Outlook on relations: Personal networks and psychosocial characteristics of visually impaired adolescents
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Results: Personal networks

Introduction

This chapter is the first of three chapters concerning the results of our study into the meaning of personal networks and social support for blind and visually impaired adolescents. In describing the results, the theoretical framework (figure 5.1 on the next page) is used as an outline. This framework is extensively explained in section 2.5.

In this chapter, results are described with regard to the personal networks. We also present the correlations between network aspects. Thirdly, the connection between on the one hand vision-related, socio-demographic and context variables and on the other hand the network aspects is described.

Results concerning psychosocial characteristics, results for adjustment, well-being and loneliness, and their relation with vision-related, socio-demographic and context variables, will be presented in Chapter 6. Relations between the main blocks of variables as shown in the theoretical framework, will be analyzed and described in Chapter 7.
In the current chapter, research questions a.1, a.2, a.3 and a.4 are answered:

a.1 What is the size and composition of the personal network of blind and visually impaired adolescents? What is the social support, the balance in social support and the satisfaction with that support of these adolescents?

a.2 What is the correlation between the network aspects of blind and visually impaired adolescents?

a.3 What are the differences with respect to the network aspects between several subgroups in the total group of blind and visually impaired adolescents? The subgroups were chosen as a result of the preferred theoretical framework and previous results on this subject (see Chapter 2):
- blind, severely visually impaired and moderately visually impaired adolescents
- male and female adolescents
- age-groups: 14-17, 18-20, and 21-23 years of age
- congenital or acquired visual impairment
- stable or progressive visual impairment
- level of independence as regards mobility
- different housing conditions
- regular education, special education or both
- different job situations
- different ethnic or cultural backgrounds.

a.4 In what way do blind and visually impaired adolescents differ from sighted adolescents with respect to these network aspects?
In section 5.1, results with regard to structural and functional network aspects of the networks of our participants will be presented (research question a.1). Section 5.2 presents correlation results with regard to the network aspects of blind and visually impaired adolescents (research question a.2). The relation between network aspects on the one hand and vision-related, socio-demographic and context variables, like age, sex and the degree of the visual impairment, on the other hand is described in section 5.3. For an overview of these background characteristics we refer to table 4.1 in Chapter 4. In general, background characteristics can be divided into three groups:

- socio-demographic characteristics (sex, age, socio-economic status (SES))
- context characteristics (living situation, school situation, job situation)
- vision-related characteristics (degree of impairment, progressive or stable disorder, time of onset of disorder and dependency as regards mobility).

In exploring this relation, multiple regression analysis was used (method enter and backwards). For example, the size of the network was used as dependent variable, and the background characteristic variables as predictors. In this way, differences between subgroups within the sample will appear to answer research question a.3.

The comparison of the network results with those of sighted adolescents of two reference projects is presented in 5.4 (question a.4). A more general comparison of our results with research results in the literature is presented in Chapter 8. A summary of all the network results is presented in the last section (5.5).

## 5.1 Network aspects of blind and visually impaired adolescents

In this section, the structural and functional aspects of the networks of blind and visually impaired adolescents are presented. Firstly, the structural network aspects are described (5.1.1), secondly the functional network aspects (5.1.2).

### 5.1.1 Structural aspects

Results for size and composition of the personal network of the participants in this study are derived from the Social Network Map (see section 3.4.1). With this instrument, participants listed the names of persons that are important to them in eight sectors: close family, extended family (e.g. uncle, aunt), friends including a romantic partner, persons of school and work, club mates, neighbors, professional careworkers, and peers from the living group. A specific person could only be listed in one sector (see 3.4.1).

The size of the total network was computed by counting all the network members in each sector of the network map. Results for composition of the network consist of, firstly, the number of persons named in each sector of the network map. Secondly, network members were categorized in domains like kin and nonkin members. Finally, characteristics of listed persons were analyzed, like their age or if they have a visual impairment.
Results: Personal networks

Network size
The average number of significant persons in the personal networks of blind or visually impaired adolescents is 14.7 persons (s.d. = 8). The median is 13. The smallest network in the interviewed group of adolescents consists of two persons and the largest one of 49 persons.

Figure 5.2 Size of the personal network (N=316)

Small networks, generally defined as networks consisting of fewer than 12 persons (Buysse, 1997), are found for 41% of the blind and visually impaired adolescents. Large networks, consisting of more than 18 persons (Buysse, 1997), are reported by 24% of the participants.

Network composition
Table 5.1 shows the distributions concerning the eight sectors of the 'Social Network Map': close family, extended family, friends, persons from school or work, club mates, neighbors, professionals/therapists, and living group members. This was also the fixed order of presenting the questions to the participants. For each sector the question was: "Are there - extended family members - who are important to you? Will you tell me the names of those family members?"

Notice that significant network members could only be listed in one sector. For instance, a friend from a football club could only be listed in the sector friends or the sector club. The participants decided in which sector they wanted to list each network member (see 3.4.1). The average size of the sectors, unit of analysis is the participant, is also presented graphically in figure 5.3.
Table 5.1  Sectors in the network (mean by participant)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Mean number of persons</th>
<th>s.d.</th>
<th>Minimum - Maximum number of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close family</td>
<td>3.1</td>
<td>1.3</td>
<td>0 - 10</td>
</tr>
<tr>
<td>Extended family</td>
<td>2.7</td>
<td>3.3</td>
<td>0 - 24</td>
</tr>
<tr>
<td>Friends</td>
<td>4.2</td>
<td>3.4</td>
<td>0 - 21</td>
</tr>
<tr>
<td>School/Work</td>
<td>2.1</td>
<td>2.6</td>
<td>0 - 19</td>
</tr>
<tr>
<td>Club mates</td>
<td>1.2</td>
<td>3.0</td>
<td>0 - 25</td>
</tr>
<tr>
<td>Neighbors</td>
<td>.5</td>
<td>1.2</td>
<td>0 - 8</td>
</tr>
<tr>
<td>Professionals</td>
<td>.7</td>
<td>1.2</td>
<td>0 - 14</td>
</tr>
<tr>
<td>Living group</td>
<td>.1</td>
<td>.6</td>
<td>0 - 5</td>
</tr>
</tbody>
</table>

Figure 5.3  Composition of the personal network

Figure 5.3 and table 5.1 show that the largest sectors in the network are friends, close family members and extended family members. These persons constitute the heart of the network. The average number of friends for the total group of blind and visually impaired adolescents is four. More than 65% of the participants has fewer than five friends. One third of the interviewed group said that they had a romantic partner at that moment or in the six months before the interview.
Parents are important to most participants and are very frequently named. The sectors schoolmates/colleagues and club mates are not as large as the friends and family ones. The fact that an important person can be named only in one sector could have caused this result. The sectors neighbors, professionals and peers of the living group are the smallest ones.

To determine whether every existing close family member is also mentioned as an important network member, the network results for the sector 'close family' were compared with answers of the participants concerning the composition of their close family. The results show that answers to these two questions differed from each other for 29% of the participants. In other words, some members of the close family were not named as a significant person in the network of the participant. Most often these persons were older brothers or sisters, followed by younger brother or sisters, and siblings in general.

The listed persons in the map were furthermore divided in percentages of kin and nonkin in the personal network. The network of blind and visually impaired adolescents is mostly composed of nonkin members (see table 5.2).

Another question with regard to characteristics of network members was, whether or not they were blind or visually impaired. Two variables were computed: the mean percentage blind or visually impaired network members in general and the mean percentage blind or visually impaired friends. On average ten percent of all the listed network members is also blind or visually impaired. The majority of the interviewed adolescents (53%), however, mention no blind or visually impaired persons in their network.

What is the mean percentage of blind and visually impaired friends, in other words, how many friends are blind or visually impaired too? The mean percentage of visually impaired friends is 24%. In other words, one out of four friends is also blind or visually impaired. A network consisting of friends who are all blind or visually impaired, is found for 11% of the total group (N=316). A majority of the participants (58%) have no blind or visually impaired friends.
Table 5.2 Composition: background characteristics of network members

<table>
<thead>
<tr>
<th>Composition variables</th>
<th>Mean</th>
<th>s.d.</th>
<th>Minimum-Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network members:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Kin</td>
<td>44%</td>
<td>20%</td>
<td>0% - 100%</td>
</tr>
<tr>
<td>Network members:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Nonkin</td>
<td>56%</td>
<td>20%</td>
<td>0% - 100%</td>
</tr>
<tr>
<td>Network members:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Visually impaired</td>
<td>10%</td>
<td>15%</td>
<td>0% - 83%</td>
</tr>
<tr>
<td>Friends:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Visually impaired friends</td>
<td>24%</td>
<td>35%</td>
<td>0% - 100%</td>
</tr>
<tr>
<td>Age difference: friends</td>
<td>5 years</td>
<td>6 years</td>
<td>0 - 35 years</td>
</tr>
<tr>
<td>Network members:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Turkish or Moroccan background</td>
<td>2%</td>
<td>5%</td>
<td>0% - 44%</td>
</tr>
</tbody>
</table>

How old are the friends of blind and visually impaired adolescents? Are all the friends roughly of the same age, or do they vary much in age? Our results show that the average range of the age of listed friends is five years. For instance, in a network of friends there is a 15-year old and a 20-year old friend. Four percent of the total group of participants have friends which differ twenty years in age. For example, they have a friend of 15 years old and one who is 35 years old. Striking is the presence of many friends who are older than the participants themselves. The distribution of values regarding this variable is not normal. It has a top on the left line, as shown by the large standard deviation.

The last row in the table indicates the percentage of network members with a Turkish or Moroccan background (2%). These network members are often mentioned in the sector school/work. The distribution of values regarding this variable is also skew, as shown by the large standard deviation. The percentage of blind and visually impaired adolescents with a different cultural background in the sample, however also other than Turkish or Moroccan, was seven percent (see table 4.1 in Chapter 4).

Some of the participants mentioned no persons in the sectors of the network map. Subsequently, these results concerning leaving a specific sector of the network empty are presented (see table 5.3). The sector 'living group' is left out because only 13% of our participants live in an institute (see 4.1.3.).

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1 More information concerning structural and functional network aspects, and experiences with the care system, of visually impaired Dutch adolescents with a Turkish or Moroccan cultural background, are described in Van Nieuwstadt (1996).
Results: Personal networks

The results show that very few participants leave the sectors close family members and friends empty. In the other sectors, and especially in the sectors club mates and neighbors, the percentage of adolescents who list no network members is quite large.

Table 5.3 Percentage of blind and visually impaired adolescents (N=316) leaving a specific sector of the Social Network Map empty

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage of adolescents leaving that sector empty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close family</td>
<td>0.3 %</td>
</tr>
<tr>
<td>Extended family</td>
<td>25.6 %</td>
</tr>
<tr>
<td>Friends</td>
<td>7.9 %</td>
</tr>
<tr>
<td>School/work</td>
<td>29.7 %</td>
</tr>
<tr>
<td>Club mates</td>
<td>65.8 %</td>
</tr>
<tr>
<td>Neighbors</td>
<td>75.6 %</td>
</tr>
<tr>
<td>Professionals</td>
<td>54.1 %</td>
</tr>
</tbody>
</table>

5.1.2 Functional network aspects

The following functional aspects of the personal network are discussed in this section:
- social support, for all network members and for support provider systems
- reciprocity in social support
- satisfaction with regard to network aspects.

Social support

The results described in this section are based on two instruments: the Social Network Grid (SNG) of the Leiden project, and the Personal Network List (PNL) of the Utrecht project. These instruments are extensively described in 3.4. The SNG instrument distinguished four kinds of support: practical and emotional support, and perceived and received support. In all four kinds it concerns support as experienced by the blind or visually impaired adolescent. Perceived support reflects individuals' confidence that adequate support would be available if it is needed, received support is the frequency of supportive transactions that did take place in a certain period of time (see 2.1.2). The PNL distinguished between support in respect to: practical problems, relational problems and leisure time. The last concept could be considered as social companionship. All these concepts are described in 2.1.2.

Sarason et al. (1987) argue that social support is a global concept, so different kinds of social support all refer to one and the same thing, namely the feeling of
Results: Personal networks

being loved or not loved by other persons. Most descriptions of support of children, load on one factor (Berndt & Perry, 1986; Dubow & Ulmann, 1989) which means that they are highly correlated (Furman & Buhrmester, 1992). Analysis revealed that all the kinds of support in this study are related to one another (p < .001). Therefore, the distinction between several kinds of support is empirically less meaningful and useful. To join other support researchers, we therefore also use a global general social support score in this study. However, the distinction between the instruments is still maintained in this chapter to facilitate the comparison of our results with those of the two different projects.

To measure social support with the Social Network Grid, a six-point scale was used for received support and a three-point scale for perceived support. In accordance with the procedures of Buysse (1997), the six-point scale was transformed into a three-point scale. Subsequently, the four results of: perceived and received practical support and the perceived and received emotional support, were summed up to create a global social support score for all network members. The three different kinds of support from the Personal Network List (practical support, relational support, and social companionship) are also summated.

Social support: network members

The scores on the SNG total social support concept ranges from: 1=never or almost never supporting to 3=almost always supporting. The highest support scores on this instrument are found for romantic partner (if any) and mother (both around 2.50). Next are friends, father and teachers (around 2.25). Followed by support of classmates, living group members, siblings, professionals and colleagues (around 2.05). Subsequently followed by extended family members and grandparents (around 1.85). The differences between social support scores of the above described network members are generally small.

The results for the total social support concept of the PNL are quite similar. Most important with regard to social support on this instrument are romantic partner, mother and best friends. Followed by father, brothers and sisters, classmates and colleagues. Least important for social support are friends/acquaintances. The differences between these network members with regard to social support on the PNL are small too.

Social support: support provider systems

Because of the above mentioned small differences between the social support scores of twelve categories in the SNG and seven categories in the PNL, and in order to simplify and order the results according to other network research (Cauce et al., 1994), support scores for several provider systems were separately computed.

The social support scores of the Social Network Grid were computed for five support provider systems: parents, siblings, extended family members, peers (romantic partner, friends, classmates and living group members) and the formal network (professionals and teachers). The social support scores of all the network members were also computed into a total social support score for the total network.
With the categories of the Personal Network List, the scores were computed into three support provider systems: parents, siblings and peers (romantic partner, best friends, friends/acquaintances, classmates/colleagues). The support scores of these three systems are also computed into a total social support score for the total network.

In creating this social support score of support provider systems and the total social support score, the presence of a specific network member was taken into account. For instance, if a participant listed no romantic partner, the social support score for the provider system 'peers', - consisting of romantic partner, friends, classmates and living group members - was computed using three network groups instead of four.

The social support scores of the SNG still ranges from: 1=never or almost never supporting to 3=almost always supporting. The PNL social support scores still ranges from: 10=not important for giving support to 100=very important for giving support. The total social support scores of the SNG and the PNL correlate $r=.37$ ($p < .001$, see table 5.7). This rather moderate correlation could be explained by differences between the two instruments: the two instruments differ with respect to network members (see 3.4), extended family members are not included in the PNL instrument, while they are in the SNG instrument. The answer scale and kinds of support differ slightly too. The correlation between PNL parental support and SNG parental support is $r=.50$ ($p < .001$), between peers support it is $r=.41$ ($p < .001$). The results with regard to social support from provider systems of blind and visually impaired adolescents are presented in table 5.4.

Table 5.4 Social support from different support provider systems

<table>
<thead>
<tr>
<th>Support provider system</th>
<th>SNG (Range 1-3)</th>
<th>(s.d.)</th>
<th>PNL (Range 10-100)</th>
<th>(s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>2.3</td>
<td>(.38)</td>
<td>65</td>
<td>(22)</td>
</tr>
<tr>
<td>Siblings</td>
<td>2.0</td>
<td>(.54)</td>
<td>54</td>
<td>(22)</td>
</tr>
<tr>
<td>Extended family</td>
<td>1.9</td>
<td>(.43)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Peers</td>
<td>2.3</td>
<td>(.45)</td>
<td>58</td>
<td>(17)</td>
</tr>
<tr>
<td>Formal network</td>
<td>2.1</td>
<td>(.47)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total support</td>
<td>2.2</td>
<td>(.30)</td>
<td>59</td>
<td>(20)</td>
</tr>
</tbody>
</table>

n/a = not applicable

Table 5.4 shows that blind and visually impaired adolescents perceive quite a lot of support from their network members. Parents are the most important source for support, followed by peers on both support instruments. On the SNG their
Results: Personal networks

Social support scores are not significantly different, however on the PNL they are. Striking is the result that formal network members are more important for giving support, than siblings or extended family members are. Except for the SNG social support score of parents and peers, and the SNG social support score of siblings and extended family members, all the social support scores of different support provider systems significantly differ from each other.

Reciprocity in social support

Reciprocity in social support is measured with the Social Network Grid asking the participants about the balance of support in each relationship, using a three-point scale: +1=more giving than receiving, 0=reciprocal, and -1=more receiving than giving. In this question, support implies a combination of emotional and practical support.

The reciprocity results for each - separate - network member in the personal network indicate that the average scores of reciprocity in social support are in a negative direction for almost all network members. In other words, blind and visually impaired adolescents characterize their relationships with regard to social support, as nonreciprocal; in more receiving than giving support. They perceive the most balanced relationships with their siblings, living group members, grandparents, class members, friends and a romantic partner. Relationships with teachers and professional careworkers are, logically, the most unbalanced ones.

To aggregate the reciprocity scores, we computed reciprocity scores for each of the five support provider systems: i.e. parents, siblings, extended family members, peers (romantic partner, friends, class members and living group members) and formal network members (professionals and teachers). In creating this reciprocity score of provider systems, the presence of a specific network member was taken into account. The reciprocity scores of all network members were also computed into a total reciprocity score (see table 5.5 and figure 5.4). The reciprocity scores still range from: -1=more receiving than giving, to +1=more giving than receiving.

Table 5.5  Reciprocity in support: support provider systems

<table>
<thead>
<tr>
<th>Support provider system</th>
<th>Reciprocity mean score (range -1 to +1)</th>
<th>(s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>-.37</td>
<td>(.48)</td>
</tr>
<tr>
<td>Siblings</td>
<td>.05</td>
<td>(.47)</td>
</tr>
<tr>
<td>Extended family</td>
<td>-.14</td>
<td>(.55)</td>
</tr>
<tr>
<td>Peers</td>
<td>-.04</td>
<td>(.35)</td>
</tr>
<tr>
<td>Formal network</td>
<td>-.80</td>
<td>(.39)</td>
</tr>
<tr>
<td>Total reciprocity score</td>
<td>-.22</td>
<td>(.26)</td>
</tr>
</tbody>
</table>
As table 5.5 shows, relationships with regard to exchanging social support with siblings and peers are the most balanced ones. The most unbalanced relationship in that regard is, logically, with formal network members. The average total reciprocity score is negative (-.22). In other words, blind and visually impaired adolescents state that in general they receive more support than they give support themselves. Figure 5.4 shows the distribution of the total reciprocity score. The reciprocity scores of the provider systems of network members all significantly differ from each other.

![Figure 5.4 Total reciprocity score (N=316)](image)

Satisfaction with network aspects
Several questions with regard to satisfaction were included in this study: satisfaction with the emotional and practical support, satisfaction with the size of the network, and satisfaction with the content of a relationship (see 3.4.1. and Appendix I).

In the first instance, two questions concerning satisfaction with support were included in the study: satisfaction with emotional support and satisfaction with practical support. Both had to be evaluated by the participants for all their network members together. The range is between 1 (not satisfied) and 5 (extremely satisfied). The mean score for satisfaction with practical support is 3.80 (sd:.82), for satisfaction with emotional support it is 3.81 (sd:.84).
Results: Personal networks

Analysis revealed that satisfaction with emotional support and satisfaction with practical support are correlated ($r=.38 \ p=.001$). Therefore, the scores were summated and halved, thus creating a total score 'satisfaction with support' on a 1 through 5 range. The average score for general satisfaction with support is 3.80 (sd:.70), the distribution of this variable is shown in figure 5.5. From the total sample of visually impaired adolescents (N=316), 50% are very or extremely satisfied with the social support.

![Satisfaction with support](image)

Figure 5.5 Satisfaction with support (N=316)

For satisfaction with the size of the personal network, a distinction was made between on the one hand the satisfaction with regard to the number of persons for giving support, and on the other hand the number or persons to undertake leisure activities with.

An obvious majority (75%) of the participants are satisfied with the number of network members with regard of receiving support from them. One out of four participants is not satisfied with the size of the network in this respect, and wants more persons to receive support from. These participants want to expand their network especially with more supportive sighted friends, a romantic partner if they had not one, class mates and colleagues.

A minority of the participants are satisfied with the number of significant persons in their network with regard to undertaking activities together (40%). In other words, sixty percent are not satisfied. They want to expand their network in this regard, and especially with more sighted and blind or visually impaired peers, class mates, colleagues, and a romantic partner if they had not one.
The last question on satisfaction with the network concerns the content of existing relationships with network members. The majority of the participants (59%) are satisfied with the content of the relationship with all their network members. So, 41% are not satisfied and want to change the content of the relationship with one or more network members. More specific, the participants want to change the content of the relationships with persons at school and work, sighted peers and parents.

5.2 Correlations between network aspects

In a correlation analysis for all the network aspects of the personal network of blind and visually impaired adolescents, to answer research question a.2, significant or marginally insignificant correlations are found. Strongly significant relations are not present among the network aspects. Since the sample of adolescents is large (N=316), the marginally insignificant correlations are not interpreted.

Firstly, the correlations within structural aspects are described (table 5.6), secondly the ones within functional aspects (table 5.7), and thirdly the correlations between structural network aspects and functional network aspects (table 5.8).

In what way do the structural aspects correlate with each other? The total network size is a sumscore of the size of the eight sectors of the Network Map, so logically all the sector sizes correlate significantly with the total network size. The total network size is therefore not mentioned in this part. Included composition variables in the analysis and table 5.6 are: the size of the eight sectors, the percentages of visually impaired network members and friends, and the presence of a romantic partner.
### Table 5.6  Correlation between structural network aspects

<table>
<thead>
<tr>
<th></th>
<th>a1</th>
<th>a2</th>
<th>a3</th>
<th>a4</th>
<th>a5</th>
<th>a6</th>
<th>a7</th>
<th>a8</th>
<th>a9</th>
<th>a10</th>
<th>a11</th>
<th>a12</th>
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<tbody>
<tr>
<td>a1</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>a2</td>
<td>-</td>
<td>1.00</td>
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<td></td>
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<td>0.04</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p < .05    ** p < .01  N=265

**Legend:**

- **a1** total network size
- **a2** total persons close family
- **a3** total persons extended family
- **a4** total number of friends
- **a5** total visually impaired friends
- **a6** total persons school/work
- **a7** total persons club
- **a8** total listed neighbors
- **a9** total listed professionals
- **a10** total living group members
- **a11** percentage visually impaired network members
- **a12** percentage visually impaired friends
- **a13** having a romantic partner
Results: Personal networks

The size of some but not all sectors correlate with each other, however only moderately (between $r=.11$ and $r=.25$). A once described relationship will not be repeatedly described in this section. So, the relation between for example the size of the sectors close family and class members is only described once.

The size of the sector close family members correlates with large numbers of listed class members/colleagues. A large sector of extended family members correlates positively with the size of the sectors friends, school/work, and professionals. Furthermore, many listed friends correlates with a large number of listed professionals. The number of blind or visually impaired friends correlates positively with, of course, the size of the sectors friends, class members/colleagues, professionals and having a romantic partner. The size of the sector club mates correlates positively with the sector class members/colleagues. The size of the sector neighbors correlates with none of the other structural network aspects. Many listed professionals relates with many mentioned living group members. And finally, a high number of living group members correlates with a high percentage of visually impaired friends and having a romantic partner. The percentages of visually impaired network members and visually impaired friends correlates logically high ($r=.74$).

In table 5.7 the correlations between functional network aspects are shown.

Table 5.7  Correlation between functional network aspects

<table>
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<tr>
<th></th>
<th>a1</th>
<th>a2</th>
<th>a3</th>
<th>a4</th>
<th>a5</th>
<th>a6</th>
<th>a7</th>
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<td>.05</td>
<td>.07</td>
<td>.02</td>
</tr>
</tbody>
</table>

* $p < .05$  ** $p < .01$  N=265

Legend:

a1 total support PNL  a6 support peers SNG
a2 support parents PNL  a7 total reciprocity score
a3 support peers PNL  a8 reciprocity parents
a4 total support SNG  a9 reciprocity peers
a5 support parents SNG  a10 satisfaction with support
A few significant correlations are found between the functional network aspects. We already mentioned the correlation between total support from SNG- and PNL-instruments ($r=-.37$). Logically, the support of parents and peers on one instrument correlates strongly with the total support score, because this score is a sum of them. This is also the case for reciprocity in support with parents and peers and the total reciprocity score. Therefore these correlations are not mentioned.

A large amount of total social support on the PNL correlates positively with a high degree of satisfaction with support. A high total support score on the SNG correlates with a more reciprocal relationship with peers. PNL parental support correlates positively with support from peers and satisfaction with support. SNG parental support correlates positively with support from peers, and negatively with reciprocal relationships with parents and all network members. PNL peers support correlates positively with reciprocal relationships with all network members and satisfaction with support. SNG peers support correlates negatively with reciprocal relationships with peers. The reciprocity in the support relationship with parents and peers do not correlate.
Table 5.8  Correlations between structural network aspects and functional network aspects

<table>
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<tr>
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<th>b2</th>
<th>b3</th>
<th>b4</th>
<th>b5</th>
<th>b6</th>
<th>b7</th>
<th>b8</th>
<th>b9</th>
<th>b10</th>
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<td>a7</td>
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<tr>
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<td>.07</td>
<td>.29**</td>
<td>.17**</td>
<td>-.14*</td>
<td>-.12*</td>
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<td>.13*</td>
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</table>

* p < .05   ** p < .01  N = 265

<table>
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<th>b1</th>
<th>total support PNL</th>
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<td>b2</td>
<td>total support SNG</td>
</tr>
<tr>
<td>a3</td>
<td>extended family</td>
<td>b3</td>
<td>support peers PNL</td>
</tr>
<tr>
<td>a4</td>
<td>friends</td>
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<td>support peers SNG</td>
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<tr>
<td>a5</td>
<td>number blind friends</td>
<td>b5</td>
<td>support parents SNG</td>
</tr>
<tr>
<td>a6</td>
<td>school/work</td>
<td>b6</td>
<td>support parents PNL</td>
</tr>
<tr>
<td>a7</td>
<td>professionals</td>
<td>b7</td>
<td>total reciprocity</td>
</tr>
<tr>
<td>a8</td>
<td>partner</td>
<td>b8</td>
<td>reciprocity parents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b9</td>
<td>reciprocity peers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b10</td>
<td>satisfaction with support</td>
</tr>
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</table>
Finally the correlations between structural and functional network aspects are presented. The significant correlations, see table 5.8, are not very strong (between \( r = .12 \) and \( r = .29 \)). A large network correlates positively with the amount of support on the PNL and the support from peers. A large number of listed close family members correlates positively with the total support and the support from parents. A large number of listed extended family members relates with a high score on total support, a lot of parental and peers support and a more nonreciprocal relationship with parents. A lot of friends correlates with a lot of support from peers. Participants who listed a lot of blind and visually impaired friends, perceive more parental support, and experience more reciprocal relationships with their parents and all their network members. A lot of listed class members/colleagues relates positively with a lot of peers support. The sizes of the sector club mates and neighbors does not relate with any of the functional aspects, as does the percentages visually impaired network members and friends. Participants who listed a high number of professionals, perceive a more nonreciprocal relationship with all their network members. Finally, participants who have a romantic partner, experience less parental support and more support from peers. They experience more reciprocal relationships with their parents and with all of their network members.

5.3 Differences between subgroups

With multiple regression analysis - with one dependent variable and several independent variables as predictors (method backwards) - question a.3 concerning differences between subgroups within the sample visually impaired participants can be answered. In presenting the results, standardized beta, adjusted \( R^2 \), p-value for significance and means for subgroups are mentioned. Used predictors were: sex, age, living in an institute, living independently, having no job, special or regular education, socio-economic status (SES), degree of impairment, stable or progressive impairment, time of onset of impairment and dependency regards mobility. Firstly, the results concerning structural network aspects are described (5.3.1), followed by those for functional network aspects (5.3.2).

5.3.1 Structural network aspects

Most background characteristics lack effects on network size, only progressive disorder and age show a significant influence (see table 5.9). A large network is connected with a progressive disorder and an older age. The predictive power of this model, however, is low. Interpretations of these results are described in Chapter 8.
Do subgroups within the sample blind and visually impaired adolescents differ with regard to the composition of their network? Multiple regression analysis, using eleven predictors, reveals several strong and several less strong predicting models for the network composition variables (see table 5.10). The dependent variables are sizes of the eight sectors, percentages visually impaired network members and friends, range of age of friends, and having a romantic partner.

The prevalence of persons in specific categories or sectors in the personal network is generally best predicted by context characteristics, especially the living situation of participants. In some sectors, the size is connected with vision-related characteristics, especially having a progressive disorder, the degree of the disorder, and dependency regarding mobility. Socio-demographic characteristics only have a small predicting strength. Overall, the regression results for the size of the eight sectors in the personal network show that, in general, the predicting models are not strong. The explained variance is between 1% and 7%, however, 18% for the sector living group members.

How are the sizes of the specific sectors in the network influenced? The findings show that adolescents who live in an institute list less close family members, more extended family members, more neighbors, more living group members and more professionals. Adolescents who live independently report more extended family members, more friends, more class members and colleagues, and more living group members. Participants who are unemployed list more professionals. More friends, living group members and professionals are listed by participants with a progressive disorder. Moderately visually impaired participants and participants who feel dependent on persons as regards mobility list more extended family members. Sex only correlates with the size of the sector friends: females mention more friends. The only effect of age is found for the sector club mates: older adolescents report more club mates.

The second set of composition results concerned the characteristics of the listed network members: whether or not they had a visual impairment, the age of the friends, and whether or not participants had a partner. Regression results (table 5.10) show that these composition results are strongly connected with all three groups of background characteristics: socio-demographic, vision-related, and context characteristics. The explained variance is between 15% and 37%.
<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj. R^2</th>
<th>Beta</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
</thead>
</table>
| Close family (range 0 - 10) | living in an institute     | .01      | -.11  | .044   | 3.2: not living in an institute
|                          |                             |          |       |        | 2.7: living in an institute                  |
| Extended family (range 0 - 24) | living in an institute     | .03      | .14   | .012   | 2.6: not living in an institute
|                          |                             |          |       |        | 3.8: living in an institute                  |
|                          | degree of impairment        |          | .14   | .020   | 2.0: blind                                   |
|                          |                             |          |       |        | 3.1: severely visually impaired
|                          |                             |          |       |        | 2.8: moderately visually impaired            |
|                          | dependency mobility         | .12      | .047  |        | 2.6: low dependence                          |
|                          |                             |          |       |        | 2.7: high dependence                         |
| Friends (range 0 - 21)    | living independently        | .07      | .16   | .004   | 3.9: not living independently
|                          |                             |          |       |        | 5.9: living independently                    |
|                          | progressive disorder        | .15      | .007  |        | 3.7: stable disorder                         |
|                          |                             |          |       |        | 4.9: progressive disorder                    |
|                          | sex                         | .12      | .032  |        | 3.7: male                                    |
|                          |                             |          |       |        | 4.7: female                                  |
| School/work (range 0 - 19) | living independently        | .01      | .13   | .025   | 2.0: not living independently
<p>|                          |                             |          |       |        | 2.9: living independently                    |
| Club mates (range 0 - 25)  | age                         | .01      | .12   | .040   | 0.9: 14-18 years                             |
|                          |                             |          |       |        | 1.4: 18-21 years                             |
|                          |                             |          |       |        | 1.7: 21-24 years                             |</p>
<table>
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<th>Adj. $R^2$</th>
<th>Beta</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
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<td>0.7: living in an institute</td>
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<td>.003</td>
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<td>0.1: not living independently</td>
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<td>0.3: living independently</td>
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<td>.081*</td>
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<td>0.1: stable disorder</td>
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<td>0.2: progressive disorder</td>
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<td>.25</td>
<td>.000</td>
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<td>0.9: progressive disorder</td>
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<td>1.2: no job and school</td>
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<td>Adj. R²</td>
<td>Beta</td>
<td>p</td>
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</tr>
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<td>--------------------------------</td>
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<td>------</td>
<td>-------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>% visually impaired</td>
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<td>.30</td>
<td>.000</td>
<td>8%: not living in an institute</td>
</tr>
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<tr>
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<td>degree of impairment</td>
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<td>.008</td>
<td></td>
<td>12%: ever special education</td>
</tr>
<tr>
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<td>.021</td>
<td></td>
<td>16%: blind</td>
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<tr>
<td></td>
<td>time of onset</td>
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<td>.027</td>
<td></td>
<td>10%: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td>sex</td>
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<td>.021</td>
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<td>7%: moderately visually impaired</td>
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<td>no job</td>
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<td>.049</td>
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<td>10%: 14-18 years</td>
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<td></td>
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<td>11%: 18-21 years</td>
</tr>
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<td>7%: 21-24 years</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10%: congenital disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13%: acquired disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8%: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12%: female</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9%: job/school</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18%: no job and no school</td>
</tr>
<tr>
<td>% visually impaired</td>
<td>living in an institute</td>
<td>.37</td>
<td>.45</td>
<td>.000</td>
<td>17%: not living in an institute</td>
</tr>
<tr>
<td>friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>71%: living in an institute</td>
</tr>
<tr>
<td>(range 0 - 100)</td>
<td>special education</td>
<td>.25</td>
<td>.000</td>
<td></td>
<td>8%: always regular education</td>
</tr>
<tr>
<td></td>
<td>degree of impairment</td>
<td>-.13</td>
<td>.010</td>
<td></td>
<td>36%: ever special education</td>
</tr>
<tr>
<td></td>
<td>sex</td>
<td>.12</td>
<td>.015</td>
<td></td>
<td>44%: blind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24%: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19%: moderately visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28%: female</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Predictors</td>
<td>Adj. $R^2$</td>
<td>Beta</td>
<td>p</td>
<td>Means for subgroups</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>--------------------------------</td>
<td>------------</td>
<td>------</td>
<td>---------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Range of years of friends</td>
<td>living independently</td>
<td>.15</td>
<td>.26</td>
<td>.000</td>
<td>4: not living independently</td>
</tr>
<tr>
<td>(range 0 - 35)</td>
<td>age</td>
<td>.16</td>
<td>.005</td>
<td></td>
<td>10: living independently</td>
</tr>
<tr>
<td></td>
<td>living in an institute</td>
<td>.13</td>
<td>.015</td>
<td></td>
<td>3: 14-18 years</td>
</tr>
<tr>
<td></td>
<td>sex</td>
<td>.10</td>
<td>.065*</td>
<td></td>
<td>5: 18-21 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6: 21-24 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1: not living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6: living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6: female</td>
</tr>
<tr>
<td>Having a partner</td>
<td>living independently</td>
<td>.15</td>
<td>.30</td>
<td>.000</td>
<td>0.3: not living independently</td>
</tr>
<tr>
<td>(0 = no, 1 = yes)</td>
<td>degree of impairment</td>
<td>.17</td>
<td>.002</td>
<td></td>
<td>0.7: living independently</td>
</tr>
<tr>
<td></td>
<td>sex</td>
<td>.15</td>
<td>.006</td>
<td></td>
<td>0.2: blind</td>
</tr>
<tr>
<td></td>
<td>time of onset</td>
<td>.15</td>
<td>.006</td>
<td></td>
<td>0.2: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td>living in an institute</td>
<td>.12</td>
<td>.020</td>
<td></td>
<td>0.4: moderately visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.4: female</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3: congenital disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.5: acquired disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3: not living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.4: living in an institute</td>
</tr>
</tbody>
</table>

* .05 < p > .10 (tendency)
Characteristics with a predicting effect on a high percentage of blind and visually impaired network members in the network, are: living in an institute, attending special education, being blind, being older, having an acquired visual disorder, being female and being unemployed. Listing many blind and visually impaired friends is quite strongly connected with: living in an institute, attending special education, being blind and being female. Some participants have a larger range in the age of their friends than other participants. Participants with friends who differ much in their age, are: living independently, older, living in an institution, and female. So, participants who live with their parents have friends who are approximately of the same age. Which background characteristics can predict whether or not blind and visually impaired adolescents have a romantic partner? Analyses show that participants with a romantic partner, are: living independently, visually impaired, female, having an acquired disorder, and are living in an institute.

5.3.2 Functional network aspects

Social support
Which background characteristics (socio-demographic, vision-related or context characteristics) significantly predict the social support scores? For instance, does age have an effect on support from peers, i.e. are peers more important for social support in late adolescence than they are in early adolescence? In the first set of analysis, the dependent variables were the support of five provider systems and the total support score of the Social Network Grid (SNG). In the second set of analysis, the dependent variables were the support of three provider systems and the total support score of the Personal Network List (PNL). The results are respectively presented in table 5.11 and 5.12.

Firstly, the multiple regression results of social support on the SNG are described. As shown in table 5.11, participants who are living independently report less parental social support than participants who are not living independently. Blind adolescents experience more parental support compared with visually impaired adolescents. Sibling support is only significantly connected with sex; females report more sibling support than do males. A lot of support from extended family members is significantly predicted by living independently, being female and attending special education. Support from peers is significantly predicted by sex; females report more peer support than males. The predicting model of support from formal network members is the strongest one. Support from formal network members - professionals, therapists, teachers - is predicted by living situation and sex. Participants who live in an institute and females experience more support of professional careworkers and teachers than do males and participants living with their parents or living independently. Finally the total social support score of the SNG is, not so strongly, connected with: sex (girls perceive more social support) and living situation. Participants who are not living independently or are living in an institute report more social support on the SNG.
Table 5.11  Multiple regression for SNG social support (range scores: 1-3)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj.R²</th>
<th>Beta</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents support</td>
<td>living independently</td>
<td>.05</td>
<td>-.21</td>
<td>.000</td>
<td>2.36: not living independently</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.14: living independently</td>
</tr>
<tr>
<td></td>
<td>degree of impairment</td>
<td></td>
<td>-.12</td>
<td>.025</td>
<td>2.41: blind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.34: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.30: moderately visually impaired</td>
</tr>
<tr>
<td>Sibling support</td>
<td>sex</td>
<td>.02</td>
<td>.16</td>
<td>.010</td>
<td>1.90: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.08: female</td>
</tr>
<tr>
<td>Ext. family support</td>
<td>sex</td>
<td>.07</td>
<td>.24</td>
<td>.000</td>
<td>1.81: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.99: female</td>
</tr>
<tr>
<td></td>
<td>living independently</td>
<td></td>
<td>-.15</td>
<td>.029</td>
<td>1.91: not living independently</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.76: living independently</td>
</tr>
<tr>
<td></td>
<td>kind of education</td>
<td></td>
<td>.13</td>
<td>.047</td>
<td>1.83: always regular education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.94: ever special education</td>
</tr>
<tr>
<td>Peers support</td>
<td>sex</td>
<td>.04</td>
<td>.20</td>
<td>.001</td>
<td>2.21: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.39: female</td>
</tr>
<tr>
<td>Formal support</td>
<td>living in an institute</td>
<td>.16</td>
<td>.38</td>
<td>.000</td>
<td>1.99: not living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.48: living in an institute</td>
</tr>
<tr>
<td></td>
<td>sex</td>
<td></td>
<td>.15</td>
<td>.027</td>
<td>2.01: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.14: female</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Predictors</td>
<td>Adj. R²</td>
<td>Beta</td>
<td>p</td>
<td>Means for subgroups</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Total social support SNG</td>
<td>sex</td>
<td>.07</td>
<td>.22</td>
<td>.000</td>
<td>2.1: male</td>
</tr>
<tr>
<td></td>
<td>living independently</td>
<td>-.13</td>
<td>.017</td>
<td></td>
<td>2.2: not independently</td>
</tr>
<tr>
<td></td>
<td>living in an institute</td>
<td>.11</td>
<td>.041</td>
<td></td>
<td>2.2: not living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.3: living in an institute</td>
</tr>
</tbody>
</table>

Table 5.12 Multiple regression for PNL social support (range scores: 10-100)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj. R²</th>
<th>Beta</th>
<th>p</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents support</td>
<td>living independently</td>
<td>.06</td>
<td>-.25</td>
<td>.000</td>
<td>67: not living independently</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52: living independently</td>
</tr>
<tr>
<td>Sibling support</td>
<td>no job</td>
<td>.04</td>
<td>.15</td>
<td>.009</td>
<td>54: job/school</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39: unemployed</td>
</tr>
<tr>
<td></td>
<td>SES</td>
<td></td>
<td>-.13</td>
<td>.022</td>
<td>56: lowest SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55: low SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52: higher SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50: highest SES</td>
</tr>
<tr>
<td></td>
<td>degree of impairment</td>
<td></td>
<td>-.12</td>
<td>.043</td>
<td>58: blind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>53: moderately visually impaired</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj. R²</th>
<th>Beta</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peers support</td>
<td>sex</td>
<td>.07</td>
<td>.22</td>
<td>.000</td>
<td>54: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62: female</td>
</tr>
<tr>
<td></td>
<td>living in an institute</td>
<td>.13</td>
<td>.023</td>
<td></td>
<td>57: not living in an institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>63: living in an institute</td>
</tr>
<tr>
<td></td>
<td>SES</td>
<td>-.10</td>
<td>.069*</td>
<td></td>
<td>58: lowest SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60: low SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55: higher SES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56: highest SES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total social support</th>
<th>Predictors</th>
<th>Adj. R²</th>
<th>Beta</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNL</td>
<td>sex</td>
<td>.02</td>
<td>.13</td>
<td>.031</td>
<td>57: male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60: female</td>
</tr>
<tr>
<td></td>
<td>living independently</td>
<td>-.14</td>
<td>.020</td>
<td></td>
<td>59: not living independently</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54: living independently</td>
</tr>
</tbody>
</table>

* .05 < p < .10
Secondly, the regression results for social support on the PNL are described. Parental support on the PNL is only significantly predicted by the living situation of the participants. Adolescents who are living independently report less parental support. For support from siblings the results are: adolescents who are unemployed experience less sibling support, participants with a low SES score report more sibling support, and blind adolescents experience more support of their siblings than visually impaired adolescents. Support from peers, as measured with the PNL, is connected with three background characteristics: sex, living situation, and SES. Females experience more support from peers than do males. Adolescents living in an institute report more peers support than do adolescents who are living independently or with their parents. Adolescents with a lower score on socio-economic status report slightly more support from peers compared with adolescents with a high SES score. Lastly, the predictors for the total social support score on the PNL. A high social support score is predicted by being female and not living independently.

Reciprocity
The predicting model, with background characteristics as predictors, and the total score for reciprocity in social support as the dependent variable, is again not very strong (see table 5.13). Predicting characteristics for a more reciprocal relationship with all network members are: living independently and not living in an institute. Adolescents who are living with their parents experience therefore the most unreciprocal support relationships in general. A trend is found for degree of impairment: moderately visually impaired adolescents report the most balanced relationship compared with blind and severely visually impaired adolescents.

Table 5.13 Multiple regression of reciprocity, predictors: background characteristics of participants

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj. R²</th>
<th>B</th>
<th>p</th>
<th>Means for subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>living</td>
<td>.03</td>
<td>.15</td>
<td>.008</td>
<td>-.24: not living independently</td>
</tr>
<tr>
<td></td>
<td>independently</td>
<td></td>
<td></td>
<td></td>
<td>-.14: living independently</td>
</tr>
<tr>
<td></td>
<td>living in</td>
<td>.12</td>
<td>.033</td>
<td>.008</td>
<td>-.23: not living in an institute</td>
</tr>
<tr>
<td></td>
<td>an institute</td>
<td></td>
<td></td>
<td></td>
<td>-.17: living in an institute</td>
</tr>
<tr>
<td></td>
<td>degree of</td>
<td>.10</td>
<td>.078*</td>
<td></td>
<td>-.24: blind</td>
</tr>
<tr>
<td></td>
<td>impairment</td>
<td></td>
<td></td>
<td></td>
<td>-.28: severely visually impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.20: moderately visually impaired</td>
</tr>
</tbody>
</table>

*.05 < p > .10
Results: Personal networks

**Satisfaction**
Because the answer categories for satisfaction with regard to the size of the network and the content of a relationship are dichotomous (yes or no), these questions were not included in regression analyses for satisfaction. Analyses were therefore only carried out for satisfaction with support. Which background characteristics can predict satisfaction with social support?

Multiple regression analyses show that only two characteristics can predict, though weakly, a high satisfaction with support: being female, and having a job/meaningful way to spend the day.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>Adj. $R^2$</th>
<th>Beta</th>
<th>$p$</th>
<th>Means for subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with support</td>
<td>sex</td>
<td>.03</td>
<td>.16</td>
<td>.004</td>
<td>3.7: male 3.9: female</td>
</tr>
<tr>
<td></td>
<td>no job</td>
<td>- .12</td>
<td>.036</td>
<td></td>
<td>3.8: job/school 3.4: unemployed</td>
</tr>
</tbody>
</table>

### 5.4 Comparison with sighted adolescents

For a valid comparison between visually impaired adolescents and sighted adolescents - to answer research question a.4 - two reference projects were chosen (see 3.3.3): one project of Leiden University and one of Utrecht University. The comparison of structural network aspects is described in section 5.4.1, followed by the comparison of functional network aspects in 5.4.2. Analyses were based on two-tailed t-tests. Results are reported when significant on a .05 level or just insignificant (.05 < $p$ > .10). The Utrecht study contained no structural network aspects, and is therefore only mentioned in section 5.4.2. The Leiden study included structural as well as functional network aspects.

The reference group of adolescents from the Leiden study consists of 63 adolescents, aged 12 through 16. Their level of education is between average and somewhat below average (Buysse, 1997). Our group of participants slightly differs with regard to age and level of education. Therefore, the comparison with the group of sighted adolescents of the Leiden study has some limitations. Besides this age and education difference, results with regard to social support from and reciprocity with siblings of sighted adolescents in the Leiden study are only presented for siblings older than seven years. In our study, the results for siblings of blind and visually impaired adolescents concern all their siblings, regardless their age. The mean age of siblings of the visually participants will therefore be lower than the mean age of siblings of the sighted adolescents. This fact has to be
considered in interpreting results for support from and reciprocity with siblings.

Next to the comparison with sighted adolescents of the Leiden study, our results are compared with those of adolescents with behavior problems (N=63) living in a residential institute from the Leiden study (Buysse, 1997) (see 3.3.3).

5.4.1 Comparison of structural network aspects

Network size

In figure 5.6, a comparison of the network size of three groups of adolescents is presented. The three groups are: our participants (N=316), sighted adolescents (N=63), and adolescents with behavior problems (N=63).

The average size of the personal network of blind and visually impaired adolescents is significantly smaller than that of the reference group of sighted adolescents (t=3.04, p < .001). The average number of persons in the networks of our participants is 14.7 (s.d. 8), that of sighted adolescents is 19.8 (s.d. 13) (Buysse, 1997). In most studies on the size of networks of adolescents, the number of network members is between 15 en 20 (Cotterell, 1994). When the visually impaired adolescents older than 18 years are left out of the analysis, the average network size drops with two persons to 13.3 (s.d. 8; N=144), this size is also significantly smaller (t=3.67, p < .001) than that of sighted peers.

![Figure 5.6 Comparison of network size](image-url)
The occurrence of small networks, networks consisting of fewer than 12 persons, is higher in the group blind and visually impaired adolescents (N=316) compared with sighted adolescents (41% versus 25%). Large networks, consisting of more than 18 persons, are found for 24% of the blind and visually impaired adolescents compared with 41% in the sighted group. These results are exactly each other's opposite.

The results for adolescents with behavior problems living in a residential centre, show more similarity with the results of blind and visually impaired adolescents. Average size of the networks of adolescents with behavior problems is 15.6 persons (s.d. 9) and small networks are more common among these adolescents as compared with the reference sighted group (Buysse, 1997). Small networks are reported by 41% of the adolescents in residential care, and 30% of them reported large networks. In other words, these results show much more similarity with the results of blind and visually impaired adolescents, than those of sighted adolescents do.

Network composition
Compared with sighted adolescents from the reference group of the Leiden project, the blind and visually impaired adolescents list fewer persons in the sectors extended family members (t=3.48, p < .05) and neighbors (t=2.23, p < .05). A tendency in the same direction is found for the sector friends (t=1.92, .05 < p > .10). In figure 5.7 the size of the sectors are presented for the group visually impaired and the group of sighted adolescents. The average size of the sectors and variance are presented for three different groups in table 5.15.

![Figure 5.7 Comparison of sectors in the personal network](image)
The smaller sector extended family could be explained by the older age of our participants, because the number of listed extended family members decreases with increased age (see 5.3.1). However, when the oldest group of blind and visually impaired participants is left out of the analysis, the number of named extended family members is still significantly lower compared with that of sighted adolescents. The lower number of friends is also not caused by differences in age, because the number of friends just increases with increasing age.

The number of significant neighbors is lower for the visually impaired adolescents compared with the sighted peers. This result could be related to the fact that some of the visually impaired adolescents, at this or an earlier date, live in a kind of institute without nearby neighbors. However, when controlling for this living situation, our participants still list fewer neighbors. The average size of the other sectors of the Social Network Map of our participants (N=316) are not significantly different from sighted adolescents. The smaller network of blind and visually impaired adolescents is therefore caused by: fewer listed extended family members, neighbours and friends.

When the visually impaired adolescents older than 18 years are left out in analysis, in order to make the comparison groups more similar with respect to age, the sizes of all sectors, except close family, are significantly smaller.

Table 5.15  Size of the sectors for different groups (mean)
When the results of blind and visually impaired adolescents are compared with those of adolescents with behavior problems in residential care, they show more similarities. Adolescents in residential care also tend to list fewer friends and fewer extended family members (Buysse, 1997). Certain factors can possibly play a part in this more similar result: the different living situation - as living in a residential environment -, the presence of support from members of the formal network, family stress or family problems due to impairments or behavior problems, or factors within the adolescents such as feelings of insecurity or low self-esteem.

In the Leiden study (Buysse, 1997), the percentage of participants that list no persons in specific sectors of the Social Network Map was calculated. For blind and visually impaired adolescents these percentages were also computed and presented in table 5.3. The comparison of these percentages is presented in table 5.16.

Table 5.16 Percentage of adolescents of different groups leaving a specific sector of the Social Network Map empty

<table>
<thead>
<tr>
<th>Sector</th>
<th>Visually impaired adolescents</th>
<th>Sighted adolescents reference group</th>
<th>Adolescents behavior problems residential group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close family</td>
<td>0.3</td>
<td>0.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Extended family</td>
<td>25.6</td>
<td>2.4</td>
<td>27.0</td>
</tr>
<tr>
<td>Friends</td>
<td>7.9</td>
<td>3.2</td>
<td>12.7</td>
</tr>
<tr>
<td>School/work</td>
<td>29.7</td>
<td>39.7</td>
<td>34.9</td>
</tr>
<tr>
<td>Club mates</td>
<td>65.8</td>
<td>63.5</td>
<td>77.8</td>
</tr>
<tr>
<td>Neighbors</td>
<td>75.6</td>
<td>49.2</td>
<td>68.3</td>
</tr>
<tr>
<td>Professionals</td>
<td>54.1</td>
<td>95.3</td>
<td>27.0</td>
</tr>
</tbody>
</table>

The results show that the reference group of sighted adolescents from Buysse (1997) always listed someone in the sector close family. In contrast, some blind and visually impaired adolescents do leave this sector empty, however compared with adolescents with behavior problems not so often. Listing nobody in the sector extended family shows more variation. One out of four blind and visually impaired adolescents names no extended family members, compared with a rather smaller percentage with sighted adolescents. Regarding the sector friends, the results are more striking. As stated earlier, the average size of the sector friends of blind and visually impaired adolescents tends to be smaller than that of sighted adolescents. Complementary, the percentage of blind and visually impaired adolescents that list no friend at all is higher than that of sighted adolescents (8% versus 3%).
Results: Personal networks

sector neighbors is also more often left empty by blind and visually impaired adolescents, compared with the reference group.

The patterns of the results of blind and visually impaired adolescents are, again, more similar to the results of adolescents with behavior problems living in a residential institute, than to those of sighted adolescents.

In the study of Buysse (1997) very few characteristics of network members were presented. Only a comparison of kin and nonkin members is possible. Mean percentages for kin members and nonkin members for the blind and visually impaired adolescents are respectively 44% and 56% (see 5.1.1). These percentages are not quite different for sighted adolescents and adolescents with behavior problems living in a residential institute. For the first group they were: 47% and 53%, for the second group 42% and 58%. The network of all three groups of adolescents is therefore mostly composed of nonkin members.

5.4.2 Comparison of functional network aspects

In the reference projects of Leiden and Utrecht, social support of classmates, colleagues and living group members were not presented. Even so, questions regarding satisfaction were not included in these projects. Therefore, comparison for these concepts with results of sighted adolescents is not possible. We can compare the concepts: social support and reciprocity in support exchanging. Firstly, comparison results for social support are described, followed by reciprocity.

Social support, network members
In table 5.17 a summary is presented of the social support scores of network members of the personal networks of visually impaired adolescents and sighted adolescents. The answers range from 1=never or almost never supporting, to 3=almost always supporting. The results in table 5.17 are descriptive. Results for significant differences with regard to the social support scores of support provider systems between the groups of adolescents, are presented in table 5.18.
Results: Personal networks

Table 5.17 Social support from network members for two groups of adolescents (Range scores 1 - 3)

<table>
<thead>
<tr>
<th></th>
<th>Visually impaired adolescents (N=316)</th>
<th>Sighted adolescents (N=63)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(s.d.)</td>
<td>(s.d.)</td>
</tr>
<tr>
<td>Partner</td>
<td>2.6 (.45)</td>
<td>2.9 (.28)</td>
</tr>
<tr>
<td>Mother</td>
<td>2.5 (.41)</td>
<td>2.8 (.35)</td>
</tr>
<tr>
<td>Friends</td>
<td>2.3 (.49)</td>
<td>2.3 (.57)</td>
</tr>
<tr>
<td>Father</td>
<td>2.2 (.50)</td>
<td>2.6 (.54)</td>
</tr>
<tr>
<td>Teacher(s)</td>
<td>2.1 (.48)</td>
<td>1.7 (.53)</td>
</tr>
<tr>
<td>Siblings</td>
<td>2.0 (.54)</td>
<td>2.4 (.57)</td>
</tr>
<tr>
<td>Extended family</td>
<td>2.0 (.41)</td>
<td>2.1 (.58)</td>
</tr>
<tr>
<td>Grandparents</td>
<td>1.8 (.50)</td>
<td>2.2 (.59)</td>
</tr>
<tr>
<td>Professionals</td>
<td>2.0 (.52)</td>
<td>2.0 n/a</td>
</tr>
<tr>
<td>Total support</td>
<td>2.2 (.30)</td>
<td>2.4 (.30)</td>
</tr>
</tbody>
</table>

In the two groups of adolescents, the significance of specific network members or group of network members for giving support is not similar. It seems that the reported support from close family members of visually impaired adolescents, is lower compared with the results of sighted adolescents. Friends seem important sources for support for both groups, and teachers are especially important for giving support to visually impaired adolescents. Whether or not differences are significant is shown is table 5.18.

Social support, provider systems

The comparison of average support results for five support provider systems and a total general social support score for our participants and sighted adolescents of the Leiden study, is presented in table 5.18. The range of the scores is between 1=seldom or never supporting, to 3=almost always supporting. Note that the reported support of siblings of blind and visually impaired adolescents is based on all siblings, in contrast to the support of siblings of sighted adolescents. The sibling support of the latest group is based on siblings older than seven years.
Table 5.18 Social support from support provider systems, comparison with reference project Leiden (Range scores 1 - 3)

<table>
<thead>
<tr>
<th></th>
<th>Visually impaired adolescents (s.d.)</th>
<th>Adolescents reference group (s.d.)</th>
<th>Adolescents residential group (s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>2.33 .38</td>
<td>2.69** .45</td>
<td>2.45 .63</td>
</tr>
<tr>
<td>Siblings</td>
<td>1.99 .54</td>
<td>2.37** .57</td>
<td>2.03 .62</td>
</tr>
<tr>
<td>Peers</td>
<td>2.30 .45</td>
<td>2.36 .54</td>
<td>2.49 .54</td>
</tr>
<tr>
<td>Ext. family</td>
<td>1.89 .43</td>
<td>2.12** .52</td>
<td>2.08 .67</td>
</tr>
<tr>
<td>Formal network</td>
<td>2.07 .47</td>
<td>1.73 .52</td>
<td>2.25 .64</td>
</tr>
<tr>
<td>Total network</td>
<td>2.17 .30</td>
<td>2.36** .30</td>
<td>2.27 .31</td>
</tr>
</tbody>
</table>

(N=316) (N=63) (N=63)

** p < .01

Figure 5.8 Support from provider systems: comparison with Leiden project
Comparison with results of sighted adolescents in the Netherlands (Buysse, 1997) reveals that the mean score of social support for the total network of visually impaired adolescents is lower (t=5.28, p < .01). Since the total social support score is an average score and not a sumscore, the possible effect of network size is controlled for. So, the networks of blind and visually impaired adolescents are smaller than those of sighted adolescents, and on average our participants report less received support. When the results for several provider systems are concerned, it is clear that the support from peers (t=.72) and, surprisingly, professionals (t=1.30) is equal for both groups. In other words, the amount of support from peers and professionals for visually impaired and sighted adolescents is not significantly different. The reported social support from parents, siblings and extended family members is significantly lower in the group visually impaired adolescents compared with the results of sighted adolescents (parents t=6.10, p < .01; siblings t=4.94, p < .01; extended family t=3.33, p < .01). In what way the age difference of the siblings contributes to this result concerning sibling support, is not clear.

When the older visually impaired participants (older than 18 years) are left out of the analysis - to make the comparison with sighted adolescents more correct with respect to age - the social support scores of the visually impaired adolescents do not change at all. Because multiple regression results, see 5.3.2, showed no effects of age on support, this is not surprising. Therefore, the above described differences between visually impaired and sighted adolescents still count.

The social support scores on the Personal Network List (PNL) were also computed into support of provider systems: parents, siblings and peers. The range of the scores was between 10 (low support) and 100 (high support). We compared our results with those of sighted Dutch adolescents (Rispens, Hermanns & Meeus, 1996). The results are presented in figure 5.9.

Figure 5.9 shows that the reported social support scores of blind and visually impaired adolescents are lower for all provider systems as well as for the total social support score. All the differences are significant on two tailed t-tests. Parents are more supporting (t=6.45) to sighted adolescents (75 (s.d. 22) versus 65 (s.d. 21)), as are siblings (t=5.95; 64 (s.d. 24) versus 54 (s.d. 22)) and peers (t=5.71; 66 (s.d. 23) versus 58 (s.d. 17)). The total support score differs almost 10 points (t=5.77; 68 (s.d. 23) versus 59 (s.d. 20)). The results for the comparison of social support between visually impaired adolescents and non-impaired adolescents on the two instruments, SNG and PNL, are quite similar.
Figure 5.9  Support from provider systems: comparison with the Utrecht project

Reciprocity in social support
In what way differ sighted adolescents from visually impaired adolescents with regard to reciprocity in social support? The range of the scores is between -1=more support receiving than giving, and +1=more support giving than receiving. The results for several groups of adolescents are presented in table 5.19.

Table 5.19  Reciprocity in social support for different groups adolescents
(Range scores -1 through +1)

<table>
<thead>
<tr>
<th></th>
<th>Visually impaired adolescents (s.d)</th>
<th>Adolescents reference group (s.d)</th>
<th>Adolescents residential group (s.d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>-.37 (.48)</td>
<td>-.50 (.53)</td>
<td>-.49 (.59)</td>
</tr>
<tr>
<td>Siblings</td>
<td>.05 (.47)</td>
<td>.14 (.55)</td>
<td>-.04 (.63)</td>
</tr>
<tr>
<td>Ext. family</td>
<td>-.14 (.55)</td>
<td>-.24 (.61)</td>
<td>-.45 (.60)</td>
</tr>
<tr>
<td>Peers</td>
<td>-.04 (.35)</td>
<td>-.03 (.42)</td>
<td>-.26 (.56)</td>
</tr>
<tr>
<td>Formal network</td>
<td>-.80 (.39)</td>
<td>-.84 (.37)</td>
<td>-.83 (.37)</td>
</tr>
<tr>
<td>Total network</td>
<td>-.22 (.26)</td>
<td>-.30** (.21)</td>
<td>-.43 (.29)</td>
</tr>
</tbody>
</table>

(N=316)  (N=63)  (N=63)

** p < .01
The total reciprocity score is significantly more negative in the sample sighted adolescents ($t=2.67, p < .01$). This somewhat surprising result is mainly caused by the tendency of more reciprocal supporting relationships with parents ($t=1.88$) and extended family members ($t=1.28$) for the group visually impaired adolescents. This result was not expected. Most reciprocal support relationships are with siblings and peers, for both groups of adolescents.

When the older visually impaired adolescents - older than 18 years - are left out of the analysis, the comparison results change. Only the reciprocity in support exchanging with parents and extended family members for visually impaired adolescents change, they become more nonreciprocal (respectively -.44, s.d. .50 and -.21, s.d. .53). This causes a more negative total reciprocity score of visually impaired adolescents (-.27 s.d.=.26 (N=144)). Comparison of this result with the total reciprocity score of sighted adolescents reveals that the total reciprocity score of this, smaller, group of young visually impaired adolescents no longer differs significantly ($t=0.83$).

**Satisfaction**

The Leiden reference project did not offer possibilities to compare results with regard to this functional network aspect. General comparisons with literature on adolescents satisfaction with social support will be presented in Chapter 8.

5.5 **Summary**

What is the size and composition of the personal network of blind and visually impaired adolescents? What is the social support, the balance in social support, and the satisfaction with that support of these adolescents? The average network size of blind and visually impaired adolescents is 15 persons. They have a significantly smaller network than sighted adolescents, who have an average network size of twenty persons. The largest sectors in the network of visually impaired adolescents are: friends, extended family, and close family. The majority of network members is nonkin, 10% of the network members is also visually impaired, and professionals are a small part of the network (5%).

Blind and visually impaired adolescents perceive quite a lot of support, especially from parents and peers. They perceive more support from formal network members than from siblings and extended family members. With regard to satisfaction, the majority of the blind and visually impaired adolescents seems satisfied with support.

What is the correlation between the network aspects of blind and visually impaired adolescents? First of all, the significant correlations were only moderately strong. Correlations between the size of the different groups of persons - sectors - in the personal network show many positive correlations, indicating that listing many persons in one sector is related to listing many persons in other sectors. There is no compensatory mechanism. The scores on the two social support instruments correlate strongly with each other. Furthermore we found significant positive relations between social support and satisfaction with support.
The correlation between parental and peers support was positively correlated too, as was peers support and reciprocal relationships in a network. A large network correlates positively with social support, although in computing the support score we have taken the network size into account. Interesting is the relationship between listing many visually impaired friends on the one hand, and experiencing more parental support and more reciprocal relationships on the other hand. Participants with a romantic partner experienced more reciprocal relationships with their network members.

What are the differences with respect to the network aspects between several subgroups in the total group of blind and visually impaired adolescents? In summary, differences within the sample impaired adolescents show that the most influencing background characteristics for network aspects are: living situation, work situation, degree of impairment, and kind of impairment. The characteristics age, time of onset, and dependency on persons as regards mobility only influence in some cases. The only small influence of age and sex is somewhat surprisingly. In sum, a mix of personal characteristics and environment characteristics influences structural and functional network aspects. However, generally spoken their influence is low.

In what way do blind and visually impaired adolescents differ from sighted adolescents, with respect to these network aspects? Compared with sighted adolescents, blind and visually impaired adolescents list fewer extended family members, neighbors and friends, resulting in a significantly smaller network. The results of the visually impaired group show more similarity with adolescents with behavior problems (Buysse, 1997) than with sighted adolescents. Compared with sighted adolescents, blind and visually impaired adolescents receive less support from most of their network members, however not from peers. This unexpected result is also reflected in the less negative reciprocity score. Reciprocity in social support for the impaired group is slightly negative, but more reciprocal than that of sighted adolescents. However, when visually impaired adolescents older than 18 years are removed from the sample, the total reciprocity in support relations differs not from that of sighted adolescents. The total social support score still does.
Using a visually impaired adult's perspective can provide quite a lot of support, especially from patients and peers. They perceive more support from formal network members than from siblings and extended family members. With regard to satisfaction, the majority of the blind and visually impaired adult's needs are met with support.

What is the correlation between the network aspects of blind and visually impaired adolescents? First of all, the significant correlations were only under additional constraints. Correlations between the size of the different groups of persons across the network show many positive correlations, indicating that having more people in one sector is related to having many people in other sectors. There is no compensatory mechanism. The scores on the two social support assessment correlate strongly with each other. Furthermore, we found significant positive relations between social support and satisfaction with support.