such as "Parents' duty is to do their best for their children even at the expense of their own well-being" and "Grandparents' duty is to contribute towards the economic security of grandchildren and their families". The second measure asked who should bear the responsibility for tasks like financial support for older persons who are in need and for personal care for older persons who need help with bathing or dressing. The answer categories range from 1 (family only) to 5 (state only). A mean scale was created and coded such that higher scores reflected greater state responsibility.

Statistical analysis

The analysis was carried out through the statistical software package STATA 9. First we performed a description of the outcome variable according to country, age group, gender and region or population group. Next was bivariate analysis in which the balance of exchange outcome was regressed on each of the independent variables by means of ordinary least-squares regression (OLS). Finally multivariate regressions were executed using the full model, again by OLS. All regression analyses were run separately for the Israeli and German samples. We corrected for the fact that more than one respondent per household answered the survey questions using robust cluster variance estimation.

Results

Table 2 presents the amount and the net direction of the overall balance of exchange. As noted earlier, the sums in Euro reflect both the financial amounts and the time exchanged (in terms of Euro values in hourly wage equivalents). Positive amounts indicate a greater extent of giving than of receiving and negative amounts indicate the opposite. In general, the support balance for the population aged 50 and over was similar in both countries, with an average annual sum of 2.229 € in Germany and 2.429 € in Israel. Respondents aged 80 and over in both countries showed a negative balance (except Arab-Israelis). All other age groups demonstrated a positive balance. In Germany, those aged 60–69 had the greatest degree of giving as opposed to receiving. Respondents aged 50–59 were also net givers, but to a lesser degree and those aged 70–79 were even less so. In Israel, the greatest tendency of net giving was found among those aged 50–59, followed closely by the 60 to 69-year olds and to a much lesser degree by the 70 to 79-year olds. Results from sensitivity analyses (not presented in the table) showed the robustness of these findings, when basing the exchange balance calculation on varying values of instrumental help due to selected hourly wage rates. The table indicates, moreover, that German men and women were generally similar in the degree of exchange but there was some gender variation by age. German women aged 50–69 were greater givers than men, but men aged 70–79 were greater givers than women of this age group. Among respondents aged 80 and over, the women were receivers to a profoundly greater degree than the men. In Israel, women were also net givers to a greater degree than men. This was especially true among women aged 50–59 and to a lesser degree among those aged 60–69. However, women aged 70–79 gave less than men, even though both were net givers. Israeli women aged 80 and over received much more in terms of Euro equivalents of support than men.

As for within-country population group comparisons, similarities reigned for the most part in Germany. However, East-German women aged 60–69 were net givers to a greater degree than their counterparts from the West, while women aged 70–79 from the East were net givers to a lesser degree. In Israel, Arab respondents had different

Table 2 Balance of support: Euro given minus Euro received in Germany and Israel by age group, gender and region or population group

	50–59			60–69			70–79			80+			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
	Balance (Euro given minus Euro received)														
Germany															
Total[a,b]	2,138	3,619	2,872	2,772	4,302	3,555	2,046	1,242	1,570	−175	−3,246	−2,402	2,195	2,257	2,229
West Germany	2,342	3,936	3,128	2,973	3,797	3,392	2,211	1,496	1,798	−108	−3,280	−2,350	2,361	2,223	2,286
East Germany[c]	1,611	3,087	2,365	2,142	5,859	4,112	1,501	777	1,036	[− 620]	(−3,367)	−2,801	1,690	2,506	2,160
Israel															
Total[a,d]	2,015	4,095	3,161	2,792	3,285	3,048	1,913	1,483	1,654	−652	−1,760	−1,276	2,050	2,736	2,429
Veteran-Jewish Israelis[e]	2,273	4,188	3,317	3,124	3,813	3,476	1,865	2,004	1,946	−401	−894	−678	2,246	3,116	2,719
Arab-Israelis	2,401	4,813	3,661	4,096	1,793	2,810	1,526	(31)	611	[1,703]	[3,194]	(2,328)	2,803	2,701	2,747
Russian immigrants[f]	(576)	(3,369)	2,225	(1,328)	(2,520)	1,956	(2,247)	(567)	1121	[− 2,163]	[− 5,089]	(−3,906)	979	1,589	1,337

Source: Survey of Health, Ageing, and Retirement in Europe 2004 (Germany, Release 1) and 2006 (Israel, Release 0). FALL: own calculations, weighted. ( ) = unweighted $n < 30$, [ ] = unweighted $n < 10$

[a] The maximum of hours given/received is 16 a day

[b] Costs for an hour of social support in Germany: 10 €

[c] Persons who lived in the GDR before 1989

[d] Costs for an hour of social support in Israel: 5 €

[e] Excluding persons who immigrated to Israel from the FSU after 1989

[f] Persons who immigrated to Israel from the FSU after 1989

overall patterns of exchange. For example, Arab men aged 60–69 gave to a greater degree than their veteran-Jewish counterparts, but Arab women in the same age group gave much less than the Jewish women. Moreover, Arab men in this age group gave more than Arab women, while veteran-Jewish women gave more than veteran-Jewish men. Among 70–79 year olds, Arab women gave to almost the same extent that they received, but Jewish women in the same age group had a positive net balance in favor of giving of some 2,000 €. The greatest discrepancy emerged among those aged 80 years old and older: veteran-Jewish-Israelis received slightly more than they gave and Arab-Israelis gave much more than they received, especially the women. In comparison, the Russian immigrant respondents were similar to the veteran-Jewish-Israeli group, except that their net extent of giving was smaller.

Table 3 presents the unadjusted bivariate associations of the balance of exchange measure. In Germany, a large collection of background characteristics and social ties variables were associated with the outcome. Two health measures and one motivation variable were also associated. In the Israeli sample, a slightly greater number of variables were correlated at this level. Moreover, variables from all of the variable blocks were found to have a bivariate relation, including those from the area of social policy. In the next step, therefore, the exchange balance outcome was regressed on all the variables in the analysis in a multivariate analytic procedure.

Table 4 presents the results of these multiple regressions. In the German sample, three background variables retained their significant association with exchange balance, even after controlling for the effects of the other variables. Respondents aged 80 and above had a negative association, indicating that the older respondents were less likely to have positive net exchanges. Women and respondents in the second wealth quintile were more likely to have a positive net exchange balance. Moreover, one of the two health variables that were significant at the bivariate level remained significant at the multivariate level of the analysis: persons with more IADL limitations were less likely to be net givers.

Turning to the social network variables, the table shows that only two such variables were meaningful at the multivariate level. German respondents with medium residential proximity to their closest child were less likely to be net givers than the reference category as were respondents who had great-grandchildren. In addition, the greater the sense of family obligation indicated, the greater their tendency to be net givers of support. However, the exchange balance outcome in Germany was unrelated to the social policy measures used in the analysis. Finally, while a number of predictors were indeed identified, the strength of the respective associations was modest.

Table 3 Balance of support: unadjusted bivariate correlations

	Germany	Israel
Background		
Age group 60–69[a]	0.06*	−0.02
Age group 70–79[a]	−0.06*	−0.09**
Age group 80+[a]	−0.14**	−0.12*
East Germans[a]	−0.01	
Arab-Israelis[a]		0.02
Russian immigrants[a]		−0.06**
Women[a]	0.04*	0.06**
Middle education[a]	0.02	0.09*
High education[a]	0.07	0.11*
Wealth second quintile[a]	0.09**	−0.03
Wealth third quintile[a]	0.09**	−0.06
Wealth fourth quintile[a]	0.13**	−0.00
Wealth fifth quintile[a]	0.12**	0.14**
Make ends meet	0.06	0.16**
Health		
Cognitive orientation	0.08	0.09**
Depressive symptoms	−0.04	−0.15**
Self-perceived health	0.11**	0.12**
Chronic disease[b]	−0.05	−0.09**
IADL limitations	−0.11**	−0.07*
Social policy		
High dependency on pension income[c]	−0.05	−0.10**
Public with private health insurance[c]	0.05	0.07*
Social ties		
Has a partner[d]	0.10**	0.13**
No. of children	0.12**	−0.01
Medium proximity with closest child[d]	−0.05	−0.02
Close proximity with closest child[d]	0.09	−0.01
In the same household[d]	−0.00	0.03
Frequency of contact[e]	0.16**	0.10**
No. of grandchildren	0.06*	−0.03
Has great-grandchildren[d]	−0.11**	−0.10**
No. of living parents	0.03	0.07*
No. of siblings	0.03	0.03
Motivations		
State responsibility	−0.05	−0.08*
Family duties	0.09**	0.03
Observations	1,696	1,103

Source: Survey of Health, Ageing, and Retirement in Europe 2004 (Germany, Release 1) and 2006 (Israel, Release 0)

FALL: own calculations, unweighted

* Significant at 5%

** Significant at 1%

[a] Reference categories: Age group (50–59); Region (West Germans); Group (Veteran-Jewish Israelis, excluding persons who immigrated from USSR after 1989); Gender (Men); Education (Low); Wealth (first quintile)

[b] Reference category: chronic disease (absence of chronic disease)

[c] Reference category: pension ratio (low dependency on pension income); health insurance (public only)

[d] Reference categories: partner (does not have a partner); residential proximity with closest child (far proximity); great-grandchildren (does not have great-grandchildren)

[e] Frequency of contact with most frequently contacted child

Table 4 Balance of support: adjusted multivariate correlation

	Germany	Israel
Background		
Age group 60–69[a]	0.02	−0.01
Age group 70–79[a]	−0.07	−0.07
Age group 80+[a]	−0.11**	−0.08
East Germans[a]	−0.00	
Arab-Israelis[a]		0.08
Russian immigrants[a]		−0.06
Women[a]	0.06*	0.08**
Middle education[a]	−0.02	0.05
High education[a]	0.02	0.07
Wealth second quintile[a]	0.07*	−0.09*
Wealth third quintile[a]	0.04	−0.10*
Wealth fourth quintile[a]	0.07	−0.06
Wealth fifth quintile[a]	0.06	0.06
Make ends meet	0.03	0.08*
Health		
Cognitive orientation	0.02	0.01
Depressive symptoms	0.03	−0.06*
Self-perceived health	0.06	0.08
Chronic disease[b]	−0.01	−0.04
IADL limitations	−0.06*	−0.00
Social policy		
High dependency on pension income[c]	0.02	−0.01
Public with private health insurance[c]	0.02	0.02
Social ties		
Has a partner[d]	0.01	0.09*
No. of children	0.04	−0.13
Medium proximity with closest child[d]	−0.09*	−0.05
Close proximity with closest child[d]	0.05	−0.04
In the same household[d]	−0.06	−0.04
Frequency of contact[e]	0.07	0.11*
No. of grandchildren	0.06	0.09
Has great-grandchildren[d]	−0.08*	−0.04
No. of living parents	−0.01	0.02
No. of siblings	−0.01	0.01
Motivations		
State responsibility	0.00	−0.03
Family duties	0.08**	0.03
Observations	1,696	1,103
R-squared	0.10	0.12

Source: Survey of Health, Ageing, and Retirement in Europe 2004 (Germany, Release 1) and 2006 (Israel, Release 0)

FALL: own calculations, unweighted

* Significant at 5%

** Significant at 1%

[a] Reference categories: age group (50–59); region (West Germans); group (Veteran-Jewish Israelis, excluding persons who immigrated from USSR after 1989); gender (men); education (low); wealth (first quintile)

[b] Reference category: chronic disease (absence of chronic disease)

[c] Reference category: pension ratio (low dependency on pension income); health insurance (public only)

[d] Reference categories: partner (does not have a partner); residential proximity with closest child (far proximity); great-grandchildren (does not have great-grandchildren)

[e] Frequency of contact with most frequently contacted child

Moreover, the extent of explained variance by the model was modest as well (10%). This suggests that while some important correlates of the outcome in the integrated model were found, much remains to be explained.

The same analysis with the Israeli sample identified seven variables with significant associations with the balance outcome, after controlling for the relative effects of the other variables. These included four background characteristics, one health indicator and two social network variables. Table 4 shows that Israelis in the second and third wealth quintiles had a lower likelihood of being net givers than respondents in the lowest wealth category (reference group). Stated otherwise, those in the mid to lower wealth categories tended to have smaller positive overall support balances than those in the lowest of the wealth categories. Moreover, the easier the respondents found it to make ends meet at the end of the month, the more likely they were net givers. In addition, the table shows that Israeli women had a greater likelihood of having positive net balance scores than men. As for the health factors, we see that the greater the number of depressive symptoms reported, the lower the likelihood of having a positive balance of support. Finally, two social ties were positively associated with the balance outcome. Having a spouse or a partner and the frequency of contact with the most frequently contacted child were both predictors of net giving.

Although variables reflecting the institutional and value structures of Israeli society (social policy and motivations) were associated with the overall support balance outcome at the bivariate levels, they did not maintain their association when the effects of the other variables in the model were considered as well. Thus, for example, while there seemed to be an initial tendency for those who espoused greater state responsibility (as compared to family responsibility) to have a lower likelihood of being positive net givers of support, this association was not upheld in the adjusted multivariate analysis. It should also be noted that the strength of the associations in the multivariate stage of the procedure was modest, as was the strength of the entire model. That is, some twelve percent of the variance in the overall support balance outcome measure was accounted for by the variables in the multivariate regression.

Discussion

Research on family transfers has been largely limited to studies in single countries. While there are some more recent comparative studies across Western Europe (Albertini et al. 2007; Attias-Donfut et al. 2005), including one that comprised Germany and Israel among the countries studied (Lowenstein and Daatland 2006), we found it

fruitful to look in depth at transfers in two specific socie- ties. Germany and Israel share some of the basic characteristics of Western modernity but differ from each other in regard to welfare regime, socio-demographic structure and socio-cultural traditions, and moreover show systematic variation among population groups. Compari- son of these settings allowed us to consider the inter- relationship of the different components of the exchange balance that were addressed in this study.

To examine the phenomenon of private intergenera- tional transfers by older people in its entirety, the analysis looked at both financial transfers and the transfer of time (provision of practical assistance). Both types of transfers were considered in both possible directions: giving and receiving. A uniform consideration of transfers was made possible by costing the value of the time transfers and including these derived values in the calculation of a net transfer balance. Thus, by summing up the financial value of all transfers, a single outcome measure that reflected the essence of the phenomenon was created. This outcome measure was used to examine the key correlates of inter- generational transfers in Germany and Israel.

The results of the empirical analysis revealed that the first hypothesis was largely confirmed. That is, the net transfer balance was positive through age 79 in both countries. This means that in terms of exchange, older people in both settings contributed to the family more than they received. On the whole the net balance decreased with age. It was highest among persons aged 50–69, but even among the 70-year olds giving still outweighed receiving. Only among the 80-year olds and older did the transfer balance reverse its direction. Thus, the findings provide a strong overall confirmation of the patterns established so far by separate studies of each transfer type.

Support was also evident for the second hypothesis concerning the impact of health and functional status, even though somewhat different results emerged in the two countries. In Germany, persons with more IADL limita- tions were less likely to be net givers. In Israel, respondents with a greater number of depressive symptoms were less likely to achieve a positive overall balance of support. However, in both countries, poorer health was clearly associated with net receiving.

The final hypothesis which postulated differences in the predictors of intergenerational exchange between the two countries was only partly supported. Germany and Israel did have different predictive patterns, but contrary to expecta- tions, Israel did not have consistently stronger predictors related to resources and needs. The emerging patterns were inconclusive, with health and functional status being equally predictive in both countries, age (as a proxy for need) being a stronger predictor in Germany, and economic resources a stronger but somewhat ambivalent predictor in

Israel. The socioeconomic variables partly worked in opposite directions in both countries. In Germany, the second wealth quintile had a positive association with net transfer balance, meaning that persons in this group on average had higher positive exchange outcomes than those in the lowest wealth quintile. In Israel, the second and third wealth quintiles had a significantly lower net transfer bal- ance than the lowest quintile. On the other hand, subjective income showed the expected resource effect, with those who had less difficulty in making ends meet having a higher positive balance. The data do not currently provide a con- clusive answer for these socioeconomic differences. One can speculate, however, that the higher level of wealth in Germany may offset the contribution of time transfers, thus leading to a higher positive exchange balance in the second quintile. In Israel, on the other hand, wealth and income levels are generally lower and there is less variation in wealth among the lower quintiles. In this latter case, the practical assistance provided by the lowest quintile may produce a stronger positive exchange balance than that which is achieved in the next higher wealth quintiles.

Additional salient findings from this inquiry are worthy of note. First, women aged 50–69 had greater positive exchange balances than men. That is, when household financial transfers and provision of practical help are con- sidered jointly, it appears that women contribute more than men. This balance gets reversed among the 70-year olds, due perhaps to a decrease in the provision of practical support by older women. Nevertheless, the overall findings point to the significant contribution of women to private intergenerational exchange, a fact that is frequently over- looked when only financial transfers are considered. It cannot be disregarded, however, that the gender difference might be somewhat biased due to the assignment of household level information to individual household members, a limitation of the SHARE household design. Further inquiry in this area is therefore needed.

Second, different predictors also emerged in the block of social ties variables, when comparing the German and the Israeli samples. In the former, respondents with medium geographic proximity to their closest child were less likely to be net givers than the reference category as were respondents who had great-grandchildren. In the latter, having a spouse or a partner and the frequency of contact with the most frequently contacted child were both pre- dictors of net giving. Thus, it seems that in Israel social capital was more clearly associated with a positive exchange balance than in Germany. Therefore, the findings only partially support the notion that exchange is governed by the nature of one's social network.

Finally, the results of the current inquiry did not support the notion that social policy indicators impact upon transfer outcomes in the short run. This result invites a number of

possible reactions. First, it could be that pension and health insurance arrangements influence financial transfers but not that much the transfer of time. Since our exchange balance includes the element of time transfer in the summary measure, this may explain the lack of association. A second observation is that social policy may indeed affect transfers, but the indicators used in this analysis did not sufficiently capture this. Lastly, it may be that intergenerational exchange is governed by familial norms that transcend the effect of social institutional norms. Given all the above, further investigation is needed to clarify this association, or the lack thereof.

A limitation of the present study may be the small degree of explained variance that emerged from the analytic model in both countries, and the relatively small effect sizes for each of the independent variables. This result might suggest that the outcome variable introduced in this inquiry—intergenerational exchange balance—is more complicated than our data allow us to handle. As noted above, a full explanatory model would need to include indicators of the two individuals that are involved in the exchange as well as of their relationship. Furthermore, where money and time transfers follow different lines of causality, the explanatory power of the balance model may be lower (for separate analyses of money and time transfers given and received cf. Kohli et al. 2007). The aim of our study, however, was not a full explanation of our balance measure, but an exploration of whether the elderly are net givers, contrary to modernization theory and many "common sense" assumptions, and whether this holds after controlling for the dimensions identified as relevant in the literature review. In this respect, the results of our study are unequivocal: the elderly—in both countries and all five cultural settings—are net providers of financial and social support, with a reversal of the picture only for the "old old" aged 80 and more. If we included transfers mortis causa, the positive exchange balance would be even more marked, and might extend to the oldest group as well.

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