III. METHODS

> "If psychology is to be a complete science and to provide truths that are applicable at the level of the actual lives of individual human beings, it must develop and regard as essential procedures guided by rigorous methodological norms that are appropriate to relating theoretical and empirical knowledge back to the lifeworld. This requires qualitative modes of knowledge distinct from those involved in hypothesis testing" (Schneider, 1998, p. 283).

Since the present study is based on the Harvard Child Bereavement Study, I begin by introducing this original study. Then follows a detailed discussion of sampling and analysis procedures, of strategies to test the reliability of findings, and of the computer software that facilitated the analysis. After that, the coding system as well as coding guidelines are presented. To close the methods section, limitations of the present study are discussed.

1. Harvard Child Bereavement Study

The Harvard Child Bereavement Study is a prospective, longitudinal study that was conducted by Silverman and Worden (1993) to investigate the consequences of the death of a parent on dependent children. A nonclinical sample of 70 bereaved families as well as a control group of 70 nonbereaved families, were drawn from communities in the greater Boston area. 70% of the overall sample were Catholic, reflecting the large concentration of Roman Catholics in this area. 98% of the sample were American born, white families.

Bereaved families were recruited through the funeral homes who had served the families at the time of the death. Mothers and fathers were on average 41 years old, with a range between 30-57 (SD = 5.11). The sample of 125 bereaved children consisted of 65 boys and 60 girls with an average age of 11.6 (SD = 3.08), ranging from 6-17[2]. 74% of the children lost a father, the remainder their mother. The acceptance rate was 51% of all bereaved families that were contacted. Families who accepted and those who did not were not different with respect to gender and age of the deceased, suddenness of death, religion, number of children. 58% of the children in the sample (34 boys and 38 girls) had experienced the death of a parent following a long illness. In a few cases, suicide or accidents were reported as causes of death, but most of the deaths (89%) were from natural causes. While most longitudinal studies of bereavement lose 20-

[2]One girl was 18 years old at Time 1. She was interviewed along with her siblings. However, because of her age her records were later not included in the study.

35% of their subjects during the course of the study (Silverman & Worden, 1992), the attrition rate in this study was remarkably low (6%).

Nonbereaved families were selected through the schools of the same communities that the bereaved families lived in. In each nonbereaved family, one parent of the same sex as the bereaved parent was interviewed, and one child, matched with a child from the bereaved group by age, gender, grade in school, race, and family religion. The children were picked randomly by using a table of random numbers from school lists for the same grade as the bereaved child. Letters were sent to the families, and, if they refused to participate, the next eligible name on the list was contacted. This resulted in a number of 70 control children, 39 boys and 31 girls with an average age of 11.94 (SD = 2.98).

Interview procedure and content. In both the bereaved and the nonbereaved group, family members were interviewed individually in the family homes. Bereaved families were interviewed four months, 12 months, and two years after the loss. In the nonbereaved group, family members (one parent and one child) were interviewed at two corresponding time points. The semistructured interviews included many open questions and lasted about two hours. The interviewers followed a standard set of questions. For a listing of the major themes that were asked in the interviews see appendix A. In a majority of the cases, one person interviewed the same family at all three time points. While the interview guideline was similar for all three time points, there was also some variation. For example, detailed demographics were only asked at Time 1, and questions inquiring about the past year of bereavement obviously were only asked at Time 2. All interviews were audiotaped and many of them later transcribed. Interview questions for bereaved families covered a wide range of areas such as affective response to the loss, communication, coping, parenting, concept of death, and daily life. A modified version of the interview was done with the control group of nonbereaved families.

Quantitative measures. All families completed questionnaires assessing several dimensions of family functioning (e.g., cohesion, adaptability, coping styles, and life changes). In addition, several outcome measures were implemented to assess the adjustment of each family member. The surviving parents assessed their own level of depression and distress, and their children's emotional and behavioral problems. The children rated their perception of competence in different areas (e.g., self worth, scholastic, social, and athletic competence), as well as their locus of control. For a more detailed description of the measures selected as an asset to the present analysis, the reader is referred to section are described in more detail in section 2.2.3 on Quality control of Data analysis. For a complete list of the quantitative measures see appendix B.

2. The Present Study

> "Contrary to what you may have heard, qualitative research designs do exist" (Miles & Huberman, 1994, p.16).

This dissertation is based on a subsample drawn from the Harvard Child Bereavement Study. As described above, the Child Bereavement Study comprises qualitative as well as quantitative data. Because of the current state of knowledge on grief as a family process, and the resulting explorative nature of my research questions, I focused on data from the open-ended questions geared towards qualitative analysis. Some of the quantitative measures were analyzed as well to back up the qualitative findings.

When I first started working with the data, I thought that I would be focusing on certain interview questions (such as questions on communication, mutual understanding, daily family life). However, after reading the first interviews, it became clear that important information about any of these issues could be found anywhere in the interview, and that limiting myself to analyzing only selected areas would result in a great loss of information. Therefore, I decided to work with whole interviews. Some of the interviews yet had to be transcribed, which was time consuming. However, listening to tapes of interviews generally contributed to my understanding of what the families in my sample were going through. It seemed to bring me at least a little closer to the families' actual experience.

2.1 Sample

Since the in-depth analysis of qualitative interview data is very time consuming and easily reaches a taxing level of complexity, I had to focus on a small number of families. Also, there were three interviews for each bereaved family member (three time points), and interviews of at least three family members (parent and at least two children) to be analyzed. Because of the small sample, it seemed reasonable to select families that were similar in certain regards. I decided to focus on families who experienced a death following a long illness, because this was the situation for a majority of the families in the study, and because almost all cases of mother loss resulted from a long illness.

Furthermore, I chose families with more than one child of whom at least one was adolescent. These families were already in a developmental phase of increasing flexibility of family boundaries (Carter & McGoldrick, 1988), considering that adolescent demands for more independence tend to precipitate structural shifts and the renegotiation of roles in families (Preto, 1988). Another reason to select families with adolescent was that interviews with older children

tend to be richer in information because older children usually have more developed verbal capacities than younger children[3]. Families with more than one child were chosen because this enabled me to look at family dynamics at different levels, for example at the interaction between parent and children as well as between siblings. Finally, since research on gender effects (Gilligan, Lyons, & Hanmer, 1989; Silverman, 1988; Harvard Child Bereavement Study, Silverman & Worden, 1993) suggests that it may be a different story for a family to lose a mother or a father, I selected families who lost a father and families who lost a mother.

Applying the described criteria to the selection of bereaved families, resulted in a sample of five father and five mother-headed bereaved families, each with at least two children. Overall, this amounted to a total of 102 interviews to be analyzed. To be able to compare outcome scores of bereaved and control families, I also selected a group of nonbereaved families, each involving one parent, and one child matched by age and gender with a child from the bereaved group. The income level in the bereaved group ranged from 10.000 to more than 50.000 $ per year, with a majority of 7 parents reporting a range between 20.000 and 40.000. The income level was significantly higher in father- than in mother-headed families at T2 (F (1,9) = 9.85; $p < .05$) and T3 (F (1,7) = 9.67; $p < .05$). This group difference, however, was not significant with regard to the perceived adequacy of income level. All fathers but only one mother reported to derive their income from their salary only. The majority of the mothers reported life insurance and pension either as additional or as primary source of income. A basic description of the ten selected families is presented in the tables 1 and 2. Families are identified by the number that they had received at the point of data collection. These ID-numbers will be used throughout the following description of methods as well as in the subsequent report of the findings.

[3] I also included the interview materials of the 18-year old girl whose data hadn't been added to the records of the original sample, because these interviews were exceptionally rich and helpful to gain a more complete understanding of her family.

Table 1: Age and gender distribution of mother- and father-headed families

Age & gender distribution	Family identification number				
Mother-headed:	#10	#18	#48	#52	#53
Children's age/ years	13,14	11,13	10,15	14,16	10,12,16
Children's gender[a]	f, m	m, m	m, f	m, f	f, f, m
Parent's age	42	40	47	47	38
Father-headed:	#04	#14	#40	#58	#73
Children's age	10,12,17	11,15	11,12,15	11,13,16,18	14,17
Children's gender	m, f, f	f, m	f, m, f	m, f, m, f	f, f
Parent's age	40	38	41	41	41

[a] The letters f and m refer to female and male gender of the child. The order of the letters corresponds to the listing of children's ages in the previous line.

Table 2: Sociodemographic indicators of mother- and father-headed families

Sociodemographic indicators	Family identification number				
Mother-headed:	#10	#18	#48	#52	#53
Years married	18	19	23	17	17
Income level					
T1	adequate	barely ad.	adequate	not adequate	adequate
T2	adequate	adequate	more than ad.	not adequate	adequate
T3	adequate	barely ad.	adequate	barely ad.	adequate
Health insurance					
T1	covered	covered	covered	covered	covered
T2	not ad.	not ad.	not adequate	not adequate	not ad.
T3	not ad.	not ad.	not adequate	barely ad.	not ad.
Job change T1	no	stop work	stop work	stop work	no
Religion	Catholic	Catholic	Jewish	Catholic	Catholic
Father-headed:	#04	#14	#40	#58	#73
Years married	18	17	17	19	18
Income level					
T1	adequate	adequate	adequate	barely ad.	adequate
T2	adequate	more than ad.	more than ad.	barely ad.	adequate
T3	adequate	more than ad.	barely ad.	?	?
Health Insurance					
T1	covered	not ad.	covered	not adequate	covered
T2	not ad.	not ad.	not adequate	not adequate	not ad.
T3	not ad.	not ad.	not adequate	not adaquate	not ad.
Job change T1	no	no	no	stop work	no
Religion	Protestant	Catholic	Catholic	Protestant	Catholic

2.2 Data analysis

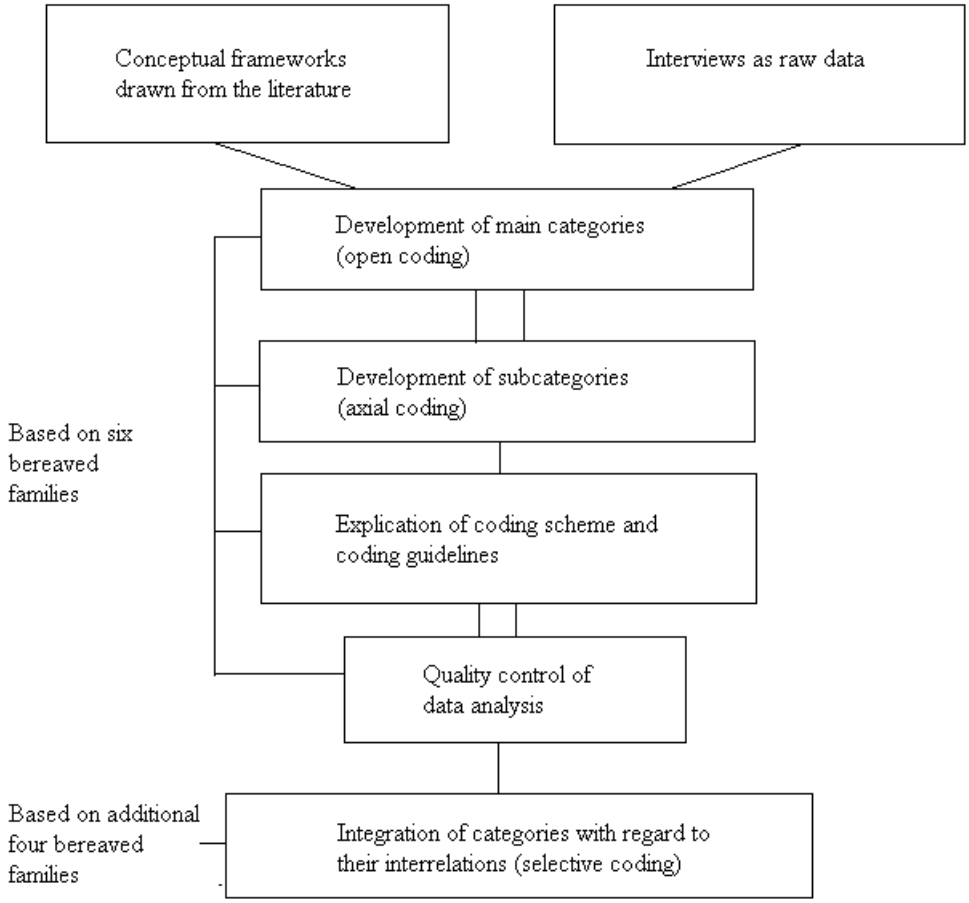
> "Certain analytic processes show up in every analysis of the data of qualitative interview studies: sorting the data, achieving local integration, achieving inclusive integration. In analyses intended to generalize regarding issues, coding is also important. In a typological analysis, the characterization of types is crucial" (Weiss, 1994, p. 181).

My data analysis was guided by two approaches to aim at developing a coding scheme that reflects and helps to interpret the patterns in the data (see figure 1 below). On the one hand, I drew on the literature for cues that would alert me to potential areas of interest and importance in the data. On the other hand, I tried to stay open for new discoveries and unexpected phenomena. For this purpose, interview transcripts were analyzed with qualitative methods influenced by grounded theory (Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1998).

This approach mainly guided my analysis because grounded theory is considered one of the most advanced methodologies for qualitative research (Wiedeman, 1991), and because it was most compatible with the ongoing data analysis of interview materials of the Harvard Child Bereavement Study. In some regards, however, I also drew on more eclectic approaches as advanced by Miles & Huberman (1994) and Weiss (1994). Variations from grounded theory methods will be pointed out during the course of describing the procedure.

To begin with, the major elements of grounded theory methods are outlined. Second, the actual process of developing the category system is described. Then follows a description of reliability tests, and of the way in which I used computer-software as a tool assisting me in analyzing the data.

Figure 2: Procedure of category development and data analysis



2.2.1 Rationale. Grounded theory is a systematic approach of coding data by following three major steps of analysis: open coding, axial coding, and selective coding[4] (Glaser, 1978; Strauss, 1987; Strauss & Corbin, 1998). Procedures proposed by other authors basically involve similar analytic processes, such as coding, sorting, local and inclusive integration (Weiss, 1994), or data reduction, data displays, and conclusion drawing/verification (Miles & Huberman, 1994).

In the *open coding* phase, transcripts are sift through in order to look for major themes and patterns in the data. This requires a line-by-line, sometimes a word-by-word, examination of interview transcripts. The data are broken into discrete parts by labeling and grouping similar phenomena to form categories. During this process of identifying concepts, transcripts are constantly reviewed for commonalities and differences. This is what Glaser & Strauss (1967)

[4]Qualitative coding is different from quantitative coding. Quantitative coding requires preconceived theoretical codes, into which the data are placed, while qualitative coding means creating categories from the interpretation of the data (see Glaser, 1978).

called *constant comparative analysis*. Codes are compared with one another within the same transcripts, and with codes in other transcripts. *Axial coding* refers to the next step, in which the major concepts developed in the initial phase are applied to large amounts of data. The purpose of this is to clarify and define each category by examining not only all the data it covers but also variations from it. During this phase of refinement, categories are often split in subcategories to gain a more "fine tuned" set of codes, and to be able to highlight different aspects of a phenomena. Finally, *selective coding* is thought to bring the big picture together by determining how categories are related. This last step of analysis aims at going beyond the descriptive level and arriving at a theory that is "grounded in the data".

Both *axial* and *selective* coding deal with the interrelatedness of categories. In the first case, the focus is on each main category and its relations to its subcategories; in the latter, the attempt is to integrate all categories by drawing a model in which relations of categories are specified. Weiss (1994) refers to these steps as local integration, and inclusive integration, which "knits into a single coherent story the otherwise isolated areas of analysis that result from local integration" (p. 160). Grounded theory suggests to, in both coding stages, define relations between categories by means of a coding paradigm involving conditions, interaction, strategies, and consequences. *Conditions* can include events or incidents that lead to as well as that mediate the development of a phenomenon. *Interaction* refers to all the dynamics that occur in the context of, or in response to the phenomenon. *Strategies* are devised to handle or manage the current situation, and *consequences* refer to the outcome of interaction and action under certain conditions. This means that for every category of interest, the researcher should ask questions such as: What are the *conditions* influencing this phenomenon, which *action* or *interaction strategies* are used to handle it, and what are the *consequences*? In the same way, the researcher should look at the whole set of defined categories, and examine which of the categories represent which characteristics of the paradigm.

Another important feature of grounded theory methods is *memo writing*. The coding of text passages easily turns into a procedure of merely classifying the data instead of analyzing them. For this reason, it is crucial for text interpretation to comment on text passages with memos. Strauss (1987) pointed out that coding and commenting constitute the two central basic activities in qualitative data analysis. Memos can include hypotheses, questions, comments on categories, relations between categories, methodological aspects, or any other ideas that may come up throughout the process of analyzing the data. Thus, the actual interpretive work crystallizes in memos, and, as categories, memos need to be reconsidered, reviewed, sorted, and integrated in order to nourish the discovery process.

2.2.2 Procedure and research questions. In grounded theory, the expectation is that categories emerge completely from the data. However, Weiss (1994) pointed out that the process of analysis is always influenced by our theoretical assumptions and research interests:

> "Some coding categories we bring to our studies before even knowing what the interviews will produce. We plan to use them because they are related to the problem we hope to study. Others we bring with us as readiness to interpret respondent's comments in one way or another. The readiness comes from our training, our reading, our life experiences, and our general understandings" (p.155).

Concepts or hypotheses coming from the literature can serve to sensitize the researcher in terms of what to look for, as long as they are considered provisional, hypothetical possibilities that need to be supported by actual data (Glaser, 1978). Thus, while looking for themes in the data, I was guided by the theoretical concepts and empirical findings pointed out in the literature. Therefore, the process of coding was inductive as well as deductive in nature. For instance, it was quite clear from the literature, that, in order to understand family dynamics, I would have to consider the nature of a family's communication and daily routine. Previous work led me to hypothesize that families with "open" communication, and a stable but not rigid daily routine (see section on family theory) would be better equipped to deal with the ramifications of a loss than families who were lacking these features. In the same way, previous findings from the Child Bereavement Study on children's construction of a continuing connection to their deceased parent clearly suggest that activities that give the deceased a place in family life play an important role in the accommodation process (Silverman & Nickman, 1996). While keeping these and other cues or assumptions in mind, I still approached the data with three major research questions that are listed in table 3 below. The open nature of these questions served to always bring back the focus to the phenomenon of interest, and to stay open to the discovery of unexpected themes and patterns.

Table 3: Major research questions of the present study

How do the families in the present subsample deal with their daily life after their loss?
How does this process develop during the first two years of bereavement?
In which ways are these patterns similar or different for mother- and father-headed families?

While there was a certain order kept in following the steps of open, axial, and selective coding, there was also a back and forth movement between these coding modes. Especially, in

the beginning, I moved between open and axial coding for quite a while, and later on, between axial and selective coding. Also, I certainly thought about interrelations between categories at all points in the process of data analysis. Weiss commented on the cyclical nature of qualitative research: "All analytic processes occur throughout the analysis. Coding is intended to provide the materials for sorting and integration, but sorting and integration can also raise questions for further coding" (p.154). Thus, the distinction of two phases of analysis, as described below, only refers to the primary focus at a certain point in time. Broadly spoken, the first phase of analysis was oriented towards clarifying specific themes or categories, while the second phase was more oriented towards the different overall patterns or trajectories of managing with family life after the loss of a parent. The different steps involved in this two phase procedure are depicted in figure 1 (see above).

Between open and axial coding. In the initial, open coding phase, the aim was to discover elements that are relevant to how families were managing after the loss, and to organize these elements into main categories. Some aspects that had been pointed out in the bereavement, the family, and the coping literature, as well as in reports of previous findings from the Harvard Child Bereavement Study, seemed to be relevant with respect to these families as well. Among these were the circumstances surrounding the loss, the connectedness within and outside the family, the communication patterns, and the family's accommodation to the loss. Other themes that fit more into a developmental and relational perspective were the extent to which continuity in family life was maintained, the degree to which family members were in touch with each other, and the occurrence of growth in the face of life's changes.

After developing this set of preliminary main categories, I moved on to axial coding. In order to highlight different facets of and give more shape to each main category, I derived some of the specifying subcategories completely from the data, and tested the relevance of those codes that I had formulated beforehand against the interview materials[5]. Here, the coding paradigm involving conditions, action/interaction strategies, and consequences was used as a systematic way of asking questions about particular themes. For example, the issue of a family's ability to talk about the deceased was examined with questions such as: Under what conditions is talking about the deceased difficult? What strategies are used to bring the topic up or to block it? What are the consequences of trying to talk about the deceased in a certain way? Systematically

[5]While some subcategories were derived directly from the data, the following a priori codes were drawn from the literature as well as from prior findings of the Harvard Child Bereavement Study: History of illness, Expectedness of death, Social integration, Social support, Parenting styles, Affective response, and Perceived growth.

approaching the data with these kind of questions served to deepen the analysis of each category. It should be noted that not all features of the coding paradigm always apply to the theme under scrutiny. Depending on the topic, some questions may be more applicable than others. The category Family communication, for instance, calls more for questions regarding intersectional strategies, while the category Maintaining continuity sparks more questions about actional strategies.

Open as well as axial coding was done with interviews of the first three families (each with at least three family members, interviewed at three time points). I am aware that, at least after arriving at the second set of interviews, I must have already been reading the interviews through the lens of my preliminary category system. Yet, with every new interview, I tried to put the list of categories aside, and to be open for potential new discoveries. After a while, it became clear that the themes I had identified repeatedly appeared to be crucial to how families were managing with their situation. At this point, I left the stage of moving between open and axial coding, and started to completely focus on axial coding. Thus, the interviews of the next three families were used specifically for the further refinement of main and subcategories categories. Main categories and their subcategories are depicted in table 4. For coding guidelines that formalized how to deal with difficult cases the reader is referred to appendix C.

Table 4: Main categories and their subcategories forming the coding scheme

Circumstances surrounding death	History of illness Expectedness Focusing on survival
Meaning of the loss	Describing what is lost
Connectedness within the family	Perceived closeness Getting alone Being supportive
Connectedness outside the family	Social integration Social support
Communication in the family	Talking about the deceased: Sharing memories, Sharing feelings, Talking about what the deceased would do, Referring to deceased in a humorous way, Referring to deceased as moral rock Discussing daily life issues Blowing up at each other
Being in touch with each other	Perception of each other Perceived expectations
Maintaining continuity in family life	Structuring home life Parenting as a single parent Parenting style
Family accommodation to loss	Affective response Perceived growth

Most of the restructuring and rearranging within the category system happened during the analysis of the first 36 interviews. New aspects were added, some did not seem to apply to more than one family, and others were put on the backburner to wait and see if they come up again. For example, the first interviews seemed to inform about growth perceived in oneself as well as in others, which would have resulted in two subcategories on growth. But the next interviews did not provide enough information about growth perceived in others. Therefore, I was forced to drop this subcategory. From the start, I wrote down all my first impressions, comments, hypotheses, thoughts, and definitions in memos. This is an example of a memo on how to handle the time factor:

> 10/26/97. "It is important that the time factor does not cause confusion. To keep it clear what point in time I am referring to, information on the time surrounding illness should probably be subsumed under Circumstances surrounding death, including issues such as talking about death although it represents family communication as well. Then, there would be one category that represents the time prior death, while all other categories reflect the time after the loss".

The decision making regarding the structure of the category system, in some cases, involved a longer process. As illustrated in the memo, there was often more than one possible answer to the question of where to subsume certain information. After all, organizing codes in a hierarchy of main categories and subcategories has also to do with what the researcher wants to emphasize on. The subcategory Describing what is lost, for instance, first seemed to reflect aspects of families' accommodation to the loss because by talking about what they had lost, family members addressed how they felt about facing a life without their loved one. Later on in the analysis, it appeared that they were really referring to what the loss meant for them, and that this represented more a condition determining what life was going to be like than an expression of adjustment to loss. Because of the significance of the meaning of the loss for these families, the description of what was lost was moved to the level of a main category which, later on in the report, would be used to introduce the reader into the families' experience and situation after the loss.

From axial to selective coding. The next step of my analysis was to apply the coding scheme to more families (still as part of axial coding) in order to "add meat" and to verify the evolving findings. Miles & Huberman (1994) suggest that verification of qualitative findings can be reached through the replication of these findings based on the analysis of additional interviews. Thus, the interviews of the next four bereaved families were examined regarding similarities or deviations from previous findings. Furthermore, at this point of the analysis, I specifically looked out for interrelations between the main categories, which means that I moved from axial to selective coding. For this purpose I made use of the coding paradigm (conditions, interaction and action strategies, consequences), determining which codes most fittingly reflected each of the four features of the paradigm. *Contextual conditions* were mainly represented by Circumstances surrounding the loss, Connectedness outside the family, and Meaning of the loss. *Interactional aspects* of the data were mostly reflected in the categories Connectedness within the family, Being in touch with each other, and Communication, while *action strategies* appeared to be represented by Maintaining Continuity. Information on the *consequences* of how families tried to mange with their new life situation was primarily contained in the category Accommodation to loss.

It should be noted that using the coding paradigm in this way was not meant to suggest a linear model of family functioning following loss. Rather, it served as heuristic frame to hypothesize about the role of each variable in the context of the other variables. For example, all variables appeared to affect Accommodation to loss in a more or less direct way. However,

action/interaction strategies, such as maintaining continuity, seemed to be more crucial for family functioning than *contextual conditions*, such as the connectedness outside the family. In this way, each category was examined in terms of its relations to other categories, which again was accompanied by memos that contained upcoming hypotheses and observations, for example memo on Maintaining Continuity:

> (11/10/97). "It seems that continuity depends first of all on the extent to which the parent is in touch with the children's needs, which again is related to the connectedness within the family. Continuity appears also more likely if there is an effort to include the deceased in family life (e.g., by talking about the deceased). Check for these relations between categories in next interviews".

During the process of theorizing and data analysis, these hypotheses served to approach each interview with a set of propositions with regard to which new data needed to be checked through. This always involved looking out for alternative explanations or what Huck and Sandler (1979) called rival hypotheses. As Maxwell (1996) defined the role of hypotheses in qualitative research "they are generally formulated after the researcher has begun the study; they are grounded in the data and are developed and tested in interaction with it, rather than being prior ideas that are simply tested against data" (p. 53).

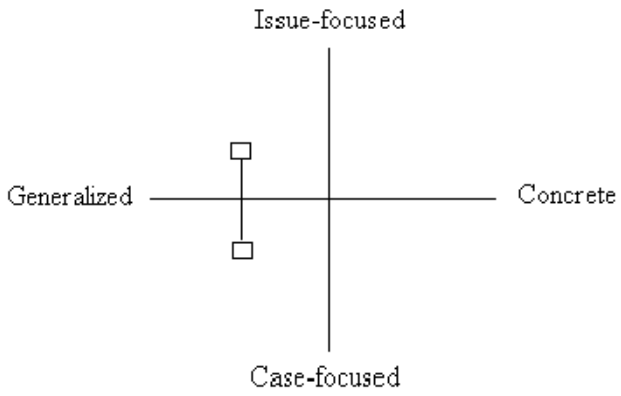
To further examine the upcoming hypotheses on the background of the coding paradigm, mother- and father-headed families were compared with respect to their overall constellation of categories. This led to questions such as, under what *conditions*, and with the utilization of which *action*- and *interaction strategies* do some families seem to suffer from more negative *consequences* related to the loss than other families? Looking at different families, under what *conditions* does single parenting appear to be more problematic, and what are the *consequences* of this? In this last phase, again, comparison was the most crucial mode of analysis, because examining differences between mother- and father-headed families served as a tool or strategy to sharpen the analysis. For instance, the importance of continuity became clear to me mainly because of the extent to which this issue seemed to characterize differences between these two groups. Thus, it was only through focusing alternately on contrasts and on similar patterns that certain key themes emerged.

Changing perspectives. The nature of a qualitative study can be identified by its specific perspective on the data. In some cases, this perspective changes during the course of the study. Weiss (1994) suggested two continua on which most qualitative studies can be located. One axis ranges from a focus on issues to a focus on cases, and the other from a concrete to a generalized level. Issue-focused analysis deals with issues as learned from respondents, while case-focused

analysis deals with the respondents themselves. With regard to the level of generalization, the researcher can stay on the level of what particular respondents report, or generalize from reports of a sample of respondents. It should be noted that, in this context, generalization does not refer to the transference of conclusions from a sample of people to the general population. Rather, it involves making statements about a group of respondents with respect to a certain phenomenon.

My original orientation was issue-focused and generalized, with the additional option of maybe discovering different types of families, which would involve a case-focused but still generalized mode. However, especially in the initial phase of analysis, it was necessary to stay case-focused and concrete, in order to gain an understanding of the families' experience. Therefore, I approached family after family, as opposed to, for example, looking first at all children, and then at all parents. While creating a file for each family that contained the findings from all categories, I also sorted the data of all families according to categories. This enabled me to switch between an issue and a case perspectives at any point. Then, I proceeded to write separate result sections on each main category, in which I reported on findings from all families. In these sections, it was easy to stay issue-focused while reporting on the main line of findings. However, whenever I needed to explain a variation from this main line, it was necessary to go back to a case perspective in order to explain why a particular family appeared to respond differently from the others in a certain regard. This moving around between locations on the continua formulated by Weiss (1994) is portrayed in figure 3.

Figure 3: Changing perspectives on the data, located on the continua issue- versus case-focused and generalized versus concrete.



At a later point during the analysis, it became clear that mother- and father-headed families were strikingly different from each other with regard to several categories. I had anticipated certain differences, which was why I had chosen a sample with mother- as well as father-headed families in the first place. However, I had not expected these differences to be so

substantial. After realizing that this constituted a major topic in the data, I decided to present these findings with a case-focused, generalized perspective within the issue-focused sections. This means that the features *mother-* and *father-headed* served as characteristics to distinguish two types of families, and that these differences between these family types would be reported on in the context of each theme.

2.2.3 Quality control of data analysis. Qualitative researchers have argued that the concepts validity and reliability, being rooted in the tradition of quantitative research, are not applicable to qualitative research (e.g., Guba & Lincoln, 1981; Sandelowski, 1986; for counterarguments see Miles & Huberman, 1994), and that the rigor of qualitative data analysis is better accounted for by criteria such as credibility or trustworthiness. Although this argument mainly concerns semantics, the authors seem to have a point in wanting to prevent misunderstandings that can easily occur if the same terms are applied to different research paradigms. Regardless of the choice of terminology, though, researchers within both paradigms seek for a certain rigor and quality control of their analysis. According to Miles and Huberman (1994), the terms validity/credibility refer to the extent to which findings make sense and give an authentic portrait of the phenomenon under study, while reliability/trustworthiness, in the broadest sense, address to what extent the analysis has been conducted with reasonable care and rigor. In the following section, I describe the ways in which I have tried to attend to both aspects of quality control.

To ensure the reliability/trustworthiness of my coding scheme and its application, I had a second person code a sample of interviews that I had already worked on. My second coder was an undergraduate in psychology who did not have any experience in the field of bereavement, but enough basic psychological knowledge to easily learn how to code interviews according to the coding scheme and coding rules. As a sample for reliability check, I chose the interviews of three families that I had worked on in the first phase of data analysis. From these interviews, I selected those that seemed to be the richest in content, to ensure that the whole range of categories would be applied. Additional criteria for selection were that I needed a parent as well as a child interview from each family, and that each time point had to be represented in the sample at least once. At the same time, I also made sure that those quotes used in the coding scheme to explicate categories were not taken from the group of interviews selected for reliability check, so that agreements wouldn't be based on accidentally matching quotes. For pragmatic reasons, I marked the segments of interests in the interviews, and had the second coder apply the codes from the manual only to the marked text passages (see chapter V, section

1 on limitations of the present study). According to Miles & Huberman (1994) the formula for the calculation of concordance rates between coders is:

$$\frac{\text{Number of Agreements}}{\text{Number of Agreements + Number of Disagreements}}$$

Miles & Huberman (1994) propose to only continue working with a set of codes, if the concordance rate has reached about 80%. These 80% may indicate that some adjustments in the coding scheme are still required. Finally, the concordance rate should be more towards 90%. To begin with, I had my second coder work on Time 1 - interviews of one of the first families I had looked at myself. At this point, the concordance rate was almost 80% for the parent interview, and about 82% for the child interview. While discussing the parts in which we had not agreed, it became clear that our disagreements were primarily a result of my not defining some of the categories clearly enough. After reformulating these definitions, I had her code interviews of two more families. Now, the concordance rates ranged between 89 and 95 %. The number of agreements and disagreements between coders, as well as the concordance rates for each interview are depicted in table 5.

Table 5: Agreements and disagreements between two coders, as well as concordance rates for each interview

Interview[a]	Time	Agreement	Disagreement	Concordance %
5800	T1	94	26	78%
5801	T1	45	10	82%
4000	T2	116	15	89%
4003	T2	62	4	94%
1000	T3	180	10	95%
1002	T3	145	13	92%

[a] The first two digits of the identification codes refer to the family code and the next two digits indicate the family member. For example, 5800 T1 represents the code for an interview with the parent of family 58 at Time 1. 5801 T2, then, stands for the youngest child of family 58 interviewed at time 2, and so forth.

In addition to the double coding with two independent coders, I then rechecked my own codings. Once the category system seemed advanced enough (after coding interviews of the three families), I coded the interviews of the next three families based on the formulated coding manual. Four months later, I went back to these interviews to code them again, without having

made any changes within the coding scheme in the meanwhile. At this point I had reached concordance rates ranging between 90 and 94%. While one may assume that coding the same interviews for a second time necessarily results in a higher agreement rate, I found it very surprising how little I seemed to recognize as familiar, or remember from the first time I worked on these interviews. The number of agreements and disagreements with my own judgement on the same interviews at two different time points are presented in table 6.

Table 6: Agreements and disagreements within one coder (the author), as well as concordance rates for each interview (A selection of interviews coded twice, three months apart)

Interview	Time	Agreement	Disagreement	Concordance %
1800	T1	102	11	90%
1801	T1	85	8	91%
5200	T2	75	5	94%
5202	T2	69	6	92%
0400	T3	87	8	92%
0401	T3	38	4	90%

Two basic ways of achieving the validity/credibility of findings and interpretation were to constantly check with the data to ensure that categories clearly portray what is actually contained in the interview materials ("thick description"; Geertz, 1973), and to examine to what extent findings based on the first group of families could be verified with data of the second group of families ("verification"; Miles & Huberman, 1994). This process is described in the section 2.2.2 on Procedure.

Furthermore, quantitative data from standardized questionnaires were used as an additional source of information to help interpret the findings from qualitative analyses. Using a variety of methods is part of the general principle known as triangulation (Denzin, 1970; Maxwell, 1996). The purpose of triangulation is to reduce the risk that one's conclusion reflect the limitations or biases of a specific method, and to gain a better assessment of the credibility of one's explanations and interpretations of patterns or phenomena in the data. The measures included in this analysis represent parents' assessment of themselves, their children, and the family as a whole, as well as self-assessments of each child.

Parent's assessment. Depression was measured with the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item measure of depressive symptomatology that is widely used in epidemiological research. On a 4-point Likert

scale, higher values reflect a higher level of depression. Scores are added to yield a total score (items 4, 8, 12, 16 are reversed for scoring purposes in that they express positive affect). A cut-off score of 16 or above is used to indicate clinically significant levels of depression. Orme, Reis, and Herz (1986) reported for internal reliability a Chronbach Alpha of .88.

The Family Adaptation and Cohesion Scales-III (Faces III) (Olson, Portner, & Lavee, 1985) yields two measures of family functioning: the degree of cohesion or emotional bonding that family members have toward one another, and the degree of adaptability or the ability of a family to change its power structure, role relationships, and relationship rules in response to changing circumstances and developmental stress. FACES III is a 20-item self-report inventory, scored by adding all odd items in order to achieve the Cohesion scale, and adding all even items for the adaptability scale. Respondents rate items on a 5-point Likert scale, on which higher values represent a higher level of cohesion and adaptability. Since FACES III does not measure extreme levels on either dimension, Olson (1991) suggests to interpret the dimensions as linear, with higher scores being correlated with better family functioning, and low scores being indicative of dysfunction. Olson and associates (1983) reported an internal consistency of .62 for the adaptability scale and .77 for the cohesion scale. The two dimension have been shown to be basically orthogonal (r =.03) (Olson, Portner, & Lavee, 1985).

On the Child Behavior Checklist (CBCL) (Achenbach & Edelbrok, 1983, Achenbach, 1991), bereaved parents reported on each child's emotional and behavioral problems by rating an inventory of 118 behavioral problem items with the options "not true", somewhat or sometimes true", or "very often or often true". This version of the CBCL identifies eight behavioral syndromes that can be applied to all children. These subscales were determined by factor analysis and utilize 89 of the items from the total of 118 items on the CBCL (social withdrawal, somatic complaints, anxiety-depression, social, thought, and attention problems, and delinquent and aggressive behavior). In addition to the eight narrow band syndromes there are three broad band scales: The total behavior problem score is based on all items and reflects overall severity of dysfunction. The two other scales, internalizing and externalizing are based on selected syndrome scales and reflect inward directed (withdrawn behavior, somatic complaints, and anxiety-depression), and outward-directed (aggression, delinquency) problems, respectively. On the three broad band scales, Achenbach and Edelbrok (1991) suggest a score of 64 or greater to demarcate children with problems sufficient to warrant the attention of mental health professionals.

Children's self-assessments. The Perceived competence scale for children (PCSC) (Harter, 1982) is a self-report scale on which children assessed six areas of perceived competence: 1) scholastic competence, 2) social acceptance, 3) athletic competence, 4) physical appearance, 5) behavioral conduct, 6) global self-worth. Each item is scored form 1 to 4, higher scores indicating higher perceived competence. The scale consists of 28 pairs of statements describing two opposite ends of a specific behavior. Children selected the place on the continuum that was "true" or "sort of true" for themselves. Internal consistency values range from .73 to .83 (Harter, 1982).

The Locus of control scale (LCS) (Nowicki & Strickland, 1973) measures generalized expectations for internal versus external control of reinforcement among children, in other words the degree to which children feel that they can affect their environment and what is happening to them. It has been used with children from third grade through college, and norms are available for various age-groups in that range. Traditionally, there has been an age effect for this phenomenon. Older children are more likely to have a stronger sense of empowerment over their environment and to feel less helpless (Harvard Child Bereavement Study; Worden & Silverman, 1993). Higher scores on the scale indicate more of an external locus of control. Nowicki & Strickland (1973) report estimates of internal consistency via the split-half method, corrected by the Spearman-Brown formula, of r = .63 (for grades 3, 4, 5); r = .68 (for grades 6, 7, 8); r = .74 (for grades 9, 10, 11); and r = .81 (for grade 12).

2.2.4 Computerized coding: FolioVIEWS. As computer software, I used the textbase manager Folio Views for Windows, Version 4.1 (Folio Corporation, 1993). This program serves well for textbase management, search, retrieval, coding, memoing and so forth. In comparison to other programs recommended for qualitative data analysis (e.g., ATLAS/ti; or NUDIST), Folio Views search capabilities are unmatched, and its code-, retrieve-, and memoing features are as user friendly as in the other programs (see Miles & Weitzman, 1994). My interview transcripts were created in a word processor, and then imported into Folio Views. All transcripts were merged to one big file in which every single word is indexed. Then, this document was structured in a table of content with two levels, so that the first level corresponded to the family, and the second to single family members at certain time points.

FolioVIEWS was an essential tool in my data analysis. It was not only helpful during the process of coding but also ensured that I would not overlook any coded passages when integrating and interpreting findings. For example, by clicking on the different points in the table

of content, I could jump to any interview, which made it easier to navigate this document without losing important information. Folio Views has also different features that can be used for coding. For my purposes the highlighters worked best. Highlighters can be applied to the text, just like highlighter pens. They can be given different names and colors for different types of information. I defined a highlighter for each subcategory, and a color for all subcategories belonging to the same main category. Then, I went over the interviews and coded the material with the highlighters. Depending on the interview statement of interest, highlighters were applied to words, sentences, phrases, or whole passages. Based on the application of highlighters to these text units, I could later run searches for particular highlighters, and have, in an extra window, all the quotes (hits) for a particular category listed. I could choose to have only quotes from one family or person listed, or from all transcripts. In the same way, I could choose which list of quotes I wanted to have printed out.

The different steps of using Folio Views for data analysis are depicted in table 7 below. While the order largely corresponds to the way I proceeded, there was also some moving back and forth between steps. Hypotheses about emerging patterns in the data were noted in memos that were attached to the text or to highlighters throughout the process of category development and analysis (see section 2.2.2 on Procedure).

Table 7: Description of procedural steps of category development and analysis in FolioVIEWS

Procedural steps	Description
1. Establish the database	Import all interview transcripts into one big FolioViews file
	Structure this file through table of content
2. Segment the material	Read through first interviews and mark areas relevant to research questions (see table 3) with different colors (representing main categories)
3. Code segmented material	Specify color codes through definition of subcategories
4. Develop the code book	Pull out quotes by running a search for each subcategory
	Print out selected example quotes for all categories
5. Test reliability of codes	Print out example interviews with marked segments
	Familiarize second coder with code book
	Have this reliability coder apply codes to subsample of interviews previously coded by the author (see section 2.2.3 for details)
6. Add further material	Read through and code more interviews (again step 2 and 3) to collect more quotes
7. Sort quotes by family & time	Pull out quotes reflecting each subcategory for each family member at all three time points
8. Sort quotes by category & time	Pull out quotes reflecting each subcategory for each category at all three time points
9. Retrieve quotes in original interview context	Run a search for specific category in a particular interview
	Run a search for the quote itself