Chapter 1

General introduction

Heaven forbid you should get a medical problem in the middle of a cozy home delivery, says one side [opponents of home delivery]. As if it’s always so safe in hospital if you give an epidural straight off, comes the reply. Research blames both sides of the quarrel: things go wrong fairly often in handover of care from midwife to hospital. (Kreulen, 2014, p. v2)

The central argument in this dissertation is that tensions between individuals and groups complicate the way they deal with errors in an organizational context. This argument is supported by the case in this introductory chapter: care handover between community midwives who assist healthy women during “normal” childbirth at home or in a polyclinic environment, and clinical midwives who work in a hospital and assist women with complicated, pathological childbirth. The above excerpt from an article in the Dutch newspaper Trouw illustrates the difficulty they have cooperating on the handover and the consequences this may have for quality of care. On a deeper level than mere disagreement on the proper location to give birth (i.e., at home or in the hospital), community midwives and hospital midwives belong to separate professional groups. In this chapter I argue that this is what leads to problems in their cooperation.

This case introduces the three central concepts of this dissertation. First, handover is generally viewed as a moment in the care process with a high risk of error (Manser, Foster, Gisin, Jaeckel, & Ummenhofer, 2010).
Thus, in this context, errors are a relevant factor to investigate, which is important because error handling is the topic of this dissertation. Second, whereas community and clinical midwives officially share the same profession and as such might have a similar outlook on issues, in practice they do not identify with the group of midwives in general. Instead, their primary source of social identity is their specific organizational role of community or clinical midwife. Because of the different organizational settings they work in, community midwives view labor and childbirth as a natural, physiological and uncomplicated process, while clinical midwives see it as an inherently problematic, pathological process (Van der Lee, Driessen, Houwaart, Caccia, & Scheele, 2014). Third, the clash of these different views during handover is a source of identity threat, which can have negative consequences for intergroup cooperation between the two groups of midwives during handover.

One example of possible negative consequences is identified in a recent report by the Dutch Inspection for Health Care (IGZ) entitled “Possibilities for improvement maternity care still incompletely used” (IGZ, 2014). The report points out that although the various parties responsible for pregnancy and birth care have improved cooperation in the past few years, their care is still not integrated. Thus, parties in the maternity care system still find it hard to cooperate smoothly. Another conclusion is that parties do not share their experiences often enough, as error evaluation takes place almost only within their own professional group. An additional indication comes from a scientific study on coordination between midwives and secondary care providers (Schölmerich et al., 2014). The researchers concluded that pregnant women were forced to compensate for the lack of coordination between care providers by taking on a more active role themselves, for instance by providing information on test results or
correcting erroneous information.

The societal relevance of this dissertation lies in the contribution to our understanding of organizational functioning and the way this influences the people who work in or otherwise need to deal with these organizations. All studies presented in the present and following chapters contribute to our understanding of these organizational processes, and the midwife case provides a vivid first example of this broader relevance. By using the example of midwife handover in the explanation of the central concepts in this dissertation, I anchor the relevance of my research focus in organizational practice. Research on cooperation between midwives is important because problematic cooperation indicates possible risks to quality in the Dutch maternity care system. The case is also important in a broader sense, because cooperation problems between maternity care professionals are an illustration of the importance of intergroup processes in relation to errors. Everyone born in the Netherlands has passed through at least part of the Dutch maternity care system. The birth of a child has a great impact on mother, child, their family and friends, but sometimes also on the health care professionals involved. Because childbirth is such a significant moment, errors have a deep impact. Thus, if it is true that error handling is linked to the extent to which different groups obtain a level of shared identity, and that errors are associated with identity threat, then these are significant topics not just for organizations or the people working in them, but for society as a whole.

In the remainder of this introduction, I first delineate the background of the midwife case, briefly summarizing the history of the Dutch maternity care system, and the position of various groups of health care professionals within it. Then I describe previous research on the three central theoretical elements in relation to the midwife case, using excerpts from interviews with
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community and clinical midwives as illustrations.²

Case background

Historically, the Dutch sociocultural environment regards pregnancy and childbirth as normal physiological processes (Hingstman, 1994); it emphasizes the importance of home, family and the role of the mother; and it has a careful attitude toward the use of medication (De Vries, Nieuwenhuijze, Buitendijk, & Midwifery Sci Work, 2013). The Dutch maternity care system is unique in that it has a relatively high percentage of home births compared to other industrialized countries, for instance 32.7% in 2008 in the Netherlands as compared to 1% in Flanders (the Dutch-speaking region of Belgium) (Christiaens, Nieuwenhuijze, & de Vries, 2013, p. 93). An important aspect is the legally protected position of the community midwife who is an independently operating health care professional who guides women through the process of natural, physiological pregnancy and childbirth. In the case of medical or obstetric pathology, the midwife directs women to an obstetrician in a hospital (Hingstman, 1994).

However, Dutch people are not taking home birth for granted anymore. This development is primarily visible in criticism of the safety of the Dutch maternity care system. Recently, a critical study presented worrying figures about the relatively high perinatal mortality rate in the Netherlands (Evers et al., 2010). The authors concluded that the risk of perinatal death of infants was higher among low-risk deliveries starting in

² Interviews with 15 community midwives and 12 clinical midwives, and one resident (obstetrician in training). Key interview topics dealt with cooperation between community midwives and clinical midwives, specifically in terms of errors and risks during and after handover.
primary care (thus, under the supervision of a community midwife) than among high-risk deliveries starting in secondary care under the supervision of an obstetrician. Although this study was questioned thoroughly, one criticism being that the study sample was not representative of the Dutch population (De Jonge et al., 2010), the study caused a stir in the national media. Headlines such as “Maternity care system in the Netherlands fails” (NRC Handelsblad, 3 November 2010) and “Baby is safer with obstetrician” (Trouw, 4 November 2010) drew the attention of politicians and prompted the government to engage in such action as awarding funding for local cooperation initiatives aimed at improving the organization of perinatal care.

Another sign of the new view is the growing medicalization of the childbirth process, indicated by a lower percentage of home births (dropping from 34.1% in 1994 to 23.4% in 2010) and an increase in medical interventions during childbirth (Christiaens et al., 2013). The impact of medicalization is reflected by the caregivers’ changing ideas on what constitutes a “normal” pregnancy and childbirth. More pregnancies and births are labeled “abnormal” now than a few decades ago (Amelink-Verburg & Buitendijk, 2010). This move toward medicalized pregnancy and childbirth influences the wishes and demands of pregnant women as well as the role of midwives (Christiaens et al., 2013).

These changes are occurring in the context of a relationship between midwives and obstetricians that has always been rife with tension and conflict. For centuries, midwives’ efforts to maintain their independent position have been countered by obstetricians’ attempts to curtail their influence in maternity care (Van der Lee et al., 2014). The dominant voice of obstetricians in the recent criticism on the safety of midwife-led home births again stirred ill-feeling among midwives, who felt threatened in their position. Midwives can also feel that their position is endangered by the
development of new cooperation models, such as the shared care model (Posthumus et al., 2013) that “threatens to bring midwives into hospitals under the direction of medical specialists” (De Vries et al., 2013, p. 1122). This “threat” has already become reality in part, as recently there has been a strong increase in the number of midwives working in hospitals, called alternatively hospital-based midwives (Cronie, Rijnders, & Buitendijk, 2012), clinical midwives (Wiegers & Hukkelhoven, 2010), and secondary level midwives (Amelink-Verburg & Buitendijk, 2010), as opposed to community-based or primary level midwives who are the conventional midwifery practitioners in the Netherlands. In this dissertation, I use community midwife and clinical midwife to distinguish between both types of midwives.\(^3\)

Community and clinical midwives obtain the same basic training and qualifications. In the view of the Dutch midwives association, the KNOV, the initial role of the clinical midwife was to “guard the physiological approach of a patient with a medical indication within the clinical setting” (KNOV, 2002; translation by Wiegers & Hukkelhoven, 2010, p. 2). In the past decade, however, this role has shifted because clinical midwives have gradually received additional training in pathology and risk assessment. Moreover, though they always remain under the formal supervision of an obstetrician, clinical midwives have become more autonomous (Wiegers & Hukkelhoven, 2010). For instance, in some hospitals clinical midwives have gained the authority to handle the transfer of care (henceforth: handover) during childbirth in the case of (a risk of) complications. In this type of handover, which was the subject of the newspaper article cited at the

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\(^3\) In order to stay as close as possible to the respondents’ word use, I also use the terms first line (midwife) and second line (midwife) in my translation of interview quotes. First line refers to primary, non-hospital-based care and second line to secondary, specialist care that is often hospital-based (Wiegers & Hukkelhoven, 2010).
beginning of this chapter, a community midwife hands over the woman in childbirth to the clinical midwife. During this handover, known for its risk of errors (Manser et al., 2010), the responsibility for the care of woman and child shifts to the clinical midwife.

For this case study I zoomed in on community midwives and clinical midwives rather than including other professionals in the maternity care system, such as obstetricians, obstetricians-in-training, and nurses. By doing so, I study the interaction between community midwives and clinical midwives in relative isolation, so that I could address the specific aspects of the relationship between these two groups and show how an organizational system influences the way people relate to each other—even if those people are in essence part of the same (in this case professional) group. By using this relatively subtle, context-driven, and novel differentiation between groups within an overarching profession instead of—for instance—the more typical interprofessional strife between physicians and nurses, I can focus on more nuanced and original insights regarding the consequences of differences in sources of identity for intergroup interaction. Specifically, as I make clear later in this introduction, the operational context of both groups of midwives profoundly shapes their identity. The home care and clinical settings are so different that community and clinical midwives feel like they are part of two different groups, instead of the overarching profession of midwives. This division creates tensions when community and clinical midwives need to cooperate, for instance during handover.

In the following three sections I detail aspects of these tensions between community midwives and clinical midwives. The first section explores the topic of errors in organizations. I discuss this topic first because the primary contribution of this dissertation is adding knowledge on error handling in cooperative settings in organizations. Particularly, throughout
this dissertation I reiterate that the intergroup perspective is important for understanding the difficulties individuals and groups have in handling errors in a constructive way. In this intergroup perspective, social identity theory (e.g., Tajfel, 1982; Tajfel & Turner, 1979) provides insight into the origins of these difficulties. Therefore, the second section concerns social identity theory and the way it is applied in organizational research. The third section explains identity threat, which is the central concept used in this dissertation. In brief, the central argument is that because social groups are an important part of people’s identity, errors or the risk of errors can form a threat to that identity source, and people may attempt to act in certain ways that prevent damage to their identity.

**Errors in organizations**

Human errors can be defined as actions that do not lead to the intended outcome, that are unintentional, the result of a goal-directed action, and potentially avoidable (Frese & Zapf, 1994; Reason, 1990). Errors are thus differentiated from accidents (e.g., a fire caused by lightning, which is not a goal-directed action), violations (an intentional act), and failures (which can be the result of deliberate experimenting). Lastly, there is a difference between error and risk, contained in the third element of the definition: errors are potentially avoidable. Taking a risk means accepting that circumstances may prevent you from reaching your goal, in other words, recognizing and considering the potential to err, but taking the risk anyway. The wrong estimate of risk involved in a certain action could, however, be considered an error (Hofmann & Frese, 2011).
Handover is a risky event because a lot of information must be transferred from one professional to another. In the case of childbirth and the handover between community and clinical midwife, this can entail information on why the handover is necessary, the pregnant woman’s allergies and her medical history. Because of this high “information density,” handover is a moment when care providers often forget to transfer information or do not transfer it correctly (Greenberg et al., 2007).

I think the biggest risk at handover is when you forget to pass something on. No matter whether it’s obvious or secondary, a feeling you have or the idea that something’s not right, the danger lies in forgetting something.
Community midwife 10

Care providers forgetting to pass on information can be considered an error. In terms of the definition of errors used in this dissertation, the goal of transferring all necessary information is not reached due to one caregiver’s unintended, potentially avoidable action (e.g., forgetting a bit of information).

The explanation of the midwife in Box 1.1 emphasizes the risk of handover on the individual level of error handling, in this case personally forgetting to pass on information. In the following sections I will explain other levels that do more justice to the often more complex circumstances in which errors occur. In organizational settings, people seldom operate completely autonomously; they need to cooperate with other people and groups in specific configurations, and in this context errors frequently occur.
Specifically, I argue that the intergroup level of explanation gives the most insight into why handover is such a difficult moment in the care process, because the intergroup perspective accurately incorporates the social context in which midwives operate.

Organizations and associated individuals and groups will always have to deal with human error (Frese & Hofmann, 2011). Ample scientific literature, as well as popular books that go by titles like “Brilliant mistakes” (Schoemaker, 2011) or “Brilliant blunders” (Livio, 2014) emphasize the positive effects of errors: they offer learning opportunities (Sitkin, 1992; Zhao, 2010) and can contribute to innovation (Hammond & Farr, 2011). Error management culture, which emphasizes sharing knowledge on errors and helping in error situations (Van Dyck, Frese, Baer, & Sonnentag, 2005), is associated with improved organizational performance. Thus, it is to the own benefit of organizational members to accept the existence of errors and deal with them positively. In practice, however, people in organizations find it very hard to deal with errors constructively (Baumard & Starbuck, 2005; Edmondson, 1996; Hartnell, MacKinnon, Sketris, & Fleming, 2012; Tucker & Edmondson, 2003).

Previous studies have identified many factors that complicate or facilitate constructive (organizational) error handling. In an overview of these factors, it is useful to distinguish between the levels of research adopted in these studies. Research on organization theory often differentiates between three different levels: the individual, group (e.g., team or department), and organizational level (e.g., Daft, Murphy, & Wilmott, 2010; Hitt, Beamish, Jackson, & Mathieu, 2007). I use this categorization in my overview of findings on error handling in organizations; see Table 1.1 for a selection from the three levels.
Table 1.1. *Research findings on the subject of error handling on the individual, group, and organizational level*

<table>
<thead>
<tr>
<th>Level of inquiry</th>
<th>Key findings</th>
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| **Organization** | - Organizational error management culture enhances organizational performance (Van Dyck et al., 2005)  
- Learning from failures is difficult for organizations, because managers ‘explain away’ both large and small failures to external and idiosyncratic causes (Baumard & Starbuck, 2005) |
| **Group** (team/department) | - Leadership behavior shapes shared perceptions of the consequences of making and reporting mistakes, which in turn influences the number of errors actually reported (more errors reported when leader is more open) (Edmondson, 1996)  
- Psychological safety enhances learning from failure (Edmondson, 1999)  
- Tacit beliefs about appropriate response to errors are shared within a team and influence group performance (Cannon & Edmondson, 2001)  
- Team training has the potential to improve team error handling (Weaver, Bedwell, & Salas, 2011) |
| **Individual** | - Errors can occur at different levels of cognitive regulation (from unconscious to conscious) and in different phases of planning and execution of action (Frese & Zapf, 1994)  
- Training methods that encourage making and handling errors during training lead to better training outcomes than training methods that do not encourage errors during training (Keith & Frese, 2008)  
- Emotional stability is associated with fewer error-related negative emotions (Zhao, 2010)  
- Errors are caused by cognitive biases that facilitate our behavior under normal conditions but sometimes fail under circumstances that somehow deviate from normal conditions (Reason, 1990) |
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All three levels have been thoroughly addressed in research. For instance, on the individual level there is evidence for the positive effects of individual error management training (Nordstrom, Wendland, & Williams, 1998), a training method that encourages active exploration and making errors as opposed to avoiding errors (Frese, 1995). In their meta-analysis, Keith and Frese (2008) confirmed that error management training leads more strongly to improved performance and decreased frustration than training that does not explicitly address positive aspects of errors. Furthermore, in an experimental study Dimitrova (2014) found that error management instructions have a relatively positive influence on on-task thoughts, which is a measure of attention directed towards the task at hand, compared to instructions suggesting that errors should be avoided at all costs.

Studies investigating error handling at the group level show that error-related beliefs often similar in teams are dissimilar between teams, and that these shared beliefs have an impact on team performance (Cannon & Edmondson, 2001). A study on the influence of error culture on accident occurrence in fire fighting teams concluded that having an error management culture was significantly related to reduced error occurrence in both high and low-risk situations (Fruhen & Keith, 2014). Other researchers have studied the role of team leaders—such as managers—in stimulating or inhibiting constructive error handling. Zhao (2010), for instance, found in an experiment that when people felt their leader was tolerant of errors, they experienced less negative emotion than when they saw the leader as error-intolerant. Another experimental study concluded that leaders perceived as employing error management instead of error prevention gained more trust from their followers (Dimitrova, 2014). Lastly, besides the findings on individual error management training, training at the team level has also been found to improve team error handling (Weaver et al., 2011).
Research on the organizational level focuses on the influence of organizational context on the way employees handle errors, the organizational factors that hamper constructive error handling, and the most beneficial ways of error handling. Regarding the influence of organizational context, Hofmann and Stetzer (1998) found that in an organization with a positive safety climate and open communication on safety issues, employees were less likely to make self-serving attributions regarding accident occurrence and more likely to be open about the true cause of the accident. Regarding organizational factors that hinder error handling, Baumard and Starbuck (2005) observed very limited organizational learning in their analysis of failures in a large telecommunication firm. They concluded that the managers in this organization were not motivated to analyze failures thoroughly. Instead, managers explained both small and large failures in terms of their idiosyncratic or external causes. Lastly, Van Dyck et al. (2005) studied the effects of organizational error culture and concluded that an error management culture was most beneficial for organizations, as its presence was positively associated with performance and long-term survivability.

These three levels of research offer important insights separately, other research approaches points to the importance of exploring between-level processes more carefully. One example of such a cross-cutting approach is research that explores the intergroup level of error handling in organizations. Research on these phenomena has predominantly been conducted in medical settings, due to the increased prevalence of cooperation between groups of medical specialists. This trend has yielded an interest in the complications that can arise in interprofessional cooperation, for instance in multidisciplinary teams that can be considered an intergroup context. Edmondson (1996) commented that “communication failures caused by intergroup tensions may [...] affect the ability of teams to discuss
and correct mistakes” (p. 87). Supplementing this statement, another study found that hierarchy and power issues, for instance between residents and physicians and between residents and nurses, were important contributors to communication failures which in turn were a main cause of medical mishaps (Sutcliffe, Lewton, & Rosenthal, 2004). Research focusing on multidisciplinary teams in health care found that cooperation difficulties between group members was caused by differences in language, values and cultures and was expressed in tensions and disagreement regarding the proper treatment of patients (Rovio-Johansson & Liff, 2012). A study on the way narratives about patient safety evolved throughout the process of incident reporting discovered that these narratives were continuously reproduced in ways that not only reflected factual experiences, but also beliefs and identities. The author concluded that such narratives “reinforce professional boundaries and identities through distinguishing the ‘safe’ from the ‘risky’ or ‘them and us’” (Waring, 2009, p. 1729).

Thus, there have been ample efforts to incorporate the intergroup perspective in studies on cooperation and error handling. The processes described above point to the problems that can arise when groups of different (health care) professionals need to cooperate. The observation that cooperation problems can result in unfavorable consequences for patient care is an indication of the necessity to pay attention to the intergroup level of error handling. What is missing, however, is a solid theoretical foundation for the reasons why intergroup tensions exist and how these tensions can lead to problems in error handling. Still little is known about the processes that underlie error handling in intergroup situations and how to overcome the difficulties. To fill this knowledge gap, this dissertation offers a conceptual framework based on a widely applied theory of intergroup relations: social identity theory.
A brief introduction to social identity theory

Social identity theory (SIT; e.g., Tajfel, 1982; Tajfel & Turner, 1979) started out as a theory to explain behavior of people both within a group (the ingroup), toward other groups (outgroups) and between groups (intergroup behavior). Examples of intergroup behavior that called for an explanation were prejudice, discrimination and conflict. The origin of SIT is often considered to be the minimal group experiments (e.g., Billig & Tajfel, 1973) that assigned research participants to groups that had little in common, sometimes only a trivial characteristic such as the preference for a certain painter. After assignment to a group, participants had to divide points between their ingroup and an outgroup. Although the groups had no previous shared history, no contact between them, and there was no individual advantage to be gained by the division of points, the experiments yielded consistent evidence that participants favored their ingroup. Thus, “even the most stripped-down conditions were sufficient to encourage ingroup-favoring responses” (Haslam & Ellemers, 2006, p. 42).

SIT proposes that these findings can be explained by the fact that humans have a fundamental need to feel part of a larger collective. Thus, their identification with a social group affects intergroup behavior. Elaborating on this explanation, identification with a social group makes it important for people to distinguish their own group positively from other groups, and thus maintain a positive group-based self-esteem (Tajfel & Turner, 1979). Positive self-esteem can be attained by comparing the ingroup with relevant outgroups and by emphasizing the positive distinctiveness of the ingroup. The extent to which the ingroup is valued positively or negatively often results from comparisons with others, which is why social identity is considered “primarily relational in nature” (Tajfel,
Social identity is commonly defined as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255). This definition contains three components of identity: cognitive (knowledge of membership), affective (emotional attachment to the group), and evaluative (value assigned to the group). Van Dick (2001) suggested adding a fourth, behavioral component that acknowledges that group identification is associated with specific action, such as adherence to group norms (Hogg & Reid, 2006) and, under specific circumstances, hostility to outgroups (Brewer, 1999).

These components reveal two general elements that make the concept of social identity relevant. One, when people identify with a certain group, they know they are member of that group, they feel emotionally connected to that group, and they behave in ways that are consistent with the norms of that group. This all has to do with behavior within a group. Two, and originating from the first element, when people identify with a group this can also influence how they evaluate other groups and act in relation to them. In other words, social identity also has implications for intergroup behavior, which can be defined as “any behavior displayed by one or more actors toward one or more others that is based on the actors’ identification of themselves and the others as belonging to different social categories” (Tajfel & Turner, 1979, p. 40). This intergroup behavior is relevant for the subject of this dissertation.

Intergroup behavior cannot always be easily predicted beforehand for various reasons. First, since most people belong to more than one social group, they can derive their social identity from multiple sources. Depending on the social context, social groups become salient, meaning that they form
significant reference categories within that context. The categories are not fixed, but are dependent on a context that enables people to compare the own group with others. Moreover, people can strategically choose which group they categorize themselves in, as was shown in an experiment with math students (Hornsey & Hogg, 2002). When the students were led to believe that their subgroup was lower in status than another subgroup (humanities students), they categorized themselves more in the superordinate category of university students than when they believed that their subgroup was higher in status, in which case they identified more with their subgroup of math students.

The response to the existence of social categories may differ depending on the circumstances and on individual characteristics. For instance, the level of identification with a group partly determines the response to a negative intergroup comparison (Doosje, Ellemers, & Spears, 1995). When researchers experimentally manipulated the status of an ingroup as being lower than an outgroup’s status, participants who did not identify strongly with the ingroup indicated greater variability in the performance of the ingroup than people who did identify strongly with the ingroup. The researchers interpreted this as a strategy of low identifiers to enhance their own status (implying that not all members of the ingroup compared negatively to the outgroup) versus the motivation of high identifiers to show solidarity to the ingroup by perceiving the ingroup as performing homogeneously (Doosje et al., 1995).

Lastly, the way people respond in a comparative context that is negative for the ingroup can also depend on the perceived opportunity to move into a group with a higher status. In general, permeability of group boundaries is associated with social mobility strategies—attempts to associate oneself with a different group—and impermeability of group
boundaries with social creativity strategies, for instance, attempts to compare groups on a dimension that is more positive for the ingroup (Tajfel & Turner, 1979). Consistent with predictions from SIT, Jackson et al. (1996) discovered that when a group was negatively distinct from another group, members of this group engaged more in social creativity strategies when it was not possible to change groups than when this was possible. This effect was identical in minimal groups—where students were randomly categorized as either under- or overestimators of a number of dots—and natural groups consisting of cigarette smokers or women. The authors concluded, “believing that one cannot escape a negatively distinctive in-group prompted efforts to cast the ingroup in a more favorable light” (Jackson et al., 1996, p. 253).

**Identification in organizations**

The concept of identity helps capture the essence of who people are and, thus, why they do what they do – it is at the core of why people join organizations and why they voluntarily leave, why they approach their work the way they do and why they interact with others the way they do during that work. (Ashforth, Harrison, & Corley, 2008, p. 334)

Ashforth and Mael (1989) were the first to adopt the perspective of SIT to organizations. Their argument was that whereas mere categorization is evidently sufficient to induce intergroup behavior, the organizational context strongly intensifies the consequences of identification. Thus, whereas experimental studies can easily create intergroup situations, the organizational setting adds several important elements to the study of social identity. First, a source of identity that can only be found in a work context is
one’s profession or occupation. SIT research has paid relatively little attention to this source of identity because it is difficult to evoke outside of an organizational setting. Second, an organization contains particular characteristics—many of which are relevant for intergroup behavior—that are hard or even impossible to simulate in an experimental study: the necessity for people to perform well in order to keep their job, for instance because their family relies on their income; an organizational structure that involves frequent meetings and the necessity to cooperate with individuals and groups on a longer term, without always having the ability to choose group membership and cooperation partners; and the presence of formal supervisors one has to answer to for an extended period of time (i.e., substantially longer than the duration of an experiment).

The relevance of ideas from SIT for organizations has been thoroughly recognized in social science research of the previous decades (Alvesson & Empson, 2008; Ashforth et al., 2008; Ashforth & Mael, 1989; Haslam, 2004; Hogg & Terry, 2000; Kreiner & Ashforth, 2004; Russo, 1998; Van Dick, 2001; Van Knippenberg & Van Schie, 2000). Ideas from SIT have been adopted to explain phenomena such as organizational socialization, role conflict, and intergroup relations (Ashforth & Mael, 1989); organizational deviance, leadership, and mergers and acquisitions (Hogg & Terry, 2000); group performance, work-related feelings such as satisfaction and motivation, and the importance of group norms (Van Dick, 2001); and the multiple ways in which people can identify with an organization (Kreiner & Ashforth, 2004).

Generally, research on social identity processes in organizations recognizes that organizations and the groups within them (e.g., a department, a project team, or a group of professionals such as physicians) with which people can be associated, form important sources of social identity (Hogg &
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Terry, 2000). Recognizing the importance of “work-related identities to people’s sense of self” (Hogg & Terry, 2000, p. 135) helps understand intergroup behavior in organizations. Intergroup behavior is especially relevant since the “more exclusive, concrete, and proximal” character of groups in organizations (Ashforth et al., 2008, p. 348) makes them more likely foci of identification for employees than the organization as a whole (Van Knippenberg & Van Schie, 2000). When people from different groups in an organizational context need to work together, factors that complicate cooperation on an intergroup level should be considered.

Box 1.2. Identification among community and clinical midwives

The case of handover between community midwives and clinical midwives offers an excellent example of a situation that triggers intergroup behavior. Midwives usually either work in the home or polyclinic setting as a community midwife or in the hospital as a clinical midwife. Officially, they do not belong to the same organization. Community midwives are usually self-employed or part of a practice shared with other community midwives. Clinical midwives are employed by the hospital. In any case, community midwives are relatively foreign to the hospital setting because they usually guide home births. The following midwife is an exception. She has guided births in both settings.

You have a totally different profession if you work at home or if you work in a hospital, as a midwife. I’ve done so many births [both] at home and in hospitals, and if I compare myself in that sense, the way I act... I am almost a different person. (excerpt from an interview with a community midwife, from De Vries, 2005, p. 227)
Besides the differences in location and employment, this midwife refers to an even more profound aspect that differentiates “doing” births at home or in a hospital setting, namely that her sense of identity is different in the two settings (“I am almost a different person”). Later on (De Vries, 2005, pp. 227-230) the midwife says that the difference is related to the fact that at home, a woman in labor receives all the attention and patience of the midwife, whereas in hospital there is a stronger inclination to medicalize the birth, i.e., to speed the process up by means of medical interventions.

The two types of midwives often say they do not belong to the same group, despite their shared education. Thus, one can speak of two subgroups, which this clinical midwife also refers to:

It’s a pity that we’re sometimes seen as two camps instead of one. Two camps set up against each other. Clinical midwife 4

That the two subgroups are more meaningful for their members than the whole group of midwives can be explained by looking at the factors that contribute to subgroup identification: proximity, exclusiveness and concreteness.

Especially for clinical midwives, fellow members of their subgroup are far more *proximal* than members of the community subgroup. The two subgroups work at different locations and are sometimes unaware of each other’s activities.

*We don’t really work together. They [community midwives] send people in and then they almost always leave, so they don’t know what we do. Of course afterwards they hear stories from those people about how things...*
Because the similarities within the subgroup are greater than within the overall group of midwives, the subgroup of clinical or community midwife is also more concret and exclusive. That community midwives have more in common with fellow community midwives than with clinical midwives adds to their feeling of identification with the group of community midwives. Similarities within subgroups and differences between subgroups come to the fore when looking at their different views on childbirth:

*The community midwife thinks: everything is fine, until there is evidence to the contrary. It’s natural, it’s OK, your own body can do it. That’s the approach. We approach it like this: there’s a problem, the delivery is not progressing. What’s the problem and what can we do about it?* Clinical midwife 12

Community midwives view childbirth as a natural, physiological and thus normal process that generally can and should proceed with a minimum of medical intervention, whereas clinical midwives view it as a problematic and sometimes pathological process that requires care in a setting where mother and child can be closely monitored.

As this section explains, the concept of social identity is relevant for understanding behavior within (ingroup) and between groups (intergroup behavior). The ingroup aspect is evident in that midwives identify with their subgroup of community or clinical midwives. Furthermore, group identification is generally associated with positive behavior within the group, such as loyalty and adherence to group norms. A shared identity contributes
to information sharing, coordinated action, cooperation, and helping behavior (Ashforth et al., 2008). The presence of a threatening outgroup can under some circumstances lead to ingroup favoritism (Hewstone, Rubin, & Willis, 2002) and hostility and conflict between groups (Brewer, 1999). This intergroup behavior is important because especially in organizational settings—for instance in handover between midwives—groups need to cooperate. It is thus relevant to discover why human behavior in intergroup situations can be problematic. One concept from SIT that can help to explain this is the concept of social identity threat.

Identity threat

Because social identity is vital for self-esteem, it can be very disturbing when a source of identification is threatened. Identity threat has been described in various ways (Petriglieri, 2011). Kreiner and Sheep (2009, p. 32) define it as: “Individuals face identity threats when their sense of self is called into question.” Another description states: “Any thought, feeling, action, or experience that challenges the individual’s personal or social identity is a threat” (Breakwell, 1983, p. 13). These definitions suggest that identity threat is a broad concept. To unpack this concept, in this section I first explore types of identity threat. Then I differentiate between sources of threat. Lastly, I discuss possible responses to identity threat. Throughout the section I link these aspects to the case of handover between midwives.

Researchers distinguish four types of threat: categorization, acceptance, distinctiveness, and value threat (Branscombe, Ellemers, Spears, & Doosje, 2001). The first two types of threat are not relevant for the development of my argument and therefore I discuss them only briefly. Categorization threat occurs when someone is characterized against one’s
will in a certain group, for instance in the case of discrimination during a job interview. In a way, acceptance threat is the other side of the coin, as this occurs when one’s membership of a social group is questioned, which can happen in a group of high-performers when a group member’s performance is substandard (Branscombe et al., 2001).

In the case of distinctiveness, the threat lies in the possibility that the identity of the ingroup becomes less distinctive, which makes people’s position in their environment less clearly delineated. Distinctiveness can be based on the relative size of the ingroup or the distinct characteristics of people in that group in comparison to one or more relevant outgroups. Group distinctiveness is a very important motive in SIT (Tajfel & Turner, 1979). This was evident in the midwives case, where the exclusive (unique) character of the subgroup facilitated identification. The need for a distinct identity is sometimes so strong that it surpasses the need for a positive identity. An example of this is the finding that Polish students, who evaluated their own national identity more negatively than Dutch students, nevertheless identified more strongly with their national group than their Dutch counterparts (Mlicki & Ellemers, 1996). Thus, because group distinctiveness is important, the possibility that it will diminish in the future can cause identity threat.

The final type of threat relevant to this dissertation pertains to a decrease in the value of an identity, where specific aspects of ingroup competence and morality can be at stake. Morality refers to inherent notions of “good” or “bad” and to characteristics such as honesty, whereas competence refers to how successful someone is in executing a certain task, and is associated with traits such as intelligence and skillfulness (Leach, Ellemers, & Barreto, 2007; Wojciszke, 1994). An example of a threat to morality can be found in a study on managers in jobs that were tainted
physically, socially or morally (Ashforth, Kreiner, Clark, & Fugate, 2007). Zooming in on the category of moral taint, this included occupations such as exotic entertainer or employee of an abortion clinic. The negative associations outsiders have regarding these functions resulted in a threat to the value of the work-related identity of employees in these jobs. Ashforth et al. (2007) explored ways in which these employees “normalized” the tainted aspects of their jobs, thus minimizing the negative consequences of identity threat. I will come back to these and other responses to identity threat in the next subsection.

**Box 1.3. Types of identity threat among midwives**

When community midwives and clinical midwives come in contact with each other, during handover, they can feel that their identity is threatened in multiple ways due to their clashing views. Here I explain how the distinctiveness and value of the subgroup identities can be at stake.

Particularly community midwives may feel that the distinctiveness of their identity is under threat. As I said in the case description, their autonomous position is jeopardized by the medicalization of childbirth. In this context, community midwives feel compelled to emphasize their unique contribution to maternity care, and thus their distinctiveness.

*Midwives are always a bit headstrong, proud of their profession and of what they accomplish. I think that connects us community midwives. And of course, there is quite a lot of criticism in research, so we have to join forces to maintain first line midwifery care, and show that we deliver good quality care.* Community midwife 3
For both subgroups, handover forms a situation which questions the value of their identity in terms of both morality and competence. When community and clinical midwives come in contact with each other, they are confronted with other perspectives on the “right” approach to maternity care. The threat to the morality of midwives thus consists of uncertainty whether their own approach to childbirth is inherently good or not. In essence this is a moral problem and views are often diametrically opposed, as the newspaper excerpt at the beginning of this chapter shows:

*Heaven forbid you should get a medical problem in the middle of a cozy home delivery, says one side. As if it’s always that safe in hospital if you give an epidural straight off, comes the reply.* (Kreulen, 2014, p. v2)

Moreover, especially community midwives show signs of a threat to their perception of competence. In the interviews they repeatedly mentioned their need to be taken seriously by clinical midwives and other second line care providers during handover. Taking someone seriously in this context means viewing the person as an intelligent professional and recognizing their competence. One community midwife described a situation where she did not feel taken seriously by a clinical midwife.

*Sometimes, when a woman requests pain killing, they [clinical midwives] start to question things at that point, like “she seems to have good contractions, let’s wait and see for a bit.” And you think: I already did that! Then it doesn’t feel like I’m being taken very seriously. [...] And I do understand them, with the “good contractions,” but sometimes you think: just ask me a bit more, like “she seems to be doing so well, why are you sending her in?” [...] Because you think: it’s not like I’m going to send
Besides types of identity threats, several sources of threat are discernible. A direct threat can result from the behavior of an outgroup, for instance in the case of intergroup conflict (Fiol, Pratt, & O'Connor, 2009). Alternatively, identity threat can originate in the ingroup, for instance when negative ingroup behavior in the past leads to unfavorable comparisons with outgroups (Branscombe et al., 2001). Another possibility of threat emanating from inside the ingroup is when a person’s continued membership of the group is in danger, which can happen when other group members call into question a person’s loyalty to the group (Petriglieri, 2011). Individuals may also experience threat if they feel a conflict between two simultaneously existing sources of identity. A frequently used example is the conflict someone can feel between being a dedicated parent and a hard-working employee.

**Box 1.4. Sources of identity threat during handover**

During handover, different perspectives on important issues (e.g., social circumstances vs. medical indication) become clear. Community midwives sometimes feel that the clinical perspective is more dominant.

_They really look at medical necessity to decide whether to take someone on. This woman can be totally exhausted, she may have all sorts of problems or some kind of history. And they still go like “Well, madam, you’re not really interesting. Just go to another hospital, because we don’t have room for you.” There’s a very different way of dealing with... of looking at interests._ Community midwife 7
Clinical midwives also want their perspective to be taken into account. This need is sometimes expressed as irritation, which occurs when community midwives pay too much attention to non-medical factors such as the social circumstances of the woman in labor—information that in the view of the clinical midwife is less relevant at the moment of handover.

*You’re just sitting there, listening to a whole story about all the issues this woman has in her history, and how terrible she felt about this and that. Yeah yeah, she’s bleeding or she isn’t bleeding!* Clinical midwife 12

Thus, for community midwives, the source of identity threat is the behavior of members of an outgroup, in this case the clinical midwives. Specifically, this behavior relates to having enough consideration for the physiological perspective on childbirth or not. The other way around, clinical midwives also emphasize the importance of their clinical perspective, but the identity threat is less pronounced here, and mostly seems to surface in the form of irritation at—in their eyes—redundant information from the community midwife during handover.

The final relevant source of identity threat for individuals can arise when they carry out an action or are involved in an event that is inconsistent with the meaning attached to a certain identity (Petriglieri, 2011). Undesirable events can form an identity threat because they may go against identity-related expectations and thereby form “a threat to the images that actors wish to maintain for themselves and others” (Sheer & Weigold, 1995, p. 592). An example of this is a physician making an error, which is not in accordance with the infallible image of physicians (Dixon-Woods, Suokas, Pitchforth, & Tarrant, 2009). Based on this literature, I argue throughout the
dissertation that errors can cause a sense of threat to the value of people’s identity. For instance, an error is generally an undesirable event with a negative connotation. If the ingroup is associated with making errors, then this may become a less valuable source of identification. Given the negative connotation of errors, if a group is associated with making errors, this may threaten the value of the identity attached to that group. Even the error of an outgroup member can form a source of identity threat if the interactive setting entails that the ingroup is also associated with this error.

**Responses to identity threat**

When someone’s identity is under threat, there are many ways of dealing with this to avert a negative impact. People are not passive receivers of threat; they are motivated to mitigate or eliminate the social identity threat to increase or restore individual and group-based self-esteem (Blanz, Mummendey, Mielke, & Klink, 1998). People are not just motivated to protect their identities, the strategies they use to do so have been shown to have actual positive effects. This is evidenced in a recent study on students in identity-threatened groups that showed a positive influence of identity protection strategies on long-term motivation and performance (Sherman et al., 2013). Reddy (2011) found that in situations of identity threat, activating positive aspects of a social identity served as a protection against negative outcomes, such as underperformance and distress.

In different circumstances, people use different strategies against identity threat. When it is possible to change the position of the ingroup as a whole, groups can become hostile or competitive to outgroups (Blanz et al., 1998; Petriglieri, 2011) or retaliate against them (Fischer, Haslam, & Smith, 2010). Again, certain factors facilitate or inhibit behavioral strategies for dealing with identity threat. For instance, it is known that events that trigger
identity threat can elicit antisocial behavior in organizations, which is described as actions aimed at colleagues that may result in physical, psychological or emotional harm (Robinson & O'Leary-Kelly, 1998). A survey study demonstrated that the relationship between identity threat and antisocial behavior is not straightforward, but depends on factors both individual (e.g., having a favorable attitude toward revenge) and contextual (e.g., the presence of other people that exhibit antisocial behavior) (Aquino & Douglas, 2003).

**Box 1.5. Responses to identity threat: Distrust and disagreement**

Because no formal hierarchy exists between the two groups of midwives and because they are actually part of the same profession, the relative position of the own group can change in reference to the other. Thus, it is useful to follow a response tactic to identity threat that tries to lower the status of the other group and raise the status of the own group. Among midwives, two aspects of interaction during and in the context of handover point to this tactic. One was distrust about the (motives for) decisions of the other group of caregivers:

*In that hospital it really feels like the midwife’s records are dissected completely to see whether you’ve dropped a stitch somewhere or made a little mistake. And then you get a call about it, like “Why didn’t you draw a blood sample at the time?” or “why didn’t you do this or that?” It immediately sets the tone.* Community midwife 14

*Of course sometimes you have midwives who think very physiologically, who find it hard when lots of interventions are done, and who guard against*
unnecessary stuff being done. I think that as clinical midwives we do that too, but it’s not always seen like that. There’s some sort of distrust on the first line that we do all sorts of stuff, things that are unnecessary or redundant. Clinical midwife 1

Midwives often mentioned disagreement and conflict regarding decisions of members of the other group.

They are often much faster at cutting the umbilical cord, taking the child away, sucking out the throat, and so forth. In my opinion you don’t need to cut the cord and take the baby away immediately. I sometimes think it’s a pity. Just let the baby recover for a while, it’s had a tough time. For instance after a vacuum extraction or something, it’s only normal for it to take a bit longer before the baby is completely OK. And there’s research that shows that cutting the umbilical cord quickly is not always what’s best for these babies. Community midwife 8

If we think that labor augmentation is necessary because the contractions are not good enough, then they [community midwives] shouldn’t go against us when people are around and say “we don’t think that’s necessary.” Clinical midwife 6

Distrust and disagreement may decrease the effectiveness of handover, because they are generally not conducive to collaborative behavior. In this study, it seems as if these social identity-related processes mostly emerge in non-acute situations. In acute situations, all caregivers involved understand that the second line perspective must dominate, and immediate action is vital. When there is no direct urgency, for instance when a woman in labor
requests pain medicine (which a community midwife is not allowed to give) the level of disagreement between the two groups becomes stronger.

*If you have real fetal distress, everyone is alert. But sometimes you are in a hurry for your client, although medically speaking there is not much urgency. So then, if it’s busy, you need to stand there for a while before something happens, and you think: come on guys, just take a second to put her on a drip.* Community midwife 6

When the stakes are high, caregiver groups that otherwise might conflict more often seem better able to focus on what is important, and social identity processes move to the background. This points to the context-dependence of social identity processes. Although their impact may decrease when situations become acute, in non-acute settings social identity remains relevant because quality of care is at stake.

If it is hard or impossible to change the position of the self or ingroup, people can resort to forms of cognitive coping, which Tajfel and Turner (1979) called social creativity strategies. People can try to emphasize some flattering characteristic of their group or compare the own group with another one lower in status (Blanz et al., 1998). For instance, a study on managers in so-called dirty occupations (e.g., exterminators and morticians) found that they attached positive meanings to the occupation, challenged negative perceptions, and compared themselves with other people or groups that were even worse off (Ashforth et al., 2007). Another study found that employees whose organizational identity was threatened by unfavorable rankings of their university responded by directing attention to positive aspects of their university and comparisons with universities on
characteristics that were not mentioned in the rankings (Elsbach & Kramer, 1996).

Another cognitive strategy constitutes changing the evaluation of the characteristics a group is associated with. For instance, when surgeons describe themselves as the most complete type of doctor in the hospital, this incorporates both their heroic work in the operating room and basic daily activities such as doing rounds (Pratt, Rockmann, & Kaufmann, 2006). People may defend themselves against identity threat created by unwanted events by formulating accounts that draw minimal attention to the undesired aspects, for instance, excusing or justifying their behavior (Sheer & Weigold, 1995). Conspiracy accounts can also be used to mitigate identity threat (Sapountzis & Condor, 2013). This rhetorical strategy challenges the dominant assumptions about intergroup relations, specifically regarding who is in charge and has legitimate power.

A final possible cognitive strategy is individualization, where individuals disconnect cognitively from fellow group members without actually changing group membership (Blanz et al., 1998). For example, imagine a member of a group that needs to work on an assignment. If the group’s result is a mediocre grade, this group member can tell herself that she at least has done her best, whereas the other members may not have put in the required effort.

**Box 1.6. Community midwives vs. clinical midwives**

The previous sections have made clear that community midwives experience identity threat, especially to the distinctiveness and value of their identity during handover. This makes it relevant to see whether community midwives use social creativity strategies in the way they speak about the
Chapter 1

differences between the two subgroups. To explore whether they do, now I present a community midwife’s answer to the question: “Do you feel there is a difference between first line and second line midwives?”

Yes, a very big difference, in all respects. Look, one group is protocol oriented, the other is individually oriented. They [community midwives] focus on the individual case, the autonomy of the women, and their own expertise and training, and based on that they make a decision that can differ from the protocols. The second line relies on protocols. That’s already a big difference in working. You have to stick to protocols and when you do that, you do a good job. They are team oriented. First line midwives are one-on-one oriented. [A clinical midwife] sometimes take sides with colleagues instead of the person who needs care. If your colleague says, “That person’s so pathetic, don’t pay too much attention to her” or “Well, I did this and this” and the other thinks “That’s odd,” then she will speak up for her colleague instead of for the client. She will never see the client again anyway, whereas she still needs to work with her colleague for four more years. So that works differently from when you have one-on-one care, in which your client is important. Community midwife 7

Besides reconfirming the strong differentiation between the two subgroups of midwives, this quote highlights a positive aspect of the community midwife’s own subgroup (i.e., client centeredness) in contrast to a less positive aspect of the clinical midwives subgroup (i.e., protocol centeredness). She even implies that the client is not really important to clinical midwives, which is of course a serious accusation. This is an example of a social creativity strategy, because although client centeredness may not be the most status-enhancing characteristic distinguishing the two
groups, emphasizing this aspect instead of others that do not compare the ingroup as positively with the outgroup, allows the community midwife to boost her self-esteem.

In the previous sections I discussed the literature on errors in organizations, social identity theory, and identity threat. Using this literature as a theoretical lens I explored the handover between community midwives and clinical midwives at the intergroup level. I have shown how identification of community and clinical midwives with their respective subgroups influences cooperation during handover. I argued that especially the group of community midwives experiences a threat to the distinctiveness and value of their identity, which can result in attempts to mitigate the negative consequences of this threat. Because identity threat is triggered by the presence of the other subgroup, the responses to identity threat came to the fore during handover. This happened in the form of distrust and disagreement about the suitability of decisions. I conclude that these aspects can harm quality of care, mostly in sub-acute situations. Moreover, these conclusions not only point to the importance of considering the problems in handover from an intergroup perspective. They also imply that it is relevant to adopt this perspective in other situations where groups need to cooperate, because this may yield similar and innovative findings regarding error handling. This adoption of the intergroup perspective on error handling in different organizational contexts is exactly the focus of this dissertation.

**Contributions and research focus**

I started this chapter with the statement that tensions between individuals and groups complicate the way they deal with errors in an
organizational context. Having explored the relevant concepts and theories, it is now possible to state the focus of this dissertation, which is the detailed analysis of organizational members’ responses to error-related social identity threat. As the midwife case illustrates, it is relevant to study how organizational members respond to identity threat because it can have a significant influence on cooperation between organizational groups and thus organizational outcomes. The research presented in this dissertation intends to make two main contributions: one to the theory and practice of error handling in organizations, focusing on the intergroup level; and the other to SIT, conducting qualitative research on language use and thereby attending to contextual factors in the organizational setting, such as the forced interaction with specific other groups in realizing joint goals.

The first contribution entails applying an intergroup perspective to error handling in organizations. As discussed earlier, there is ample research on the individual, team, and organizational level over error handling, whereas the intergroup level has been relatively overlooked. SIT, an important theory on intra- and intergroup behavior, has great explanatory power when it comes to human interactive behavior. For organizations, it is important to note the social identity perspective to understand why, under some circumstances, errors are perceivably more threatening, and understand how organizational members respond to this threat in relation to other organizational groups. This dissertation incorporates SIT as a theoretical lens to study error handling in organizations at the intergroup level.

Second, this dissertation contributes to research on SIT by paying more attention to contextual factors than is usually done in SIT research and by taking into account the role of language use in qualitative rather than quantitative research. Quantitative research on language use that has its origin in SIT is based on the idea that language is a tool that people use to
reach a certain social distance from other people (Giles, Willemyns, Gallois, & Anderson, 2007; Semin, 2008). In this sense, language use can be defined as social action, as it can bring about changes in the social environment and shape intergroup relations (Edwards & Potter, 1993). For instance, studies have shown that people describe undesirable behavior of an ingroup member differently than the identical behavior in an outgroup member (Maass, Salvi, Arcuri, & Semin, 1989). Specifically, people use more abstract words to describe negative (undesirable) behavior of an outgroup member. For instance: an ingroup member *hits* another person, but an outgroup member exhibiting the same behavior *is aggressive*. This abstract wording is thought to be an expression of the implicit assumption that such negative behavior is typical for that outgroup. Thus, abstract language use reinforces existing outgroup stereotypes and increases or maintains the preferred social distance between the ingroup and outgroup (Maass et al., 1989).

As is often the case in SIT research, *quantitative* studies such as those described above make the strongest contributions to the realm of intergroup language use. Lab experiments and surveys are valuable because they leave out context factors and offer a “clean” picture of the influence of certain variables on (organizational) outcomes. To fully understand human behavior in organizations, however, the context of the behavior is very important. The way people more or less spontaneously use language can give a lot of insight into their thoughts, feeling and ideas, because language is so closely related to identity and thus to feelings toward other groups (Fiedler, Semin, & Finkenauer, 1993). Studying language use qualitatively in the organizational context brings a unique contribution to SIT research because it gives insight into important social identity processes, in this case the way organizational members respond to the identity threat triggered by errors.
Chapter 1

My research emphasizes the role of organizational context factors for this aptly described reason:

Where features of context lead a person to react to a situation in terms of a social identity that is shared with specific others, behavior will be qualitatively different from that which results where this identity is not shared [...] Context should have an impact, among other things, on the degree to which people: (a) like and trust each other; (b) communicate effectively; (c) are able to persuade and influence each other; (d) seek to cooperate; and (e) are able to act collectively. (Haslam, 2004, p. 38)

Studying heterogeneous cases in different organizations is useful because it facilitates a broad exploration of the research topic. During the process of examining error-related intergroup processes in various contexts, I saw the same type of response across contexts. This gives extra strength to the findings because it shows that people respond to errors and risks in quite the same ways in different intergroup settings. In the following sections I outline the cases that form the empirical basis of this dissertation.

Dissertation outline

In total, I studied four research settings, including the handover between midwives discussed in this chapter. Several factors contribute to the selection of settings. First, and simply because the central topic of this dissertation is error handling in organizations, the primary condition for choosing cases was a strong emphasis on errors. For instance, the casino
General introduction

(Chapter 4) emphasizes following procedures to ensure security, while the infrastructure project (Chapter 2) has a strong focus on risk prevention. An important consideration was that all studies had a clear intergroup context, with multiple groups needing to cooperate. This is complicated by a lack of joint identification and in most cases by differences in status and responsibilities. In all cases, these circumstances are central to intergroup error handling. When assessing the suitability of a setting, a further important consideration was the extent to which I could study the contrasts between different types of organizations. For instance, whereas the midwife case in the current chapter looks at bridging the boundaries of intramural (community midwives) and extramural (clinical midwives) care, the hospital department in Chapter 3 covers intramural care only. Lastly, there was also a degree of convenience sampling. Accessibility to the organizations was often aided by contacts provided by colleagues.

Chapter 1 introduces why intergroup error handling may be problematic and sets the point of departure of this dissertation: errors are a possible cause of identity threat. The following chapters all focus on the way organizational members deal with this identity threat. The chapters build on each other, showing how people respond to identity threat in various situations of possible or actual error occurrence. Chapter 2 deals with the attribution of responsibility in the context of risk of errors, Chapter 3 covers identity management strategies in organizational members’ narratives about their own and others’ errors that have already happened, and Chapter 4 is on response to feedback about errors from (partial) outgroup members. Chapter 2 thus deals with identity threat-related responses in situations when errors have not yet occurred, and Chapter 3 and 4 are about responses to actual errors. In these chapters employees speak of errors themselves (Chapter 3) and respond to the fact that others address them on their errors (Chapter 4).
Chapter 1

Chapter 5 sums up the conclusions and discusses the findings in the light of theoretical and practical contributions. Figure 1.1 gives an overview of the chapters and their position in relation to errors.

![Figure 1.1. Overview of chapter subjects in relation to error occurrence](image)

Going into the empirical chapters in more detail, Chapter 2 deals with a study on risk discourse in and around an infrastructural project team. I collected the data for this chapter with Freek van Berkel, a consultant for the municipality as well as external PhD candidate at VU University, who followed the project team for eight months as a participant observer. Both of us conducted most of the interviews together. The project team under study was part of a department of a Dutch municipality that was under high scrutiny because of failure in earlier projects. Therefore, everything that
happened in the project studied in this chapter—hereafter referred to as Project Underwater—was viewed with the utmost attention by everyone involved, because nobody in the project could risk failure if he wanted to maintain his position. This created great pressure on the project team to prevent errors. In this chapter I argue that because of these circumstances, the risk of errors posed a threat to the identity of the project team, which resulted in a discourse that focused on attributing responsibility for the risk of errors to stakeholders outside of the project team, and a polarization of relationships between stakeholders. Consequently, the project team attempted to eliminate risk sources by withholding information from stakeholders they perceived as responsible for inflicting risks on the project. Furthermore, deteriorated intergroup relationships led to conflicts between stakeholders.

Chapter 3 comprises a study of incident narratives of health care providers in a Dutch hospital that specializes in eye care. The aim of this study was to explore how health care professionals made sense of incidents, with a particular focus on the strategies they used to protect their professional identity in the face of incidents. The context of health care is relevant because in this setting incidents can have immediate consequences for people’s physical wellbeing. For this study, a Master’s student under my supervision conducted interviews with nurses, residents and physicians about incidents they had encountered and how they dealt with them. The analysis consisted of a detailed categorization of identity management strategies in the stories these health care professionals told about incidents, according to an existing framework for distinguishing between these strategies (Blanz et al., 1998). I found that nurses and residents employed multiple types of identity management strategies simultaneously, which points to the benefit of combining different strategies. I also found that physicians used the
strategy of patronization of other professional groups, which I considered to be a specific form of downward comparison.

Chapter 4 discusses a study in three branches of a Dutch casino. I collected all the data and the casino reimbursed the costs I made in executing the research. In contrast to the chapters that deal with the informal response to incidents or (possible) errors, this chapter focuses on the response to formal feedback on (erroneous) behavior. The argument in this chapter is that feedback on errors elicits identity threat, especially when it comes from an outgroup member, and especially when there is a great emphasis on error and risk prevention, as is the case in the casino. Here, observers from the security department operated from a different perspective (the term used in the chapter is institutional logic) than the people they gave feedback to, such as dealers and table managers. I interviewed representatives of all groups—mainly security managers, dealers, and table managers—in the three branches to facilitate comparisons between the branches. Ultimately, no clear differences emerged. It was apparent, however, that in all three branches criticism caused identity threat and was received sensitively because the observers who had been work floor employees were now in a position to give feedback to their former peers. Sensitivity was amplified by the fact that observers made a shift from the hospitality logic of work floor employees to the security logic of the security department. This chapter shows the relevance of intergroup processes for the reception of feedback on errors from outgroup members.

Chapter 5 returns to the overarching research focus and discusses the findings from the preceding chapters in terms of their theoretical and practical implications. I revisit the intended contributions to research on error handling in organizations and research on SIT. This chapter reflects on methodological issues and makes suggestions for future research and finally
explicates the conclusion of this dissertation.

Table 1.2 shows an overview of the research settings and also indicates the amount of empirical material used for this dissertation. In total, 1110 A4 pages of transcribed interviews and meetings were read, coded, and analyzed both manually and with MAXQDA (Rettie, 2008), software for qualitative data analysis.

Table 1.2. Overview of research settings and data collected

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Research setting</th>
<th>Type of interviewees</th>
<th>No. of interviews and meetings</th>
<th>No. of transcribed A4 pages analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perinatal handover</td>
<td>Community and clinical midwives</td>
<td>28 interviews</td>
<td>130 pages</td>
</tr>
<tr>
<td>2</td>
<td>Department of specialist hospital</td>
<td>Physicians, nurses, and residents</td>
<td>14 interviews</td>
<td>183 pages</td>
</tr>
<tr>
<td>3</td>
<td>Municipal infrastructure project</td>
<td>Project team members and other stakeholders</td>
<td>14 interviews</td>
<td>475 pages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 project meetings</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Holland Casino (three branches)</td>
<td>Security managers, observers, dealers,</td>
<td>37 interviews</td>
<td>322 pages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>table managers, operations supervisors</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>92 interviews</strong></td>
<td><strong>1110 pages</strong></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>30 project meetings</strong></td>
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</tr>
</tbody>
</table>

The chapters in this dissertation are the result of earlier conference presentations, conference proceedings, and journal papers. Table 1.3 (see next page) gives an overview of the presentations and publications related to the chapters.
Table 1.3. *Overview of presentations and publications*

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Presentations and publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parts of an earlier version of this chapter were presented at the Inter-Disciplinary Conference on Conflict and Communication, 2011, Prague, Czech Republic, and published in the proceedings of this conference with the following reference: Os, A. van, Gilder, T.C. de, Dyck, C. van &amp; Groenewegen, P. (2013). A telling tale: A social identity perspective on communication about errors in organisations. In A. Ternès (Ed.), <em>Communication breakdowns and breakthroughs</em>, pp. 111 – 125. Inter-Disciplinary Press. The midwife case in this chapter is to be adapted to a paper and submitted to a scientific midwifery journal.</td>
</tr>
<tr>
<td>2</td>
<td>The paper on which this chapter is based is accepted for publication at the <em>Journal of Health Communication and Management</em>. Earlier versions of this chapter were presented at the International Conference on Incident Disclosure in Health Care, 2012, Sydney, Australia; the EAWOP (European Association of Work and Organizational Psychology) conference, 2013, Münster, Germany; and the EGOS (European Group of Organization Studies) conference, 2013, Montréal, Canada.</td>
</tr>
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<td>3</td>
<td>The paper on which this chapter is based is accepted for publication (with minor revisions) at the <em>International Journal of Project Management</em>. An earlier version of this chapter was presented at the Applied Qualitative Research Conference, 2013, Derby, England.</td>
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<tr>
<td>4</td>
<td>The paper on which this chapter is based is to be submitted to the <em>European Management Journal</em>.</td>
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