

reached among natives in Am Schöpfwerk, though immigrants living there also express a high level of scepticism (44.3 per cent). There is a marked polarization of the attitudes among immigrants in Am Schöpfwerk, because 40.2 per cent disagree with this item. In contrast to these results are the attitudes in the other areas: In Laudongasse and Ludo-Hartmann-Platz the scope of disagreement is about two thirds and is almost equally high among immigrants and natives. Independent variables are of some importance. Immigrants as well as natives in Laudongasse and Ludo-Hartmann-Platz tend to be more pessimistic concerning future immigration the older they are. Education has a positive impact for natives in Laudongasse and Ludo-Hartmann-Platz. The proportion of neutral statements is relatively low.

3 Dimensions of interethnic coexistence

At this point we want to make the step from the general evaluation of the neighbourhood to concrete contacts with and the knowledge of people in the neighbourhood. The topic of social interactions in the neighbourhood context has been and still very controversial matter of discussion. A theoretical starting point can be found in the Intergroup Contact Theory, to which the most influential contribution was provided by Gordon Allport (“The Nature of Prejudice”, 1954). There are two basically contradictory theoretical approaches, both of which have been empirically confirmed:

Contact Theory anticipates that more social interactions produce more interethnic tolerance and increase social cohesion and solidarity (Brewer & Miller 1984). Contact Theory was theoretically extended by Pettigrew (1998), who formulated five conditions for positive results of social interactions between groups:

- equal status between groups,
- common goals to be reached,
- intergroup cooperation,
- support of laws and customs and
- potential of friendship.

The antipode is *Conflict Theory*, which argues that (on the local level) diversity fosters outgroup distrust and ingroup solidarity. Early theoretical inputs were given by Erving Goffman, Niklas Luhmann, Ralf Dahrendorf and Lewis Coser, who together had no primary interest in the local level but rather in the macro-sociological and structural level of conflict. Several empirical studies concerning interactions at the local context proved the basic assumptions of Conflict Theory, namely, that ethnic diversity reduces social cohesion and social capital, e.g., Lancee and Dronkers (2008a, b) for the Netherlands, Stolle et al. (2008) on the basis of U.S. and Canadian data, and Letki (2008) for British neighbourhoods.

The variable “interethnic coexistence” is covered via different levels and types of contacts. The classical Contact Hypothesis states that living in segregated neighbourhoods leads to less contact with the majority ethnic group and therefore hinders the

integration of immigrants. The question, however, is how important the neighbourhood is for the interethnic contact of individuals. Boomkens (2006), for example, states that modern city dwellers are oriented towards friends and facilities over a very large area. Their lives and thus their contacts are not limited by the borders of their neighbourhood. Laan Bouma-Doff (2004, 2007a, b) states that processes such as globalisation and communication technology have diminished the influence of the neighbourhood on the social contacts of individuals.

The importance of the neighbourhood for contact, however, differs greatly throughout the course of life. Young children are very much oriented towards their street or their neighbourhood. Working people and (secondary school) students orient themselves towards the city as a whole or even towards other cities, while for the elderly the world narrows back to their neighbourhood or street. Besides the ethnic composition of the neighbourhood, other neighbourhood characteristics can also influence interethnic contact. Physical characteristics such as streets, squares, parks and shopping malls can create possibilities for interethnic contact, also by attracting individuals from outside the neighbourhood. However, in our research we focus on social characteristics of neighbourhoods – the ethnic, housing and household composition as well as education and social interactions. These characteristics are often highly related. A large amount of low-rent dwellings attracts low-income groups that are often also ethnic minority groups (Van Kempen & Bolt 2003). By taking other social neighbourhood characteristics into account, we can determine whether it is due to the ethnic composition of the neighbourhood that people have less interethnic contact or whether the low average income or high percentage of rented dwellings in these neighbourhoods better explain the lack of interethnic contact.

A theoretically stimulating input was provided by Putnam (2007), whose empirical evidence stems from ethnically diverse neighbourhoods in the U.S. He stated that ethnic diversity in neighbourhoods has a negative influence on contact. In heterogeneous populations there is less trust and less understanding between individuals, even between individuals who are alike. The more people are surrounded by “others”, the more they stick to themselves and the less they trust other people. Therefore, people who live in ethnically heterogeneous neighbourhoods will have less contact with “others” and even less contact within their own ethnic group. Lancee and Dronkers (2008 a, b) replicated Putnam’s (2007) research in the Netherlands and found that both natives and ethnic minorities have less trust in their neighbourhood and neighbours when they live in ethnically diverse neighbourhoods. Putnam’s findings were criticised by Giddens (2007), who postulated that it is impossible to apply the same analysis to Europe, because of a lack of comparable data (this was falsified by Lancee and Dronkers 2008a, b). Gesthuizen et al. (2009) and Hooghe et al. (2006) analyzed ethnic diversity on the European national level (data basis: Eurobarometer, European Social Survey) and refuted Putnam’s claim that ethnic diversity results in weaker social capital. Criticism was expressed by Murie and Musterd (2004), who postulated that effects on a national level are not the same as effects on the neighbourhood level, because

- choosing a small-scale spatial level of analysis may imply different mechanism between ethnic diversity and social trust,
- it is much more likely that people of different ethnic groups have social interactions in an ethnically mixed neighbourhood,
- social interactions affect sociological and psychological processes (e.g., building trust).

Table 13: **Recent research in neighbourhood social interactions**

Authors	Research focus
Boschman & van Middelkoop (2009)	connections between residential segregation and interethnic leisure contacts
Martinovic et al. (2009)	the dynamics of interethnic contact on immigrants in the Netherlands
Mollenhorst (2009)	the effect of meeting opportunities on personal relationships
Mollenhorst, Völker & Schutjens (2009)	overview concerning the investigation of neighbour relations in the Netherlands
Pinkster (2007, 2009), Pinkster & Volker (2009)	connections between neighbour relations (localized social networks), social resources, labour market participation and social mobility
Semyonov & Glikman (2009)	research on the interrelations between ethnic residential segregation, social contacts, and anti-minority attitudes in European societies
Völker, Flap & Mollenhorst (2009)	the influence of meeting places on recruiting friendship networks
Gijsberts et al. (2010)	the impact of neighbourhood in interethnic relations
Vervoort, Flap & Dagevos (2010)	the importance of the ethnic composition of the neighbourhood and ethnic minorities' social contacts

Source: own compilations.

It is important to note that there is a twofold theoretical gap in Putnam's hypotheses, because the measures (social trust and solidarity) he used belong to the category of cognitive social capital. He also claimed his results were valid for behavioural social capital, such as the structure of friendship networks or social interactions with neighbours. As a consequence of this gap the behavioural component has to be included as well, if one wants to analyse social capital in the neighbourhood context. Up to now there has been a lack of international comparative surveys combining the cognitive and behavioural aspects of social capital. But now, the GEITONIES database provides the opportunity to connect the cognitive (e.g., trust) and behavioural (e.g.,

friendship networks) components of social capital in an international comparative context.

Earlier research by Gijsberts and Dagevos (2005) tested the influence of the ethnic composition of neighbourhoods on interethnic friendship relations. They found an effect of both the ethnic composition of the neighbourhood and the ethnic composition of the city as a whole on interethnic friendship relations. Minority groups in cities and in neighbourhoods with a higher share of minorities more often have friends from within the own ethnic group. Gijsberts and Dagevos also found better language skills and more contact with natives among minority groups in neighbourhoods with more natives. Laan Bouma-Doff (2004, 2007a, b) tested whether leisure contact of minority groups with natives is dependent on the ethnic composition of the neighbourhood. When personal characteristics, language skills and cultural orientation are taken into account, she found a significant effect of the ethnic composition of the neighbourhood. Bruess (2004) found out that young men more often tend to approve of ingroup favouritism that prohibits interethnic contact, while in contrast young women more often agree with notions of dissimilation or interaction that facilitate encounters with outgroup members. Subgroup analyses (Vervoort et al. 2010) point to the importance of religious affiliations and their consequences for interethnic contacts under certain conditions. Table 13 provides an overview of the state of the art of recent research on this topic.

The following empirical analysis try to reflect the different layers of contacts people might have on a more general and on the local level. Thus, we start with some very general forms of knowledge of people in the neighbourhood. In a next step we investigate the contacts of varying social closeness with persons in the neighbourhood (Chapter 3.1). In this part of the report the focus of attention lies not only on contacts but on conflicts as well. Of course, we are interested in intraethnic interactions, but our special interest is laid on interethnic social interactions between natives and immigrants as these contacts reflect a lot of information about the social climate in a local context. In a final subchapter, the contact quality and the evolution of contacts in the neighbourhood are analyzed. Then we turn to the so-called “overall social network”, which comprises the total number of people the respondents think about in different contact fields. The quantitative as well as the qualitative aspects are investigated, which means the characteristics of the overall networks, too (Chapter 3.2). We proceed to the closest circles of friends and/or relatives of whom up to eight persons could have been named and for whom ample information was gathered. We start with the dimensions and a general characterisation of these networks, and special emphasis is laid on the questions surrounding the ethnic composition of the most important members of our respondents’ social networks. Finally, we look at partnerships as the closest form of interethnic relations, in particular whether the partnerships of our respondents are interethnic or not.

3.1 Knowledge of and contacts with people in the neighbourhood

The dynamics of social integration and social exclusion at the neighbourhood level in European cities was investigated by Bodygendrot and Martiniello (2000). The neighbourhood has without doubt an impact on interethnic relations (Gijsberts et al. 2010). Since Blalock (1969) presented his theory of minority-group relations, it has become a permanent point of discussion which conditions promote or hinder intergroup contacts. Macro-structural theories of intergroup relations (see Blau & Schwartz 1984) are a promising approach but are often not applicable because of data structure. Age and thus generation affiliation is an important variable that influences contacts and with it the formation of social networks. Within a certain age range there is usually some homogeneity in social networks (Kalmijn & Vermunt 2007).

The empirical analyses start with a discussion of the general knowledge of the other people in the neighbourhood and concrete contacts with them, taking into account whether these are interethnic or not.

3.1.1 Knowledge of the people in the neighbourhood

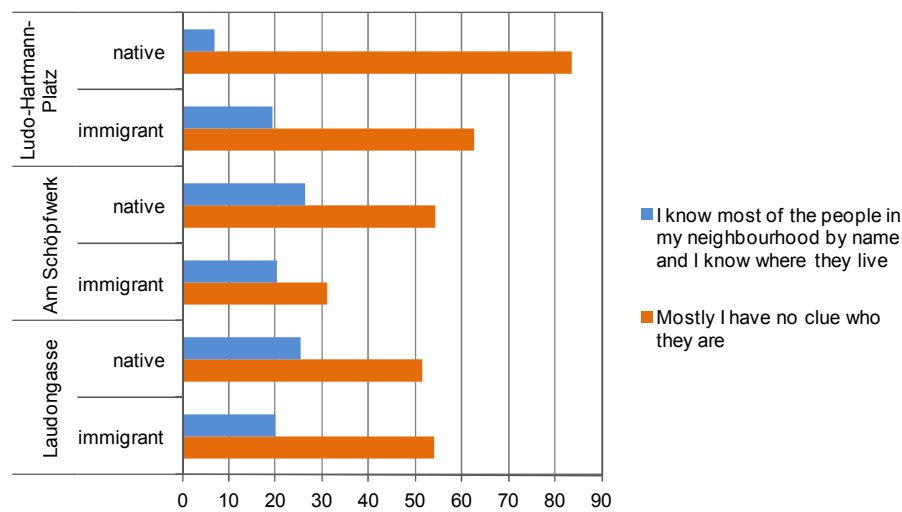
It is a general phenomenon across the investigated neighbourhoods that most respondents do not know the other people residing in the neighbourhood by name or where they live. In all research areas between 60 and 85 per cent of immigrants and natives as well disagree on this statement (compare Figure 4). The peak value occurs among natives in Ludo-Hartmann-Platz (85.8 per cent): Social relations on the local level are characterized by a high degree of anonymity. It is interesting that the variations among immigrant respondents are rather modest. In all three areas about 20 per cent of the immigrants agree with this item. There is more variation in disagreement, the highest being among immigrants in Am Schöpfwerk (70.7 per cent). The proportion of neutral statements is most pronounced in Laudongasse.

χ^2 -coefficients prove that group differences are not significant in Laudongasse and Am Schöpfwerk. The picture is different, however, at Ludo-Hartmann-Platz. Here significant group differences occur in the sense that, contrary to immigrants, the local natives have only very limited social relations in this respect and don't know very much about the other people living there. This is proved by the significantly negative correlations between age and this item among natives in Laudongasse and Am Schöpfwerk. In Laudongasse a negative correlation with length of residence can be observed among immigrants, but it is considerably stronger among natives.

Figure 4 sheds some light on the extent of anonymity in social interactions in the local context. Obviously, anonymity by far dominates in daily interactions in Ludo-Hartmann-Platz, where around 84 per cent of the native residents agree with this statement, and among immigrants too the scope of agreement is high (62.6 per cent). The rate of agreement among immigrants in Ludo-Hartmann-Platz is by far the highest. The group differences are also significant there. If one compares the two items,

the results for natives at Ludo-Hartmann-Platz turn out to be similar. It may be that “not knowing them by name” was more or less interpreted as identical to “have no clue”. Significant group differences can be stated for Am Schöpfwerk, where again the natives (54.5 per cent) verbalize a high degree of anonymity. The immigrants in Am Schöpfwerk know people in the area much better. In Laudongasse no group-specific differences are observable.

Figure 4: Agreement with two statements about the general knowledge of the people in the neighbourhood (in %)



Source: GEITONIES Vienna Survey 2010, own calculations.

Blue: positive statement, orange: negative statement.

Agreement: Sum of “agree strongly” and “agree” on a five-step Likert-scale.

Significant group differences in the neighbourhoods: “I know most of the people...”: Ludo-Hartmann-Platz ($p = .011$); “Mostly I have no clue who they are”: Am Schöpfwerk ($p = .004$) and Ludo-Hartmann-Platz ($p = .004$).

It is clear that the items that analyze general social contacts are interconnected with each other. Thus, it is not surprising that the empirical results to a certain degree overlap. One result must explicitly be mentioned: The native population in Ludo-Hartmann-Platz is the group with the poorest general knowledge of the people around. On the local level their superficial social interactions are dominated by anonymity and social distance. The local context does not provide them with intensive social contacts. Of course, this does not say anything about their possible social interactions with friends or relatives from outside.

3.1.2 Contacts in the neighbourhood

As already mentioned before, the Contact Hypothesis is one of the most well-researched theoretical constructs for designing and evaluating programs to promote more positive intergroup relations, though its utility for explaining the conditions of intergroup contact for racial attitudes and beliefs was and still is often criticized. Under ideal circumstances, when a member of a majority group meets with a minority group member and the experience is positive, an attitude change on two levels results. First, there is an attitude change that is target-specific. That is, initial assumptions about the other arising from the (negative) stereotypes associated with his or her group are replaced by more positive perceptions of the individual. Second, these new positive associations with the individual become extended to that individual's group as a whole, thus ameliorating any existing negative attitudes toward the group. Allport delineated four key conditions for such a meeting: equal-group status within the situation; common goals; intergroup cooperation; and institutional support. Several other conditions were sub-joint, the most important of these being voluntary participation and intimate contact (see Amir 1969, 1976).

There is strong empirical support demonstrating that, when effectively implemented, the conditions described above indeed do lead to a positive attitude change that is target-specific (e.g., Brown & Wade 1987; Hewstone & Brown 1986; Riordan & Ruggiero 1980). The evidence is less clear, however, regarding a global attitude change toward that group. Most studies do not find that the positive attitude toward the individual is translated into a more positive attitude toward the group as a whole or into positive behaviour toward other individual group members (see Hewstone & Brown 1986 for a review; Miller 2002). Scarberry et al. (1997) demonstrate that a global attitude change can be consistently achieved, however, under carefully controlled conditions.

The Contact Hypothesis contains a long list of conditions for a successful contact. However, Pettigrew and Tropp (2000), in their meta-analysis of contact studies, found that it is not necessary for all of Allport's conditions to be present simultaneously for a reduction of prejudices. Mere contact can be a sufficient condition for a bias reduction that is lasting and generalizes beyond the individuals to their larger group. Importantly, however, each of Allport's conditions further enhances the prejudice-reducing effects of mere contact and thus the more conditions that are co-present, the more likely a successful and lasting outcome will be achieved (Wagner et al. 2003).

Unfortunately, in social reality there are significant barriers to meeting many of the conditions and, indeed, even to arranging for a "mere contact" to take place. This, in turn, limits the number of contacts that actually take place. Despite its promise, the Contact Hypothesis appears to suffer from three major defects:

– *The practicality issue*: creating a contact situation involves overcoming some serious practical obstacles. Contact between rival groups according to the conditions

required by the Contact Hypothesis might be very complicated to arrange and expensive to run.

– *Anxiety*: Although participation in a contact is voluntary, the high anxiety involved in the contact situation may hinder its success. The anxiety felt by participants may cause a contact to be unsuccessful or at least not reach its potential. Intergroup interactions are often more anxiety-provoking than interpersonal, and such anxiety may not be conducive to harmonious social relations (Islam & Hewstone 1993; Stephan & Stephan 1985; Wilder 1993). Intergroup anxiety is the result of the anticipation of negative reactions during the intergroup encounter (Stephan & Cookie 2001; Stephan & Stephan 1996). An individual who is anxious is more likely to use heuristics. Thus, if an intergroup contact produces significant levels of anxiety in the individual or individuals involved, that person is more likely to apply stereotypes to the outgroup (Bodenhausen 1990; Bodenhausen & Wyer 1985). Wilder (1993) pointed out that, when in a state of anxiety, group members are likely to ignore any disconfirming information supplied in the contact context. Under such conditions, as Wilder and Shapiro (1989) demonstrated, when a member of the outgroup behaves in a positive manner that contradicts the expectations of the other side, members of the ingroup do not alter their opinions and recall the outgroup as behaving in a manner consistent with the stereotype. In such a case, the contact between these members is unlikely to bring about any change in the group stereotype.

– *Generalization*: How can a generalization be created from a specific contact with certain outgroup members to the outgroup as a whole? The results of a contact, however successful, tend to be limited to the context of the meeting and to the participants (Amichai-Hamburger & McKenna 2006; Reinders 2004; Emerson et al. 2002). One of the greatest challenges to the Contact Hypothesis is deciding whether or not the results of a positive contact with a member of the outgroup will further be generalized. Group saliency during the interaction appears to be of critical importance to successful generalization. However, there is much debate among researchers as to what level that salience should be. Hewstone and Brown (1986) argued that a general contact is likely to be perceived on the interpersonal level and therefore not have any impact on the intergroup level. In other words, if the individual is perceived only as an individual rather than also as a representative member of his or her group, then any attitude change will remain target-specific. They suggested that, for a positive contact to have a wider group-level impact, individual participants need to be seen as representatives of their group so that the (out)group identity is highly salient. Conversely, Brewer and Miller (1984), among others, have suggested that for a contact to succeed, group saliency should be low.

Hamburger (1994) suggested that when the central tendency of the stereotype is the only component to be measured, a large part of the picture is ignored. He added that this component may be the most resistant to change. Thus, negative results of group generalization based solely on central tendency measures may lead to erroneous conclusions regarding the Contact Theory in general. The inclusion of more sensitive

measurements, such as variability, provides a more accurate picture, as well as allowing an investigation into the background processes. Several recent studies demonstrated Hamburger's suggestion that the central tendency is likely to be the more rigid component in the stereotype (Garcia-Marques & Mackie 1999; Hewstone & Hamburger 2000). Clearly, when all the necessary ingredients are present, positive and beneficial results may be obtained; but to produce such an outcome may at best be difficult under traditional circumstances (for a review see Brown & Hewstone 2005).

The Contact Hypothesis requires an equal status between the members of both groups taking part in the contact. According to McClendon (1974), equal status increases the likelihood for perceived similarities between the groups and so enhances the likelihood for improvement in their relationship and in the reduction of stereotypes (Pettigrew 1971). Optimally, there should be both external equal status (in real life) and internal equal status (within the contact) between the people taking part in the encounter. In face-to-face encounters, even very subtle differences in manner of dress, body language, use of personal space and the seating positions taken in the room can belie real (or perceived) status differences. As Hogg (1993) showed, within group interactions people tend to be highly sensitive in discerning subtle cues that may be indicative of status.

How often do immigrants and natives have contact with one another? Why do some people have an ethnically homogeneous network, whereas others have more ethnically mixed relationships? These questions are of key importance for understanding the social distance between immigrants and natives in contemporary urban societies. Although important, prior research has been unable to fully address these questions, for several reasons. First, past research has examined interethnic contacts in general – without examining how interethnic contacts vary across social contexts (e.g., work, neighbourhood, home, school). Second, earlier research studied these questions exclusively from the perspective of immigrants, so that little is known about the determinants of interethnic contacts among natives. Third, there is a strong tendency in prior studies to consider only contacts immigrants have with natives and to leave out contacts that immigrants from a certain country have with immigrants from other countries. Fourth, earlier research has mostly been done in a single country, and very few if any cross-national studies exist.

The public and semi-public space provides a specific opportunity structure which has considerable influence on the frequency and quality of social interactions between individuals and social groups (Mollenhorst 2009; Mollenhorst et al. 2008 a, b; Völker et al. 2009). The individual network diversity and the formation of substructures is to a certain degree the outcome of opportunities for contact or their constraints (Marsden 1990). Neighbourhood-based social networks are usually of considerable importance for immigrants as they provide social resources (Pinkster & Völker 2009) that reach far beyond the social and spatial borders of a neighbourhood (e.g., labour market participation, see Pinkster 2009). One important aspect of the evaluation of social contacts is their frequency, which is strongly interwoven with the aspect of declining

social distance by different contact variants. The frequency of social contacts can serve as a valid indicator of the general social climate in the local context.

Neighbour relations are often more or less stereotyped (Mollenhorst et al. 2008 a, b) and take place on an emotionally more distanced level. “Smalltalk” is a kind of contact that ranges on the lower level of a contact continuum. This continuum ranges from mere “saying hello” to very close variants of contact, for example, “common activities” or “mutual visits”. The general comparison of our neighbourhoods in Table 14 shows that the differences between immigrants and natives are nowhere statistically significant. In Ludo-Hartmann-Platz the χ^2 value ranges at the fringe of significance. In interpreting the bi-variate analyses one can see that the lowest rate of complete lack of contact in the local context (5 per cent compared to rates between 7 and 9 per cent in the other areas) is found among immigrants in Laudongasse. On the other hand, persons with considerable smalltalk contact circles (from 6 to 20 persons) can more often be found in Laudongasse and in Am Schöpfwerk than in Ludo-Hartmann-Platz. This means that, generally speaking, the frequency of contacts is higher in these two neighbourhoods. In Laudongasse immigrants and natives in identical proportions (41 to 42 per cent) exchanged smalltalk. In Am Schöpfwerk the rate of immigrants with frequent smalltalk contact is much higher (47 per cent) than among natives (35 per cent). The latter dominate in the category of three to five episodes of smalltalk. This is very similar to the natives in Ludo-Hartmann-Platz, where 39 per cent of this group exchanged communication with three to five persons. Independent variable analysis shows that age is of importance only for immigrants in Am Schöpfwerk. Older immigrants living there are less frequently exchanging smalltalk.

Table 14: Exchange of smalltalk during the last three months in the neighbourhood

No. of people	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
None	5.0	9.0	9.0	9.0	8.1	7.0
1–2	12.0	10.0	12.0	10.0	13.1	14.0
3–5	29.0	27.0	21.0	38.0	27.3	39.0
6–20	41.0	42.0	47.0	35.0	29.3	32.0
21 or more	13.0	12.0	11.0	8.0	22.2	8.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	99	100

Source: GEITONIES Vienna Survey 2010, own calculations. No significant group differences within the neighbourhoods.

Mutual visits to one’s apartment represent a much closer kind of social contact than mere communication. Visits require a certain degree of mutual confidence and intimacy. Some kind of homogeneity in moral concepts or social belonging is a *condi-*

tio sine qua non for generating confidence in social relations (Marsden 1988) and thus for closer social interactions.

Table 15: **Mutual visits in the neighbourhood during the last three months**

No. of people	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
None	28.3	34.0	33.0	44.0	31.2	36.0
1–2	26.3	20.0	31.0	19.0	25.3	27.0
3–5	24.2	29.0	24.0	23.0	22.2	24.0
6–20	13.1	17.0	11.0	12.0	16.2	13.0
21 or more	8.1	0.0	1.0	2.0	5.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	99	100	100	100	99	100

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Laudongasse ($p = .035$).

Starting with the aspect of complete absence of home visits among natives in Am Schöpfwerk the proportion is by far the highest (44 per cent), whereas among the other groups the rates range between 28 and 36 per cent (compare Table 15). Significant group differences are found for Laudongasse, where 8.1 per cent of the immigrant respondents but no one native welcomed 21 or more visitors at home. In all research areas the bulk of the respondents (between 41 and 55 per cent) ranged in the categories of between one and five visitors. In Ludo-Hartmann-Platz, immigrants obviously have more visitor contacts than local natives.

Table 16: **Arguments in the neighbourhood during the last three months**

No. of people	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
None	80.0	88.0	89.0	79.0	82.0	82.0
1–2	15.0	8.0	11.0	15.0	14.0	17.0
3–5	5.0	3.0	0.0	5.0	2.0	1.0
6 and more	0.0	1.0	0.0	1.0	2.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	100	100

Source: GEITONIES Vienna Survey 2010, own calculations. No significant group differences within the neighbourhoods.

The frequency of conflicts is a further indicator of the general social climate in local contexts. The high rate of complete absence of conflicts in all neighbourhoods is very striking (see Table 16). 80 to 89 per cent of our respondents in both groups had

not had a single conflict with other local people. Only very few people had had an argument with more than five conflict partners. Usually there were conflicts only with one or two people. Among the natives the proportions are the highest in Ludo-Hartmann-Platz and Am Schöpfwerk, among the immigrants in Laudongasse and Ludo-Hartmann-Platz. In the neighbourhood Am Schöpfwerk the differences between natives and immigrants are somewhat more accentuated than in the two other neighbourhoods: Here, more natives than immigrants got into an argument with more than three neighbours.

3.1.3 Interethnic contacts in the neighbourhood

The modes of social interactions are characterized by different degrees of intimacy. It is an old question in empirical research at what point an “acquaintance” becomes a “friend” (Allan 1989; Argyle & Henderson 1985) and is to be understood as “friendship” (Kurth 1970) from a social-psychological standpoint. Clearly, close social relations such as friendships and friendly relations are usually characterized by some degree of interdependence (Kelly & Thibaut 1978), though such close relations are always multidimensional (La Gaipa 1977) and include sociological and psychological components (Lazarsfeld & Merton 1954). It is also a fact that friends are not chosen by mere accident (Verbrugge 1977), and that individual-oriented analyses must take into account the importance of similarity (Zeggelink 1995). Close social interactions are not stable and static but in a permanent process of change. They may become closer or more distant depending on different events or stages in life, etc.

Individual characteristics are important determinants of interethnic contact. Individuals from minority groups differ in the extent to which they have contact with natives. Belonging to a certain ethnic group, age, sex, migration generation, educational level and income are highly related to the readiness for interethnic contacts.

Compositional differences between ethnic groups play an important role as well. Cultural dissonance, such as lack of cultural capital – and perhaps particularly the lack of fluency in the language – of the majority population may make it difficult for some ethnic groups to establish contacts with natives compared to other minority groups. Therefore, those immigrant groups with a lower level of cultural dissonance usually have more contacts with natives (Gijssberts & Dagevos 2005; Gijssberts et al. 2010).

Second-generation migrants and also younger people in general more often have interethnic contacts than the older generation (Boschman & Middelkoop 2009). The main factors are better language skills (Gijssberts & Dagevos 2005) and their education in schools where they meet natives. The first-generation guest-workers were expected to return to their country of origin, which explains why this group was less oriented towards social contacts with members of the receiving society (e.g., Turks and other Muslims; Musterd 2003).

Women from some minority groups have less contact with natives than with men (Laan Bouma-Doff 2004, 2007 a, b). These women participate less in activities gener-

ating opportunities for social contact. Especially Turkish and other Muslim women are oftentimes in a disadvantaged position on the labour market and less often participate in civic organisations, such as sport clubs, etc. (Musterd 2003).

Educational level and income are also important factors. Higher educated people and those with higher incomes have more trust in others and are more open to contacts. Laan Bouma-Doff (2004, 2007 a, b) detected a positive influence of education on the frequency of contact of minority groups with natives, but when she looked specifically at leisure contact she found no effects.

Work can influence leisure contacts of minority groups with natives in two ways. Work can lead to contacts on the job, whereby people get to know other natives, acquire the local language, values and norms, have a more positive attitude towards natives and therefore have more contacts. Gijsberts and Dagevos (2005) came to the conclusion that minority groups have more contact with people from outside their own ethnic group when they have a job. On the other hand, working people have less leisure time, and therefore fewer opportunities to have interethnic leisure contacts.

Finally, household composition can influence interethnic leisure contact. Singles spend more leisure time outside the house than couples and families do and therefore will have more chances of encounters with natives.

Table 17: **Different types of (interethnic) contacts of natives in the neighbourhood**

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	With nat.	With imm.	With nat.	With imm.	With nat.	With imm.
During the last three months, I exchanged smalltalk with ...						
Yes	100.0	68.2	96.7	65.6	94.0	84.3
Total abs.	88	88	90	90	83	83
Mean*	11.1	2.5	7.3	2.3	8.2	4.0
During the last three months, I visited at home/I welcomed in my home ...						
Yes	92.2	37.5	100.0	22.2	90.7	42.6
Total abs.	64	64	54	54	54	54
Mean*	4.4	0.8	4.5	0.5	3.4	0.8
During the last three months, I got in an argument at least once with ...						
Yes	72.7	45.5	35.3	82.4	62.5	50.0
Total abs.	11	11	17	17	16	16
Mean*	1.4	0.5	0.7	1.5	0.8	0.7

Source: GEITONIES Vienna Survey 2010, own calculations. * Mean number of contacts.

Table 17 incorporates three contact variants – two positive (smalltalk, home visits) and one negative (getting into an argument) – which are analyzed comparatively. Starting with smalltalk it is obvious that natives in all three neighbourhoods more frequently interact verbally with other natives. In Laudongasse all native respondents

had such communication, in the other local contexts the rates were slightly lower but everywhere above 94 per cent. Communication between natives and immigrants obviously does not happen as frequently, in particular in Laudongasse and Am Schöpfwerk, where two thirds of the native respondents exchanged interethnic smalltalk during the last three months. There is more interethnic communication in Ludo-Hartmann-Platz, where the rate is 84.3 per cent. A comparison of the mean number of smalltalk comes to the interesting result that the highest rate is between natives in Laudongasse (11.1), followed by Ludo-Hartmann-Platz (8.2) and Am Schöpfwerk (7.3). This means that there is a sharp difference compared with the number of interethnic smalltalk, which are considerably less frequent. The sharpest difference is in Laudongasse (11.1/2.5) and in Am Schöpfwerk (7.3/2.3). One has to add that the results for natives at Ludo-Hartmann-Platz are contrary to the results from above, because 85 per cent exchanged in some smalltalk with immigrants. The natives in this neighbourhood have the highest “visit/welcoming rate” of immigrants (0.8) and a medium conflict rate (0.7).

Continuing with the socially more close contact variant of mutual visits, one notices a sharper difference in the absolute numbers even between natives in Laudongasse and Ludo-Hartmann-Platz. Interethnic visits are a less frequent event than intra-ethnic ones. This is true for all three neighbourhoods. A good indicator is a comparison of the mean number of visits/welcomes: In Laudongasse and Ludo-Hartmann-Platz this number lies at around 4.5 in native/native visits and 3.4 in Am Schöpfwerk, but everywhere less than one in the interethnic context. The lowest numbers are observed in Am Schöpfwerk, where natives welcomed/visited only 0.5 immigrants during the recent three months.

When analyzing the frequency of interethnic conflicts it is interesting to note that natives at Ludo-Hartmann-Platz and Laudongasse more often got into an argument with natives than with immigrants.⁶ Contrary to this is the conflict situation in Am Schöpfwerk, where the natives reported having more frequent conflicts with immigrants than with their compatriots. One must add that the mean number of interethnic conflicts in Am Schöpfwerk was 1.5 for a period of three months, which is not really much. Nonetheless, the conflict rate in the other areas was even lower (below one case per three months). From the perspective of statistical validity, the absolute number of cases forming the basis for the analyses of conflicts was rather small. This means that these results, though very interesting, have to be interpreted with some care.

Table 18 shows the three categories of interethnic contacts from the perspective of immigrant respondents. A striking result is the high proportion of immigrants who exchanged smalltalk with natives. The rates were about 94 per cent in Laudongasse and Am Schöpfwerk but lower (84.3 per cent) in Ludo-Hartmann-Platz. Nonetheless,

⁶ A result that again proved the outcome of the authors’ previous investigations in different categories of Viennese housing stock (Kohlbacher & Reeger 2006).

communication between the immigrant and the native population is a very frequent phenomenon in all three research areas. Concerning intra-ethnic communication and smalltalk with immigrants of different origin, the picture is more diverse: There is a sharp contrast between the high proportion of intra-ethnic communication in Am Schöpfwerk (75.6 per cent) and the low frequency in Laudongasse (23.6 per cent). The situation in Ludo-Hartmann-Platz lies in between these two extremes. If we compare communication with compatriots and immigrants from different countries, the differences in Laudongasse and Ludo-Hartmann-Platz are remarkable.

Table 18: **Different types of (interethnic) contacts of migrants in the neighbourhood**

With people of...	Laudongasse			Am Schöpfwerk			Ludo-Hartmann-Platz		
	Same origin	Other origin	Native origin	Same origin	Other origin	Native origin	Same origin	Other origin	Native origin
During the last three months, I exchanged smalltalk with ...									
Yes	23.6	56.8	94.4	75.6	76.8	94.4	55.4	81.1	84.5
Total abs.	89	88	89	90	90	90	83	82	84
Mean*	1.2	4.9	8.2	4.4	2.9	4.1	5.8	5.7	5.8
During the last three months, I visited at home/I welcomed in my home...									
Yes	25.8	31.8	91.0	67.7	49.2	53.0	59.0	47.5	49.2
Total abs.	66	66	67	65	65	66	61	61	61
Mean*	1.2	1.9	5.7	2.3	0.9	1.2	4.0	1.5	1.8
During the last three months, I got in an argument at least once with ...									
Yes	23.5	41.2	70.6	36.4	18.2	54.5	35.3	47.0	41.2
Total abs.	17	17	17	11	11	11	17	17	17
Mean*	0.4	0.5	1.1	0.4	0.3	0.5	0.5	1.2	1.6

Source: GEITONIES Vienna Survey 2010, own calculations. * Mean number of contacts.

What about the amount of smalltalk? We come to interesting results if we compare the mean values of everyday communication. In Laudongasse there is a considerable variation in the frequency of communication, with a peak value (8.2) of immigrant/native communication but the smallest amount of intra-ethnic smalltalk (1.2). The amount of smalltalk with immigrants of other ethnic belonging ranks on a medium level (4.9). In Ludo-Hartmann-Platz the mean values of communication with all three groups of local people are more or less identical. In Am Schöpfwerk the smalltalk contact of immigrants with immigrants of the same origin is at a higher level (6.8), but the number of interethnic talks is really modest (2.9).

What about the closer interaction of welcoming neighbours in one's own apartment? Immigrants in Laudongasse report frequent mutual visits with natives. With a mean value of 5.7 the number of such visits is highest compared with the other neighbourhoods. In Ludo-Hartmann-Platz and Am Schöpfwerk immigrant/native visits

are more rare and happen only at a rate of one to two during the last three months. It is interesting that in Laudongasse there is a sharp discrepancy between the relative high frequency of welcoming native neighbours and the less frequent phenomenon of welcoming immigrants of the same or of other origin (mean values of 1.2 resp. 1.9). An explanation of this discrepancy seems to be difficult on the basis of our data. The high standard deviation of 10.2 is an indicator of extreme differences in the frequency of mutual visits between the immigrant respondents in our sample. In Am Schöpfwerk and Ludo-Hartmann-Platz mutual visits with Austrians happen at a medium rate. The smallest mean value (2.9) refers to visits with immigrants of other origin in Am Schöpfwerk. At Ludo-Hartmann-Platz the standard deviation of 8.2 for intra-ethnic welcoming indicates a considerable variety in the number of visits between different respondents.

As to the social contacts (smalltalk and visits) with co-ethnics, the general trend is obvious: Contacts are relatively rare in Laudongasse, they happen at a medium rate in Ludo-Hartmann-Platz and are most frequently reported in Am Schöpfwerk. Talking and visiting with immigrants of other origin more often happens in Laudongasse and Ludo-Hartmann-Platz than in Am Schöpfwerk.

With respect to verbal conflicts, the absolute number of cases which were the basis for the conflict analyses is rather small. Table 18 proves that in Laudongasse, where immigrants report the highest frequency of conflicts with natives. 70.6 per cent got into at least one argument during the last three months, though the mean number of conflicts (1.1 during three months) is in the end very moderate. Immigrants in Am Schöpfwerk speak of rare conflicts. The frequency of arguments is highest between immigrants and natives (0.5) and lowest between immigrants of different origin (0.3). It is an important result that, in the case of immigrants, the mean values of conflicts are consistently lower in Am Schöpfwerk than in Ludo-Hartmann-Platz, where conflicts of immigrants with natives and with immigrants of other ethnic background are observed more often than in the local context of Am Schöpfwerk. Even in comparison to the “better-off” neighbourhood of Laudongasse, the mean values of immigrant/native conflicts and conflicts between immigrants of different origin in Am Schöpfwerk are lower.

3.1.4 Evolution of contacts in the neighbourhood – frequency and quality

For a general analysis of the dynamics of group interactions, Brown (2000) provided a profound overview. Social contacts between individuals and groups are very dynamic phenomena. This is particularly true for the interethnic contacts of immigrants (Martinovic et al. 2009). Usually contacts need some time to develop; some may become better over time, others may become worse. Often social distance dominates at the beginning of a relationship, and closer relationships are an outcome and at the same time a vehicle of becoming more acquainted with each other.

Table 19: Evolution of the frequency of contacts in the neighbourhood over the last years

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Pl.	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
More contacts now than previously	45.0	45.0	25.0	23.0	28.0	31.0
Less contacts now than previously	13.0	9.0	20.0	42.0	22.0	7.0
More or less the same	41.0	45.0	55.0	35.0	48.0	61.0
Don't know	1.0	1.0	0.0	0.0	2.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	100	100

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Am Schöpfwerk ($p = .002$) and Ludo-Hartmann-Platz ($p = .020$).

Starting with the evolution of the mere frequency of interactions (see Table 19), we see that in Laudongasse in both groups the proportion of respondents (almost one half) who report an increase in the number of contacts is considerable. This result contrasts the situation in Am Schöpfwerk, where in particular the natives (42 per cent) verbalized a considerable decrease in contact. A further important point is that in Am Schöpfwerk and Ludo-Hartmann-Platz the differences between natives and immigrants are even significant. It is interesting that in Am Schöpfwerk the natives in particular and in Ludo-Hartmann-Platz the immigrant respondents expressed the opinion that the number of contacts had decreased over recent years. In Ludo-Hartmann-Platz the majority of natives (61 per cent) reported no change in the frequency at all.

It is remarkable that the length of residence obviously plays a significant role in the sense that frequency of contacts decreased the longer the duration of residence. This correlation could be found for Laudongasse immigrants and natives, for immigrants in Am Schöpfwerk and for natives in Ludo-Hartmann-Platz. At first glance this appears very strange, but it actually mirrors social reality of modern urban life. Initial openness towards social contacts may be transformed into a more reserved attitude after some negative contact experiences.

Table 20 clearly shows that time changes not only the frequency but also the quality of social interactions. Starting with the neutral news, the majority of respondents in our areas reported that the quality of contacts had remained the same over the last years. The peak value is reached among natives in Ludo-Hartmann-Platz (72 per cent), the lowest proportion among natives in Am Schöpfwerk (41 per cent). Here, the proportion of natives who verbalized a decline in the quality of interactions is by far the highest (41 per cent). This result is completely in line with our analyses about the frequency of contacts. In this neighbourhood the group differences are statistically significant, because among the immigrants only 19 per cent estimated their social contacts as less good than previously.

Table 20: **Evolution in the quality of contacts in the neighbourhood over the last years**

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
Better contacts now than previously	35.0	36.0	25.0	16.0	28.0	17.0
Less good contacts now than previously	5.0	4.0	19.0	41.0	13.0	10.0
More or less the same	59.0	60.0	56.0	41.0	55.0	72.0
Don't know	1.0	0.0	0.0	2.0	4.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	100	100

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Am Schöpfwerk ($p = .002$).

In Ludo-Hartmann-Platz twice as many respondents of both categories reported an improvement and not a worsening of their neighbourhood contacts. In Laudongasse a decline in contact quality was reported by not only very small proportions in both groups of the local population. On the other hand, interactions had also improved – this can be said for both groups of respondents in Laudongasse, in Am Schöpfwerk for 25 per cent of the immigrants and for at least 16 per cent of the natives.

The length of residence plays a role in the sense that the longer the residence, the worse the contact quality. There is a positive correlation of this variable among immigrants in Laudongasse and Am Schöpfwerk, for natives only in Ludo-Hartmann-Platz. Once again negative contact experiences seem to be the cause for this.

3.2 Overall social networks

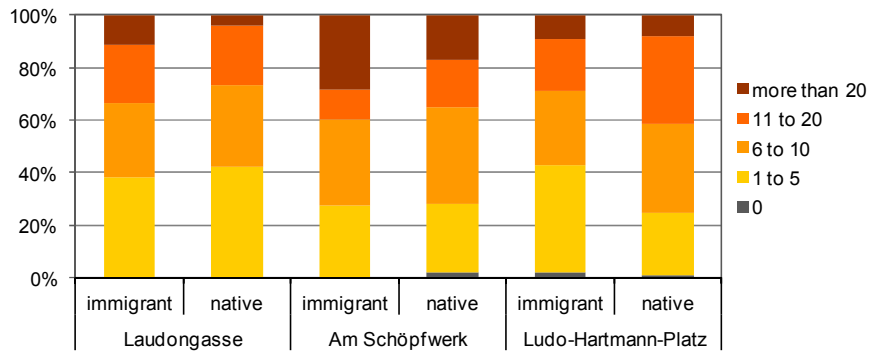
3.2.1 Dimensions of the overall social network

Social networks are of manifold importance. They are, for example, relevant for attaining social status (Lin 1999). Residential segregation to some degree confines social contacts, but this does not mean that social networks are a mere outcome of segregation. In scientific research there has been considerable discussion about the relevance of segregation for interethnic social contacts and the formation of friendship networks (e.g., Massey & Denton 1985; Sigelman et al. 1996; Musterd 2003; Mouw & Entwisle 2006; Cheshire 2007; Laan Bouma-Doff 2007a, b).

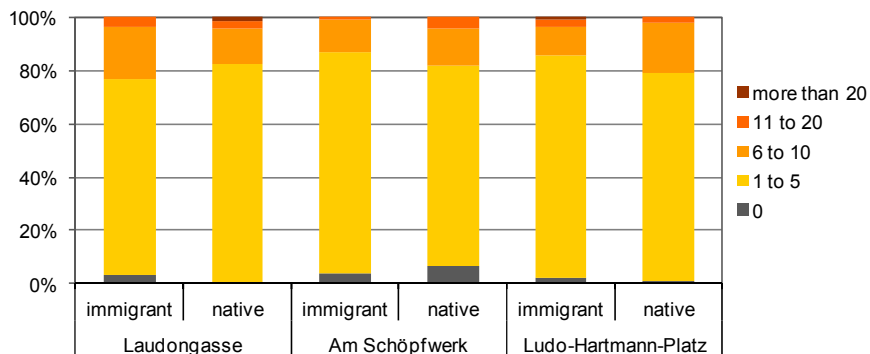
The size of a social network varies considerably from one person to the other and is thus determined by a number of psychological, social, status-related, economic, and other determinants. Before analyzing the composition of social networks one must check the size in absolute numbers.

Figure 5: Size of the global social network for spending free time, confidentiality/advice and helping out

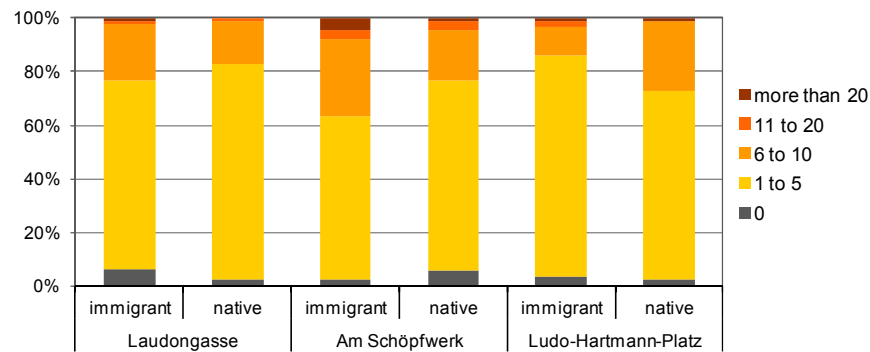
SPENDING FREETIME



CONFIDENTIALITY AND ADVICE



HELPING OUT



Source: GEITONIES Vienna Survey 2010, own calculations. No significant group differences within the neighbourhoods.

Cases of complete social isolation are, of course, rare, but there are some in our sample: among immigrants in Ludo-Hartmann-Platz and natives in Am Schöpfwerk. The vast majority of our respondents reported spending their free time with between one and ten persons. In Am Schöpfwerk relatively extensive contact circles (from 11 to 20 and in some cases even more than 20 persons) are reported by immigrants.

Individual social networks are also segregated depending on the degree of confidence an individual has in different persons. One would not ask someone for personal advice, as usually a closer social or even an emotional relationship and a higher degree of confidence is necessary for this. In Am Schöpfwerk the proportion of native respondents who have no one whom they would ask for an advice lies at about 7 per cent, which is not much, albeit the highest value found in our research areas. Among the immigrants in Am Schöpfwerk at least 3.5 per cent don't have any advisor at all, and the same proportion of persons with a migrant background report this in Laudongasse. In all research areas the majority of respondents (from 73 to 83 per cent) in both categories have a circle of one to five persons who act as personal advisors. In Laudongasse about one fifth of the immigrants and in Ludo-Hartmann-Platz an equal proportion of the natives reported having even six to ten advisors who enjoy their confidence.

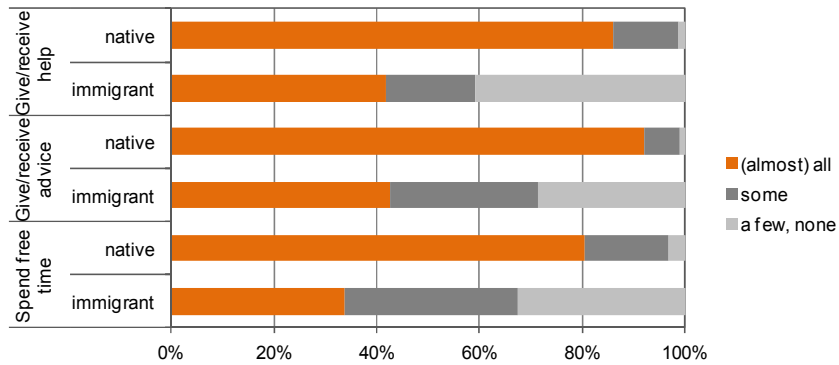
Helping each other also requires close relationships and is usually based on a long-term social interaction. The number of contact partners usually decreases simultaneously with the closeness of a contact category (Pettigrew 1998). This general trend is also mirrored in our data. The vast majority of respondents reported a contact circle consisting of one to five persons, which is considerably less than the circle of people from/to whom they would accept/give some advice. Among natives in Am Schöpfwerk and immigrants in Laudongasse about 6 per cent do not have a single person with whom they could exchange help. Contact circles of six to ten persons are reported by 28.7 per cent of the immigrants in Am Schöpfwerk and by 26.2 per cent of the natives in Ludo-Hartmann-Platz. This means that natives in Ludo-Hartmann-Platz and immigrants in Am Schöpfwerk maintain extensive social networks for the purpose of mutual help. With rising age the help-oriented interactions become more frequent, too. Also education is of importance: There are weak positive correlations for natives in Am Schöpfwerk and immigrants in Ludo-Hartmann-Platz.

3.2.2 Characterisation of the global social network

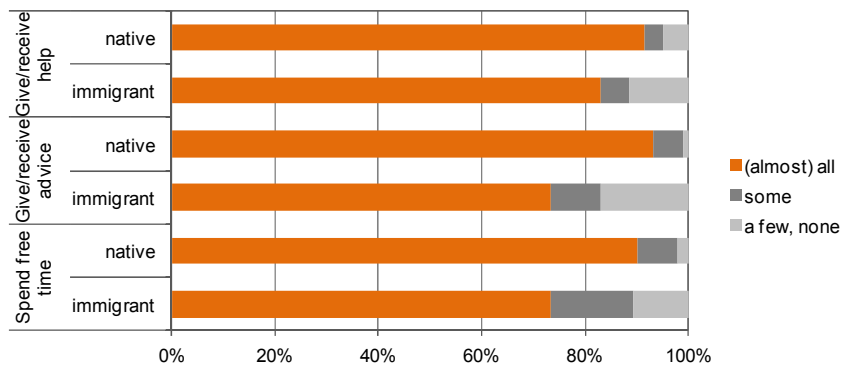
Social ties are usually the product of a complex and focused individual organization process (Feld 1981). Marsden (2004, 2005) provides a detailed overview of network analysis and recent developments in network measurement. The following analysis focuses on the overall structure of the global network of the respondents and intends to answer the question whether there are any differences between natives and immigrants. The overall presentation of the size of the global networks in the different contact fields is given above. It was decided to group the results, seeing that the size of the respondents' global networks in the four contact fields was rather heterogeneous.

Figure 6: Share of people of the same ethnic origin in the global social network by contact fields

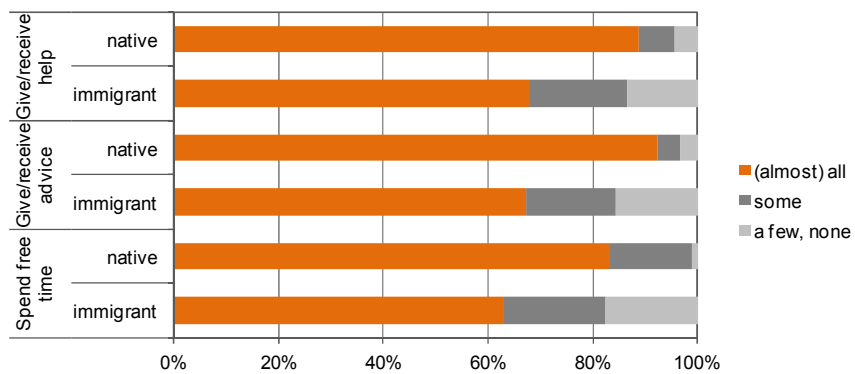
LAUDONGASSE



AM SCHÖPFWERK



LUDO-HARTMANN-PLATZ



Source: GEITONIES Vienna Survey 2010, own calculations.

Figure 6 visualises the fundamental difference between the native and immigrant population, which in Laudongasse can be found in the strong mono-ethnic composition of the social contact circles of natives and the considerable plurality within the networks of immigrants. The χ^2 -analysis reveals that the differences for all contact fields are consistently significant. Despite the dominance of mono-ethnic structures in the networks, natives spend more free time with a mixed group consisting not only of compatriots. In the context of mutual advice the network exclusively consists of people of the same origin. The contact circles of immigrants in Laudongasse are more of a mixed type, in particular compared to the immigrant population of Am Schöpfwerk. With increasing intimacy in a contact field, the proportion of mono-ethnic networks also increases: from one third in the context of spending free time to about 42 per cent for giving/receiving advice or help. It seems to be contradictory that the proportions of immigrants who report having few/none compatriots in the respective contact circles also rise with the intimacy of an interaction, but this trend is not really consistent (32.6 per cent in spending free time, 40.7 per cent in giving/receiving help). In the native group those networks are rare.

In the case of Am Schöpfwerk Figure 6 shows that the natives' contact circles are once again more mono-ethnic than those of the local immigrants and of the natives in Laudongasse, too. Compared to Laudongasse, lower χ^2 -values mirror the fact that the group differences are significant but not as distinctive as in Laudongasse. Concerning all categories of contact, the native respondents report mono-ethnic structures at 90 per cent and even higher proportions. Ethnically mixed social contacts are the most reported for spending free time but occur at a negligible rate in giving/receiving advice (5.7 per cent) or giving/receiving help (3.6 per cent). Concerning independent variables, age plays a role among immigrants and natives as well. There is a negative correlation of the age of native respondents and the number of contacts for spending free time and giving/receiving help.

The immigrants' contact circles are dominated by mono-ethnic structures, though circles of a mixed type can more frequently be found than among natives. Once again mono-ethnic contacts increase from spending free time (73.4 per cent) to giving/receiving help (83 per cent). Nonetheless, the rate of immigrants who only have a few or even no persons of the same origin in their contact circle is considerably higher than among natives: 16.9 per cent in giving/receiving advice and 11.4 per cent in giving/receiving help. The proportion of mixed interaction circles decreases from 16 per cent to 5.7 per cent in the respective contact fields. Among immigrants living in Am Schöpfwerk independent variables are of some importance. There is a positive correlation of age with the contact circles for spending free time and giving/receiving help.

The contact circles of the native residents in Ludo-Hartmann-Platz resemble to a higher degree those in Laudongasse than in Am Schöpfwerk, and group differences are again statistically significant. There is some mono-ethnic dominance in the natives' networks, though one must not neglect the fact that at least 15.6 per cent spend their free time in ethnically mixed groups and 4.4 per cent have only few/none natives

in their circle of giving/receiving help. This means that the networks of the local natives are not as strictly mono-ethnic as in Am Schöpfwerk. The local immigrant population consists of about two thirds of contact partners of the same origin. The increase in proportions in the contact continuum from spending free time to helping is only moderate. In Ludo-Hartmann-Platz it is remarkable that the proportion of multi-ethnic contact circles in each contact category is relatively high (around 19 per cent). Contact networks with a few or even no compatriots can more frequently be found there than in Am Schöpfwerk but less frequently than in Laudongasse. Among the independent variables, age is of some importance for the contact circles of spending free time among natives. There is a negative correlation between age and this group.

A general but not very surprising result is that the proportion of respondents whose social network (almost) completely consists of relatives increases in accordance with the degree of intimacy of a contact (compare Figure 7) and is thus generally higher in giving/receiving help than in spending free time. In each neighbourhood this general trend shows local specificities. In Laudongasse intergroup differences are observable but remain moderate and are not statistically significant.

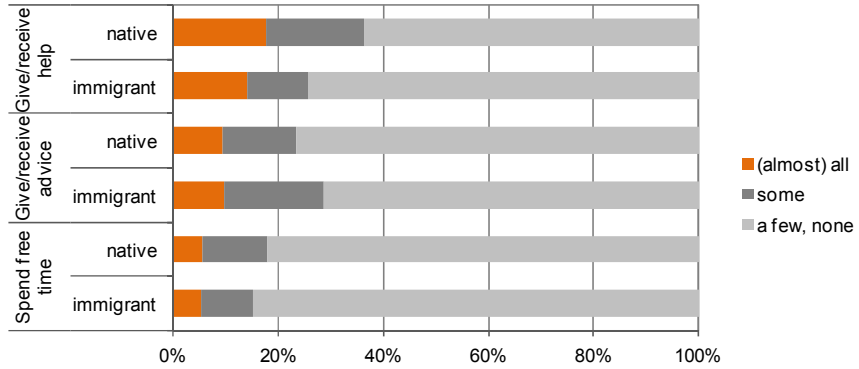
The results in Am Schöpfwerk are significant, at least concerning the item “*spending free time*”. One third of the immigrants in this area spend their free time within a social network that almost completely consists of relatives. A further 32 per cent report a more mixed, and a further one third a network that includes only a few relatives. For advice giving/receiving the networks consist either completely or not at all of relatives but are seldom mixed. In the context of mutual help the rate of mixed networks is on the rise. Compared to the native population, immigrants much more often spend their free time with social groups consisting of their relatives. More than 55 per cent of the natives in Am Schöpfwerk report free-time networks with only a few relatives. There is a profound structural change in the natives’ networks if one observes the context of advice and help. Those contact circles are to about 37 per cent composed (almost) completely of relatives, but it is important to note that these proportions are still lower than among the immigrants in the same area.

From Figure 7 we learn that in Ludo-Hartmann-Platz the group differences in the case of leisure time are significant. Once again, in both groups the networks change in accordance with the intimacy of contacts, from incorporating only a few relatives to a dominance by relatives, with considerably higher proportions in the immigrant group. In Ludo-Hartmann-Platz, too, the recreation networks of natives are composed of only a few relatives, though the proportion of mere relative networks increases in the context of advice and help. The natives’ networks are more of a mixed type than those of the immigrants in the same area.

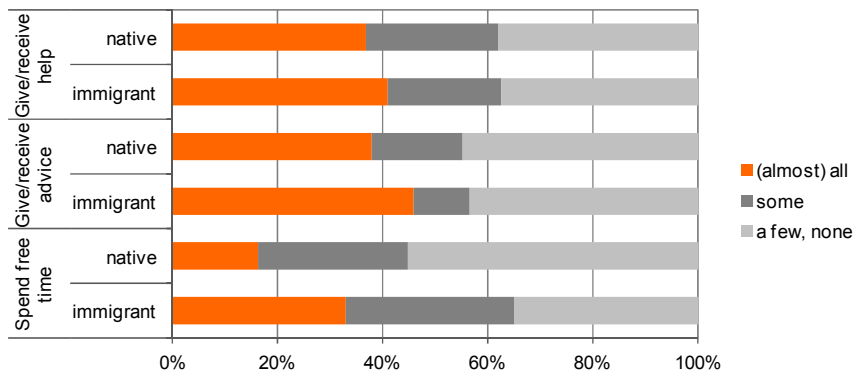
Figure 8 shows that in Laudongasse people living in the same neighbourhood are not very important contact partners. This can be said for immigrants and natives as well. The networks of local natives are more mixed than those of the immigrants. In Am Schöpfwerk, at least in the contact fields of leisure time and mutual help, the results are more significant.

Figure 7: Share of people in the global social network who are relatives of the respondent by contact fields

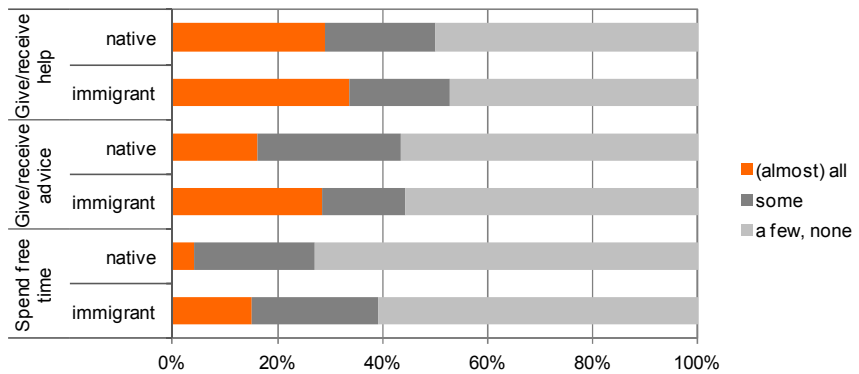
LAUDONGASSE



AM SCHÖPFWERK



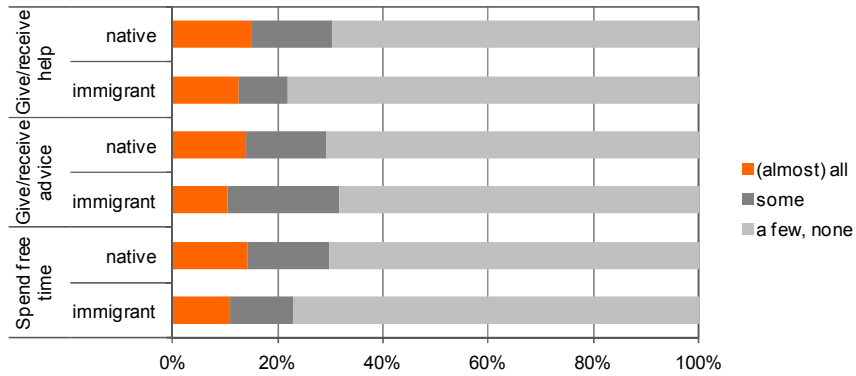
LUDO-HARTMANN-PLATZ



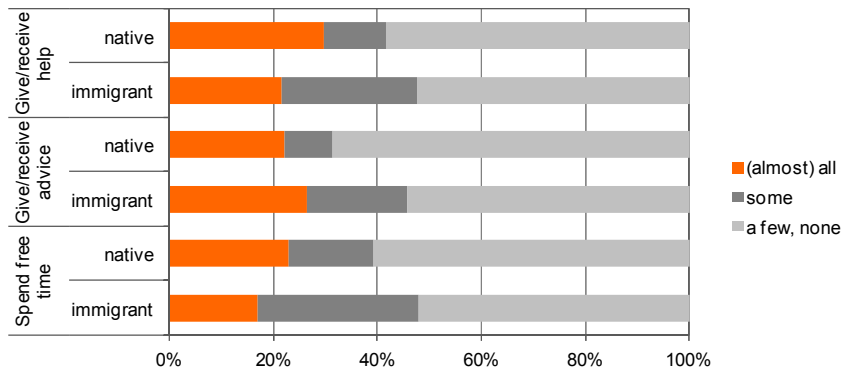
Source: GEITONIES Vienna Survey 2010, own calculations.

Figure 8: Share of people in the global social network who are living in the same neighbourhood by contact fields

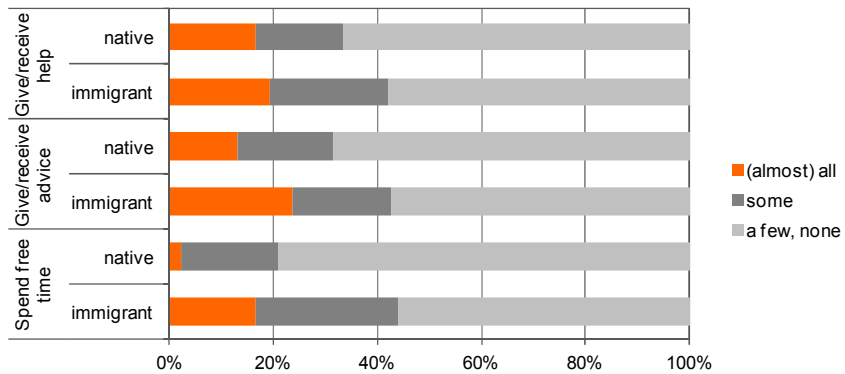
LAUDONGASSE



AM SCHÖPFWERK



LUDO-HARTMANN-PLATZ



Source: GEITONIES Vienna Survey 2010, own calculations.

Among the local immigrant population the proportions of respondents with no local contact partners are generally lower than among natives. In the contact fields of recreation (31 per cent) and mutual help (26 per cent) the rate of mixed contact circles is remarkable. In the advice context more than 26 per cent of the interviewed immigrants rely on contact circles that consist exclusively of local people. In particular in the realm of mutual help is the proportion (29 per cent) of (almost) exclusive native networks remarkable. In Ludo-Hartmann-Platz the rate of respondents who have no local neighbours in their contact circle is higher among natives than among immigrants. The statistical tests prove that, in the leisure time context, the difference is significant. 79 per cent of the natives have (almost) no local people in this contact circle. In particular in recreation, but in advice too, more immigrants report circles of mixed or purely local type.

3.3 Social networks – most important members

3.3.1 Dimension and ethnic composition of most important members

There are two basic parameters of social networks which were interesting for answering our main research questions: size and ethnic composition.

Esser (1992) provided useful analyses regarding the conditions for the generation of interethnic friendships. A lively discussion has gone on about the determinants of friendship choices in multiethnic societies and how race and ethnicity determine such choices (Fong & Isajiw 2000; Joyner & Kao 2005; Kao & Joyner 2004). That there are specifics in the personal relations of immigrants is well known since Breton's analyses (1964). It is obvious that no general group-specific trend can be detected, though as a classical hypothesis of urban sociology since Simmel (1903) it is often anticipated that urban life increases social isolation, something that has since also been empirically proved (McPherson et al. 2006). Table 21 visualizes the considerable variability in the size of close social networks in our research areas. For practical reasons only the most important contact partners are regarded. Urban neighbourhoods produce environmental constraints that per se influence social networks and the social context of these networks (Huckfeldt 1983). Not only the local context per se, but also the national context plays a role in modelling neighbourhood effects (Musterd & Pinkster 2009).

As a general trend, in all research areas about half of the respondents in both groups have from three to five close social relations (see Table 21). Group differences are statistically significant in the neighbourhood Am Schöpfwerk. In this social housing area, the proportion of immigrants who reported only a very small (0 to 2) circle of friends⁷ is 20 per cent points higher than among natives. In Am Schöpfwerk in both

⁷ The "circle of friends" or "friendship network" may consist of friends as well as relatives.

groups the number of respondents with six to eight close relations is very small compared with Laudongasse and Ludo-Hartmann-Platz. In Laudongasse a higher proportion of natives than immigrants reported only limited friendship networks, whereas 10 per cent points shows that more immigrants than natives can rely on bigger networks of six to eight persons. In Ludo-Hartmann-Platz the analysis of the circle of friends does not show significant group-specific variations. Age is also of some importance: There is a negative correlation for natives in Laudongasse and for immigrants in Ludo-Hartmann-Platz, which means that the number of friends in these groups decreases in the higher age groups, a common phenomenon in the course of life.

Table 21: **Size of the current social network: Number of most important members**

No. of persons	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
0 to 2	23.0	35.0	53.0	34.0	35.0	29.0
3 to 5	53.0	51.0	45.0	60.0	50.0	54.0
6 to 8	24.0	14.0	2.0	6.0	15.0	17.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	100	100

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Am Schöpfwerk ($p = .016$).

Table 22 provides a rough differentiation of the circles of friends by the criterion of birthplace. The friendship networks of natives in all research units are dominated by natives (in Ludo-Hartmann-Platz and Am Schöpfwerk by more than 80 per cent, in Laudongasse by 76 per cent). In general, the immigrants' social networks are more heterogeneous, though one must admit that this item does not provide information about the concrete ethnic composition of the social networks. This is particularly true for Laudongasse, where about two thirds of the local immigrant population have close relations with persons of foreign as well as of native origin.

Table 22: **Place of birth of the members of the current social network**

Country of birth	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
All born in Austria	28.0	76.5	16.5	81.9	17.3	80.6
All born abroad	11.0	0.0	60.8	0.0	48.0	2.0
Born both in Austria and abroad	61.0	23.5	22.7	18.1	34.7	17.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	98	97	94	98	98

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are highly significant in all three neighbourhoods ($p = .000$).

In Am Schöpfwerk the majority of respondents with a migrant background (61 per cent) maintains close contacts exclusively with other immigrants. In Ludo-Hartmann-Platz, too, this can be said about one half of the immigrant respondents, but here more (35 per cent) mixed social contacts than in the 12th district research unit can be observed. The proportion of immigrants who have exclusively native circles of friends is considerable, the highest rate (28 per cent) being reached in Laudongasse; in the other two neighbourhoods it lies at 16 per cent.

In Laudongasse and Am Schöpfwerk the independent variable age is of some importance among the immigrant population. The coefficient indicates a negative correlation in both areas which is somewhat stronger in Am Schöpfwerk than in Laudongasse. Also length of residence plays a role. The negative coefficient indicates that the longer immigrants have been residing in the neighbourhood, the more Austrians are part of their social networks. This is true for immigrants in Laudongasse and Am Schöpfwerk. Natives in Ludo-Hartmann-Platz integrate more and more foreign-born persons into their social network. Among immigrants in Ludo-Hartmann-Platz there is also some negative correlation with the variable education, which means that the higher educated immigrants have more Austrian friends in their social network, possibly due to the fact that there are less immigrants in tertiary education institutions.

Table 23: Ethnic composition of the close social network of immigrants (abs. and in %)

	Laudongasse	Am Schöpfwerk	Ludo-Hartmann-Platz
All born in Austria	28	16	17
All born abroad	11	57	47
Of same origin total	8	53	41
<i>guest-worker</i>	1	27	26
<i>Eastern Europe</i>	2	2	8
<i>EU-15</i>	4	24	0
<i>outside Europe</i>	1	0	7
Mixed	3	4	6
Share same origin (%)	72.7	92.3	87.2
Born in Austria and abroad	61	22	34
Of same origin total	38	17	24
<i>guest-worker</i>	4	10	9
<i>Eastern Europe</i>	10	2	5
<i>EU-15</i>	19	1	7
<i>outside Europe</i>	5	4	3
Mixed	23	5	10
Share same origin (%)	62.2	77.2	70.6

Source: GEITONIES Vienna Survey 2010, own calculations. *: For the group of respondents that has friends from both Austria and abroad, the assessment of origin was done for those born abroad.

The next step concerns the question of the concrete ethnic composition of the actual social network for those who either have close relations who were all born abroad and for those who have close relations who were born in Austria and abroad. Do these persons come from the same regions as the respondents or are the interethnic relations more diverse in nature? According to Vienna's migration history, we defined the following relevant regions:

- Guest-worker countries (successor states of the former Yugoslavia and Turkey),
- Eastern Europe (EU-12 and other Eastern European countries),
- EU-15, Norway and Switzerland and
- the rest of the world (Asia, Africa, Americas).

Table 23 sheds some light on the ethnic composition of the friendship networks of immigrant respondents. Obviously, the number of immigrants with pure Austrian friendship networks is highest in Laudongasse. Their numerical presence is almost the same in Am Schöpfwerk and Ludo-Hartmann-Platz. Concerning mere immigrant networks one must emphasize that the proportion of immigrant networks of the same ethnic origin is by far the highest in Am Schöpfwerk (92 per cent). In Laudongasse the respective proportion is still considerable, with 73 per cent having friends who were all born abroad and share the same origin. The ethno-national structures are also quite different. In Am Schöpfwerk guest-workers and EU-15 immigrants dominate, in Ludo-Hartmann-Platz friends from guestworker countries constitute a clear majority.

The biggest absolute number and share of ethnically mixed networks can be found among immigrants who live in Laudongasse. Here about 62 per cent of the immigrants are reported to have mixed friendship networks sharing the same origin. Two groups dominate: Eastern Europeans and EU-15 immigrants. Ludo-Hartmann-Platz is next, where the share of networks of same origin is about 72 per cent. In Am Schöpfwerk the number of mixed networks is lowest, whereas the percentage of mono-ethnicity is highest (77.2 per cent).

Table 24: **Ethnic composition of the close social network of natives**

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
Born in Austria and abroad*						
Number of cases	23	100.0	17	100.0	17	100.0
Background of close contacts born abroad						
Guest-worker	2	8.7	6	35.3	1	5.9
Eastern Europe	3	13.0	5	29.4	2	11.8
EU-15	13	56.5	3	17.6	6	35.3
Outside Europe	2	8.7	3	17.6	5	29.4
Mixed	3	13.0	0	0.0	3	17.6

Source: GEITONIES Vienna Survey 2010, own calculations. *: Friends from both Austria and abroad: assessment of origin for those born abroad.

Among respondents with a native background, only two persons in Ludo-Hartmann-Platz have a social network entirely consisting of immigrants. Therefore, Table 24 contains only the detailed information for natives maintaining a network consisting of both persons with and without a migration background. The number of mixed social networks is highest in Laudongasse. These networks mainly consist of EU-15-immigrants. Though the numbers of mixed networks in Am Schöpfwerk and Ludo-Hartmann-Platz are exactly the same, there are profound differences concerning their structure: In Am Schöpfwerk persons from former guest-worker countries and Eastern Europe dominate by far. In Ludo-Hartmann-Platz more than one third come from EU-15 countries and 29 per cent from regions outside Europe.

3.3.2 Characteristics of the close social network

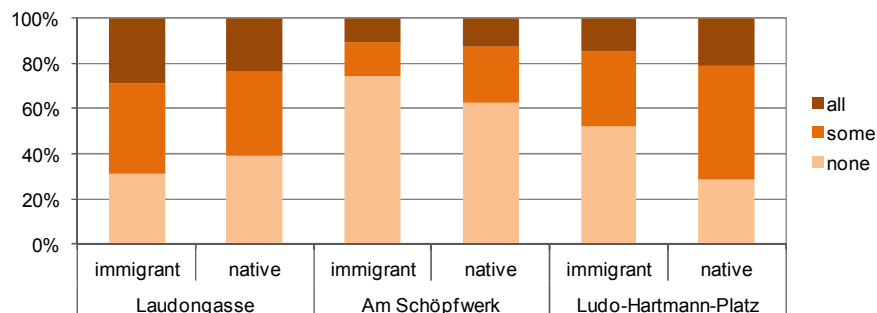
In the following we will go into some more detail on the characteristics of the structure of the close social network. Again, it has to be emphasized that the following analysis does not tell us anything about the size of the individuals' network. If, for example, a person has a circle of friends consisting exclusively of relatives, this may mean that one out of only one contact is a relative or that eight out of eight contacts are relatives.

The main questions to be answered in the following are:

- To what extent are social networks concentrated within the families?
- What is the importance of the neighbourhood for close relations?

The first question that occurs is one about the relationship or more exactly the context in which the relationship started. Are the current friends relatives or did they get to know each other at the workplace? From an overall perspective these two fields are far more important than others, such as whether they got to know each other as members of organizations or clubs.

Figure 9: Colleagues and fellow students in the close social network

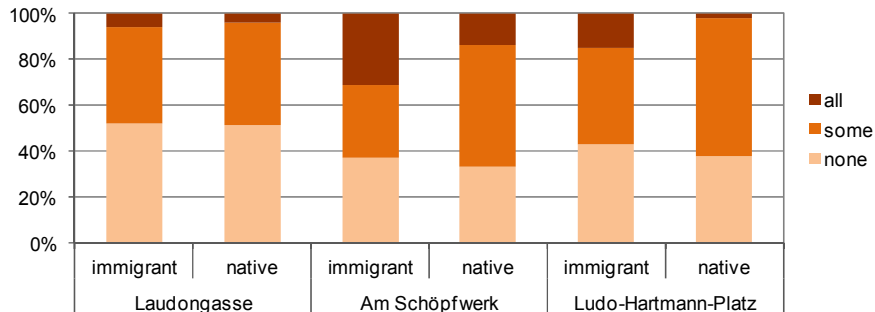


Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Ludo-Hartmann-Platz ($p = .010$).

Concerning the participation of colleagues in individual friendship networks, pronounced differences both between our research areas and immigrants and natives are obvious (see Figure 9). In Am Schöpfwerk the proportion of those having no colleagues in their current social network is by far the highest in both groups, in particular among immigrants. In Laudongasse about one third of the respondents in both groups have social networks without colleagues, and there are no significant differences between the local immigrant and the native population. In Ludo-Hartmann-Platz the difference between immigrants and natives is statistically significant. Here one half of the immigrant respondents but only 28.6 per cent of the natives have not a single colleague in their actual network.

Figure 10 shows that relatives obviously play a more important role in our respondents' social life than do colleagues. This is particularly the case for Ludo-Hartmann-Platz and the networks of the local immigrant residents. Here, the χ^2 -test indicates a statistically significant difference between immigrant and native networks. In Am Schöpfwerk one third of the immigrants' networks consist completely of relatives, which again indicates a significant difference compared with the networks of the natives. In Laudongasse relatives play a minor role. More than a half of our respondents in both groups do not have a single relative in their contact circle, and only small proportions have networks that consist completely of family members.

Figure 10: **Relatives in the close social network**



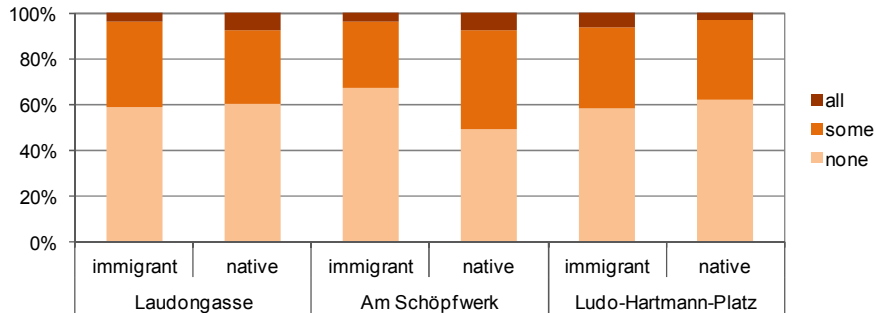
Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Am Schöpfwerk ($p = .009$) and Ludo-Hartmann-Platz ($p = .004$).

Concerning where the respondents met their current contacts, the outstanding role of Vienna has to be emphasized. The rest of Austria is not relevant (203 out of a total of 2,029 friends), and the current neighbourhood is also less important than the rest of Vienna (381 out of 2,029 friends). The same applies to the country of origin (in the case of immigrants) or other countries abroad.

Now, because the local neighbourhood context is the main focus of our interest, we would like to provide an overview of the friendship networks that came into existence in the three neighbourhoods. One has to keep in mind the time factor, i.e., that

these people may have moved to somewhere else in the meantime but were living in the respective areas when friendship relations were first established.

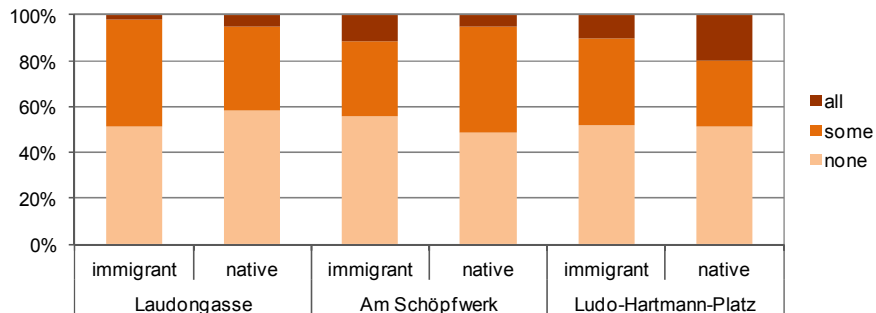
Figure 11: **Persons met in the current neighbourhood in the close social network**



Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Am Schöpfwerk ($p = .037$).

The role of persons met in the neighbourhood in the formation of close relations shows relatively weak differences between natives and immigrants as well as between the neighbourhoods (cf. Figure 11). The only exception is observed in the neighbourhood Am Schöpfwerk, where natives have more local contact partners in their close social network than immigrants. The reason is clear: Social housing was opened for foreign citizens only as late as in 2006. Many natives have lived in this social housing area since it was built and thus had more time and chances to get to know somebody who lives there.

Figure 12: **Close contacts who currently live in the same neighbourhood**



Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Ludo-Hartmann-Platz (0.040).

A related question deals with the current place of residence of the respondents' close contact partners: Do they live nearby or farther away?

A comparative look at the three research areas shows the general trend (see Figure 12): More than half of our respondents in both groups do not have a single close contact person living in the same neighbourhood. Concerning individual networks that are completely or largely composed of local partners, more pronounced differences are obvious. In Ludo-Hartmann-Platz one fifth of the natives have close contact networks that consist completely of people living nearby. Among immigrants only 10 per cent report the same importance of local residents in their contact circles. For this area the χ^2 -test proves significant differences between both groups. In Am Schöpfwerk the proportion of networks of this kind is two times higher among immigrants than in the native group. In Laudongasse the presence of networks consisting entirely of persons residing in the same neighbourhood is negligible in both groups of residents. These findings are not very surprising, though empirical surveys in other urban contexts came to quite different results (see, for example, Gijsberts et al. 2010).

3.4 Interethnic partnerships

That bi-national partnerships and marriages are an important vehicle of social integration was already proved by a number of empirical surveys (Schoen & Weinick 1993) and for many different countries, e.g., for Germany (Schroedter & Kalter 2008), The Netherlands (Van Tubergen & Maas 2005), Canada (Kalbach 2002) and Australia (Giorgas & Jones 2002). For economic integration, too, marriage is a promoting factor (Meng & Gregory 2005) of considerable importance. Varying rates of intermarriage must also be explained by taking into account cross-national differences (Kalmijn 2007), gender affiliation and belonging to a certain race or ethnic group (Jacobs & Labov 2002; Kulczycki & Lobo 2002; Braun & Recchi 2008). There is a broad consensus in social science and integration politics as well that interethnic marriages and partnerships are an important indicator of integration into a local society.

Table 25: Actual relationship status

Has partner	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
Yes	50.0	71.0	79.0	64.0	63.0	57.0
No	50.0	29.0	21.0	36.0	37.0	43.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	100	100	100	100	100	100

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are significant in Laudongasse ($p = .002$) and Am Schöpfwerk ($p = .019$).

At the time of our survey the majority of our respondents were living in some kind of permanent relationship (legal marriage or cohabitation; see Table 25). Significant group differences occur in Laudongasse and Am Schöpfwerk in the sense that the

proportion of immigrants in Laudongasse who were singles was remarkably high (one half); in Am Schöpfwerk the native group had a relatively high rate (36 per cent) of local respondents having no partners. In Ludo-Hartmann-Platz the group differences concerning this aspect are negligible.

There are marked differences between the neighbourhoods concerning the origin of present partners of natives. Table 26 shows that, for example, in Ludo-Hartmann-Platz almost 30 per cent of them have a partner of foreign origin, whereas in Laudongasse the respective share is only 15.5 per cent. In particular among the local immigrant population in Laudongasse is the rate of partnerships with natives remarkably high (52 per cent). Especially the younger birth cohorts of immigrants have partners of native origin. In the native group the rate of interethnic partnerships in Ludo-Hartmann-Platz is lower than in the other two research areas. Among immigrants living in Am Schöpfwerk interethnic partnerships with Austrians occur rarely.

Table 26: **Origin of the present partner**

	Laudongasse		Am Schöpfwerk		Ludo-Hartmann-Platz	
	Immigrant	Native	Immigrant	Native	Immigrant	Native
Native origin	52.0	84.5	13.9	76.6	26.9	70.2
Foreign origin	48.0	15.5	86.1	23.4	73.1	29.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total abs.	50	71	79	64	63	57

Source: GEITONIES Vienna Survey 2010, own calculations. Group differences are highly significant in all three neighbourhoods ($p = .000$).

More than 86 per cent of the immigrants maintain a relationship with a partner who is of foreign origin. In this 12th district area one fourth of the natives have partners of foreign origin, which is higher than in Laudongasse but lower than in Ludo-Hartmann-Platz. In Ludo-Hartmann-Platz one out of four respondents with a migrant background and about 30 per cent of the natives live in some kind of interethnic partnership.

4 Exploring neighbourhood embeddedness

4.1 Introduction

Up to now, we have analyzed and discussed a number of different items and have learned about the residents' perceptions of and attitudes towards the neighbourhood, about trust and about social contacts of different degrees of emotional closeness. We now take a step forward and ask about the relevance of all these interactions for "local embeddedness". We should recall that GEITONIES was a project that focused on the relevance of urban space for interethnic coexistence. What is now lacking is a synop-