

The transition from elementary to secondary school goes along with a myriad of social, cognitive, and biological developments (Steinberg & Morris, 2001), making the onset of adolescence a challenging period in life. Not surprisingly, adolescence has been described as a period of *storm and stress*, in which conflict with authority figures, mood swings, and antisocial behaviors are more likely to arise (Hall, 1904). As adolescents enter secondary school at about age 12, they start living their lives more independently from their parents as their activities and interests center around those of their peers (Allen & Land, 1999; Berndt, 1982; Larson & Richards, 1991). At the same time, adolescents have to cope with the new responsibilities secondary school demands, get to know their new classmates, and deal with puberty and its physical and cognitive changes. These challenges can be stressful for adolescents, as illustrated by the following (translated) quotes of early adolescents participating in my studies, after being asked to describe unpleasant experiences that occurred to them during the last couple of months:

'I hoped secondary school would be a fun time with new kids and new friends, but actually it was quite disappointing'

'I have gotten my first period'

'My parents often yell at me if I do not listen to them, which I do not like because it is too noisy for my ears'

'I have got a broken heart ... Teenage drama and stuff'

'These stupid school projects... They make me stress out and I think I am allergic to stress'

'I am fighting with myself about what I want'

In dealing with these hassles, it might stand to reason for adolescents to turn to individuals who already dealt with these issues – parents. However, whereas parents likely know best how to address these issues, adolescents seek to become more independent from their parents and want to take their own decisions, irrespective of their parents' opinions. Instead, the opinions and behaviors of peers become a more salient guideline for how to behave and which decisions to take. However, previous research on the role of peers' opinions and behaviors in the lives of adolescents have highlighted the peer context as socializing agent for risky behaviors. Indeed, many risk behaviors (e.g., substance use, delinquency, aggression) take place in the presence of peers (Erickson & Jensen, 1977; Gardner & Steinberg, 2005; Lahey, Moffitt, & Caspi, 2003) and peers may influence each

other's risk behaviors through imitation or encouragement (see Dishion & Tipsord, 2011), suggesting that the peer context puts adolescents' healthy development at risk. Amongst the most frequently cited papers concerning peer influence discuss how peers contribute to (the preference for) adolescent risk taking (Gardner & Steinberg, 2005), substance (ab)-use (Borsari & Carey, 2001; Ennett & Bauman, 1994), and delinquency (Warr & Stafford, 1991), suggesting that many researchers have attempted to understand the role of peers in the development of adolescent risky, negative behaviors.

THE PEER GROUP AS A POSITIVE CONTEXT

Although research findings on the undesirable features of the peer context are compelling, this research does not do justice to the positive role peers unquestionably fulfill in the lives of adolescents: Peers may actually help adolescents – in an adaptive way – to navigate the turbulent life-stage they are in:

'I have very loving friends who help and support me'

'I am very worried about the fights my parents have,
but I have a good friend with whom I talk about it'

'One of my friends has a problem, but I will not tell what it is about
because he trusted me that I would not tell anyone'

'The father of a girl I know from the horse-riding club has passed away'

'I heard my best friend has a lot of fights at home'

These quotes illustrate how the peer group may function as a positive and supportive environment in which adolescents care about each other, and underline the notion that peers take up a central role in the support network of adolescents (Del Valle, Bravo, & López, 2010; Helsen, Vollebergh, & Meeus, 2000; Hombrados-Mendianta, Gomez-Jacinto, Dominguez-Fuentes, Garcia-Leive, & Castro-Travé, 2012).

The general aim of this thesis is to understand the positive role peers may play in the lives of adolescents in general, and to understand their role in adolescents' support network in particular. In the remainder of this introduction, I will clarify which problems adolescents experience and may need help with, which adolescents are typically involved in giving and receiving help, what the scientific and societal relevance of this dissertation is, and how social networks play a prominent role herein. The chapter ends with the central research question and an overview of the chapters of this dissertation.

DAILY HASSLES

Individuals all experience problems at some point and to some degree, as do adolescents. Over the years, researchers have investigated stressors, hassles, and negative life events adolescents generally experience (e.g., Ames et al., 2005; Compas, Davis, Forsythe, & Wagner, 1987; Wright, Creed, & Zimmer-Gembeck, 2010). An exemplary study describing the types of hassles adolescents are confronted with was done by Fallon and Bowles (1999), who asked 1,022 11 to 18 year old adolescents to describe one major and one minor problem they experienced during the last six months. Results showed that major and minor daily hassles were (in order of frequency) primarily experienced in the domains of family, interpersonal relationships, education, and health.

To give an impression of the problems participants in my studies experienced, I made an overview of the unpleasant events they said they experienced during the last and current school year, compiling their answers over six waves. 1,013 participants reported one or multiple negative events ($N = 1,714$) during this period of time. I compiled these problems into several categories, which are displayed in Table 1.1, together with the frequency with which participants mentioned events of this category. Many negative events had to do with the death or health of others, such as family members, friends, neighbors, schoolmates, or acquaintances. Many participants reported issues with their pets; 9% reported the death or health issues of pets as a negative event. Social problems were also frequently mentioned as negative events; participants reported on, for instance, being bullied or teased, having fights with friends, feeling left out, or missing friends. Participants were sometimes worried about their own mental or physical health (6%), and about school related issues (e.g., receiving low grades, having to do homework, or not passing a test; 3%). Other important categories were problems within the family, such as fights with parents or siblings (4%) or fights between parents or parental divorce (2%). 26 participants (2%) did not want to elaborate on negative events.

Across all categories, girls more often reported problems than boys (56%). Differences were more pronounced regarding health issues of family and others, fights with parents, social problems, and the death or health issues of pets, where 70% of the reporters of problems in these domains were girls (see also Fallon & Bowles, 1999). Less pronounced were sex differences regarding the reporting of own health problems, deceased family or others, or parental fights or divorce (about 60% girls). Furthermore, boys and girls reported school problems and 'other' problems to the same extent. Strikingly, boys slightly more often than girls indicated that their problems were 'private', 'none of your business' or 'not something I want to talk about' (about 60% boys).

Most participants experiencing problems reported that they received support of their peers: Of the participants that indicated to have experienced something unpleasant during the past two school years, 92% of indicated on at least one time point that they received help from at least one classmate, whereas 8% did not. In the following, a more

detailed notion is given of help in adolescence; what is help, what is the role of peers in adolescents' network of helpers, and which adolescents typically receive and give help in the peer context?

DEFINITION OF HELP

Help arguably falls under the broad concept of prosocial behavior, which has been defined as '*voluntary behaviour that benefits others or promotes harmonious relations with others*' (Dovidio, Piliavin, Schroeder, & Penner, 2006; Eisenberg et al., 1999). The many supportive behaviors that exist have been grouped into four broad categories (House, 1981; Tardy, 1985): Emotional support (e.g., provision of care, or listening), informational support (e.g., provision of information or advice) appraisal (e.g., provision of feedback), and instrumental support (e.g., provision of materials or money). The results of a focus group study (Bergin, Talley, & Hamer, 2003) among 11 to 13 year olds suggested that particularly the alleviation of negative emotional states is a salient form of help that adolescents exchange with their peers (see also Dunfield, 2014). Other types of help that participants described were helping to develop skills, such as sports and school related skills, and providing instrumental support. The common ground of all forms of help is that they provide the receiver of support with the feeling '*...that one is cared for, esteemed, and part of a mutually supportive social network*' (Taylor, 2011).

In this dissertation, adolescents' network of helpers is identified using a so-called peer nomination technique. Peer nominations have been frequently used to identify relations or interactions between individuals – for example, friendships, liking, and also helping (see Baerveldt, Van Duijn, Vermeij, & Van Hemert, 2004; Dijkstra, Lindenberg,

Table 1.1
Categories and frequencies of reported 'unpleasant events' (N events = 1,714)

Category	Frequency	%
Death (relative)	418	24
Death (other person than relative)	217	13
Health issues (relative)	216	13
Pet (death, illness)	155	9
Social (e.g., bullying, having fights with friends, feeling left out, ...)	144	8
Health issues (self)	97	6
Other minor (e.g., losing a soccer match, biking in the rain, ...)	84	5
Death of teacher	83	5
Fight (with parents or siblings)	72	4
Health issues (other person than self or relative)	61	4
School (e.g., receiving low grades, having to do homework, not passing a test, ...)	56	3
Other major (e.g., father/mother fired, moving houses, ...)	48	3
Fight between parents or parental divorce	37	2
No elaboration on event (e.g., 'private', 'none of your business')	26	2

Verhulst, Ormel, & Veenstra, 2009). Following this procedure, I asked participants to identify classmates who *'help you with problems (for example, with homework, with repairing a flat [bicycle] tire, or when you are feeling down)'*. The types of help included in this question capture examples of the most salient forms of help for adolescents as identified by previous researchers (Bergin et al., 2003; Dunfield, 2014); practical (instrumental, informational) and emotional support. By asking participants about peers who help them in general instead of asking about specific, single instances of help, I aim to capture a longer standing relationship, providing a receiver of help with the feeling of *'being part of a supportive social network'* (Taylor, 2011).

THE ROLE OF PEERS AS A SOURCE OF HELP

Among adolescents that seek help, most of them turn to non-professional sources of help rather than teachers, (school) counselors or doctors. Indeed, family and peers are the most prominent sources of help (Fallon & Bowles, 1999). As children transition into adolescence, friends and classmates take up a more prominent role as helpers whereas the role of parents decreases (Del Valle et al., 2010; Helsen et al., 2000; Hombrados-Mendoza et al., 2012). Adolescents may, however, either turn to parents or peers depending on the type of support they need – although it is difficult to establish clear patterns as of yet. Both parents and peers provide emotional and practical support (e.g., Hombrados-Mendoza et al., 2012; Reid, Landesman, Treder, & Jaccard, 1989), but it is unclear how often parents or peers are consulted for each specific type of support. There are indications that peers are more often consulted in case of relational issues with family or peers, whereas parents are more often consulted in case of health problems or (school) stress (Fallon & Bowles, 1999; Sullivan, Marshall & Schonert-Reichl, 2002). Similarly, researchers argued that one of the prime reasons to consult parents is to take advantage of their expertise, whereas help among peers also functions to strengthen relationships and provide companionship (Reid et al., 1989; Sullivan et al., 2002).

Thus, although the magnitude of the role peers play in the provision of specific types of help is unclear, it is known that they play a substantial role in adolescents' network of helpers, and that this role gains importance during the transition to adolescence. In this dissertation, I will further examine the peer help network during this transition.

WHICH ADOLESCENTS TYPICALLY GIVE AND RECEIVE HELP?

Although it is clear that adolescents receive help for their problems and whom they generally consult, it is less clear *which* adolescents typically receive help. That is, to my knowledge, little is known about which characteristics are associated with help with daily hassles. There is some research examining facilitators and barriers to (professional) help seeking for (clinical) mental health issues (e.g., Frojd, Marttunen, Pelkonen, Von der Pahlen & Kaltiala-Heino, 2007; Gulliver, Griffiths, & Christensen, 2010; Schonert-Reichl & Muller, 1996; Sheffield, Fiorenza, & Sofronoff, 2004) and for academic problems in the classroom context (e.g., Newman & Schwager, 1993; Ryan, Gheen, & Midgley, 1998;

Ryan, Pintrich, & Midgley, 2001), and it has become clear that girls seek help more often than boys do (e.g., Gulliver et al., 2010; Maccoby, 1990; Rickwood & Braithwaite, 1994; Schonert-Reichl & Muller, 1996).

Relative to the help seeking literature, more is known about who gives help – that is, more is known about who is generally more prosocial than others (see for a review Eisenberg, Fabes, & Spinrad, 2006). As helping others requires some ability to orient on others' needs, associations have been found between prosociality and the ability to empathize or sympathize with others (e.g., Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007; Eisenberg, Guthrie, Murphy, Shepard, Cumberland, & Carlo, 1999; Eisenberg, Miller, Shell, McNalley, & Shea, 1991). Additionally, researchers focused on associations with behaviors such as aggression (Persson, 2005), and with acceptance within the peer group (Card, 2010; Pakaslahti, Karjalainen, & Keltikangas-Järvinen, 2002; Wentzel & McNamara, 1999). However, prosociality is a construct that comprises a multitude of behaviors (e.g., sharing, defending, volunteering, being nice), of which helping is just one part. Therefore, it is known who is generally more prosocial, but not necessarily who is more helpful in particular.

Looking at this short overview, it seems that little is known about predictors of receiving and giving help in the peer context. Most importantly, however, it shows how giving and receiving help are primarily viewed from an individual perspective. That is; the vast majority of studies focused on helping as individual characteristic. Thus, adolescents were expected to give or receive help to a greater or lesser extent just like they can achieve high or low grades in school, or experience depressive symptoms more or less frequently. Researchers were primarily interested in explaining why certain adolescents were more helpful (actually, prosocial) or tended to seek help more often than others.

Although it has been acknowledged that helping is a social behavior (i.e., intended to benefit others or relations with others), this social aspect has hardly been explicitly acknowledged in theory and research designs: It has been investigated who is helpful, but not who is helpful *towards whom*. This is important, given that adolescents might be helpful towards some peers, but not towards others (Boxer, Tisak, & Goldstein, 2004; Hawley, 2003). For example, girls tend to help more often, but they might primarily help other girls and not boys (e.g., Baerveldt, et al., 2004; Nelson-Le Gall, & DeCooke, 1987). Similarly, when looking at barriers or facilitators to seeking help, or at the consequences of receiving help for adjustment, one should take into account the characteristics of the (potential) helper. For example, receiving help with school work might be useful only when one's helper is doing well in school.

Thus, the concept of help becomes more complex if the inherently relational nature of help is taken into account, that is, if it is taken into account that help is directed towards or sought from other adolescents who have particular characteristics. Taking this into account may add a different perspective to findings from previous, individually focused, research. In the following, I will specify what a relational approach to help entails, and how I aim to advance research on adolescent help in the peer context.

A RELATIONAL APPROACH TO HELP

A way in which the social, relational character of help can be taken into account is by conceiving of help as a social network. By taking a social network perspective, I shift the focus from studying an individual and its characteristics in isolation to studying the relations of individuals with their (social) environment.

Social relations between individuals can be captured by using the above-mentioned peer nomination procedure. Usually, a peer nomination question (e.g., "*Who helps you*") is followed by a list of class- or schoolmates. Students are asked to identify class- or schoolmates who fit the description in the question best. In research on adolescent development, peer nominations have often been used as a means to gain insight into someone's social standing in the classroom, by summing incoming nominations on, for example, popularity ('*Who is most popular?*'; Dijkstra, Cillessen, & Borch, 2013), friendship ('*Who is your best friend?*'; Wentzel & Asher, 1995), or peer rejection ('*Who do you dislike?*'; Card, 2010). These peer nominations can also be used to study relations between a nominator and its nominee(s) (for example: '*Michael dislikes Anna*', or '*Jonathan is friends with Lisa and Max*'); or to construct entire networks of relations (for example; '*There are 12 students who dislike each other in this classroom*', or '*Friendships in this classroom tend to cluster in groups*').

To be able to analyze these nominations using social network analysis, the collection of all nominations in a classroom (or grade, or school) should be turned into adjacency matrices indicating whether (1) or not (0) pairs of individuals are adjacent (i.e., connected) through a nomination from one person to the other and/or vice versa (Table 1.2). A sociogram, in which individuals are depicted as nodes and their relations or interactions as arrows, is a visual representation of an adjacency matrix (Figure 1.1), showing how a social network of relations simply consists of a collection of individuals (called nodes) and the relationships or interactions between them (called ties).

Looking at social networks, one can distinguish several levels of analysis: The level of the individual, the dyad (a set of two individuals), and groups (for example, triads, cliques, or an entire classroom). Furthermore, the individuals in the network can be connected through multiple relationships: For example, individuals may not only help each other, but may also be befriended. Finally, the individuals in networks have particular characteristics, such as a sex or a level of academic achievement. These characteristics can be predictive of sending or receiving nominations (e.g., girls may help others or receive help more often), or can be the outcome of relationships (e.g., help may affect achievement).

This dissertation will shed light on these aspects, and will address issues concerning (1) the different levels of the help network (2) the role of individual characteristics in explaining help networks (3) the overlap of the help network with the friendship network and (4) the role of help in the prediction of individual outcomes. In Chapter 2, I will address individual predictors of giving and receiving help, and will

Table 1.2

Adjacency matrix of one fictitious classroom at one time point, indicating whether (1) or not (0) an individual nominates another individual as helper. Individuals can also be missing (NA) at a particular time point

	1	2	3	4	5	6	7	8	9
1	-	1	0	0	1	0	0	0	1
2	1	-	1	0	0	0	0	0	0
3	0	0	-	1	0	1	1	0	1
4	0	0	0	-	1	0	0	0	1
5	NA	NA	NA	NA	-	NA	NA	NA	NA
6	1	0	0	0	0	-	0	0	0
7	0	1	1	0	1	0	-	0	1
8	0	0	0	0	0	0	0	-	0
9	1	0	0	0	0	0	1	0	-

predict help in dyads with individual characteristics: Who helps whom? In Chapter 3, I will examine the overlap of help with friendships, and address how these relations may simultaneously develop over time. In Chapter 4, I examine how help manifests itself on the classroom level, how individuals are embedded in these classroom help networks, and how the help network and the individual position in this network affect academic achievement. In the last empirical chapter, Chapter 5, I examine how help affects the development of depressive symptoms.

CHAPTER 2. WHO HELPS WHOM?

Importantly, receivers of help and helpers are not isolated from each other, as helping is a social behavior through which individuals are connected. Although some studies have sought to identify givers and receivers of help, it is relatively unknown between which adolescents help takes place. I propose that helping others is in part motivated by concerns about with whom adolescents want to (be) associate(d). Specifically, I test whether the similarity attraction perspective (McPherson, Smith-Lovin, & Cook, 2001), in which it is argued that individuals are naturally drawn to others with similar characteristics, also holds for helping. As the help network is a relatively understudied type of network, I additionally examine the structural building blocks of adolescent help networks in this chapter. That is, relationships may emerge not as a result of (similarity in) particular characteristics, but as a result of general tendencies of individuals to form relations (Veenstra, Dijkstra, Steglich, & Van Zalk, 2013; Veenstra & Steglich, 2012). For example, adolescents may prefer to help peers who have helped them (reciprocity), or prefer to help helpers-of-helpers (transitivity). Using data of 840 adolescents residing in

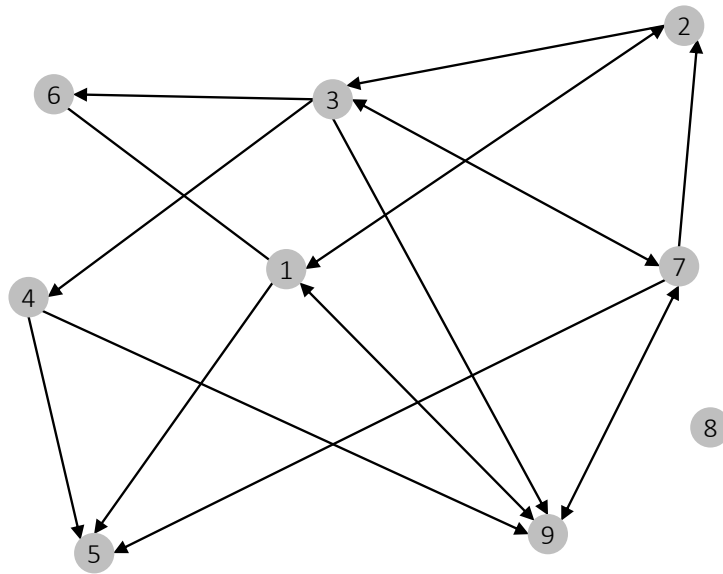


Figure 1.1
Sociogram resulting from the Table 1.2 adjacency matrix, where nodes represent individuals, and the arrows the help nominations between them

40 secondary school classrooms, this chapter provides first insights into the characteristics of help networks.

CHAPTER 3. DISENTANGLING THE INTERPLAY BETWEEN FRIENDSHIP AND HELP

Relationships are rarely characterized by one quality but often occur in multivariate forms (Pattison & Wasserman, 1999). Demonstrating this, help has found to be a distinctive feature of other positive relationships such as friendship (Furman & Buhrmester, 1992; Hartup & Stevens, 1997; Newcomb & Bagwell, 1995). Previous research primarily highlighted help as part of the definition and expectations of friendship, but I propose that the interrelatedness of friendship and help is more complex. First, associations between friendship and help are bidirectional: Not only does friendship give rise to help, help may also function as bridge to establish friendships (Wentzel & Erdley, 1993). Second, both friendships and help are directional: They can be mutually oriented (e.g. Jonathan and Lisa help each other) or one-sided (only Jonathan helps Lisa), implying that there are many configurations in which friendship and help may coincide. For example, Jonathan and Lisa regard each other as friend (mutual), but only Jonathan helps Lisa (one-sided). Third, friendship and help develop over time: They emerge and may be maintained, and each can contribute to the emergence and maintenance of the other. Using data of 41 friendship and help networks, I aim to unravel the interrelatedness of friendship and help in a more detailed way, generating new information on the role of help in friendships and vice versa, and aiding us in understanding the complexities of adolescents' social relations.

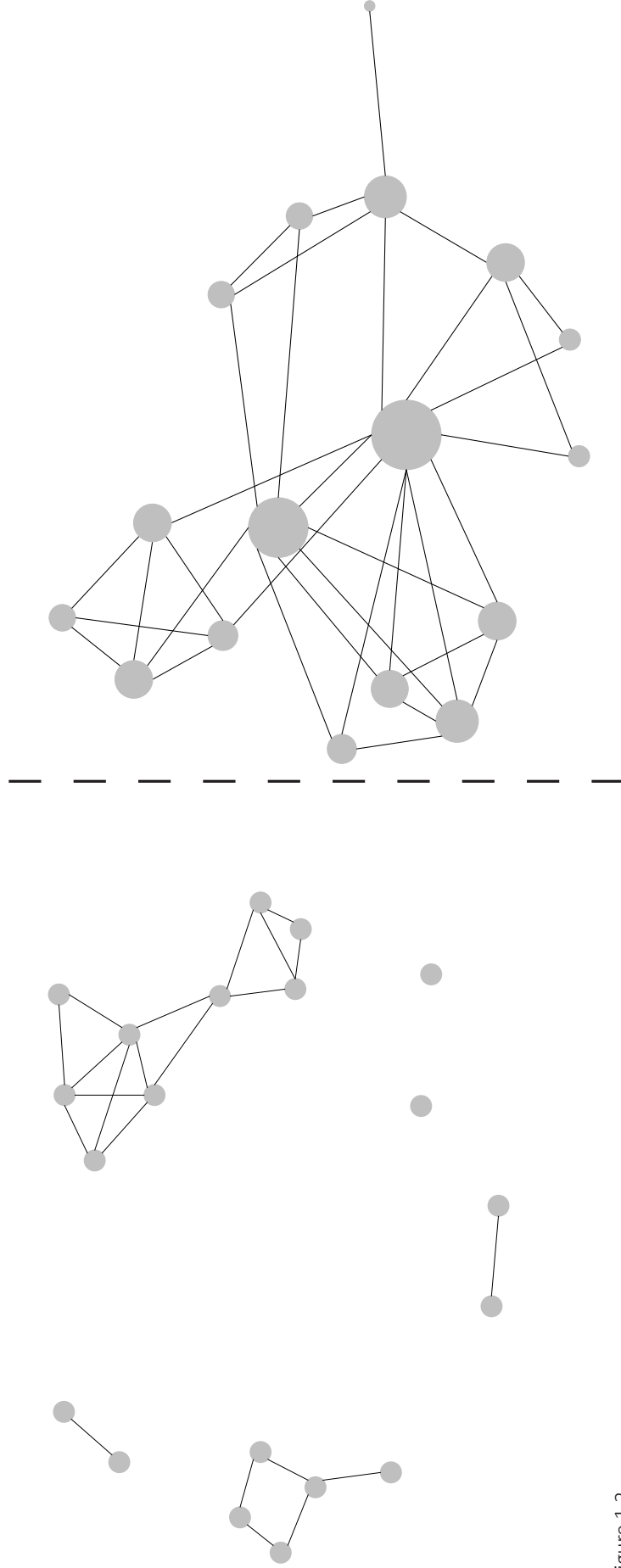


Figure 1.2
Left: A typical segmented classroom help network, in which help is concentrated in subgroups
Right: A typical centralized classroom help network, in which some individuals (i.e., the larger nodes) have more help relations than others

CHAPTER 4. CLASSROOM HELP NETWORKS, INDIVIDUAL NETWORK POSITION, AND ACADEMIC ACHIEVEMENT

After having examined help on the individual and dyadic level, I examine group-level characteristics of help in Chapter 4. No classroom help network looks the same: While analyzing help networks, the difference in quantity of help and the spread of help over individuals immediately stand out: In some classrooms, helping each other seems more common than in other classrooms. Also, in certain classrooms, helping seems segmented, that is, concentrated in sub-groups (Figure 1.2 – left). Finally, in some classrooms, some individuals have considerable more help relations than others (Figure 1.2 – right), causing the network to center around these individuals. This ‘visual’ variation in classrooms motivated me to describe differences in help network characteristics between classrooms in more detail. Furthermore, in this chapter I aim to assess whether variation in the characteristics of help networks and variation in individual embeddedness in these networks have actual consequences for adolescents. Previous findings have established that adolescents’ academic motivation and success are in part determined by the social climate in the classroom (Thapa, Cohen, Guffey & Higgins-D’Alessandro, 2013; Wang & Degol, 2016), of which peer support is a salient aspect (Fraser, Anderson, & Walberg, 1982). This study of 54 classroom help networks will provide more insight into what help networks look like and how they may affect adolescents’ school outcomes.

CHAPTER 5. CONSEQUENCES OF RECEIVING HELP FOR DEPRESSIVE SYMPTOMS

The structural characteristics and predictors of help networks having been delineated in previous chapters, I will examine the consequences of receiving help by looking at processes of social influence emerging from help on depressive symptoms. Whereas it may be appealing to conclude that help furthers positive outcomes, as it is meant to benefit (relations with) others, it may also lead to adverse outcomes. An exemplary study into depression socialization demonstrated that befriending depressed peers may increase one’s own symptoms of depression, referred to as co-rumination (Van Zalk, Kerr, Stattin, Branje, & Meeus, 2010). This process appeared to be at play especially in *supportive* friendships (e.g., Calmes, & Roberts, 2008; Rose, Carlson, & Waller, 2007). In this chapter, I will delineate how receiving help affects the development of depressive symptoms, and propose that the effect of help depends on the level of depressive symptoms of one’s helpers: Receiving help from peers who do not suffer from depressive symptoms may break depressed adolescents’ spiral of negative thoughts or emotions, whereas co-rumination may take place if helpers suffer from symptoms as well. I assess the co-evolution of 73 help networks and individual depressive symptoms to assess whether help is beneficial for the receiver of help, potentially preventing emotionally unstable adolescents from cascading into more severe internalizing problems.

THE DATASET: SNARE

SNARE stands for Social Network Analysis of Risk behaviors in Early adolescence, which is a longitudinal project on the social development of (early) adolescents with a specific focus on the interaction between (early) adolescents' peer social networks and the development of behavior. Two secondary schools were asked and willing to participate: One in the middle and one in the north of the Netherlands. In the Netherlands, secondary school follows after elementary school- there is no middle school or junior high school. Students enter the first grade of secondary school at about age 12. The SNARE-study started with a pre-assessment in September 2011, assessing all first and second grade students who agreed to participate in the study (cohort 1). One year later (2012-2013) all new first grade students were again approached for participation in the study (cohort 2). In total, 1,826 students were approached for this study, of which 40 students (2.2%) refused to participate for several reasons, for example, the parent and/or adolescent had no interest, the adolescent was dyslectic, or it was too time consuming. A total of 1,786 students participated in SNARE (*M* age pre-assessment = 12.91 years, *SD* = .70, 50.1% male, 83.9% Dutch). After the pre-assessment, the SNARE study continued with 3 regular assessments (October, December, and April) per school year, and ended after 13 assessments in April 2015. At each measurement occasion, participants were asked about several aspects of their daily lives, for example, their relationship with parents, their well-being, and time spending. In addition to that, peer nominations were used to assess, amongst others, friendships, antipathies, help, and peer valued characteristics such as popularity.

SNARE proved to be a valuable source of data for this dissertation: SNARE is a large study as it contains data from multiple measurement points and from a large number of secondary school students. This allowed me to track the development of help relations and their associations with individual characteristics over time using complex models. Moreover, because SNARE followed students from the beginning of secondary school, the actual development of help relations could be studied, as students form new social networks of peer relations at the transition from elementary school to secondary school.

IN SUM

This dissertation aims at answering the following research questions. An overview of the empirical chapters is presented in Table 1.3 and Figure 1.3.

Who gives help, who receives help, and who helps whom?

How does one-sided versus mutual help influence the initiation and maintenance of friendships and vice versa?

What is the structure of and variation between classroom help networks, which positions do individuals take up in these networks, and how are classroom network structure and individual network position associated with academic achievement?

How does receiving help affect the development of depressive symptoms, and how does this depend on the level of symptoms in helpers?

Given the scarcity of research on the positive role peers may play in adolescents' lives through help, the knowledge resulting from this project addresses a significant gap in research by providing a comprehensive image of help from three different perspectives: The individual, pairs of individuals, and the classroom. Knowledge of antecedents and consequences of help is important, as positive relationships are key to help adolescents navigate the turbulent transition from childhood into adolescence, and ensure a healthy development. Hopefully, this dissertation will provide researchers with insights that encourage further inquiry into positive aspects of the peer context, and aids teachers in understanding how adolescents' positive relations with peers may be used to improve classroom atmosphere and the well-being of their students.

Table 1.3
Overview of empirical chapters

Chapter	Research question	SNARE subsample	Method	Dependent variable(s)
2	Who gives help, who receives help, and who helps whom?	Cohort 1, school 1, 40 classrooms. 840 first and second graders (<i>M</i> age = 13.4)	Longitudinal social network analysis	Help peer nominations
3	How does mutual versus one-sided help influence the initiation and maintenance of friendships and vice versa?	Cohort 1 and 2, school 1 and 2, 41 classrooms. 953 first graders (<i>M</i> age = 12.7)	Longitudinal Bayesian social network analysis	Help and friendship peer nominations
4	What is the structure of and variation between classroom help networks, which positions do individuals take up in these networks, and how are these network indices associated with academic achievement?	Cohort 1 and 2, school 1, 54 classrooms. 1,144 first and second graders (<i>M</i> age = 13.1)	Multilevel analysis	School grades
5	How does receiving help affect the development of depressive symptoms?	Cohort 1 and 2, school 1 and 2, 73 classrooms. 1,648 first and second graders (<i>M</i> age = 13.1)	Longitudinal Bayesian social network analysis	Depressive symptoms

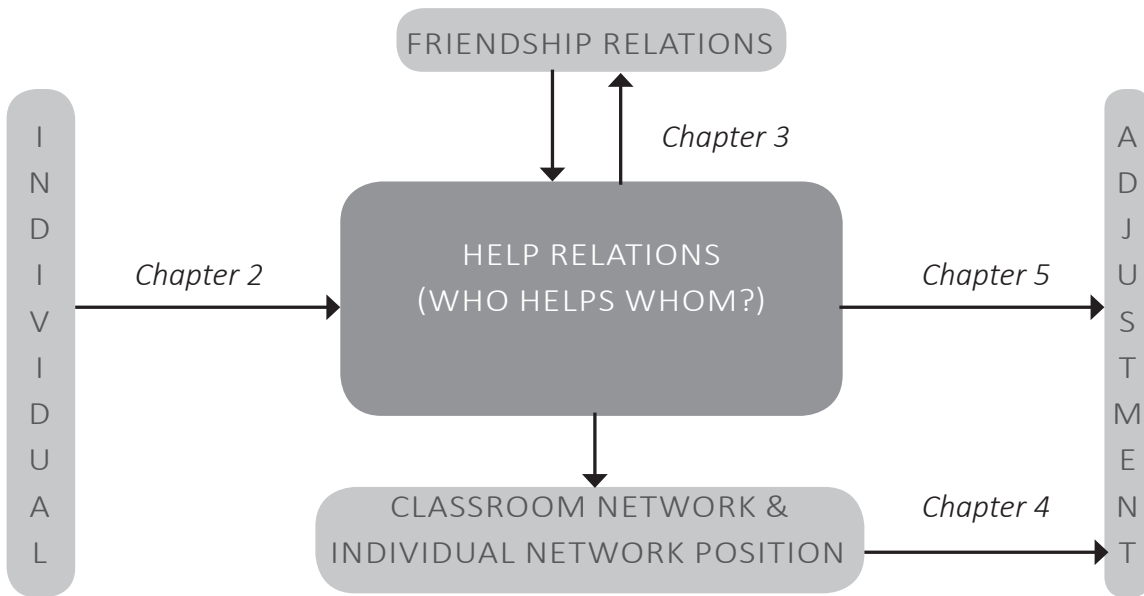


Figure 1.3
Overview of empirical chapters