Emotional communication in support groups

An explorative study of youth and therapist assessments of communication in support groups for siblings of children with chronic illness or disability

Kristin Polden Fjelnseth and Signe Krohg Owren

A thesis for the Professional Program
Department of Psychology

UNIVERSITY OF OSLO

Spring 2016
It’s like we, here, understand each other in a different way, and that makes it easier, maybe, to talk about what’s with our siblings... than it is to talk with friends at school about it (...) Everyone here, understand exactly how you feel! And that can be quite ok.

Statement from girl (14) in a support group for siblings.
Emotional communication in support groups

An explorative study of youth and therapist assessments of communication in support groups for siblings of children with chronic illness or disability
Title: “Emotional communication in support groups: An explorative study of youth and therapist assessments of communication in support groups for siblings of children with chronic illness or disability”

Authors: Kristin Polden Fjelnseth og Signe Krohg Owren

http://www.duo.uio.no/

Print: Reprosentralen, Universitetet i Oslo
Abstract

Authors: Kristin Polden Fjelnseth & Signe Krohg Owren

Title: “Emotional communication in support groups” An explorative study of youth and therapist assessments of communication in support groups for siblings of children with chronic illness or disability

Supervisors: Krister W. Fjermestad & Torun M. Vatne

Background: Support groups represent a common preventive intervention for children in vulnerable situations, such as siblings of children with chronic disorders. Little research has been done on these interventions, and how they might act supportive. A common objective of support groups is providing emotional support by meeting with other children in similar life situations and sharing common experiences. Often group leaders do not have formal training in leading child support groups. To contribute to the lack of knowledge and to provide group leaders with well-founded advice, Frambu Resource Center for Rare Disorders initiated a sibling project in 2012. The present study is part of the Frambu sibling project and aims to contribute to the knowledge about emotional communication in support groups for siblings. It is an explorative study comparing youth and therapist evaluations of emotional communication in support groups for siblings of children with chronic disorders or disabilities.

Method: Data was collected by the authors of this thesis and their supervisors. Participants, 136 youth (11-16 years) and 68 therapists working with children, rated video recorded sequences from support group sessions. The short video examples portrayed five different patterns of communication found to often appear when children express negative emotions in support groups. Quantitative data were gathered in the form of questionnaires.

Results: Statistical analyses showed discrepancies in the evaluations of support by youth and therapists. Perceived quality of support from other siblings was more consistent between the two groups, compared to perceived quality of support from group leaders. Generally, perceived support from group leaders and other siblings was rated as low to moderate, by both youth and therapists. Perceived change in emotional valence and intensity of the emotional expression for the target child in the video sequences predicted both youth and therapist ratings of support, across communication sequences. Other systematic predictors were not
found. The mean correlation between perceived quality of the conversations and perceived support was large, indicating some, but not perfect overlap.

**Conclusion:** We identified discrepancies in what youth and therapists perceive as supportive when a child express negative emotions in a support group. Through the examined sequences, support was generally perceived to be low to moderate, implying the need to find out more about what children and therapists base their evaluations upon, how support groups might provide support, and the importance of training group leaders based on knowledge about supportive communication.
Acknowledgements

Working with this thesis has been a journey of theoretical, clinical and methodological learning for us in this process that has lasted well over a year, and marks the final station of six years of university studies in psychology. We first heard about the Sibling project through different sources and got engaged in the project at different point of times, but the decision we both made, engaging in the sibling project, resulted in an unexpected collaboration.

Through the work as group leaders for siblings and their parents, and as research assistants, we´ve heard stories from families with children with chronic disorders that have made a great impact on both of us. We have also experienced different reactions in siblings when they have shared emotional experiences in a group, and these experiences have made it even more clear to us that research on how to best support children in need of support groups is highly important!

As we did not know each other from before, we have learnt to know each other as well along the way. The social support we have found in each other has in many ways been essential and together we have learnt to handle challenges coming our way.

Kristin needs to direct a special thank you to Signe for handling the fact that baby Ylva was born in November 2015 and had to keep us company from then – I am so grateful for your patience and positive attitude!

The work on this thesis have taken a while from the first ideas to the finishing process, the study became quite circumstantial and we have received help from many talented and committed people along the way.

First, we would like to thank our supervisors, Krister Fjermestad and Torun Vatne. We highly appreciate your dedication and knowledge, and we are very grateful for all the experience you have shared with us and for letting us be a part of the sibling project.

We are grateful to the siblings participating in support groups at Frambu who have given their consent for the video material to be used for research and have allowed this project to be possible, and also the youth actors of the theater group under supervision of Wencke Grepperud, as well as assisting group leaders and Christoffer Hals for helping us make the new video material.
We are grateful for the participation from Munkerud elementary school, Ammerud elementary school, Nordseter secondary school, BUP Rikshospitalet, Nic Waals Institutt, BUP Fana and Homannsbyen Family Counselling Office, who all gave us their time and efforts to evaluate the support group conversations.

We send a thank you to Wendy Silverman at Yale university for exiting supervision and helping us try to see the bigger picture through skype meetings.

Thank you, Pål Ulleberg and Anne Marie Halberg, for being very helpful on questions on methods and statistics, and thank you Yngvild Haukeland, Charlotta Jansson, Ingeborg Polden and Marilyn O’Connell who have been so kind to read our work and give us valuable input along the way.

At last, we need to thank our nearest and dearest – Anders and Niklas – who have provided us with love and support and lots of encouragement!

Oslo, April 2016

Kristin Fjelnseth & Signe Krohg Owren
# Table of Contents

1. Overview .......................................................................................................................... 1

2. Introduction .......................................................................................................................... 2

2.1 Siblings of children with chronic illness or disabilities ......................................................... 2

2.1.1 Everyday experiences of siblings .................................................................................. 2

2.1.2 Psychosocial well-being of siblings ............................................................................ 3

2.2 Support groups ................................................................................................................... 4

2.3 The emotional life of children and adolescents ................................................................... 5

2.3.1 Children’s expression of emotion ................................................................................. 6

2.3.2 Children’s ability to regulate their emotions ................................................................. 6

2.3.3 Why children express emotions .................................................................................... 7

2.4 How may support groups act supportively? ....................................................................... 8

2.4.1 Children’s mentalization abilities .................................................................................. 8

2.4.2 Children’s communication skills ................................................................................... 8

2.4.3 Prosocial behavior among children .............................................................................. 9

2.4.4 The group leader role in support groups for children .................................................. 10

2.4.5 Research on support groups for siblings ..................................................................... 10

2.5 The Frambu Sibling Project (FSP) .................................................................................... 12

2.5.1 FSP Part One – A descriptive study of support group sessions ..................................... 12

2.5.2 Adult-centered and child-centered communication ...................................................... 13

2.6 Can we rely on the view of adult experts? ....................................................................... 15

2.7 Research on children’s own perspectives ......................................................................... 16

2.7.1 Why is children’s contribution important? .................................................................. 17

2.7.2 Methodological challenges of doing research with children ....................................... 18

2.8 The purpose of the present study: Objectives and research questions ............................. 19

3. Methods and Materials ..................................................................................................... 20

3.1 Methodological approach ............................................................................................... 20

3.1.1 Step 1: Making non-sensitive video material ............................................................... 20

3.1.2 Step 2: Developing measures and collecting data ....................................................... 21

3.1.3 Step 3: Data analysis .................................................................................................... 21

3.2 Procedure: Data collection ............................................................................................... 22

3.3 Sample characteristics ..................................................................................................... 23
Figure 1: Categories of prevalent prominent communication patterns .............................................. 14
Table 1: Sample characteristics .............................................................................................................. 23
Table 2: Description of the video material ............................................................................................. 24
Table 3: Intraclass correlation (ICC) for all eight items, for youth and therapists ......................... 28
Figure 2: Percentage of youth and therapists with moderate to high agreement to the statement describing the communication pattern ................................................................. 29
Figure 3: Perceived emotion in the start of the sequence ..................................................................... 29
Table 4: Youth’s and therapists’ assessments of support and quality of the support group sequences ................................................................................................................................. 30
Table 5: Significant predictors of perceived support based on regression analyses: .................... 35
Figure 4: Support from group leader(s) ................................................................................................. 36
Figure 5: Support from other siblings ................................................................................................. 36
Table 6: Correlation matrix for assessed support and assessed quality of the conversations . 37
Overview

Outline and Clarification of Concepts

How do we know that support groups are experienced as supportive by children?

Limited research has investigated the effectiveness of support groups, which is often the only intervention provided to vulnerable groups of children, such as siblings of children with chronic disorders.

This thesis aims to broaden the knowledge about what is providing emotional support when children express negative emotions in support groups. This is the first study comparing youth’s and therapists’ evaluations of video sequences presenting prevalent communication in support groups for siblings. We want to include the perspectives of children, the potential receivers of support group interventions, because their voice has yet to be heard in the question of what kind of communication is most helpful to them.

The introduction will sum up the current research status on siblings of children with chronic disorders and the interventions they are provided. We look into support groups, which is the most common intervention siblings are offered. The potential for emotional support in a support group setting may be dependent on several factors. We address research on emotional life and ability to express emotions as well as other factors, such as mentalization abilities, communication skills, the participants’ abilities to perceive emotions and respond in a pro-social way, and the group leaders’ ability to facilitate the communication in the group. Lastly, the research of which the present study builds on, aspects which concerns doing research with children, and the research questions for this thesis will be presented.

We will in this thesis use the term children to encompass both children and adolescents, except when distinctions need to be made between the two age groups. To avoid confusion and to discriminate the young participants providing their evaluations in this study from the children participating in the evaluated support groups sequences, we call the young raters youth and the support group participants siblings.
2 Introduction

Children who are next of kin to a person suffering from physical or mental disorder receive limited support from the Norwegian social and healthcare system (Norwegian Directorate of Health, 2010). A recent multicenter study of children next of kin concludes that the health care system only partially is following the law to support this group (Akershus University Hospital, 2015). The law demands health care professionals to support and safeguard the children of patients in the healthcare system, however, siblings of children with chronic illness or disabilities (herein referred to as siblings), are not mentioned in the legislation. Thus, siblings can be seen as a vulnerable group that is easily omitted and receive limited attention by health services.

Interventions targeting children who are next of kin, and thereby also siblings, mainly consists of support groups arranged by different institutions. These groups are led by adults with varying and sometimes no formal education in leading child groups. This study aims to explore youth’s experience of emotional communication and support within support groups.

2.1 Siblings of children with chronic illness or disabilities

About 10 – 15 % of children in Norway have a chronic health condition or disability that affects their everyday life (Norwegian Institute of Public Health, 2015). Many of these children have healthy siblings, thus siblings of affected children may be considered to make up a large group of the Norwegian child population.

2.1.1 Everyday experiences of siblings

Siblings of children with chronic illness are reported to have different life experiences than siblings of normally developed children in relation to the disease, parental behavior, social support, and emotional life. In everyday life siblings may be confronted with diverse experiences related to the condition of the affected child (Alderfer et al., 2010; Vermaes, van Susante, & van Bakel, 2012). They may observe sudden and sometimes traumatic changes in health status (Hartling et al., 2014) and become powerless bystanders of medical care processes (Haukeland, Fjermedast, Mossige, & Vatne, 2015). Siblings are reported to lack knowledge about the disease of the affected child, have limited access to information about
the affected child’s condition, or have misunderstandings about the disease (Haukeland et al., 2015; Lobato & Kao, 2002; Vatne, Helmen, Bahr, Kanavin, & Nyhus, 2015).

Sibling experiences may also be related to parenting and family factors. Higher levels of psychological distress in parents of disabled children compared to other parents are reported (Dellve, Samuelsson, Tallborn, Fasth, & Hallberg, 2006). It is suggested that parents’ levels of stress and the way the family solves problems is of great importance for siblings’ wellbeing (Giallo & Gavidia-Payne, 2006). Siblings report differential parental treatment (Pitten Cate & Loots, 2000), extra care giving or responsibilities in the family, and insufficient parent–child communication (Cuskelley & Gunn, 2003; Greenberg, Seltzer, Orsmond, & Krauss, 1999; Houtzager et al., 2004; Incledon et al., 2015; Mulroy, Robertson, Aiberti, Leonard, & Bower, 2008; Tudor & Lerner, 2015; Vermaes et al., 2012; Williams, 1997). For some siblings, being exposed to physical or verbal aggression from the affected sibling can be a part of daily life (Benderix & Sivberg, 2007).

When it comes to their social life, siblings report to experience negative reactions or lack of support from their peers and disruptions in social activities (Bluebond-Langner, 1996; Carpenter & Levant, 1994; Lobato & Kao, 2002; Long, Alderfer, Ewing, & Marsland, 2013). Siblings are found to be less socially active compared to peers (Sharpe & Rossiter, 2002) and report to find questions from other children or the way other people look at them when they are together with the affected child to be difficult. They can be embarrassed on behalf of and feel sorry for their affected sibling at the same time (Larsen, To, & Fireman, 2007).

Related to their adverse experiences siblings may struggle with complex and sometimes contradictory emotions, and may experience positive and negative emotional reactions simultaneously (Haukeland et al., 2015). More troubling, siblings report to have difficulties expressing emotions (Long, Lobato, et al., 2013) and due to limited parent-child communication or lack of time with their parents they may feel emotionally isolated (Carpenter & Levant, 1994). In the study of Haukeland et al. (2015), siblings frequently reported to cope on their own rather than to seek help from others with troublesome thoughts or experiences.

### 2.1.2 Psychosocial well-being of siblings

A rising number of studies have investigated how the experiences of siblings may impact their psychosocial functioning. Both early and more recent studies are characterized by mixed results (Houtzager, Grootenhuis, & Last, 1999; Sharpe & Rossiter, 2002; Stoneman,
Some researchers have reported a significantly increased risk (as much as double) for developing emotional and behavioral problems compared with siblings of healthy children (Hartling et al., 2014). A recent meta-analysis showed small increased risks for internalising problems \( (d = .17) \), externalizing problems \( (d = .08) \) and lower resilience \( (d = -.09) \), compared with siblings of healthy children (Vermaes et al., 2012). In a substantial population study in Australia, Emerson and Giallo (2014) found that siblings had lower well-being, as measured by parent reported SDQ scores, than siblings of healthy children, but the effect sizes on the significant indicators were small.

Some studies report positive outcomes for siblings (Houtzager et al., 2004; Summers, White, & Summers, 1994; Tøssebro, 2012). These studies indicate that sibling status can have beneficial effects such as increased self-control (Emerson & Giallo, 2014; Mandleco, Olsen, Dyches, & Marshall, 2003), tolerance and understanding (Emerson & Giallo, 2014; Mulroy et al., 2008), as well as empathy and care for others (Tøssebro, 2012).

Previous research has typically been focusing on well-known diagnoses, such as pediatric cancer (Houtzager et al., 1999) and diabetes (Gardner, 1998; Wendy A. Plante & Lobato, 2008). We therefore know less about siblings of children with rare diagnoses (i.e., prevalence< 1:2000; EURODIS, 2014). There are from 6000 to 8000 different rare disorders; thus there are many siblings of children who live with such conditions in Norway (Eurodis, 2014). Research have shown that increased knowledge may reduce children’s anxiety levels and lead to increased perception of control and better adjustment (Eiser, 1990; Lobato & Kao, 2002; Wiener, Battles, & Riekert, 1999). When being sibling to a child with a rare disorder, both the sources and the accuracy of information is limited, and therefore the siblings’ knowledge might be even scarcer compared to the knowledge of siblings of children with more common disorders.

2.2 Support groups

Support groups represent a common approach to helping children and adolescents in difficult life circumstances. Plante, Lobato, and Engel (2001) argued that support groups exist because of the widely accepted belief that meeting and talking with other people who understand and share one’s unique experiences with illness can be psychologically comforting and useful. Studies of resilience have shown that children who have access to a social support system, such as family members or other trusted persons in their environment, improve their
ability to overcome and cope with crisis (Frydenberg, 2008). The social support system can involve both adults and other children (Frydenberg, 2008). These perspectives suggest the value of joining children in the same situation together in groups with the intent of giving social and emotional support.

In a review of 125 studies of group interventions for the pediatric population, Plante et al. (2001) found that group interventions could be classified into four types based on their primary goals and intended outcomes: emotional support, psychoeducation, adaptation/skill development or symptom reduction. According to Norwegian providers, the purpose of support groups is for children to experience support, gain attention and cope with difficulties, and the providers aim to prevent psychological difficulties by strengthening children’s sense of self and social competency (Regional Centre for Child and Youth Mental Health and Child Welfare, 2013; Norwegian National Advisory Unit on Learning and Mastery in Health, 2015).

Examples of the most prevalent support groups in Norway are groups for children who experience parent psychopathology (NAPHA, 2011), children who have lost a family member (Center for Crisis Psychology, 2015), and for children with divorced parents (Norwegian Directorate for Children, Youth and Family Affairs, 2013). Group interventions for siblings are more sporadically offered to siblings by habilitation centers (e.g., at the Habilitation center in Østfold), resource centers (e.g., at Frambu), medical departments (e.g., Oslo University Hospital) and patient organizations (e.g., the Norwegian Cancer Society). However, the foci and therapeutic strategies of these support group interventions vary considerably.

In conclusion, siblings may have difficult and complex emotions, so support groups may be arranged for them to express their emotions and gain support. However, the potential for emotional support in a support group setting may be dependent on several factors, such as siblings’ ability to express emotions, the other participants’ ability to perceive emotions and respond in a pro-social way, and the group leaders’ ability to facilitate the communication in the group. We will in the following sections first look at research on children’s emotional life, before taking a closer look on other factors that may contribute to the supportiveness of support groups.

2.3 The emotional life of children and adolescents

Most research on individual differences in emotion understanding has focused on preschool or young primary school children. Studies of emotion understanding in older
children and young adolescents are rare (Pons et al., 2014). It seems that late childhood and early adolescence is an important transitional period in development that has received relatively little attention with respect to emotion understanding (Pons et al., 2014).

2.3.1 Children’s expression of emotion

Our emotions express our readiness to establish, maintain, or change our relations to the environment on matters of importance. Emotions are central in all of our endeavors; cognitive processing, social behavior, and even physical health. Emotions organize and regulate our experiences in all of these domains (Berk, 2009; Campos, Frankel, & Camras, 2004). Pons et al. (2014) hypothesized that the development of a more advanced emotion understanding goes hand in hand with more advanced intellectual capacities, as well as a social environment that engenders certain ways of thinking about people as emotional agents. There is compelling evidence that children’s linguistic ability and their conversational environments are important for their developing understanding of mind and emotion (Harris, de Rosnay, & Pons, 2005).

Children express their feelings through verbal or non-verbal behavior. Almost as soon as they are able to talk, they begin to report on their own feelings and on those of other people (Harris, 2008). When it comes to non-verbal behavior, facial expressiveness of emotions is found to enhance with age, and behaviors indicative of emotion are found to vary in type, variability and duration according to age (Strayer & Roberts, 1997).

2.3.2 Children’s ability to regulate their emotions

“Emotional self-regulation refers to the strategies we use to adjust the intensity or duration of our emotional reactions to a comfortable level, so we can accomplish our goals” (Berk, 2009, p. 407). Emotional self-regulation requires voluntary, effortful management of emotions, and it improves gradually, as a result of brain development and the assistance of caregivers, who help children manage intense emotion and teach them strategies for doing so (Rothbart, Posner, & Kieras, 2008).

Young children do not always manage to regulate emotions by themselves. They may be provided with the needed social support to cope through communicating feelings (Garralda, 1996). It is important to note, though, that one need insight in the children’s emotional experience to provide appropriate support. It is therefore important to take time to explore children’s experiences before deciding how to support (Vatne, 2011).
Emotion regulation strategies become more varied, sophisticated, and flexible after school entry (Raffaelli, Crockett, & Shen, 2005). Older children have developed a mental level of emotional self-communication that help them reflect on their emotions. At the same time, children in later school age face new challenges in regulating their negative emotions because of their developing sense of self-worth and expanding knowledge (Weems & Costa, 2005). As they leave middle childhood, they increasingly look towards peers for emotional regulation (Furman & Buhrmester, 1992). When reaching adolescence, normally developed children are capable of shifting adaptively between two general strategies for managing emotion; when they find the situation changeable they tend to engage in problem-centered coping. This is, they identify the difficulty and decide what to do about it, e.g., they try to solve the problem or seek social support. When little can be done with the outcome, they engage in emotion centered coping, which is trying to control the distress, internal and private, by for example opting for distraction or trying to redefine the situation (Berk, 2009; Kliewer, Fearnow, & Miller, 1996). So, when attending a support group, the kind of emotion regulating strategy the children would use would depend on which themes are discussed. It looks like older children do not seek social support and rather try to cope with their problems internally when they face challenges they think are unsolvable.

2.3.3 Why children express emotions

Children report that they express emotions to receive support or assistance because they lack regulation skills (Zeman, Shipman, & Zahn-Waxler, 1996). In addition, communicating about difficult experiences and negative emotions are found to directly or indirectly regulate the negative emotion. In adults, Lieberman et al. (2007) have found that affect labeling disrupts the affective responses in the limbic system that otherwise would occur when negative emotional stimuli is present. It is reasonable to assume that this down regulatory effect of labeling emotions applies to children and adolescents as well.

Putting feelings into words provide an opportunity to share, understand, and reconstitute emotional experience (Harris, 2008). Pennebaker (1993) stated that talking about difficult events to create a coherent story about the distressing experience is associated positively with physical and mental health. Language is an instrument of cognitive representation, the more emotions are represented cognitively, e.g. talked about, the more children understand about their emotional experiences (Harris et al., 2005). Thus, communicating with children about their emotions will provide them with chances to develop
their emotional language further, improve their emotional understanding, and help to regulate their emotions.

2.4 How may support groups act supportively?

As mentioned above, the potential for emotional support in a support group setting may be dependent on several factors. To be able to give emotional support to each other, children need to understand what the others in the group are trying to express. Are children capable of understanding their own and others’ complex or conflicting emotions? And even more important; do they capture when others are struggling with such emotions? In the following section we look at children’s mentalization abilities, communication skills, and prosocial behavior, as these factors may be important for the children to be able to care for themselves and each other in the support group setting.

2.4.1 Children’s mentalization abilities

The development of emotional understanding follows a relatively stable sequence during middle childhood (Pons, Harris, & de Rosnay, 2004). At the age of seven years, children mainly understand important interpersonal aspects of emotions; their situational causes, their outward expression, and the event or object that serve as reminders that reactivate emotion. From around seven, an understanding of the mental nature of emotions; their connection to desires and beliefs, and the distinction between expressed and felt emotion develops. Around nine to eleven years the development is characterized by an understanding of mixed emotions, influence of morality on emotions, and the cognitive regulation of emotions (Pons et al., 2004). Adolescence is a period characterized by improvements in cognitive and affective maturation, and adolescents show improvements in various aspects of metacognition, self-evaluation, self-regulation and the coordination of affect and cognition (Steinberg, 2005). Studies of social cognition demonstrate that the transition into adolescence, among other advances, improve the ability to think more abstractly, more differentiated and more multidimensional about others (Steinberg, 2005).

2.4.2 Children’s communication skills

The conversation skills of children vary considerably across age and gender (Sehley &
Snow, 1992). It is therefore difficult to anticipate specific conversation skills of children in a certain age group. From about 12 years the gap between youth and adult communication skills decreases (Gamst, 2011).

Communication about emotional subjects is particularly challenging for many children. It seems that they, in some situations, have difficulties verbally expressing their emotions, even when their developmental preconditions suggest that they should have the ability (Aldridge & Wood, 1997; Vatne, Ruland, Ørnes, & Finset, 2012). Aldridge and Wood (1997) argued, on the basis of their observations, that children’s competency to communicate drastically drop in situations with emotional activation. Children with generally good abilities to express themselves might struggle to communicate their feelings in emotionally activated situations, making it more difficult for others to perceive their emotional state (Aldridge & Wood, 1997).

2.4.3 Prosocial behavior among children

There has not been much research attention devoted to positive changes that might occur during adolescence (Carlo, Fabes, Laible, & Kupanoff, 1999). Fabes, Carlo, Kupanoff, and Laible (1999) presented that there are general increases in prosocial tendencies as children get older, and furthermore, these tendencies are greater during early and late adolescence than during childhood. This research may underpin the support potential children have for each other in support groups for adolescents. Most of the recent research on prosocial behavior, though, investigates development of empathy rather than development of prosocial behavior, and also here, an emphasis has been on investigating younger children (Eisenberg, 1998).

According to Bergin, Talley, and Hamer (2003), prosocial behavior between children is often subtle and strongly associated with the context and the children’s relations. They argue that it might be difficult for adult outsiders to identify prosocial behavior among children. What is considered prosocial behavior will vary among youth in different environments and with different socioeconomic status (Bergin et al., 2003; Eisenberg, 1998).

In their study, Bergin et al. (2003) investigated children’s own descriptions of prosocial acts of their peers in eight focus groups of 53 11- to 13-year olds. They identified 24 categories of prosocial behavior. One of the most frequently mentioned categories was labeled providing emotional support. Sixteen of the 24 categories were conceptually related in that they involve emotional regulation. That is, prosocial children are seen by their peers as
being exemplary emotional regulators, both for themselves and for their peers. Thus, prosocial children put effort into helping others achieve a more positive emotional state (Furman & Buhrmester, 1992). Bergin et al. (2003) also found that whether a person is seen as prosocial or not depends on the context. It is not the act per se that is significant, but the meaning youth make of it that determines whether an act is perceived prosocial by youth.

2.4.4 The group leader role in support groups for children

The role of social support and learning social strategies in support groups for children and adolescents is advocated by Frydenberg (2008). These are strategies essential for adapting to a challenging life situation. When children are experiencing difficulties they need help to validate emotions, which is normally a main focus of individual therapy. The children can experience that their emotions become validated when they talk and test thoughts out loud with a person with whom they have a good alliance. It is also of importance that they are met with acceptance and understanding.

A conversation conducted in a service setting meant to give support, either individually or in a group, will typically take place in a setting that is relatively new to the child. The presence of an unfamiliar adult person can affect children’s behavior considerably (Bergin et al., 2003). The role of the professional in a conversation with children involves directing attention to the child’s expressions and validating emotions (Øvreeide, 2009). Sensitivity to the child’s focus, responses and initiatives is important (Friedberg & McClure, 2002; Øvreeide, 2009). This might pose a challenge in a group conversation as the group leader has to meet the initiatives and have sensitivity for several children at a time. The situation may demand the group leader to choose whether to follow a child’s initiative or move on, involving the other children in the conversation. As previously mentioned, a wide range of services arrange support groups. Group leaders are sometimes educated therapists or social workers, but can also be parents or other members of user organizations. Often no formal education or training is required to run these kinds of support groups.

2.4.5 Research on support groups for siblings

Several international studies emphasize the need for support groups for siblings, both as a precautionary measure and as an opportunity to share their experiences, worries and concerns with other children in similar circumstances (Burke & Montgomery, 2001; Dodd,
2004; Naylor & Prescott, 2004). Naylor and Prescott (2004) note that group sessions should aim to have both fun and therapeutic elements, and Burke and Montgomery (2001) mention that the support function of the sibling group is highly valued by the siblings themselves.

Few of the existing support group interventions for siblings are empirically grounded, and reviews regarding siblings’ mental health also note that the research base for clinical services for siblings yet has to be evaluated (Tudor & Lerner, 2015; Vermaes et al., 2012). Intervention studies for siblings rarely have control groups, generally have small sample sizes, often group siblings of children with many different illnesses together, and do not include rare disorders (Tudor & Lerner, 2015; Hartling et al., 2014; Vatne, Haukeland, Fjermestad & Mossige, 2014). Few efficacy studies exist, but previous research has shown that parents (Dodd, 2004; Evans, Jones, & Mansell, 2001; Lobato & Kao, 2002) and siblings (Burke & Montgomery, 2001; Dodd, 2004; Naylor & Prescott, 2004; Prchal & Landolt, 2009) report positive outcomes, and that some group interventions both increase the siblings’ knowledge about the disorder (Evans et al., 2001; Lobato & Kao, 2002; Prchal, Graf, Bergstraesser, & Landolt, 2012), strengthen their psychological adaptation to the situation (Prchal et al., 2012), promote self-esteem (Dodd, 2004), help resolve frustrations, enable self-expression, reduce sense of isolation, and encourage activities (Naylor & Prescott, 2004).

Williams (1997) found that an intervention that included education of diagnosis, emotional support and exchange of experiences had beneficial effects on psychological health of the siblings. An intervention which aimed to identify and use positive coping strategies for living with brothers and sisters with learning disabilities and associated challenging behavior was also found to increase sibling interaction, as well as siblings’ self-esteem and diagnostic knowledge (Evans et al., 2001).

More recent studies seem to emphasize the importance of including parents or family in interventions (Dodd, 2004; Haukeland et al., 2015; Lobato & Kao, 2005; Roberts et al., 2015; Williams et al., 2003). Lobato and Kao (2002) showed that a parent and child group intervention, the SibLink model, led to increased medical knowledge, increased sibling relations, better adjustment, and improved psychosocial functioning across different disorders.

A Norwegian study (Tøssebro, 2012) focusing on sibling status in Norway asked siblings whether they had attended any kind of initiative due to their sibling status and if this attendance was any helpful to them. They found that initiatives directed at siblings specific were perceived as more useful than initiatives directed at the whole family. Siblings also
reported that meeting with other siblings was more helpful to them than meeting with teachers or school nurses (Tøssebro, 2012).

It is important to notice that siblings frequently report using more passive coping strategies (Haukeland et al., 2015). Several participants in the study of Haukeland et al. (2015) described ambiguity regarding sharing feelings with others, and they stress the fact that practitioners should be aware that there are many alternative strategies considered by siblings to be efficient ways of dealing with emotional difficulties. Thus, there is a need to take into consideration that children are individuals with different needs, and what works for whom is not yet evaluated in the support group literature.

To summarize, support group interventions are one of the few initiatives offered to siblings, but the evidence base for such groups is not satisfying. Several studies indicate that support groups have a positive effect, and the participants often report to be satisfied with the interventions. However, researchers stress the need for evaluation of support group interventions specifically; We do not know the mechanisms through which the positive effects, i.e., the supportive function of the support groups, occur. This is one of the reasons why the Frambu Sibling Project was initiated.

2.5 The Frambu Sibling Project (FSP)

This thesis builds on results from the Frambu Sibling Project (FSP), an ongoing research project conducted by Frambu Resource Centre for Rare Disorders (herein referred to as Frambu) in collaboration with the Department of Psychology, University of Oslo (Frambu, 2016). The aim of the FSP is to contribute to the understanding of siblings of children with chronic disorders and disabilities, and to help the siblings and their families cope with the stress they may experience when having a child with a chronic condition. The FSP is a research project in three parts where the present study is based on part one of the FSP.

2.5.1 FSP Part One – A descriptive study of support group sessions

FSP part one constitute a descriptive study of support groups for healthy siblings. One of several aims was to examine the communication in support groups. In FSP part one 17 support groups with 75 youth (age 4-16 years) were videotaped during week-long residential family courses at Frambu in 2012. Each group met for three sessions and had an open discussion of the disorders of their siblings, self-perception and family relations, and emotions
and coping, respectively. Group communication was explored in a study by Vatne and Zahl (2015) through qualitative analyses of 17 of the total 51 support group sessions with 30 healthy siblings from 11 to 16 years.

Through applying the system Verona Coding Definition of Emotional Sequences – Cues and Concerns (Del Piccolo et al., 2011). Vatne and Zahl (2015) identified and categorized the siblings’ expressions of negative emotions during the sessions. The system defines a cue as a verbal or non-verbal hint which suggests an underlying unpleasant emotion that lacks clarity. A concern is defined as a clear and unambiguous expression of an unpleasant current or recent emotion that is explicitly verbalized. In a group setting cues would need further clarification and presumably the child would need the help of others to express his or her concerns. Thus, exploration and facilitation skills from group leaders would be necessary to help the children express their emotions more clearly. Concerns may or may not require exploration. If not, they would rather require an empathic response or acknowledgement by the professional (Zimmermann et al., 2011).

Based on the coded cues and concerns, Vatne and Zahl (2015) identified emotional communications sequences. An emotional sequence was defined as starting with the expression of a cue or a concern, and ending when the group left the topic or the emotion mentioned in relation with the initial cue/concern. They identified 117 such sequences.

A conventional content analysis of the 117 identified sequences revealed fourteen prominent communication patterns, see Zahl (2015) for full review. The present study concerns the five most prevalent of these communication patterns; that is, communication patterns that occurred often and were seen across all of the groups taking place during FSP, part one. We will now describe the communication styles of the five selected sequences included in the present study; the consensus, exploring, avoidant, talkative and interviewing communication styles.

### 2.5.2 Adult-centered and child-centered communication

In Vatne and Zahls’ (2015) study, two mutually exclusive styles of communication were found; adult-centered or child-centered communication. The adult-centered style was characterized by the group leader asking questions based on his/her own focus and interests, and not following up the children’s initiative or expressions. These sequences were characterized by the adult talking a lot and the children in the group being more passive.
The *child-centered* sequences differed from the adult-centered described above in that the children were more actively involved in the conversation and the group leader listened, facilitated expression of emotion, and explored the cues and concerns presented. In these sequences child initiatives or topics guided the conversation. These two styles of communication had their respective sub-categories (see Figure 1).

![Communication style diagram](image)

**Figure 1**: Categories of prevalent prominent communication patterns

The examples of *adult-centered* sequences included in the present study were the *interviewing, avoidant* and *talkative* communication styles.

The *interviewing* style was characterized by the group leader exploring themes guided by his/her own agenda or interest. The group leader was either asking a series of questions to one child, or made quick shifts between the children in the group without exploring each child’s experience further.

The *avoidant* style was characterized by the group leader inviting to close the conversation about an emotional theme expressed by a child. The group leader left the emotional theme brought up and continued the session. This category also included sequences where the group leader initiated a conversation about an emotional theme, but then quickly left the topic when children confirmed to have had this experience.

The *talkative* style was characterized by the group leader reacting to a child’s expression of negative emotion with excessive talking, directed either to the child or to the group.

The child-centered sequences included in the present study, were the *consensus* and *exploring* style of communication.
The consensus sequences were characterized by children responding to the emotional expressions of other children by sharing common or similar experiences. Children also would sometimes express their own negative emotions on the same theme.

The exploring sequences were characterized by children exploring a theme or experience related to the emotional expression of another child.

Vatne and Zahl (2015) proclaimed that the child-centered communication should be promoted to facilitate expression of emotion in support groups. Their stance is based on the theory of communication and emotion regulation. In spite of this academic and theory-based advice, we do not really know what is considered as helpful and supportive by the youth themselves, who such groups are intending to help. It is a common belief that clinical experts have the ability to decide what is best for children and adolescents but we cannot be sure about whether youth would agree to these decisions. Therefore, it seems to be important to get more information from youth themselves about how they experience interventions provided for them which is one of the aims of the present study.

2.6 Can we rely on the view of adult experts?

In the general child psychology literature, it is well established that reports from adults and self-reports from children about their distress often show discrepancies. De Los Reyes (2013) reviewed the developmental psychopathology research where assessments from multiple informants (e.g., parents, teachers, children, and practitioners) have been used, emphasizing that the conclusions depend on the informant. In a meta-analysis, Summers et al. (1994) found that parent surveys and direct observation generated more negative findings than child self-reports. More recent research also has shown a discordance between parent and sibling reports on sibling adjustment to chronic illness or disability (Guite, Lobato, Kao, & Plante, 2004). In a study of children with epilepsy, the researchers concluded that parents cannot truly account for their children’s experiences and thus serves mainly as a complementary measure (Ronen, Streiner, & Rosenbaum, 2003). These findings indicate that it is crucial to ask the children about their own perspectives (Eiser & Morse, 2001; Houtzager, Grootenhuis, Caron, & Last, 2005), because the answers we get will depend on who we ask.

Discrepancies between children and adults have not only been seen in their ratings of symptoms and behavioral observations. The views of children and therapists on variables of therapeutic process, such as the therapeutic alliance, have also shown considerable variability
(Zandberg, Skriner, & Chu, 2015). Elvins and Green (2008) have reviewed the conceptual and methodological base of current alliance concepts and measures, and make clear the diversity of methods available to measure alliance. They announce that there has been an assumption that the characteristics of alliance in children are essentially the same as those in adults, but find little direct testing of this fact. As there is no gold standard for assessments of alliance, in either adult or children populations, they recommend combining alliance ratings from multiple informants to identify associations with therapy outcome (Elvins & Green, 2008). The broadly documented discordance between children and adult evaluations of both behavioral observations and reported symptoms as well as process variables in therapy, suggests that we cannot solely rely on our assumptions as therapists about what is experienced as supportive communication in a group.

2.7 Research on children’s own perspectives

Traditionally in social science research, childhood and children’s lives have been explored solely through the views and understandings of adults who claim to speak for children, and the children’s own voices remain unheard in many issues regarding them (Alderson et al., 2005; Christensen & James, 2008). A literature search indicates that there is a rising interest in involving children in research, not only as objects to study, but as people with their own perspectives and significant opinions that can contribute to our understanding. The fundamental theoretical shift in the twentieth century in the perception of children and childhood has been of great importance for the status of children in research. The general views on children have been changing from unfinished adults to persons and from passive objects to active agents who constantly engage in creating their worlds (Soffer & Ben-Arieh, 2014). Theories of interactionism and social construction, emphasizing that children have different experiences and knowledge and actively shape their worlds, have been central in this change (Eder & Corsaro, 1999; Kirk, 2007). As children are no longer seen as merely passive objects, they should also be studied from a subjective point (Davis, 2007). This theoretical shift has demanded a change in use of methods from doing research on children to doing research with children.
2.7.1 Why is children’s contribution important?

First of all, children may be the best possible sources of information about their own experiences, feelings and attitudes. It is therefore methodically desirable to use children as informants in issues regarding their own experiences and opinions (Soffer & Ben-Arieh, 2014). As we have reviewed above, the actual experiences of children are often different from what adults think they know about children’s worlds and experiences (Ben-Arieh & Ofir, 2002; Garth & Aroni, 2003). In the general child research literature there is now a strong agreement that the inclusion of children’s voices is important to see a more complete picture. Researchers have argued that regardless of how much adults know about children, we cannot see the world through children’s eyes and we can therefore not assume that proxy reports give us appropriate information about children (De Los Reyes, 2013; Gilligan & Huebner, 2002; Kirk, 2007). This challenge is even more evident when it comes to information about children’s internal states, such as feelings, attitudes, opinions or motivations.

Secondly, involving children in research is a way of including them, respecting them, and recognizing their dignity as the research process becomes an arena for children to be heard and listened to. That is, it gives children the experience of having a voice (Curtin, 2001; Emma & Gayle, 2005). The article 12 of the Convention of the Right of the Child (1989) stresses the rights of children to participate in processes that involve decisions regarding their life (Melton, 2005; Munro, Holmes, & Ward, 2005). Because research is part of the decision-making process, it is crucial for children also to be involved in this. The right to participate in research may also be seen as a social obligation to contribute to the formation of knowledge (Bragadóttir, 2000).

As children have the ability to contribute to research in beneficial ways and they have the right to influence decisions that regard them, it should be essential to involve them in the development of interventions they might be provided in times of difficulties or crisis. The importance of including the perspectives of children is inevitable also in sibling support group research. This is not to say that children are always the best informants and that they are able to be in charge of the development of the interventions they receive. But among other notions, like those of therapists, children’s opinions about what is supportive and what is not should have implications for how we run support groups. Several researchers have pointed out that the voices of children need to be heard in the sibling research (Eiser & Morse, 2001; Haukeland et al., 2015; Houtzager et al., 2005; Tøssebro, 2012). This thesis aims to include the perspectives of children in the research on communication in support groups for siblings.
2.7.2 Methodological challenges of doing research with children

The research conducted with children has increased in volume since the beginning of this millennium (Christensen & James, 2008), correspondingly the discussions of the particular methodological and ethical issues that this raises shows in the methodological literature (see for example: Christensen & James, 2008; Fraser & Lewis, 2004; Greig, Taylor, & MacKay, 2013; Melton, 2005). The tendency to gather data through parents or other adults in research about children’s experience is to some degree embedded in concerns about the reliability and validity of data. The accuracy of children’s responses depends, among other issues, on maturation in communicative skills, cognition, socio-emotional development as well as what experiences they bring with them. A commonly stated drawback is that young children have problems recalling data and struggle to understand complex concepts, and therefore pose a threat to the authenticity of the findings (Soffer & Ben-Arieh, 2014). Studies have shown that children between the ages of 8 and 16 years can provide reliable and stable responses over time (Borgers, Sikkel, & Hox, 2004) and that children as young as 5 years old can give reliable and valid self-reports when given the opportunity to do so with an age-appropriate instrument (Burwinkle Tasha, Limbers Christine, & Varni James, 2007). The question of how far down we can go on the age continuum and still get reliable information is unresolved. This debate is primarily concerning children younger than 12 years (Ben-Arieh & Ofir, 2002), but the suitable age group for research will always depend on the methods being used. Soffer and Ben-Arieh (2014) have argued that the threats of validity and reliability are both over amplified and can be dealt with through methodological adaption to the age-group involved in research.

Several precautions must be taken when involving children in research. Both because they are a vulnerable group and the ethical considerations of how they might be affected by the research procedure is immensely important, but also methodological adaptation to the relevant age group must be made. Researchers are advised to refrain from general questions, long questions and complicated language and to use “kids’ language” (Curtin, 2001). Borgers et al. (2004) found that it appears that offering the clearest type of response options produces the best data quality in questionnaire research with children. Punch and Punch (2002) emphasized the need to conduct the study in children’s territory. Context of questioning is thought to influence stress level, motivation, cooperation, attention, retrieval of detail and communicative competence (Soffer & Ben-Arieh, 2014).
2.8 The purpose of the present study: Objectives and research questions

To our knowledge, no previous studies have explored children’s opinions of communication in support groups for siblings by obtaining their evaluations of support group sessions. The present study is an attempt to increase our knowledge about how children perceive common communication patterns seen in sibling support groups. We aimed to investigate whether children are of a different opinion than therapists, to try to obtain more accurate knowledge on how one can provide the kind of support that both siblings and other children are in need of when they attend a support group. In the following, we will use the term youth when referring to the children participating in the present study to separate them from other children. Because of the lack of previous research, the present study is a descriptive, explorative study with the aims to explore how youth and therapists assessed the categories of communication patterns by answering the following research questions:

1) To what extent do youth and therapists perceive the same degree of support in the selected prevalent communication sequences, from respectively, the other siblings in the support group and the group leader(s)?

2) Which factors predict perceived support?
   a. For the youth; does gender, age, perceived change of emotion valence or arousal predict assessed degree of support?
   b. For the therapists; does gender, years of experience, perceived change of emotion valence or arousal predict assessed degree of support?

3) Is there a relationship between perceived support and perceived quality of the conversation?
3 Methods and Materials

3.1 Methodological approach

The aim of this explorative study was to find out how youth and therapists evaluated prevalent emotional communication sequences in support groups for siblings. The present study explored how youth and therapists assessed a selection of five highly prevalent patterns of communication found in the video recorded material of the support group conversations from FSP, part one (Vatne & Zahl, 2015). Due to ethical considerations regarding the sensitivity of the original support group video material, actors were used to record new video material of the scenes from the original support group conversations. Quantitative measures, obtained through the participants’ responses on questionnaires, were used to compare the assessments made by youth and therapists.

The research process can be described in three main steps; making non-sensitive video material, developing measures and collecting data, and data analysis. Each of the steps will be reviewed in detail in the subsequent sections.

3.1.1 Step 1: Making non-sensitive video material

For use in later research, twelve short sequences (1-4 min) were selected from the 2012 video material of FSP support groups. The sequences were selected in collaboration with the FSP research group and were considered representative examples for 12 of the categories of prominent communication patterns described by Vatne and Zahl (2015). The present study has made the choice to focus on the five most prevalent of these communication patterns; that is, as mentioned, communication patterns that occurred often and were seen across all of the groups taking place during FSP, part one. The chosen sequences were transcribed and rewritten into screenplays, leaving out any information that could identify the support group participants (such as names, place of residence, and diagnoses of the siblings). In the present study we report the results from the five most prevalent categories of communication patterns found in Vatne and Zahl’s (2015) study.

Twelve youth actors (aged 11-15) were recruited from a local theatre group. Their theatre instructor provided them with a letter with information about the purpose of the project and how the video material would be used was given to them by their theatre
instructor. The actors who agreed to take part in the project received the scripts and had time for rehearsal. The filming took place at Frambu, in the same setting as the original support group recordings. To make the new video material as authentic and similar to the original as possible, the actors were directed by their theatre instructor, an employee of Frambu who was permitted to study the original videos, and the project leader of the FSP. Experienced group leaders from Frambu acted as group leaders in the new video material. All group leaders watched the original videos.

3.1.2 Step 2: Developing measures and collecting data

Questionnaires for each video sequence were developed in collaboration with the FSP research group. Through the questionnaires, the participants were asked to assess different aspects of the communication patterns in the support group scenes. The items are described in the material section below. A written procedure described how to go through the questionnaire, ensuring that all participants got the same information. Data was collected in two local primary schools and one secondary school, three youth psychiatric clinics (BUP) and one family counseling center. Both youth and therapists watched the support group scenes one after another, and they were then asked to complete the corresponding questionnaire.

3.1.3 Step 3: Data analysis

SPSS 22.0 was used for statistical analyses of the data material. Preliminary analyses were performed to ensure no violation of the assumptions of normality (see appendix E for Table of skewness and kurtosis), linearity and homoscedasticity. All assumptions for the statistical analyses performed were satisfying. Checking for desirability/confirmation bias amongst the youth showed no such bias.

Independent sample t-tests were used to compare assessed support from the youth- and therapist groups and to compare whether there was a significant difference in agreement to the category.

The relationships between assessed quality and assessed support from both group leader(s) and other siblings were investigated using Pearson product-moment correlation coefficient.

In addition, standard multiple regression was used to examine if gender, age (for youth), years of experience (for therapists), change in emotion valence and change in emotion
arousal predicted levels of assessed support from both group leader(s) and other siblings. All regression analyses were linear, enter method.

A mixed between-within subjects’ analysis of variance was conducted to assess the impact of belonging to the youth or therapist group on the scores of assessed emotion valence in the start of the video between the different videos.

### 3.2 Procedure: Data collection

Youth were recruited through the school administration of three public schools in Oslo; two primary schools and one secondary school. The schools were situated in different areas of the city, Nordstrand and Grorud, to balance out possible effects of socio-economic status. Consent forms and information about the project was distributed to the youth and their parents. Written parental consent and youth assent were obtained prior to data collection (see appendix C and D for information and consent form). The youth participants were gathered in their regular classrooms and were guided through the procedure by the research group, together with their respective classes. The youth who did not want to participate got other assignments from their teacher.

Therapists were recruited through the administration of three youth psychiatric clinics and one family counseling center. Consent forms and information about the project was distributed through the administration at each clinic. Written consent was obtained on the day of the data collection. The therapists were gathered in a meeting room and were guided through the procedure by the research group, together with their respective colleagues. Both the clinic management and the researchers emphasized that participation was voluntary, and those who did not want to participate could choose not to attend the meeting. We do not know how many therapists at each clinic who actively chose not to participate, as we did not register reasons for non-attendance in the data collection meeting. Some therapists may have been absent due to other engagements, such as client sessions. Therefore, the exact response rate in the therapist sample is unknown.

The procedure for data collection was the same for youth and therapists. Brief information about the purpose of the project was given and the procedure was explained. The participants received handouts with the questionnaires (one for each video) and were presented with a short introduction about the setting of the support group scene and which sibling they should pay attention to before watching each video example. After watching each
video, the participants were asked to answer the corresponding questionnaire. The questions were read out loud and the scales were explained after the first video. The films were shown in two different orders to balance out possible order effects.

3.3 Sample characteristics

One hundred and thirty-six youth participated in the study. The youth all attended public schools in Oslo. The youth participants were 6th to 10th graders, from 11-16 years old (M = 13.3, SD = 1.5), and 43.4% of the youth were male.

Sixty-eight therapists participated in the study. The therapists had a range of different professions; social workers, psychologists, medical practitioners, family therapists, and pedagogues. Therapists had a mean of 17.3 years of clinical working experience (SD = 11.1) and 42.6% reported experience in working with groups for children. The therapists were from 24-67 years old (M = 47.0, SD = 12.3), and 11.8% of the therapists were male.

<table>
<thead>
<tr>
<th>Table 1: Sample characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapists professions</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Psychologists</td>
</tr>
<tr>
<td>Social workers</td>
</tr>
<tr>
<td>Medical practitioners</td>
</tr>
<tr>
<td>Pedagogues</td>
</tr>
<tr>
<td>Students</td>
</tr>
<tr>
<td>Family therapists</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

3.4 Materials

3.4.1 The video material

A brief summary of the video material is described in Table 2.
### Table 2: Description of the video material

<table>
<thead>
<tr>
<th>Communication pattern</th>
<th>Group participants</th>
<th>Duration (minutes)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child-centered consensus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children responding to the emotional</td>
<td>4 (25%)</td>
<td>3:38</td>
<td>The siblings are talking about their brothers or sisters having been bullied at school and sharing common experiences of protecting their siblings. The male group leader is introducing the theme, listening and then exploring each youth’s experience by follow-up questions.</td>
</tr>
<tr>
<td>expressions of other children by sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>common or similar experiences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child-centered exploring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children exploring a theme or experience</td>
<td>4 (25%)</td>
<td>1:07</td>
<td>The siblings are expressing that it is easier to talk about things in this group because they understand each other. Another participant is validating the experience. The male group leader is validating and asking questions to the whole group exploring the theme brought up by the siblings.</td>
</tr>
<tr>
<td>related to the emotional experience of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>another child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adult-centered avoidant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The group leader inviting to close the</td>
<td>6 (17%)</td>
<td>00:53</td>
<td>The female group leader is asking the group if they ever feel nervous about their brothers or sisters. A boy gets very emotional and struggles to hold tears back. The group leader avoids further exploration by stating that “you don’t need to talk more about that” and moves on to the other siblings.</td>
</tr>
<tr>
<td>conversation about an emotional theme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expressed by a child.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adult-centered talkative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The group leader reacting to the child’s</td>
<td>6 (17%)</td>
<td>1:42</td>
<td>A girl is crying through the whole sequence, saying that she is jealous of her sibling. The male and the female group leaders respond by providing reassurance and information about what possible feelings evoked by differential treatment by parents. They do not ask questions or explore the participant’s views while talking.</td>
</tr>
<tr>
<td>crying or expression of emotion with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>excessive talking.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adult-centered interviewing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The group leader exploring themes guided by</td>
<td>5 (20%)</td>
<td>2:41</td>
<td>A boy is explaining when and how he got to know that his brother was sick. The male group leader focus on the boy and ask questions about the situation that are not directly derived from his statements, continuing to the next person at the end of the sequence.</td>
</tr>
<tr>
<td>own agenda, asking a series of questions to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one child, or making quick shifts between</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the children in the group.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To watch the complete video examples, go to https://vimeopro.com/frambu/support-group-video-examples (password: sibling).

3.4.2 The Questionnaire

The questionnaires were developed for the participants to assess eight different aspects of the communication patterns in the video, and had one single question for each aspect (for full example of the questionnaire, see appendix A). All questions were adjusted to be understandable and easy to answer, and adapted to the age of the youth in our sample. Numeric visual analogue scales (herein referred to as VAS) were used (Cremeens, Eiser, & Blades, 2007; Laerhoven, Zaag-Loonen, & Derkx, 2004). The therapists and youth got the same questions and the therapists were informed that children would also rate the videos. The items will be described in the following.

Assessment of support

Items were included for the participants to assess the degree of support provided to the sibling in which they were asked to pay attention to, herein referred to as “the target sibling”. The participants were asked to evaluate the degree of support provided from both the other siblings in the group and from the group leaders. The items were obtained from McLeod and Weisz (2005). Support was defined for the participants (in the procedure instructions) as “actions taken by the group or group leader to make the target sibling feel better or feel cared for”. Support from the other siblings was evaluated on a numerical VAS 0-10 (0 = lowest degree of support, 10 = highest degree of support). Support from group leaders was also evaluated on a numerical VAS 0-10 (0 = lowest degree of support, 10 = highest degree of support).

Assessment of the quality of the conversation

The item was obtained from the Therapeutic Process Observation Coding System - Alliance Scale (McLeod and Weisz, 2005). Youth and therapists were asked to rate the quality of the conversation on a numerical VAS 0-10 (0 = very poor quality of the conversation, 10 = very good quality of the conversation).
Assessment of the emotion of the target sibling

Items were included for assessing the perceived emotion of the target sibling, both in the beginning and in the end of each conversation sequence. The difference between these two measures were used to make a variable of perceived change in emotion. The paper-and-pencil version of the Self-Assessment Mannequin (SAM) was used for evaluation of emotion (with permission from the scale developer, Margaret Bradley and CSEA Media Core). The SAM is a well-established measure, used for assessments of emotion in a range of different settings (Bradley & Lang, 1994; Fernandes & Arriaga, 2010; Greenbaum, Turner, Cook, & Melamed, 1990; Lang, 1980). SAM has provided good convergent validity with other measures of emotions (Fernandes & Arriaga, 2010).

The original pen-and-paper version of SAM consists of three sets of drawings of a schematized human figure (see appendix B). Each of the sets of drawings represents a 5-point bipolar scale and measures one of three independent dimensions of emotion; pleasure, arousal and dominance (Bradley & Lang, 1994; Lang, 1980). The pleasure and arousal dimensions were included in our questionnaire, hence referred to as emotion valence and emotion arousal.

Validating the categories of the communication patterns

To investigate if the participants confirmed the patterns of communication as identified by Vatne and Zahl (2015), the last item in the questionnaire gave a short description of the communication pattern in the video example (e.g. “The film I’ve just seen shows children expressing that they share some of the same experience”). Youth and therapists were asked to rate their agreement to the description, on a numerical VAS, 0-10 (0 = do not agree with the statement about the conversation/communication pattern, 10 = agree with the statement). To examine if there were any bias of desirability or confirmation, a selection of the youth received this item reversed for some of the video examples (e.g. “The film I’ve just seen shows children talking about that they don’t have the same experience”).

3.5 Ethical Considerations

The present study is part of FSP, which has been approved by the Regional Committees for Medical and Health Research Ethics East (REK-nr.2011/2514). This sub-study was reported to REK 09.03.2015 for ethical consideration, and was considered by REK to be part of the overall FSP project approval.
The siblings in the video recorded support groups had given their consent for the material to be used for research, and the original recordings were only seen by the research group, therapists assisting as group leaders, and the theatre instructor. The chance of recognition of the siblings’ statements through the screenplays was minimal. The selected scenes were of such character that the themes would be recognizable for children in general and issues related to specific diagnoses or family constellations were left out.

3.5.1 The participants of the present study

All the participants of the present study were informed that they could withdraw from participation at any point, without any explanation. The study was conducted in the participants’ familiar setting and was not considered to have any negative impact. The youth participants were not asked to give any personal data except age, gender and grade. The therapist participants were not asked to give any personal data except age, gender, profession, years of clinical experience and if they had experience with groups for children. All participants were informed that the children in the films were actors, but that the conversations were taken from actual support group sessions. The participants had the opportunity to ask questions after going through the procedure.

The actors assisting in the making of non-sensitive video material volunteered to take part in this project. They were informed that the material would be displayed to youth and therapists and that they would all be informed that what they saw was acting and that they were not presenting their own personal experience.
4 Results

The results are divided into two main sections. The first section reports on reliability and validity of the assessments, and the second section examines youth’ and therapists’ assessments of support and quality, possible predictors of the assessments of support, and the relationship between support and quality.

4.1 Validity and reliability

Interrater reliability

As a measure of the proportion of overall variability accounted for by variability among individuals, Eiser and Morse (2001) suggest an estimation of intraclass correlations (ICC). A two way random ICC was chosen to estimate the interrater reliability in our sample (Landers, 2011; Shrout & Fleiss, 1979). Given that an ICC of 0.80 or more is usually taken as evidence that a scale is highly reliable between raters, the results indicate that both youth and therapists gave consistent ratings and the variations most likely reflected true individual variations in the groups’ assessments.

Table 3: Intraclass correlation (ICC) for all eight items, for youth and therapists.

<table>
<thead>
<tr>
<th>Item</th>
<th>Youth (N = 136)</th>
<th>Therapists (N = 68)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Emotion valence (start)</td>
<td>.994</td>
<td>.992</td>
</tr>
<tr>
<td>2 Emotion arousal (start)</td>
<td>.969</td>
<td>.969</td>
</tr>
<tr>
<td>3 Support from siblings</td>
<td>.992</td>
<td>.991</td>
</tr>
<tr>
<td>4 Support from group leader(s)</td>
<td>.897</td>
<td>.962</td>
</tr>
<tr>
<td>5 Emotion valence (end)</td>
<td>.993</td>
<td>.988</td>
</tr>
<tr>
<td>6 Emotion arousal (end)</td>
<td>.987</td>
<td>.976</td>
</tr>
<tr>
<td>7 Quality of the conversation</td>
<td>.955</td>
<td>.982</td>
</tr>
<tr>
<td>8 Agreement to the category</td>
<td>.976</td>
<td>.950</td>
</tr>
</tbody>
</table>

Validation of the communication patterns

The item assessing the participants’ agreement to the description of the categories generally showed high agreement, both from youth and therapists (see Figure 2).
Figure 2: Percentage of youth and therapists with moderate to high agreement to the statement describing the communication pattern.

Assessment of perceived emotion in the start of the sequences

A mixed between-within subjects’ analysis of variance was conducted to assess the impact of belonging to the youth or therapist group on the scores of assessed emotion valence in the start of the video example, across the five sequences. There was no significant interaction between participant groups and assessed emotion valence in the start of the videos, Wilks’ Lambda = .96, F (4, 198) = 2.33, p = .058, partial eta squared = .05. There was a substantial main effect of assessed emotion valence from video to video, Wilks Lambda = .29, F (4, 198) = 121.92, p < .001, partial eta squared = .71. The main effect comparing the two groups assessments of emotion from video to video was also significant, F (1,201) = 51.36, p < .001, partial eta squared = .20. Thus, therapists and youth rated significantly different emotions in the start of each video, but the difference of assessed emotion valence from video to video was larger than the differences between the groups (see Figure 3).

Figure 3: Perceived emotion in the start of the sequence
4.2 Assessments of support and quality, and possible predictors of assessed support

The results for the research questions about perceived support and predictors of perceived support, as well as the participants’ agreement to the categories, will be presented for each communication sequence respectively. For simplicity, the scores of the youth and therapists’ ratings of agreement to the category, group leader support and sibling support were divided into low scores (0 – 3), medium scores (4 – 6) and high scores (7 – 10). The relationship between perceived support and perceived quality will be presented at the end of the results section.

Table 4: Youth’s and therapists’ assessments of support and quality of the support group sequences

<table>
<thead>
<tr>
<th>Communication pattern:</th>
<th>Support from other siblings</th>
<th>Support from group leader(s)</th>
<th>Quality of conversation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Youth M (SD)</td>
<td>Youth M (SD)</td>
<td>Therapists M (SD)</td>
</tr>
<tr>
<td></td>
<td>Therapists M (SD)</td>
<td>Therapists M (SD)</td>
<td>Therapists M (SD)</td>
</tr>
<tr>
<td>Child-centered</td>
<td>4.1 (2.5)</td>
<td>4.4 (2.3)*</td>
<td>4.5 (2.2)</td>
</tr>
<tr>
<td>consensus</td>
<td>3.9 (2.2)</td>
<td>3.5 (1.9)*</td>
<td>4.2 (1.8)</td>
</tr>
<tr>
<td>Child-centered</td>
<td>6.6 (2.3)**</td>
<td>4.9 (2.2)**</td>
<td>6.2 (2.1)**</td>
</tr>
<tr>
<td>exploring</td>
<td>7.8 (1.7)**</td>
<td>6.3 (1.7)**</td>
<td>7.2 (1.6)**</td>
</tr>
<tr>
<td>Adult-centered</td>
<td>3.7 (2.1)*</td>
<td>6.4 (2.1)**</td>
<td>5.4 (1.7)**</td>
</tr>
<tr>
<td>avoidant</td>
<td>2.8 (2.0)*</td>
<td>3.7 (2.2)**</td>
<td>2.7 (1.6)**</td>
</tr>
<tr>
<td>Adult-centered</td>
<td>1.8 (1.9)</td>
<td>5.6 (2.1)</td>
<td>4.9 (2.1)*</td>
</tr>
<tr>
<td>talkative</td>
<td>2.1 (1.9)</td>
<td>5.2 (2.8)</td>
<td>4.0 (2.4)*</td>
</tr>
<tr>
<td>Adult-centered</td>
<td>2.6 (2.4)</td>
<td>5.2 (2.3)</td>
<td>4.9 (1.8)</td>
</tr>
<tr>
<td>interviewing</td>
<td>3.2 (2.6)</td>
<td>5.4 (2.4)</td>
<td>4.9 (2.3)</td>
</tr>
</tbody>
</table>

Note: *sign p<.05, **sign p<.001 (t-test).

Communication sequence 1: Child-centered consensus.

This category described children responding to the emotional expressions of other children by sharing common or similar experiences (see Table 2 in the methods section).

Youth agreement with the category description was high (M = 7.0, SD = 2.6).

Therapist agreement with the category description was high (M = 7.1, SD = 2.2). The difference was non-significant (p = .881).
Youth rated group leader support as moderate (M = 4.4, SD = 2.3). Therapists rated group leader support as low (M = 3.5, SD = 1.9). The difference was significant (t (200) = 2.651, p < .01).

Youth rated sibling support as moderate (M = 4.1, SD = 2.5). Therapists rated sibling support as low (M = 3.9, SD = 2.1). The difference was not significant (t (201) = .674, p = .501).

To predict group leader support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 11.2 %, F (4, 129) = 4.078, p < .005. Only youth age (β = -.270, p < .001) was a statistically significant predictor. The negative beta value indicates that older youth gave ratings of less support from group leader.

To predict sibling support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 16.3 %, F (4, 129) = 6.261, p < .001. Only youth gender (β = -.288, p < .001) and youth age (β = -.246, p < .005) were statistically significant predictors. The negative beta values indicate that girls and older youth rated lower support from other siblings.

To predict group leader support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 29.2%, F (4, 60) = 6.191, p < .001. Only perceived change in emotion valence (β = .450, p < .001) was a statistically significant predictor.

To predict sibling support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 8.4%, F (4, 60) = 1.380, p = .251.

**Communication sequence 2: Child-centered exploring.**

This category described children exploring a theme or experience related to the emotional expression of another child (see Table 2 in the methods section).

Youth agreement with the category description was moderate (M = 5.5, SD = 2.4). Therapist agreement with the category description was moderate (M = 5.6, SD = 2.2). The difference was not significant (p = .762).
Youth rated group leader support as moderate (M = 4.9, SD = 2.2). Therapists rated group leader support as moderate (M = 6.3, SD = 1.7). The difference was significant (t (201) = -4.707, p < .001).

Youth rated sibling support as moderate (M = 6.6, SD = 2.3). Therapists rated sibling support as high (M = 7.8, SD = 1.7). The difference was significant (t (201) = -3.872, p < .001).

To predict group leader support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 3.0 %, F (4, 128) = .996, p = .412.

To predict sibling support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 7.6 %, F (4, 128) = 2.647, p < .05. Only perceived change in emotion valence (β = .221, p < .05) and arousal (β = .240, p < .01) were statistically significant predictors.

To predict group leader support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 7.7 %, F (4, 61) = 1.266, p = .293.

To predict sibling support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 6.7 %, F (4, 61) = 1.103, p = .364.

**Communication sequence 3: Adult-centered avoidant**

This category describes the emotional theme expressed by the child being explicitly avoided and not commented on or explored further (see Table 2 in the methods section).

Youth agreement with the category description was moderate (M = 5.7, SD = 2.9). Therapist agreement with the category description was high (M = 7.1, SD = 3.4). The difference was significant (p < .05).

Youth rated group leader support as moderate (M = 6.4, SD = 2.1). Therapists rated group leader support as low (M = 3.7, SD = 2.2). The difference was significant (t (202) = 8.461, p = <.001, two-tailed).
Youth rated sibling support as low (M = 3.7, SD = 2.1). Therapists rated sibling support as low (M = 2.8, SD = 2.0). The difference was significant (t (200) = 3.092, p < .01, two-tailed).

To predict group leader support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 1.3 %, F (4, 130) = .440, p = .779.

To predict sibling support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 7.8 %, F (4, 129) = 2.733, p < .05. Only perceived change in emotion arousal (β = -.274, p < .05) was a statistically significant predictor.

To predict group leader support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 9.8 %, F (4, 61) = 1.656, p = 172.

To predict sibling support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 9.1 %, F (4, 60) = 1.503, p = .213.

**Communication sequence 4: Adult-centered talkative.**

This category describes that the group leader reacted to the child’s expression of emotion with excessive talking, directed to the child or the group (see Table 2 in the methods section).

Youth agreement with the category description was moderate (M = 5.9, SD = 2.5). Therapist agreement with the category description was high (M = 7.8, SD = 1.8). The difference was significant (p < .001).

Youth rated group leader support as moderate (M = 5.6, SD = 2.1). Therapists rated group leader support as moderate (M = 5.2, SD = 2.8). The difference was not significant (t (202) = 1.120, p = .264, two-tailed).
Youth rated sibling support as low (M = 1.8, SD = 1.9). Therapists rated sibling support as low (M = 2.1, SD = 1.9). The difference was not significant (t (201) = -.978, p = .329, two-tailed).

To predict group leader support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 12.3 %, F (4, 130) = .500, p = .736.

To predict sibling support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 21.9 %, F (4, 129) = 1.619, p = .173.

To predict group leader support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 24.5 %, F (4, 60) = 4.863, p < .005. Only perceived change in emotion arousal was a statistically significant predictor (β = -.332, p < .01).

To predict sibling support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 11.3 %, F (4, 60) = 1.913, p = .120.

**Communication sequence 5: Adult-centered interviewing.**

This category described the group leader exploring themes guided by own agenda, asking a series of questions to one child, or making quick shifts between the children in the group without exploring each child’s experience further (see Table 2 in the methods section).

Youth agreement with the category description was moderate (M = 5.7, SD = 2.6). Therapist agreement with the category description was moderate (M = 5.9, SD = 2.6). The difference was not significant (p = .672).

Youth rated group leader support as moderate (M = 5.2, SD = 2.2). Therapists rated group leader support as moderate (M = 5.4, SD = 2.4). The difference was not significant (t (202) = -.694, p = .489, two-tailed).
Youth rated sibling support as low (M = 2.6, SD = 2.3). Therapists rated sibling support as low (M = 3.2, SD = 2.6). The difference was not significant (t (202) = -1.773, p = .078, two-tailed).

To predict group leader support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 21.8 %, F (4, 131) = 1.636, p = .169.

To predict sibling support rated by youth, a regression analysis with gender, age, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 14.9 %, F (4, 131) = .739, p = .567.

To predict group leader support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The total variance explained by the regression model was 20.8 %, F (4, 61) = 4.015, p < .006. Only perceived change in emotion valence (β = .336, p < .011) was a statistically significant predictor.

To predict sibling support rated by therapists, a regression analysis with gender, years of experience, perceived change in emotion valence or arousal as predictors was conducted. The analysis was not significant. The total variance explained by the regression model was 5.7 %, F (4, 61) = .920, p = .458.

**Table 5:** Significant predictors of perceived support based on regression analyses:

<table>
<thead>
<tr>
<th>Support from</th>
<th>Child-centered consensus</th>
<th>Child-centered exploring</th>
<th>Adult-centered avoidant</th>
<th>Adult-centered talkative</th>
<th>Adult-centered interviewing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Youth</strong></td>
<td>Age</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group leader</td>
<td>Emotion change</td>
<td>Arousal change</td>
<td>Arousal change</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Siblings</td>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Therapists</strong></td>
<td>Emotion change</td>
<td>-</td>
<td>-</td>
<td>Arousal change</td>
<td>Emotion change</td>
</tr>
<tr>
<td>Group leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Siblings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4: Support from group leader(s)

Figure 5: Support from other siblings
The relationship between perceived support and perceived quality

The relationships between assessed support from group leader and other siblings and assessed quality of the conversations were investigated using Pearson product-moment correlation coefficient. The analyses showed statistically significant medium to large positive correlations (Cohen, 1988), see table 5 for correlations between perceived support and perceived quality for each video. The overall mean correlation was $r = .54$.

**Table 6**: Correlation matrix for assessed support and assessed quality of the conversations

<table>
<thead>
<tr>
<th></th>
<th>Assessed support from group leader and assessed quality of conversation</th>
<th>Assessed support from other siblings and assessed quality of conversation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child-centered consensus</td>
<td>Youth 0.57** Therapists 0.68**</td>
<td>Youth 0.50** Therapists 0.63**</td>
</tr>
<tr>
<td>Child-centered exploring</td>
<td>Youth 0.44** Therapists 0.62**</td>
<td>Youth 0.52** Therapists 0.45**</td>
</tr>
<tr>
<td>Adult-centered avoidant</td>
<td>Youth 0.49** Therapists 0.71**</td>
<td>Youth 0.19* Therapists 0.49**</td>
</tr>
<tr>
<td>Adult-centered talkative</td>
<td>Youth 0.64** Therapists 0.84**</td>
<td>Youth 0.40** Therapists 0.37**</td>
</tr>
<tr>
<td>Adult-centered interviewing</td>
<td>Youth 0.68** Therapists 0.84**</td>
<td>Youth 0.37** Therapists 0.36**</td>
</tr>
<tr>
<td>Mean correlations</td>
<td>Youth 0.56 Therapists 0.74</td>
<td>Youth 0.40 Therapists 0.46</td>
</tr>
</tbody>
</table>

*Note: *correlation is significant at the 0.05 level (2-tailed) **correlation is significant at the 0.01 level (2-tailed)
5 Discussion

5.1 Summary of results

We investigated how youth and therapists perceived support from group leaders and other siblings when one sibling was, implicitly or explicitly, expressing a negative emotion or experience. The main findings were: Generally, perceived support from group leader and other siblings was rated as low to moderate, by both youth and therapists. Youth and therapists rated support significantly different in half of the communication sequences. Perceived change in emotional valence and intensity predicted both youth and therapist ratings of support, across communication sequences. The mean correlation between perceived quality of the communication sequence and perceived support was large, indicating some, but not perfect overlap. Possible explanations and implications of these findings will be discussed below.

5.2 Perceived support

5.2.1 Generally low to moderate ratings of support

Generally, both youth and therapists gave low to moderate ratings of support through all the communication sequences. Thus, it seems that neither youth nor therapists perceived the selected sequences as very supportive for the target sibling who was expressing negative affect. This finding is a cause for concern, as the assessed sequences are examples of communication found to be frequently occurring when a sibling expresses a negative emotion in support groups for siblings (Vatne & Zahl, 2015), and thus these sequences represent possibilities for the sibling to be helped with handling difficult emotions and receive support from others.

According to literature and providers of support groups, children who attend support groups will get help to regulate their emotions through talking about their experiences, labeling emotions and listening to others who have had the same experiences (Center for Crisis Psychology, 2015; Plante et al., 2001). The five categories of communication patterns were chosen as they were the most prevalent in the material analyzed by Vatne and Zahl (2015), and because they occurred in all the video sessions. The low ratings of support might
suggest that the behavior in these sequences was not perceived by the participants in the present study as necessarily helpful for the siblings to regulate their emotions, or that the participants perceived the support provided as not appropriate to the emotion expressed by the child.

**Support from other siblings in adult-centered communication**

Youth and therapist assessments of support from other siblings were rated as low for all of the adult-centered communication sequences. This finding was not unexpected, since the adult-centered communication is characterized by other siblings remaining passive and not actively participating in the conversation (Vatne & Zahl, 2015). It looks like passivity was not perceived as very supportive. At the same time, earlier research has implied that youth may consider passivity and absence of negative behavior, e.g., making fun of others, as prosocial behavior (Bergin et al., 2003). Our results were not in line with these earlier findings, as the sequences where other siblings remained passive were not rated as supportive by neither groups.

**Support from other siblings in child-centered communication**

In the two child-centered sequences, both youth and therapists rated sibling support as higher than in the adult-centered sequences. The child-centered exploring sequence stood out with overall more positive ratings of support, it was the only sequence that showed high ratings of support from other siblings from both youth and therapists. Because of the overall low ratings of support, it is important to notice this particular pattern of communication. In this sequence the siblings shared a common experience and validated this experience, showing that they had understanding for each other. It seems that both youth and therapists appreciated either the fact that other siblings participated, that other siblings were engaged in the conversation, and/or that the siblings agreed with each other. Some researchers underpin that when entering adolescence, it becomes more important to reach out to peers for support (Furman & Buhrmester, 1992), especially if they have problems that they perceive as solvable (Kliewer et al., 1996), thus communication where the siblings show support for each other might be of particular interest considering this age group.

The consensus communication pattern received moderate ratings of support from both groups, suggesting that both therapists and youth perceived sharing common experiences as
moderately supportive. It might be an important skill for group leaders to be able to facilitate this kind of communication, as sharing and hearing others’ similar experiences also are frequently mentioned reasons for arranging support groups (Dodd, 2004; Naylor & Prescott, 2004; Plante et al., 2001).

The siblings participating in the original support groups might have perceived it as the group leaders’ responsibility to acknowledge, validate and respond to the emotional expressions of the siblings in the group. Thus, the context of a group session led by an adult might cause other siblings to stay passive or less responsive than if they were in a different setting, as research suggests that children tend to act less prosocial when adults are present (Bergin et al., 2003; Carlo et al., 1999).

There is also the possibility that the supportive behavior is too subtle and difficult to recognize for others (Bergin et al., 2003) and that when siblings interact with each other, in that they in these groups meet likeminded and maybe “understand each other in a different way” as siblings, thus they might feel comforted simply by the presence of others with similar experiences.

**Support from group leader**

The overall ratings of support from group leaders tended to be higher than the ratings of sibling support. This could reflect the fact that group leaders were more actively involved across all of the sequences, or it could be that group leaders’ behavior was less subtle, making it easier to capture the supportiveness of the group leaders’ behavior when this was present.

An interesting finding was that the distinction between perceived provided support in child-centered versus adult-centered sequences was not apparent in the ratings of support from group leader, challenging the hypothesis of Vatne and Zahl (2015) who argued that a child-centered group leader style would be favorable.

**5.2.2 Agreements and discrepancies in ratings from youth and therapists**

**Overall pattern of discrepancies**

Youth and therapists rated support significantly different in half of their total evaluations of support. As Figures 4 and 5 illustrate, it seems that youth and therapists had more joint opinions of support from other siblings, than they had in their evaluations of group
leaders. The significantly higher agreement to some of the descriptions of the communication patterns for therapists and differences in evaluations of emotion, might also suggest that there were differences in how the material was perceived.

It is probable that youth and therapists did not have common grounds for making evaluations of group leader behavior. They may also have had different understandings of the intention behind the group leader behavior. As Bergin et al. (2003) reported, the context in which prosocial behavior is seen, and also the interpreted intention of this behavior, is essential as to whether youth perceive the behavior as supportive or not. Therapists bring with them different experiences than youth, and based on their theoretical and clinical experience, they might take different qualities of the conversation into account when evaluating how helpful the group leader behavior was for the sibling expressing negative affect. Different interpretations of the behavior and the intention of group leaders’ behaviors would explain discrepancies in their evaluations.

A plausible interpretation of the stronger disagreement in evaluations of group leader support could be the fact that there were differences in how much group leaders and siblings participated in the five sequences and how implicit or explicit their behaviors were. More active participation, which group leaders generally showed through all of the sequences, might have given more room for different interpretations of the supportiveness of the behavior. Additionally, as mentioned above, more explicit behavior or expressions of supportiveness would more certainly be captured by both the participant groups.

Support from siblings

Youth and therapists rated support from other siblings significantly different in the child-centered exploring and the adult-centered avoidant communication sequences. Although there were significant differences in mean ratings between the participant groups in these two sequences, youth and therapist ranked them similarly compared to the other sequences; both groups rated the child-centered exploring sequence as the highest on support from siblings, contrary to the adult-centered avoidant that was rated as low. The results therefore imply that youth and therapists did not disagree particularly in their evaluations of support from siblings, although we do not know whether they emphasized the same factors when making their evaluations.
Support from group leader

The pattern of disagreement on group leader support was more inconsistent and showed greater discrepancies than the ratings of support from siblings (see figure 4 and 5). Youth and therapists may have more opposing views when it comes to group leader behavior.

An interesting finding were the ratings of group leader support in the child-centered exploring and the adult-centered avoidant sequence. Therapists rated the exploring sequence as considerably higher on degree of support from group leader than youth did, whereas the avoidant sequence was rated significantly higher by youth than therapists (see Figure 5). The adult-centered avoidant communication sequence stands out as the one youth gave highest ratings of support from group leader. By comparison, the same sequence was rated as the second lowest on group leader support by therapists. These discrepancies are noteworthy because these depict contrary communication patterns as will be discussed in the following.

Avoidant versus exploring communication

The apparent opposite evaluations of the avoidant and exploring communication sequences might reflect important differences in youth and therapists` perspectives on what is supportive behavior when children express negative emotions in a group setting. These communication sequences illustrate two different options for a group leader when a child expresses negative affect; either moving on with the session and thereby sidestepping the difficult emotional theme or expression, or exploring or facilitating further exploration of the child`s expression.

Based on theory of emotion regulation which emphasize that children might need help with labelling and expressing their feelings more clearly (Harris et al., 2005), the choice of exploring the child`s expression of negative affect further might seem crucial to help the child feel better. Not unexpected, this was viewed as the most supportive group leader behavior by the therapist group.

Youth, on the other hand, seemed to favor an avoidant communication style. It may seem like therapists agreed with Vatne and Zahl (2015), as they proclaimed that a more child-centered communication style is preferred. Though the youth ratings suggest that a more avoidant communication style may not be as undesirable as therapists and researchers may think. The results could suggest that youth perceived it as more supportive to let the target sibling be spared for the exposure of crying or telling about difficult emotions in front of other peers. It might be that youth saw the avoidant group leader behavior as protective and
supporting when the group leader was saying “you don’t have to tell us more about it”, shifting the focus to the other siblings, so that the target sibling got a chance to recover.

A highly relevant matter when interpreting these results is whether or not youth are able to assess what is good for them, if they know what they need when they are to express difficult emotions or experiences in a group, and at last whether the youth raters are capable of putting themselves in the observed sibling’s position. Research on children’s mentalizing abilities suggests that there will be a lot of individual differences in adolescents’ abilities of mentalization and reflexive functioning (Pons et al., 2004; Steinberg, 2005). At the same time this is a period of improvements in cognitive and affective maturation, especially in various aspects of metacognition, abstract thinking and multidimensional thinking about others (Steinberg, 2005). As our youth participants were ranging from 11 – 16 years of age, we cannot account for how developed their metacognitive abilities were, and we cannot exclude the fact that this could limit some of the youth’s ability to give valid and reliable evaluations of support.

Øvreeide (2009) has stressed the importance of having established a relation or alliance before exploring and confronting emotions. The sibling support groups in this study only met for three sessions. This allowed limited time to establish a secure relation, and this might be the reason the adult-centered avoidant communication pattern was a prevalent communication category in Vatne and Zahl’s study (2015). Possibly, the group leaders avoided further exploration as they did not find it appropriate at the time. The participating youth and therapists did not receive any information about the alliance or about how many times these groups had met before the selected excerpts they got to see. Thus, therapists might have been overly critical towards the group leaders’ avoidance in some of the communication sequences, without having received any information about the context.

### 5.3 Predictors of support

The most systematic predictors of perceived support identified, were the participants’ assessments of change of emotion valence and arousal. Perceived change of emotion was a predictor evident in all of the assessed communication patterns. Thus, the perceived emotional change, both in valence and intensity, of the target sibling is of importance for the participants’ evaluations of the supportiveness in the communication.
Youth consistently rated the initial emotion of the target sibling as significantly more positive than therapists did, even though they saw the same shift in emotion from sequence to sequence the same way therapists did. This could question whether youth were able to perceive the implicit expressions of negative emotion, and might reflect that the youth did not perceive implicit cues from the target siblings to the same degree as therapists, and therefore might have based their assessments on a somewhat more positive emotion of the target sibling.

The literature on support groups emphasizes that emotional support and help to regulate emotions is one of the main aims of support groups (Plante et al., 2001). Talking about the distressing events, labeling the emotions, and sharing common experiences is assumingly helpful to regulate the negative emotions (Lieberman et al., 2007; Pennebaker, 1993). A supportive conversation would possibly help siblings regulate their emotion toward a more positive and less aroused emotion after having presented a difficult emotion or experience in the group. The results showed that both youth and therapists may be of this same opinion. Further research on this predictor will be needed to understand the relationship between emotion regulation and support provided in support groups.

**Additional predictors significant for the child-centered consensus communication style.**

Age and gender were significant predictors only for the youth’ ratings of support in the child-centered consensus communication sequence. Youth’ age predicted ratings of group leader support, youth’ gender and age predicted ratings of sibling support. Younger children gave higher ratings of support from group leader and other siblings, which might suggest that children become more critical to the behavior of both peers and adults as they mature. The more critical evaluations of other siblings may reflect the fact that older children increasingly look towards peers for emotional support (Furman & Buhrmester, 1992) and thus they might put more responsibility for emotion regulation in the other siblings behavior. Adolescents also have a developing ability to think more abstractly, more differentiated and more multidimensional about others (Steinberg, 2005), thus the older youth may have perceived subtler signs in the communication than the youngest in our sample.

Boys gave higher ratings of support from other siblings than girls which might reflect gender differences in mentalization abilities in this age group, maybe girls perceived subtler signs in the communication sequence. Also, the target sibling in the sequence with consensus
communication pattern was a girl, thereby girls might identify more with the sibling and experience stronger the need of support from the others.

However, age and gender were significant predictors only in one of the communication patterns. Thus it is of importance to investigate what significance they may have for evaluations of support in other communication patterns. For all the other communication sequences, only change in emotion was a significant predictor. Other predictors need to be examined in future research to find out more about what youth (and therapists) may base their assessments on.

5.4 The relationship between perceived support and perceived quality of the conversations

Ratings from both youth and therapists showed medium to large significant positive correlations between perceived support and perceived quality. The overall mean correlation was large ($r = .54$), suggesting a strong relationship between the evaluations of support and quality of the conversation. This relationship seemed to be slightly stronger for therapists than youth, and also support from group leader showed stronger correlation with quality than support from siblings.

The high correlation between perceived quality and support indicates that the participants perceived the construct of support as a concept of importance for a good conversation. Considering the concept of support as something positive and helpful for the children, it is likely to assume that a supportive conversation also would be a qualitatively good conversation. As the participants also saw this relationship, this contributes to strengthen the construct validity of our measure of support. It also verifies that support, from both children and group leaders, is an important factor for the quality of a support group conversation.

At the same time, the correlations were not perfect. Both youth and therapists did discriminate between support and quality. This indicates that a qualitatively good conversation is not equal to a supportive conversation for either youth nor therapists, in spite of the strong relationship between the two ratings.

Youth tended to discriminate more between the two concepts than therapists did, as evident by the lower correlations between quality and support in the youth sample relative to the therapist sample. This could be of importance when gathering evaluations from youth,
because it implies that the answers depend on which question is asked. The question of how good the conversation was, does not necessarily provide answers about the perceived support, thus it might be critical that both questions are asked. This is in line with methodological literature, reporting that response quality among other factors depends on question phrasing (Borgers et al., 2004) and points to the need to be specific (Curtin, 2001). Borgers et al. (2004) mentions that response quality is a function of respondent characteristics, mainly cognitive abilities and question phrasing. Our questions were developed to be appropriate to youth’s age and cognitive abilities, but we can always ask about if the constructs used were defined clear and understandable enough for the participants.

As mentioned, the correlations between assessed support and assessed quality were stronger when assessing support from group leader, both for youth and therapists. An interpretation of this is that both groups rely more on group leader behavior when evaluating the overall quality of the conversation. It could look like both youth and therapists ascribed more of the responsibility to contribute to make a good group conversation to the group leaders’ supportiveness.

5.5 Methodological considerations

This thesis conducted pioneering research on how youth and therapists perceive communication in support groups, with the aim to get further knowledge on how to improve support group interventions for youth in need of support. To our knowledge no previous studies have investigated youth’s assessments of live support group conversations and no studies have looked at discrepancies between therapists’ and youth’s assessments of support in live support group communication. Because of the use of an innovative methodological approach, there are many ethical and methodological issues to discuss, and limited previous research to rely on.

5.5.1 Strengths and limitations of this thesis

The video material

This is the first study that has compared youth and therapist evaluations of support in communication patterns in realistic support group sequences. Because of the ethical concern of displaying recordings of children in vulnerable situations, alternative approaches had to be
adopted to achieve this. Other designs, such as using transcripts or explaining the communication patterns to the participants, would not have given the same vivid and realistic material for the participants to evaluate, as this would leave out too many details and nuances of the support group sequences and threaten the ecological validity. The use of actors is a common approach when presenting sessions from therapy (Etchison & Kleist, 2000; Kravitz et al., 2006) and since it was not applicable to display the original sequences with siblings participating in support group sessions, recording new videos without sensitive information was considered the best possible way to have youth and therapists evaluate the communication. Several precautions were taken in the making of the video material to get the material as credible as possible. The assistance of experienced youth actors closely directed by their theatre instructor, who watched the original support group sequences, was anticipated to minimize the discrepancies from the original video material.

The complexity of the video material gives room for different interpretations of the results, because it is uncertain which aspects of the support group sequences the participants emphasized in their evaluations. Despite giving instructions on who in the sequence participants should pay extra attention to, we cannot rule out that other factors, such as the participants liking of the siblings or group leaders or their opinions of the theme discussed, may have affected their responses. Even though the video material was made to be as realistic and similar as the original support groups as possible, the chance of the participants being affected by who they saw were actors, cannot be excluded.

It is important to keep in mind that the displayed sequences were short excerpts from the complete support group session, and the participants did not see what had preceded the sequences and what happened next. The excerpts were selected because these situations represented a possibility for meeting and validating children’s negative affect, and to help them with regulating their emotions. The evaluations of support therefore cannot be generalized to the complete support group sessions, or to support groups in general. Assessments of these sequences does not give us all the answers, but represent one piece in the puzzle of finding what is supportive in support groups.

**Control of the participants’ assessments of communication patterns**

Due to the complexity of the assessed video material, elements with the purpose of controlling what the participants were focusing on when assessing the sequences were
included. All participants received instructions prior to each video, aiming to direct their focus to the elements of the communication which they were asked to assess.

Other elements that were controlled included assessments of emotion. The results showing that youth and therapists perceived the initiating emotion of the target sibling as significantly different from video to video, and that these differences followed the same pattern for both youth and therapists (see Figure 3 in the results section), suggest that their perception of the emotional valence in the sequences did not differ significantly when assessing support and quality.

A third controlled element was the agreement to a statement describing the communication patterns. The selected sequences were categorized as five distinct communication patterns by Vatne and Zahl (2015). Thus, if these categories were recognized by youth and therapists, this could be regarded as a validation of the categories. This item generally showed high agreement (see Figure 2 in the results section), and suggest that most of the participants perceived the communication in the assessed sequences in the same way and that they confirmed the communication patterns found by Vatne and Zahl (2015).

**Generalizability**

This study was conducted with a large sample of youth from a normal population, drawn from geographical areas with a range of socio-economic profiles. This means our youth sample can be considered representative for the general youth population. Questions can be raised as to how representative these youths would be for participants in support groups. However, support groups are often conducted for youth from the normal population, who may be at somewhat increased risk of difficulties. Therefore, we consider our results to be relevant also for youth who are potential participants in support groups.

The adult participants were therapists with clinical experience working with children. However, in many cases support groups are run by adults that are not trained therapists. The therapists in our sample may have rated the communication more critically due to their expertise. We could have increased generalizability from our therapist sample by including more therapists at the primary health service level, such as school nurses and health visitors.
Methodological approach

Quantitative measures were preferred to be able to compare youth and therapist evaluations. The choice of methodological approach facilitated collection of data from large groups of participants, and youth with varying socio-economic status. This is important, as earlier research has pointed out that youth with different socio-economic backgrounds may have different conceptions of pro-social behavior (Bergin et al., 2003). A benefit of using this approach was that all participants gave their answers anonymously and individually, thus the possibility of their answers being affected by group processes or the impact of other participants’ answers was diminished compared to conducting for example a focus group study. We also examined the threat of confirmation bias, and found no general tendency to agree with the descriptions of communication patterns. Order effects of the sequences were also prevented, by playing the films in different orders for different groups of participants.

Reliability and validity of measures

Since the evaluations of support group sequences never have been gathered with this method before, the importance of basing the questionnaires on well-established measures was essential. All measures were obtained from earlier research, as described in the methods section. Due to the design of the questionnaire with single items for each aspect, reliability in the form of inner consistency of any scale was not measured.

For assessments of emotion, the SAM scale was applied because it is well used, also recently (Fernandes & Arriaga, 2010), it has a theoretical orientation, it is easy to implement, it is language- and culture free due to the use of figures/graphic mannequins instead of words (Bradley & Lang, 1994; Capaldi & Privitera, 2008; Fernandes & Arriaga, 2010; Lang, 1980). Children are capable of understanding both the dimensions and can easily indicate the SAM-figure that resembles the present affective state. Lang (1980) describes that the subjects show more interest and less fatigue with the use of these figures instead of using usual questionnaires and rating scales. It is a limitation of this study that we do not know which considerations and reflections were behind the participants’ responses, and if the processes that lead to their evaluations were differing between youth and therapists. The choice of quantitative measures disallowed the possibility to explore the answers further, thus a different approach, such as in-depth-interviews or focus groups, might had provided answers to some of the questions we can now only hypothesize about.
5.6 Implications

The findings of low support when expressing negative affect accentuate the urgency of further exploring on how support groups are providing or not providing support, and highlight the importance of giving group leaders particular training in leading support groups. Training is essential to be able to monitor the communication and use different communicative techniques accordingly. As shown in literature, and which this thesis maintains, support groups have different aims and involve different processes than individual therapy for children. Because group leaders of support groups may lack clinical experience with children or they are therapists trained for individual therapy or family therapy, the need for more knowledge about communication in support groups for children is essential to be able to provide therapists or other providers required education.

The communication in support group conversations is to a great extent guided by group leaders’ perspectives, thus group leaders will facilitate behavior and communication they think of as supportive. The results from this thesis suggest that youth do not always agree with therapists on what is supportive. The finding of large discrepancies in the view of supportive behavior, point to the need to keep more than one perspective in mind, take the context into consideration, and gather more knowledge about the youth’s perspectives to make the communication as supportive and suitable to the relevant age group as possible.

Even though this study has not determined the reasons why youth and therapists make different evaluations, we can make several suggestions. It might be that youth and therapists have different ideas of the purposes of the support group and how it might be helpful to the children participating. In which case, it could be important for the group leader to establish a common understanding of the aim of the group session. It could be that children and adolescents need more education on what happens in support groups and the reasons why the group leader might encourage the children to talk about difficult emotions and experiences. An implication would then be that group leaders need to state clearly to the children participating in support groups why it might be good to share difficult experiences with others. Guiding the conversation, the group leader can follow the child’s focus and make sure both content and emotional aspects of experiences are explored, and importantly state clearly the aims of the group and explain to the children their role and what is desired behavior, and also denote appropriate behavior during the sessions.
5.7 Further research

In this thesis we have explored the evaluations of youth and therapists of the five most prevalent of the communication patterns found by Vatne and Zahl (2015). The material gathered in this study could be explored further, keeping in mind the methodological restraints discussed. It could be interesting to also examine how therapists and youth perceive the communication patterns that were less prevalent in the support group material from FSP part one, as some of these communication patterns might be desirable, e.g., emotional empathic communication.

This thesis calls attention to the importance of involving youth in research about issues that concern them. As the present study aimed to compare the evaluations of youth and therapists, quantitative measures were advantageous for this purpose. The questions still remain as to the bases of the participants’ assessments. Further research should also focus on finding out more about what the youth and therapists base their evaluations of support on, e.g., by conducting in-depth interviews and focus group studies.

To make the best interventions for children and adolescents, it is important to consider their individual varieties and cognitive and emotional abilities in different age groups. Youth entering early adolescence have received relatively little attention in research when it comes to emotion regulation skills and prosocial behavior, it is apparent that we need to know more about their functioning to develop interventions that provide them the best possible help with their difficulties. Further research should focus on investigating the youth’ perspective as well as examining how they communicate about emotions and in which ways they can improve their emotion regulation in a support group.
6 Conclusion

Our search through the literature and the results of this study brings us to the conclusion that it is crucial to bring in more than one perspective when conducting support groups for children. We have seen that youth can participate in research and give reliable and valid answers. Our findings suggest that there are some discrepancies in what youth and therapists perceive as supportive when a child expresses negative emotions in a group. The most apparent disagreement was found in the exploring versus the avoidant communication styles, where youth seemed to favor the latter. It is important to keep in mind that exploring a child’s difficult feelings might not be appropriate in every setting, and the timing and a relational bond is critical. Support was generally considered to be low to moderate, implying the need to find out more about how support groups might provide emotional support. Our results show a positive relationship between perceived quality and perceived support, confirming the idea of support as critical for a qualitatively good support group conversation. Perceived change in emotion valence and arousal significantly predicted evaluations of support, but overall there were no other systematic predictors of perceived support. Thus, it will be important to investigate other possible factors contributing to evaluations of support. On the basis of the findings from this thesis, we stress the importance of providing education and appropriate training for group leaders of support groups for children and to continue research on support groups to be able to meet the needs of children in need of such interventions.
References


Borgers, N., Sikkel, D., & Hox, J. (2004). Response Effects in Surveys on Children and Adolescents: The Effect of Number of Response Options, Negative Wording, and


doi:10.1093/jpepsy/jsj119


doi:10.1080/00131880701369693


Nasjonal kompetansetjeneste for læring og mestring innen helse (2015, 06.02). Barn og unge som pårørende: SMIL styrket mestring i livet. Hentet fra http://www.mestring.no


Raffaelli, M., Crockett, L., & Shen, Y.-L. (2005). Developmental Stability and Change in Self-Regulation From Childhood to Adolescence. *Research and Theory on Human Development, 166*(1), 54-76. doi:10.3200/GNTP.166.1.54-76


Sykehuset i Østfold (2008). Nå er det min tur! Et ideehefte om gruppetilbud til søsken til barn med søsken med nedsatt funksjonsevne.


Appendix A

Example of the Questionnaire for the first communication sequence:

FILM nr. 1 (child centred consensus)

1) Hvordan var følelsen til jenta i den rosa og hvite jakken i starten av filmen?

2) Hvor sterk var denne følelsen?

3) Hvor mye støtte synes du de andre barna i gruppa viste jenta i rosa og hvit jakke? (sett et kryss på linjen)

4) Hvor mye støtte synes du at gruppeleder viste jenta i rosa og hvit jakke? (sett et kryss på linjen)
5) Hvordan var følelsen til jenta i den rosa og hvite jakken på slutten av filmen?

6) Hvor sterk var denne følelsen?

7) Hvor god synes du denne samtalen var? (sett et kryss på linjen)

8) Hvor enig er du i dette? (sett ett kryss på linjen):

«Filmen jeg akkurat så viser barn som forteller at de har opplevd noe av det samme selv»
Appendix B

The SAM scales used in the study

Item 1 & 5 in the Questionnaire: Measuring the pleasure - dimension using SAM:

Item 2 & 6 in the Questionnaire: Measuring the arousal - dimension using SAM:
Appendix C

Information about the study and consent form for youth and their parents:

Informasjon til skoleelever

Spørsmålet om å delta i et forskningsprosjekt

Dette er spørsmålet til deg om å delta i et forskningsprosjekt som er et samarbeid mellom Frambu og Universitetet i Oslo.

Hvordan gjør vi denne studien?
I dette prosjektet ønsker vi å finne ut hvordan barn og ungdommer ønsker å bli møtt når de deler vanskelige ting i en støttegruppe. Vi ønsker å finne ut om samtalegrupper oppleves støttende for barn og ungdommer som har behov for å snakke om vanskelige ting. Vi ønsker at dere som er barn og unge skal være med og si noe om hva dere opplever vil være støttende. Vi vil bruke informasjonen vi får fra dere for å hjelpe de som trenger å være med i en støttegruppe på best mulig måte, slik at disse barna får en best mulig opplevelse og god nok støtte når de deltar i en samtalegruppe.

Hva vil det si å være med i studien?

Vi er interessert i å vite hva du mener om samtalene du får se. Det vil ta ca. én time å se gjennom filmene og svare på spørsmålene og hele klassen skal sitte sammen denne timen.

Hva skjer med informasjonen om deg?
Alle spørreskjemaene du svarer på vil oppbevares nedlåst i et arkivskap og det er kun de som jobber med studien som vil ha adgang til dem. Alt vil oppbevares uten ditt navn på og vil bli slettet når prosjektet er ferdig. Det vil ikke være mulig å finne ut hva akkurat du har fortalt.

Frivillig deltakelse
Det er frivillig å være med i prosjektet. Det er foreldrene dine som forteller oss om det er greit at du er med, men snakk gjerne med dem dersom du er usikker. Om du sier ja til å delta, kan du senere trekke deg hvis du ønsker det, når som helst og uten å måtte si hvorfor.

Hvis du sier ja vil du få være med og se på filmer og svare på noen spørsmål når vi kommer på besøk til klassen.
Prosjektleder Torun M. Vatne som jobber på Frambu kan også kontaktes hvis du har noen spørsmål.

Prosjektleder Torun M. Vatne, tlf. 60856044. Epost tva@frambu.no

Samtykke til deltakelse i studien

Jeg har fått informasjon om studien og er villig til å delta.

Barnets navn: ………………………………………………………………………………………………. (Blokkbostaver)

Foresattes navn:…………………………………………………………………………………………….. (Blokkbostaver)

………………………………………………………………………………………………………………

Sted Dato Underskrift av barnets foresatte
Appendix D

Information about the study and consent form for therapists:

Informasjonsskriv til fagpersoner som jobber med barn

Forespørsel om deltakelse i forskningsprosjekt

Oppleves støttegrupper støttende? – Barn og fagpersoners vurderinger

Bakgrunn og hensikt
Dette er et spørsmål om du vil delta i et forskningsprosjekt med hovedformål å fremskaffe ny kunnskap om hvordan barn ønsker å bli mott når de uttrykker vanskelige emosjonelle opplevelser under samtaler i en støttegruppe. Vi ønsker å finne ut om samtalegrupper oppleves støttende for barn og ungdommer som har behov for å snakke om vanskelige ting, og vi ønsker at barn og unge skal være med og si noe om hva de opplever vil være støttende. I prosjektet vil vi innhente barns vurderinger av gruppesamtaler for barn, som er videoinnspilte kopier av reelle gruppesamtaler, innspilt av skuespillere. Videre vil vi se om vurderingene barna gjør av hva som er gode og støttende samtaler for barn samsvarer med vurderinger fra fagfolk som jobber med barn. Studien er en planlagt ny del av prosjektet ”Å vokse opp som søsken til barn med en funksjonsnedsettelse”.

Forskingsprosjektet er et samarbeidsprosjekt mellom Frambu senter for sjeldne funksjonshemninger og Psykologisk institutt ved Universitetet i Oslo.

Resultatene fra studien skal publiseres i forskjellige vitenskapelige tidsskrift og danne grunnlag for hovedoppgaven til to psykologstudenter ved psykologisk institutt, Uio. De skal også brukes som grunnlag for å utvikle undervisnings- og informasjonsmateriell til fagfolk som vurderer å igangsette støttegrupper for barn.

Hva innebærer deltakelse?
Deltakelse innebærer at fagpersoner/behandlere som har gitt samtykke til deltakelse vil samles i et møterom. Her vil dere få se utdrag fra 10 innspilte gruppesamtaler med barn og ungdommer og svarer på et kort spørreskjema etter hvert klipp.

Vi vil i spørreskjemaet registrere alder, yrkesbakgrunn, erfaring med samtalegrupper for barn og antall års klinisk erfaring, men ellers kommer vi ikke til å stille noen personlige spørsmål. Det skal ikke skrives navn eller andre ting på skjemaene som gjør at andre kan få vite hva akkurat du har svart på de forskjellige spørsmålene.

Det vil ta ca. én time å se gjennom filmene og svare på spørsmålene.
Hva skjer med informasjonen vi samler inn?

Frivillig deltakelse
Det er frivillig å delta i studien. Dersom du ønsker å delta undertegner du samtykkeerklæringen på siste side og returnerer denne til Frambu/ din leder i vedlagte svarkonvolutt. Om du sier ja til å delta, har du likevel rett til å trekke tilbake samtykket senere hvis det er ønskelig.

Dersom du har spørsmål i tilknytning til forskningsprosjektet eller spørsmål i etterkant av deltakelse, kan du ta kontakt med prosjektleder ved Frambu, Torun M. Vatne.

Prosjektleder Torun M. Vatne (Frambu senter for sjeldne funksjonshemninger)
tlf. 64856044, Epost tva@frambu.no

Samtykke til deltakelse i studien

Jeg har fått informasjon om studien og er villig til å delta.

Navn: ……………………………………………………………………………………………………………………………
(Blokkbostaver)

…………………………………………………………………………………………………………………………

Sted Dato Underskrift
## Appendix E

Table of mean, standard deviation and skewness/kurtosis values for all items:

<table>
<thead>
<tr>
<th>Youth</th>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>S. D.</th>
<th>Skewness Statistic</th>
<th>Skewness Std. E.</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video 1</td>
<td>Q1</td>
<td>136</td>
<td>3.40</td>
<td>0.71</td>
<td>-0.502</td>
<td>0.208</td>
<td>0.901</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>136</td>
<td>3.09</td>
<td>0.82</td>
<td>0.242</td>
<td>0.208</td>
<td>-0.244</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>135</td>
<td>4.12</td>
<td>2.51</td>
<td>0.305</td>
<td>0.209</td>
<td>-0.658</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>135</td>
<td>4.38</td>
<td>2.27</td>
<td>0.343</td>
<td>0.209</td>
<td>-0.395</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q5</td>
<td>136</td>
<td>3.26</td>
<td>0.82</td>
<td>0.155</td>
<td>0.208</td>
<td>-0.086</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>135</td>
<td>3.36</td>
<td>0.91</td>
<td>-0.066</td>
<td>0.209</td>
<td>-0.346</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>136</td>
<td>4.54</td>
<td>2.15</td>
<td>-0.007</td>
<td>0.208</td>
<td>-0.427</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>136</td>
<td>7.03</td>
<td>2.61</td>
<td>-0.638</td>
<td>0.208</td>
<td>-0.45</td>
<td>0.413</td>
</tr>
<tr>
<td>Video 2</td>
<td>Q1</td>
<td>135</td>
<td>2.53</td>
<td>0.69</td>
<td>0.643</td>
<td>0.209</td>
<td>0.511</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>135</td>
<td>2.91</td>
<td>1.17</td>
<td>0.09</td>
<td>0.209</td>
<td>-0.949</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>135</td>
<td>6.55</td>
<td>2.34</td>
<td>-0.456</td>
<td>0.209</td>
<td>-0.33</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>135</td>
<td>4.89</td>
<td>2.19</td>
<td>-0.072</td>
<td>0.209</td>
<td>-0.248</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q5</td>
<td>133</td>
<td>2.50</td>
<td>0.83</td>
<td>0.052</td>
<td>0.21</td>
<td>-0.525</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>133</td>
<td>3.12</td>
<td>1.16</td>
<td>0.151</td>
<td>0.21</td>
<td>-0.859</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>133</td>
<td>6.17</td>
<td>2.07</td>
<td>0.056</td>
<td>0.21</td>
<td>-0.484</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>133</td>
<td>3.17</td>
<td>2.91</td>
<td>0.599</td>
<td>0.21</td>
<td>-0.637</td>
<td>0.417</td>
</tr>
<tr>
<td>Video 3</td>
<td>Q1</td>
<td>136</td>
<td>3.90</td>
<td>0.56</td>
<td>-0.040</td>
<td>0.208</td>
<td>0.198</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>136</td>
<td>2.41</td>
<td>0.80</td>
<td>0.423</td>
<td>0.208</td>
<td>0.624</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>135</td>
<td>3.70</td>
<td>2.13</td>
<td>0.071</td>
<td>0.209</td>
<td>-0.555</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>136</td>
<td>6.43</td>
<td>2.09</td>
<td>-0.350</td>
<td>0.208</td>
<td>-0.438</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q5</td>
<td>135</td>
<td>3.87</td>
<td>0.78</td>
<td>0.047</td>
<td>0.209</td>
<td>-0.946</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>135</td>
<td>2.57</td>
<td>0.95</td>
<td>0.165</td>
<td>0.209</td>
<td>-0.052</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>136</td>
<td>5.37</td>
<td>1.73</td>
<td>-1.23</td>
<td>0.208</td>
<td>0.551</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>136</td>
<td>5.65</td>
<td>2.94</td>
<td>-0.428</td>
<td>0.208</td>
<td>-0.599</td>
<td>0.413</td>
</tr>
<tr>
<td>Video 4</td>
<td>Q1</td>
<td>136</td>
<td>4.20</td>
<td>0.63</td>
<td>-0.901</td>
<td>0.208</td>
<td>3.895</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>136</td>
<td>2.05</td>
<td>0.80</td>
<td>0.696</td>
<td>0.208</td>
<td>0.84</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>135</td>
<td>1.83</td>
<td>1.89</td>
<td>1.089</td>
<td>0.209</td>
<td>1.025</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>136</td>
<td>5.63</td>
<td>2.14</td>
<td>-0.038</td>
<td>0.208</td>
<td>-0.527</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q5</td>
<td>136</td>
<td>4.59</td>
<td>0.60</td>
<td>-1.379</td>
<td>0.208</td>
<td>1.902</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>135</td>
<td>1.69</td>
<td>0.78</td>
<td>0.8</td>
<td>0.209</td>
<td>-0.256</td>
<td>0.414</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>136</td>
<td>4.91</td>
<td>2.14</td>
<td>0.14</td>
<td>0.208</td>
<td>-0.401</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>136</td>
<td>4.08</td>
<td>2.97</td>
<td>0.264</td>
<td>0.208</td>
<td>-0.825</td>
<td>0.413</td>
</tr>
<tr>
<td>Video 5</td>
<td>Q1</td>
<td>136</td>
<td>3.37</td>
<td>0.53</td>
<td>0.396</td>
<td>0.208</td>
<td>-0.713</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>136</td>
<td>2.94</td>
<td>0.82</td>
<td>0.029</td>
<td>0.208</td>
<td>-0.126</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>136</td>
<td>2.58</td>
<td>2.35</td>
<td>0.535</td>
<td>0.208</td>
<td>-0.685</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>136</td>
<td>5.15</td>
<td>2.25</td>
<td>-0.25</td>
<td>0.208</td>
<td>-0.489</td>
<td>0.413</td>
</tr>
<tr>
<td>Q5</td>
<td>136</td>
<td>3.29</td>
<td>0.63</td>
<td>0.375</td>
<td>0.208</td>
<td>0.286</td>
<td>0.413</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>136</td>
<td>3.07</td>
<td>0.91</td>
<td>0.046</td>
<td>0.208</td>
<td>0.158</td>
<td>0.413</td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>136</td>
<td>4.88</td>
<td>1.77</td>
<td>-0.3</td>
<td>0.208</td>
<td>0.323</td>
<td>0.413</td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>133</td>
<td>5.70</td>
<td>2.61</td>
<td>-0.328</td>
<td>0.21</td>
<td>-0.466</td>
<td>0.417</td>
<td></td>
</tr>
<tr>
<td>Valid N</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Therapists**

**Video 1**

<table>
<thead>
<tr>
<th>Q1</th>
<th>68</th>
<th>3.87</th>
<th>0.52</th>
<th>-0.872</th>
<th>0.291</th>
<th>2.636</th>
<th>0.574</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>68</td>
<td>2.82</td>
<td>0.73</td>
<td>0.289</td>
<td>0.291</td>
<td>-1.066</td>
<td>0.574</td>
</tr>
<tr>
<td>Q3</td>
<td>68</td>
<td>3.88</td>
<td>2.15</td>
<td>0.185</td>
<td>0.291</td>
<td>-0.659</td>
<td>0.574</td>
</tr>
<tr>
<td>Q4</td>
<td>67</td>
<td>3.52</td>
<td>1.92</td>
<td>0.264</td>
<td>0.293</td>
<td>-0.248</td>
<td>0.578</td>
</tr>
<tr>
<td>Q5</td>
<td>68</td>
<td>3.72</td>
<td>0.62</td>
<td>0.26</td>
<td>0.291</td>
<td>-0.581</td>
<td>0.574</td>
</tr>
<tr>
<td>Q6</td>
<td>67</td>
<td>3.22</td>
<td>0.85</td>
<td>-0.299</td>
<td>0.293</td>
<td>-0.497</td>
<td>0.578</td>
</tr>
<tr>
<td>Q7</td>
<td>68</td>
<td>4.18</td>
<td>1.84</td>
<td>0.164</td>
<td>0.291</td>
<td>0.008</td>
<td>0.574</td>
</tr>
<tr>
<td>Q8</td>
<td>68</td>
<td>7.09</td>
<td>2.16</td>
<td>-1.176</td>
<td>0.291</td>
<td>1.36</td>
<td>0.574</td>
</tr>
</tbody>
</table>

**Video 2**

<table>
<thead>
<tr>
<th>Q1</th>
<th>68</th>
<th>3.03</th>
<th>0.88</th>
<th>-0.058</th>
<th>0.291</th>
<th>-1.074</th>
<th>0.574</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>68</td>
<td>2.91</td>
<td>0.75</td>
<td>-0.075</td>
<td>0.291</td>
<td>-0.659</td>
<td>0.574</td>
</tr>
<tr>
<td>Q3</td>
<td>68</td>
<td>7.78</td>
<td>1.67</td>
<td>-1.898</td>
<td>0.291</td>
<td>5.387</td>
<td>0.574</td>
</tr>
<tr>
<td>Q4</td>
<td>68</td>
<td>6.32</td>
<td>1.73</td>
<td>-0.626</td>
<td>0.291</td>
<td>0.904</td>
<td>0.574</td>
</tr>
<tr>
<td>Q5</td>
<td>68</td>
<td>2.41</td>
<td>0.67</td>
<td>0.482</td>
<td>0.291</td>
<td>0.114</td>
<td>0.574</td>
</tr>
<tr>
<td>Q6</td>
<td>67</td>
<td>3.31</td>
<td>0.72</td>
<td>-0.059</td>
<td>0.293</td>
<td>-0.343</td>
<td>0.578</td>
</tr>
<tr>
<td>Q7</td>
<td>67</td>
<td>7.24</td>
<td>1.57</td>
<td>-1.091</td>
<td>0.293</td>
<td>1.760</td>
<td>0.578</td>
</tr>
<tr>
<td>Q8</td>
<td>67</td>
<td>5.61</td>
<td>2.16</td>
<td>-0.13</td>
<td>0.293</td>
<td>-0.064</td>
<td>0.578</td>
</tr>
</tbody>
</table>

**Video 3**

<table>
<thead>
<tr>
<th>Q1</th>
<th>68</th>
<th>4.24</th>
<th>0.63</th>
<th>-0.214</th>
<th>0.291</th>
<th>-0.554</th>
<th>0.574</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>68</td>
<td>2.43</td>
<td>1.06</td>
<td>.160</td>
<td>0.291</td>
<td>-1.160</td>
<td>0.574</td>
</tr>
<tr>
<td>Q3</td>
<td>67</td>
<td>2.75</td>
<td>1.95</td>
<td>.470</td>
<td>0.293</td>
<td>-.822</td>
<td>0.578</td>
</tr>
<tr>
<td>Q4</td>
<td>68</td>
<td>3.74</td>
<td>2.24</td>
<td>.557</td>
<td>0.291</td>
<td>-.617</td>
<td>0.574</td>
</tr>
<tr>
<td>Q5</td>
<td>68</td>
<td>4.31</td>
<td>0.65</td>
<td>-.743</td>
<td>0.291</td>
<td>1.064</td>
<td>0.574</td>
</tr>
<tr>
<td>Q6</td>
<td>67</td>
<td>2.57</td>
<td>0.91</td>
<td>-.018</td>
<td>0.293</td>
<td>-.753</td>
<td>0.578</td>
</tr>
<tr>
<td>Q7</td>
<td>68</td>
<td>2.66</td>
<td>1.65</td>
<td>.607</td>
<td>0.291</td>
<td>.210</td>
<td>0.574</td>
</tr>
<tr>
<td>Q8</td>
<td>68</td>
<td>7.09</td>
<td>3.37</td>
<td>-1.212</td>
<td>0.291</td>
<td>-.005</td>
<td>0.574</td>
</tr>
</tbody>
</table>

**Video 4**

<table>
<thead>
<tr>
<th>Q1</th>
<th>68</th>
<th>4.43</th>
<th>0.58</th>
<th>-0.41</th>
<th>0.291</th>
<th>-0.711</th>
<th>0.574</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>68</td>
<td>2.10</td>
<td>0.78</td>
<td>0.808</td>
<td>0.291</td>
<td>0.851</td>
<td>0.574</td>
</tr>
<tr>
<td>Q3</td>
<td>68</td>
<td>2.10</td>
<td>1.86</td>
<td>1.561</td>
<td>0.291</td>
<td>2.756</td>
<td>0.574</td>
</tr>
<tr>
<td>Q4</td>
<td>68</td>
<td>5.24</td>
<td>2.82</td>
<td>-0.161</td>
<td>0.291</td>
<td>-1.192</td>
<td>0.574</td>
</tr>
<tr>
<td>Q5</td>
<td>67</td>
<td>4.49</td>
<td>0.66</td>
<td>-1.276</td>
<td>0.293</td>
<td>1.886</td>
<td>0.578</td>
</tr>
<tr>
<td>Q6</td>
<td>67</td>
<td>2.10</td>
<td>0.80</td>
<td>0.356</td>
<td>0.293</td>
<td>-0.255</td>
<td>0.578</td>
</tr>
<tr>
<td>Q7</td>
<td>68</td>
<td>4.04</td>
<td>2.42</td>
<td>0.097</td>
<td>0.291</td>
<td>-0.907</td>
<td>0.574</td>
</tr>
<tr>
<td>Q8</td>
<td>68</td>
<td>7.75</td>
<td>1.76</td>
<td>-1.069</td>
<td>0.291</td>
<td>1.339</td>
<td>0.574</td>
</tr>
</tbody>
</table>

**Video 5**

<table>
<thead>
<tr>
<th>Q1</th>
<th>68</th>
<th>3.56</th>
<th>0.56</th>
<th>0.296</th>
<th>0.291</th>
<th>-0.924</th>
<th>0.574</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>68</td>
<td>3.43</td>
<td>0.74</td>
<td>0.033</td>
<td>0.291</td>
<td>-0.228</td>
<td>0.574</td>
</tr>
<tr>
<td>Q3</td>
<td>68</td>
<td>3.22</td>
<td>2.63</td>
<td>0.711</td>
<td>0.291</td>
<td>-0.656</td>
<td>0.574</td>
</tr>
<tr>
<td>Q4</td>
<td>68</td>
<td>5.38</td>
<td>2.35</td>
<td>-0.142</td>
<td>0.291</td>
<td>-0.732</td>
<td>0.574</td>
</tr>
<tr>
<td>Q5</td>
<td>68</td>
<td>3.38</td>
<td>0.60</td>
<td>0.043</td>
<td>0.291</td>
<td>-0.288</td>
<td>0.574</td>
</tr>
<tr>
<td>Q6</td>
<td>68</td>
<td>3.60</td>
<td>0.78</td>
<td>0.041</td>
<td>0.291</td>
<td>-0.376</td>
<td>0.574</td>
</tr>
<tr>
<td>Q7</td>
<td>68</td>
<td>4.88</td>
<td>2.26</td>
<td>-0.034</td>
<td>0.291</td>
<td>-0.795</td>
<td>0.574</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>------</td>
<td>------</td>
<td>--------</td>
<td>-------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>Q8</td>
<td>68</td>
<td>5.87</td>
<td>2.60</td>
<td>-0.372</td>
<td>0.291</td>
<td>-0.864</td>
<td>0.574</td>
</tr>
</tbody>
</table>