Leading in Times of Crisis: Examining the Effectiveness of Different Leadership Styles across Stages of the Crisis Lifecycle

D I S S E R T A T I O N

in fulfilment of the requirements for the degree of

Doctor rerum naturalium

(Dr. rer. nat.)

presented to the
Faculty of Science at TU Dresden

by

Born on 20.04.1982 in Munich

Advisor: Prof. Dr. Jürgen Wegge
Department of Work and Organizational Psychology, TU Dresden

1. Reviewer: Prof. Dr. em. Peter Richter
Department of Work and Organizational Psychology, TU Dresden

2. Reviewer: Prof. Dr. Bertolt Meyer
Department of Organizational and Business Psychology, TU Chemnitz

Date of Submission: 10.12.2015
Date of Defense: 08.02.2016
Acknowledgements

I would like to extend my appreciation to the many individuals who have supported me in all stages of working on this dissertation.

I would like to express my earnest and profound thankfulness to Professor Jürgen Wegge, my academic mentor and supervisor of this dissertation, for encouraging me to pursue an academic career ever since having been his student in class, guiding my work with professional advice, instilling confidence in my abilities, and providing me with many, many opportunities to grow and develop. It is a pleasure to have someone as a mentor who combines healthy ambition and work ethic with contagious optimism and a sense of humour.

For accompanying me since the very early days at TU Dresden with their professional advice and friendship, I would like to extend a big and special thank-you to Dr. Meir Shemla and Dr. Dominika Wach. I would also like to thank Gabriele Buruck for working together on projects that make headway in both work and life, Dr. Kai Loewenbrück for a challenging but enriching collaboration, and Professor Heinz Reichmann for his support in conducting research in the DGN-project. Furthermore, I thank Professor Steffen Giessner for his helpful comments on an early draft of one of the empirical articles. I also sincerely thank Professor Peter Richter and Professor Bertolt Meyer who kindly agreed to review and evaluate this work.

I am thankful to all of my colleagues whom I have spent time with at TU Dresden and beyond for enriching discussions and constructive feedback on the individual studies and the overall framework of this dissertation. For their professional and personal support, I want to dedicate a warm thanks to Franziska Pschera, Johannes Wendsche, Grit Schuster, Sarah Brom, Susann Wilke, Franziska Jungmann, Anika Bohne, Tanja Hentschel, Rico Pohling, Jenny Roth, Christina Heitmann, and Kevin Smith. Last but not least, I want to make special reference to Sebastian Ingwerth.

Finally, I would like to express my deepest gratitude to my parents and my sister, to whom this work is dedicated.
# Table of Contents

**INDEX OF FIGURES** .................................................................................................................. IX

**INDEX OF TABLES** .................................................................................................................... X

**ABSTRACT (ENGLISH)** .............................................................................................................. XI

**ABSTRACT (GERMAN)** .............................................................................................................. XV

1. **INTRODUCTION** ................................................................................................................... 1

   1.1 Relevance of the Topic ........................................................................................................... 1
   1.2 Research Objectives .............................................................................................................. 2
   1.3 Structure of the Dissertation ................................................................................................. 3

2. **CONCEPTUAL CLARIFICATIONS** ....................................................................................... 5

   2.1 Crisis Definitions .................................................................................................................. 5
   2.2 Crisis Types .......................................................................................................................... 11
   2.3 Crisis Stages ......................................................................................................................... 18
   2.4 Crisis Leadership .................................................................................................................. 20

3. **STATUS QUO OF CRISIS LEADERSHIP RESEARCH** ....................................................... 23

   3.1 Rainfall and Politics: A First Approach to the Subject of Crisis Leadership ................. 23
   3.2 A Gift in Troubled Times: Charismatic Leadership in Times of Crisis ......................... 26
   3.3 Finding the Right Words: Charismatic Crisis Rhetoric ...................................................... 31
   3.4 Seeking Certainty in “Us”: Crisis Leadership from a Social Identity Perspective... 34

4. **THE CURRENT RESEARCH** ................................................................................................. 37

   4.1 Conclusions Drawn from the Preceding Chapters ............................................................... 37
   4.2 Conceptualizations of Crisis Used in the Dissertation ....................................................... 38
   4.3 Theoretical Perspectives for Investigating Crisis Leadership ............................................. 43
   4.4 Overview of the Research Program ...................................................................................... 47

5. **STUDY 1** ............................................................................................................................... 51

   5.1 Introduction .......................................................................................................................... 53
   5.2 Theoretical Background ...................................................................................................... 54
   5.2.1 LMX and Incident Reporting .......................................................................................... 56
   5.2.2 The Mediating Role of Reporting-Specific Trust ............................................................. 57
   5.2.3 Management Support for Patient Safety as a Moderator .............................................. 58
### Index of Figures

- Figure 1. The Chinese Symbol for Crisis (taken from Ulmer et al., 2015) ........................................ 5
- Figure 2. Rally-Effect Observed in U.S. Crises (Hetherington & Nelson, 2003) .................. 24
- Figure 3. Model of Charismatic Crisis Leadership (Jungbauer & Wegge, 2015) ............... 28
- Figure 4. Conceptualizations of Crisis Used in the Dissertation ........................................... 38
- Figure 5. Theoretical Perspectives for Investigating Crisis Leadership ................................. 43
- Figure 6. Hypothesized Model (Study 1 of the Dissertation) .......................................... 55
- Figure 7. Results of Structural Equation Modeling .......................................................... 66
- Figure 8. Interaction of LMX and Management Support for Patient Safety .................... 69
- Figure 9. Interaction of Identification and Codification of Patient Safety Regulations .... 69
- Figure 10. Hypothesized Model (Study 2 of the Dissertation) .......................................... 78
- Figure 11. Three-Way Interaction of Crisis, Leadership Style, and Self-Direction ....... 90
- Figure 12. Hypothesized Model (Study 3 of the Dissertation) .......................................... 101
- Figure 13. Interaction of Crisis Type and Leadership Style on Leader Evaluation .......... 115
- Figure 14. Interaction of Crisis Consequences and Leadership Style on Leader Evaluation 118
- Figure 15. Conditional Indirect Effects of Crisis Type on Leader Evaluation ................. 127
- Figure 16. Three-Way Interaction of Crisis Type, Leadership Style, and Self-Conception .. 128
- Figure 17. Integrated Crisis Leadership Model ................................................................. 141
Index of Tables

Table 1. Examples of Organizational Crises (Pearson & Clair, 1998) ........................................... 8
Table 2. Characteristics of Organizational Crisis (Sayegh et al., 2004) ........................................ 9
Table 3. Exemplary Definitions of Crisis According to Different Approaches .......................... 10
Table 4. Overview of Crisis Typologies Identified in the Literature ............................................ 12
Table 5. Characteristics of Abrupt and Cumulative Crises (Hwang & Lichtenthal, 2000) ..... 16
Table 6. Crisis Lifecycle Models and Implications for Crisis Leadership ................................. 19
Table 7. Charismatic Crisis Rhetoric and Sample Quotations (Bligh et al., 2004a) .......... 32
Table 8. Crisis Conceptualizations and Associated Definitions ............................................. 39
Table 9. Theoretical Framework of the Dissertation and Assumptions of the Crisis Stages ... 41
Table 10. Comparison of Relational, Motivational, and Functional Leadership Perspectives 46
Table 11. Overview of the Studies of the Dissertation .......................................................... 47
Table 12. Research Objectives of the Dissertation and Associated Research Questions .... 48
Table 13. Overview of the Research Program ........................................................................... 50
Table 14. Means, Standard Deviations, and Correlations among Study Variables ............. 65
Table 15. Comparison of Model Fit Indices .............................................................................. 66
Table 16. Distribution of Participants to Experimental Conditions ........................................... 83
Table 17. Means, Standard Deviations, and Correlations among Study Variables ............. 88
Table 18. Results of ANCOVA when Predicting Performance .............................................. 89
Table 19. Means, Standard Deviations, and Correlations among Study Variables (Study 1) 114
Table 20. Results of ANCOVA when Predicting Leader Evaluation (Study 1) .................. 114
Table 21. Means, Standard Deviations, and Correlations among Study Variables (Study 2) 117
Table 22. Results of ANCOVA when Predicting Leader Evaluation (Study 2) ................. 118
Table 23. Means, Standard Deviations, and Correlations among Study Variables (Study 3) 124
Table 24. Moderated Mediation Analyses Predicting Leader Evaluation (Study 3) ............ 125
Table 25. Conditional Direct and Indirect Effects of Moderated Mediation (Study 3) .... 126
Table 26. Key Findings of the Studies of the Dissertation ..................................................... 140
Table 27. Unique Contributions of the Current Research ...................................................... 149
Abstract (English)

Crisis represents an important contextual variable in the leader-follower relationship. Never is it as important as in times of “shock” when followers experience intense uncertainty and seek for sources of protection and guidance, that leaders are required to step in and find appropriate ways to alleviate fears, restore a sense normalcy, and maintain effective functioning. Over the years, studies from multiple disciplines have accumulated to a large body of literature on the topic of crisis leadership, informing the current understanding of how crises can be defined and the role of leadership in steering followers through them. However, despite a vast empirical base, important aspects in the analysis are missing, leaving the field to suffer from three fatal flaws. First, insights into the precise working of crisis leadership phenomena have remained restricted as the majority of existing studies limit their investigation to isolated and coarsely conceptualized crises. Second, past research efforts have focused on acute crisis management as the solitary leadership function, disregarding the potentially insightful study of crisis leadership across different stages of the crisis lifecycle. Third, a problematic imbalance is observable in the field that overemphasizes the analysis of particular leadership theories (i.e., charismatic-transformational leadership) to the neglect of testing the effectiveness of other leadership approaches as crisis responses. Altogether, there has been no effort to investigate crisis leadership in a systematic and integrative manner that acknowledges the breadth of what both the notions of crisis and crisis leadership encompass.

This dissertation addresses these issues with the objective of gaining novel insights on the effectiveness of different leadership styles in different crisis contexts. Synthesizing the large and disparate body of literature of crisis leadership, the current work applies theories from the safety sciences, small group research, and the management field to widen the scope of previous analyses. Specifically, it develops a theoretical framework that integrates the insights gained from these domains by utilizing a tripartite crisis lifecycle approach, identifying the stages of pre-crisis, crisis, and post-crisis, as the basis for further study. Based on these stages, the notion of crisis is expanded by conceptualizing it in terms of (precursory) critical incidents, (acute) team crises, and (fully manifested) organizational crises. The framework broadens the research perspective by recognizing that prevention, intervention, and resolution of crisis are equally important functions of crisis leadership. Using this framework as a departure point for empirical investigation, relationship-based, motivation-based, and functionally-based leadership approaches are examined across the crisis stages in three empirical studies.
Study 1 focuses on the pre-crisis stage and examines how relationship-oriented leadership forms support the preventive function of crisis leadership by promoting the reporting of critical incidents. Building on social exchange and social identity theory, this study disentangles how leader-member exchange (LMX) influences reporting of incidents in healthcare organizations through two different mechanisms. Using survey data of 15 hospitals in Germany ($N = 436$) and structural equation modelling, it reveals that LMX increases both reporting-specific trust and organizational identification of employees, which in turn positively affects reporting of incidents. Furthermore, top management support is found to moderate the link between LMX and reporting-specific trust, indicating a compensatory effect of LMX for followers who perceive management support to be low. In addition, codification of safety regulations is found to moderate the link between organizational identification and reporting of incidents, indicating that the institutionalization of safety norms through a strong follow-through of the organization facilitates reporting for highly-identified employees. The findings of Study 1 demonstrate that crisis leadership can be enacted at both the supervisory and top management level and illustrate that the resulting increase of followers’ crisis preventive behaviour can be motivated from different sources.

Study 2 focuses on the crisis stage and examines how motivational leadership approaches aid the intervention function of crisis leadership by influencing follower performance in team crises. This study extends charismatic leadership research by identifying boundary conditions under which charismatic leadership in teams does not improve but can even hurt follower performance. Specifically, it proposes that while charismatic leadership generally leads to higher performance in team-based settings, the occurrence of a team crisis decreases performance. In addition, the follower attribute of self-direction is hypothesized to interact with charismatic leadership and team crisis such that charismatic leadership adversely impacts performance in a team crisis if followers’ self-direction is high rather than low. The theoretical propositions are tested in a laboratory setting that uses the cover story of a brainstorming competition ($N = 88$) intended to promote the sales of controversial consumer products, and experimentally manipulates team crisis in the form of value-based critical team events and leadership in the form of a rhetoric-based charismatic crisis intervention. The findings support the propositions of the three-way interaction. In sum, Study 2 provides first experimental evidence that charismatic leadership can have negative performance effects in specific types of team crises, if such leadership is enacted on highly self-directed followers.
Study 3 focuses on the post-crisis stage and examines how functional leadership approaches assist the resolution function of crisis leadership in different types of organizational crisis. This study proposes that different crisis situations necessitate alternative leadership styles, which may additionally depend on follower characteristics. To this effect, it examines the interplay of (a) crisis types (sudden vs. gradual) with (b) leadership styles (pragmatic vs. charismatic), and (c) follower characteristics (pragmatism vs. idealism), hypothesizing favourable leader evaluations based on a principle of fit. The proposed relationships are tested in three experimental substudies (Ns = 62, 49, 204). Substudy 1 shows that pragmatic leadership is evaluated more favourably than charismatic leadership in gradual (vs. sudden) crises. Substudy 2 identifies the time horizon of crisis consequences as a further boundary condition and highlights that charismatic leadership can, conversely, be evaluated more favourably than pragmatic leadership if crisis consequences are perceived to manifest in the distant (vs. in the near) future. Substudy 3 replicates and extends the findings of Substudy 1 by providing evidence that the positive effects of pragmatic leadership are mediated by collective crisis efficacy and that this effect is enhanced for individuals high in pragmatism. The results of Study 3 indicate that both pragmatic and charismatic leadership represent a potentially effective approach to crisis leadership; however, their effectiveness depends on the specific crisis circumstances and the expectations that different types of followers have towards the ideal crisis leader.

Combined, the findings of the three studies offer novel theoretical conclusions that are integrated in an overarching model of crisis leadership. This model advances four propositions concerning leadership in times of crisis related to (1) the formation of the leader-follower-relationship as a basis for crisis leaders’ social influence attempts, (2) the relevance of context factors found in the organizational environment, the individual follower, and the crisis itself, (3) the specific mechanisms that underlie the crisis leadership process, and (4) the different domains of organizational life that are affected by crisis leadership.

The empirical studies contribute to research in unique ways. Study 1, in departure from research on organizations that have already achieved the goal of being “crisis-prepared” (i.e., high-reliability-organizations), extends the analysis to the healthcare sector by linking ideas and insights from the safety sciences with those from organizational behavior research. It tests a dual-process model of LMX that advances the social exchange and social identity literature and provides insights on how supervisory leadership interacts with higher level leadership functions in preventing crisis escalation. Study 2, in contrast to previous research on charismatic crisis leadership which has primarily found positive effects in large-scale
crises, detects potentially negative effects at the team level. By applying a novel operationalization of crisis in the form of critical team events and considering the individual difference variable of self-direction, it adds to the event-based crisis literature and answers scholarly calls for a more follower-centric view of leadership. Study 3 takes up a new development in the leadership field by experimentally investigating pragmatic leadership approaches in a crisis context for the first time. It builds on a theoretically established, but as of yet empirically unexplored crisis typology in order to gain novel insights into the fit between crisis type, leadership style, and follower characteristics, and identifies boundary conditions in a moderated-mediation framework that simultaneously recognizes collective crisis efficacy as an important mechanism.

Taken as a whole, the dissertation’s primary contribution is that it develops and empirically tests a theoretical framework that uniquely integrates multiple crisis conceptualizations situated at different stages of the crisis lifecycle with important, so far disregarded leadership approaches. In doing so, the current work informs the understanding of crisis leadership also from a practical point of view: The findings highlight the importance of leader adaptability and point out concrete ways of selecting and training leaders for assignment in crisis contexts. By virtue of a solid understanding of the nature of a crisis and its specific leadership requirements, crisis leaders can be better prepared to effectively engage their followers in different crisis situations with the aim of achieving desired outcomes despite difficult circumstances.
Abstract (German)


Krise durch die Konzeptualisierung als kritische Ereignisse (Vorläufer einer Krise), Teamkrise (akuter Zustand einer Krise) und Organisationskrise (volle Manifestation einer Krise) ausgeweitet. Das Rahmenmodell erweitert die Forschungsperspektive durch die Erkenntnis, dass Prävention, Intervention, und Resolution der Krise gleichermaßen wichtige Funktionen der Krisenführung sind. Mit diesem Rahmenmodell als Ausgangspunkt für die empirische Untersuchung werden sodann beziehungsorientierte, motivationsbasierte, und funktionsbasierte Ansätze der Führung entlang den Krisenphasen in drei empirischen Studien untersucht.

Studie 1 konzentriert sich auf die Phase vor dem Eintreten der Krise und untersucht, wie beziehungsorientierte Formen der Führung die präventive Funktion der Krisenführung durch die Förderung des Meldens von kritischen Ereignissen unterstützen. Basierend auf der sozialen Austausch- und sozialen Identitätstheorie zeigt diese Studie auf, wie Leader-Member Exchange (LMX) auf das Melden von kritischen Ereignissen im Gesundheitswesen über zwei verschiedene Mechanismen wirkt. Unter Nutzung von Fragebogendaten aus 15 Krankenhäusern in Deutschland ($N = 436$) und mittels Strukturgleichungsanalyse zeigt sich, dass LMX sowohl das den Meldestrukturen entgegengebrachte Vertrauen sowie die organisationale Identifikation der Mitarbeiter erhöht, was sich wiederum positiv auf das Melden von kritischen Ereignissen auswirkt. Darüber hinaus zeigen die Befunde, dass Unterstützung vonseiten des Top-Managements die Beziehung zwischen LMX und Vertrauen moderiert, was auf eine kompensatorische Wirkung von LMX für Geführte hinweist, die eine geringe Management-Unterstützung wahrnehmen. Außerdem wird aufgedeckt, dass die Verschriftlichung von Sicherheitsrichtlinien die Beziehung zwischen organisationaler Identifikation und dem Melden von kritischen Ereignissen moderiert, was vermuten lässt, das die Institutionalisierung von Sicherheitsnormen im Sinne einer hohen Implementierungstiefe organisationaler Maßnahmen das Meldeverhalten für hoch identifizierte Mitarbeiter verbessert. Die Ergebnisse von Studie 1 zeigen, dass Krisenführung sowohl auf der Vorgesetzten- als auch der Top-Management-Ebene stattfinden kann und veranschaulicht, dass die daraus resultierende Anregung der Krisenpräventionsbemühungen der Geführten aus verschiedenen Quellen motiviert sein kann.

Studie 2 konzentriert sich auf die akute Krisenphase und untersucht, wie motivationale Führungsansätze die Interventionsfunktion der Krisenführung durch Beeinflussung der Geführtenleistung in Teamkrisen fördert. Diese Studie erweitert die Literatur zur charismatischen Führung und identifiziert Randbedingungen, unter denen charismatische Führung in Teams die Leistung von Geführten nicht verbessert, sondern sogar verschlechtert.

Studie 3 konzentriert sich auf die Phase nach dem Eintreten der Krise und untersucht, wie funktionale Führungsansätze die Krisenresolution in unterschiedlichen organisationalen Krisen unterstützen. Diese Studie nimmt an, dass unterschiedliche Krisensituationen alternative Führungsstile erfordern, was zusätzlich von den Eigenschaften der Geführten abhängt. Zu diesem Zweck untersucht sie das Zusammenspiel von (a) Krisentypen (plötzlich vs. graduell) mit (b) Führungstilen (pragmatisch vs. charismatisch) und (c) Gelehrtenmerkmalen (Pragmatismus vs. Idealismus) und stellt die Hypothese auf, dass Führungskräfte bei Passung dieser Faktoren vorteilhaft bewertet werden. Die theoretischen Annahmen werden in drei experimentellen Teilstudien getestet \((N_1 = 62, N_2 = 49, N_3 = 204)\). Teilstudie 1 zeigt, dass pragmatische Führung im Vergleich zu charismatischer Führung als effektiver in graduellen (vs. plötzlichen) Krisen evaluiert wird. Teilstudie 2 identifiziert den Zeithorizont von Krisenfolgen als weitere Randbedingung und hebt hervor, dass charismatische Führung umgekehrt besser als pragmatische Führung bewertet werden kann, wenn die Krisenfolgen als weit entfernt in der Zukunft (vs. nah in der Zukunft) wahrgenommen werden. Teilstudie 3 repliziert und erweitert die Befunde von Teilstudie 1 und erbringt den Nachweis, dass die positiven Effekte pragmatischer Führung durch kollektive, krisenbezogene Selbstwirksamkeit vermittelt wird und dass dieser Effekt für Personen mit hoher pragmatischer Grundausrichtung stärker ausfällt. Die Ergebnisse von Studie 3 zeigen, dass sowohl pragmatische als auch charismatische Führung einen potenziell wirksamen Ansatz der
Krisenführung darstellen; allerdings hängt deren Wirksamkeit von den spezifischen Krisenbedingungen sowie den Erwartungen ab, die unterschiedliche Geführte von dem idealen Krisenführer haben.

In der Gesamtheit lassen sich durch die Ergebnisse der drei Studien neue theoretische Schlussfolgerungen ziehen, die in einem übergreifenden Modell der Krisenführung integriert werden. Dieses Modell trifft vier Aussagen über das Führen in Krisenzeiten in Bezug auf (1) den Aufbau der Beziehung zwischen Führungskraft und Geführten als Grundlage für soziale Einflussversuche seitens des Krisenführers, (2) die Relevanz von Kontextfaktoren im organisationalen Umfeld, in der Person des Geführten, und der Krise selbst, (3) die spezifischen Mechanismen, die dem Prozess der Krisenführung zugrunde liegen, und (4) die verschiedenen Bereiche der organisationalen Lebenswelt, die von Krisenführung berührt werden.

1. **Introduction**

1.1 **Relevance of the Topic**

In today’s world that is growing increasingly complex at a fast pace, crises strike frequently and unexpectedly. And when they do, they hit the afflicted organization and its members hard, often with devastating effects. The collapse of Lehman Brothers, BP’s Deepwater Horizon oil spill, the Volkswagen emission scandal – these are some of the more notable examples of crisis which show that, on the one hand, no organization is immune to crisis; and on the other hand, what precedes the organizational breakdown is in many cases a leadership breakdown. Indeed, resulting not least because of the intense public scrutiny witnessed in the above cases, confronting questions can be posed about the role of leadership: How can leaders prevent crises from happening? What should leaders do once a crisis has struck? And how can leaders resolve it?

While the aforementioned crises have – supported by extensive media coverage – propelled both corporate and political attempts to find answers to these questions, it is important to note that beyond these examples of large-scale organizational crises that require attendance of top management, crises can come in many other shapes and sizes. For instance, crises could be constituted by incidents that function as precursors of a crisis or specific types of critical situations that occur in teams. Though different in their magnitude, these cases have in common that they present managers with a likewise significant challenge. The challenge, as the current dissertation will argue, lies not just in establishing the right processes in order to avoid these crises from occurring in the first place (managing crisis) or in formulating appropriate crisis responses in order to restore trust of stakeholders (communicating crisis) – it also lies in what is at the very heart of the notion of leadership: leading people.

Leaders have the responsibility of leading people not just through, but also before and after a crisis. Because individuals, with their decisions and actions, bring organizations to life and influence how crises are managed, what determines how crises are prevented, dealt with, and ultimately resolved, is the extent to which leadership has succeeded in giving followers appropriate direction in all stages of the crisis lifecycle. In light of these remarks, the questions phrased above can be reformulated with the aim of recognizing leadership as a true resource in times of crisis: How can leaders encourage followers to do their best to prevent crises from happening? How can leaders motivate followers when a crisis strikes? And how can leaders instill efficacy in followers in believing that the crisis will be successfully resolved? The current research will attempt to answer these questions.
1.2 Research Objectives

Crisis represents an important contextual variable in the leader-follower relationship (Boal & Hooijberg, 2001; Osborn, Hunt, & Jauch, 2002; Porter & McLaughlin, 2006; Shamir & Howell, 1999). Over the years, a large number of studies from multiple disciplines as diverse as the safety sciences, team research, or crisis management, have accumulated to a large body of literature on the topic of crisis leadership (Morgeson & DeRue, 2006; Morgeson, Mitchell, & Liu, 2015; Pearson & Clair, 1998; Pearson & Mitroff, 1993; Perrow, 1984; Reason, 1997; Weick, 1995). However, despite the scholarly recognition of the importance of studying this subject and a large empirical base of studies to account for this, so far, there has been no effort to investigate crisis leadership in an integrative manner that acknowledges both (1) the breadth of what the notion of crisis encompasses and (2) the different styles leaders can apply to lead followers through different stages of crisis and how their effectiveness may vary depending on specific features of crisis.

More specifically, even though numerous definitions of crisis exist, there has been no published research that investigates leadership effects across different crisis conceptualizations. Likewise, from the multitude of leadership theories that exist, only few of them have been empirically accounted for when attempting to predict the effectiveness of crisis leadership interventions, even though there are compelling reasons to assume that certain leadership styles may be more appropriate than others for different crisis conditions (Boal & Hooijberg, 2001; Eggleston & Bhagat, 1993; Lord, Brown, Harvey, & Hall, 2001; Mumford, 2006). This dissertation argues that by adopting a multi-angle view which connects different crisis conceptualizations to existing gaps of current leadership theory, novel theoretical insights can be gained about the effectiveness of different leadership styles as a means of preventing, intervening in, and resolving crises.

The purpose of this dissertation is to deepen the current understanding of leadership in times of crisis and its effects on followers. The specific aims of this work are fourfold:

1. The development of a theoretical framework of crisis leadership using different conceptualizations of crisis across stages of the crisis lifecycle.
2. The empirical examination of different leadership styles and their effects on follower outcomes in these crisis stages.
3. The identification of organizational, individual, and crisis-related moderators that act as boundary conditions of these relationships.
4. The identification of associated underlying mechanisms.
To achieve this purpose, the current work integrates the multitude of extant findings from different domains into an overarching framework. A tripartite crisis lifecycle model with the stages of *pre-crisis, crisis, and post-crisis* provides the foundation for organizing the elements of the proposed research. Based on this model, the dissertation framework contributes to extant literature in the following ways. First, it widens the scope of analysis by conceptualizing crisis in terms of *critical incidents, team crisis, and organizational crisis*. Second, in an attempt to extend past investigations that have focused on the analysis of single functions of crisis management, the framework takes on a comprehensive view by considering the crisis leadership functions of *prevention, intervention, and resolution*. Third, this framework identifies specific requirements of crisis leadership across the three crisis stages that have not been attended to by prior research. As will be shown, the existing body of knowledge can benefit by studying crisis leadership across the stages from a *relationship-based, motivation-based, and functionally-based* leadership perspective.

### 1.3 Structure of the Dissertation

Chapter 2 establishes the theoretical foundation of the dissertation by introducing the concept of crisis along with common definitions, giving an overview of crisis types and crisis stages, and providing an operational definition of crisis leadership. Chapter 3 summarizes the existing body of literature on crisis leadership by presenting insights from the political field and detailed findings from the psychological leadership literature.

Chapter 4 presents the research program of the dissertation. It first draws interim conclusions from the preceding chapters by identifying research gaps and leverage points that warrant further research efforts in the field of crisis leadership. Then, it develops a conceptual framework of crisis leadership that serves as a theoretical basis for three empirical studies. This framework places different conceptualization of crisis in the context of a crisis lifecycle model and links them to different leadership theories, thereby offering a novel vantage point for investigating the topic of crisis leadership. In closing, the chapter provides an overview of the overall research program, illustrates how the three empirical studies are situated in it, and outlines their unique theoretical and methodological approaches.

Chapters 5 through 7 present the three empirical studies in detail, while Chapter 8 discusses their findings. Here, the three individual studies are summarized and integrated into an overarching model of crisis leadership. Both theoretical and practical implications are derived from the combined studies. Also, limitations and strengths of the dissertation are pointed out along with general future research suggestions and a closing statement.
2. Conceptual Clarifications

This chapter introduces the concept of crisis by tracing the historical evolution of the term and presenting scholarly definitions. Next, existing models of crisis types and crisis stages are reviewed in order to sensitize the reader for the later to be established conceptualizations of crisis in the dissertation framework. Then, the concept of crisis leadership is explained by distinguishing it from the concepts of crisis management and crisis communication. The chapter leads to an operational definition of crisis leadership as the basis for the dissertation’s research program.

2.1 Crisis Definitions

Historically, the word “crisis” is derived from the Greek krisis, meaning “decision” (Pauchant & Douville, 1991). It denotes “moments of truth when the significance of men and events were brought to light” (O’Connor, 1989, p. 54). In general terms, crisis has been described as an event that can be a “turning point for better or worse” (Carroll, 1989, p. 492). The ambivalence regarding the outcome of a crisis is mirrored in a commonly used motivational metaphor based on the Chinese translation of crisis, whose two characters mean “danger” and “opportunity” (Ulmer, Sellnow, & Seeger, 2015) (see Figure 1). The development of the modern concept of crisis traces back to the medical field where it describes a fatally dangerous health condition from which an organism cannot recover without permanent damage, external intervention, or restructuring (O’Connor, 1989). This understanding was then extended to other domains. At present, the academic notion of crisis is a vast territory, characterized by multiple interdisciplinary perspectives that offer no generally accepted definition of crisis, highlighting the inherent construct ambiguity in the academic discourse (Reilly, 1993).

Figure 1. The Chinese Symbol for Crisis (taken from Ulmer et al., 2015)
In the following, an overview of the multitude of crisis definitions will be given by categorizing them into three general approaches. The first approach views crises from a *system-based* perspective and focuses on the interaction of human and technical factors that helps explain the genesis of industrial and environmental accidents. The second approach views crises from a *team-based* perspective and examines different types of events that threaten effective functioning in a small group setting. The third approach views crises from an *organization-based* perspective and emphasizes the management of crises that impact whole organizations and their stakeholders.

Certainly, the categorization of crisis definitions into these three approaches is not unequivocal and conceptual overlaps of the constituent attributes of definitions across these approaches are likely. However, for the purposes of this dissertation, this categorization is made for three reasons. First, as will be outlined in detail on the following pages, these approaches reflect the broad research streams that have explicitly attended to the study of crisis in the past, significantly shaped its current understanding, and still stimulate the ongoing interdisciplinary discourse on the topic today. Second, as some scholars have suggested, events can be viewed at different levels of specificity and span, for instance, societal, organizational, and group levels-of-analysis (Cutting, 1981; Hoffman & Lord, 2013). Building on this assumption, the three approaches likewise reflect different levels-of-analysis and thus allow for a comprehensive inspection of crisis leadership phenomena. Indeed, leader crisis sensemaking activities have been suggested to be necessary in the wake of a crisis at any of these levels (Maitlis & Sonenshein, 2010; Morgeson, DeRue, & Karam, 2010). Third, the categorization into these three approaches fulfils the aim of sensitizing the reader for the theoretical framework of this dissertation which relates the system-based, team-based, and organization-based approaches to different crisis conceptualizations with specific crisis leadership requirements. Combined, these aspects form a backdrop for the three empirical studies of the current research program. This will be explained in more detail in Chapter 4.

The *system-based* approach is likely the most important research stream in the crisis literature in terms of its contribution towards the understanding of how crises come into being. Unique to this approach is that crises are seen as the result of inherent vulnerabilities of complex systems (Reason, 1997, 2000; K. H. Roberts, 1989, 1990a, 1990b; Weick, 1988). Crisis scholars in this group often focused their research efforts on the prevention of crisis in industries that involve hazardous and complex technologies which are prone to rapid proliferation of errors and escalation to a crisis (Perrow, 1984; Shrivastava, 1991). Common examples include large-scale accidents such as the disasters of Chernobyl, Bhopal, Exxon
Valdez, or Mann Gulch (Weick, Sutcliffe, & Obstfeld, 1999; Weick, 1988, 1993). The system-based approach is rooted in a social-constructionist basis that emphasizes the importance of sensemaking, i.e., the ongoing interpretation and retrospective making of meaning in such large-scale accidents (Weick, Sutcliffe, & Obstfeld, 2005; Weick, 2001). Research on these crises has led to insights on the operational processes of high-reliability-organizations (HROs), i.e., organizations that are exposed to high levels of risk due to highly complex and tightly coupled systems, yet manage to achieve an exceptional safety record, for example, naval aircraft carriers or air traffic control systems (Reason, 2000). Accordingly, the definitions of crisis offered by this research stream are predominantly embedded in the safety sciences literature. In his seminal article, Enacted Sensemaking in Crisis Situations, Karl Weick defines crises as “low probability / high consequence events that threaten the most fundamental goals of an organization. Because of their low probability, these events defy interpretations and impose severe demands on sensemaking” (Weick, 1988, p. 305).

Similarly, Pauchant and Mitroff (1992) define crisis as “a disruption that physically affects a system as a whole and threatens its basic assumptions, its subjective sense of self, its existential core” (Pauchant & Mitroff, 1992, p. 12). For Shrivastava (1993), crises denote “disruptive situations characterized by urgency of decision, large impacts, and system restructuring” (Shrivastava, 1993, p. 25). As can be seen, system-based definitions share similar attributes which focus on the genesis of crises, their widespread effects on an organization’s viability, and the implicit objective of achieving high reliability, alluding to the preventive role that crisis leadership can fulfil.

The team-based approach is associated with research that relates crisis to disruptive events that occur in a small group context. In early crisis research, Hamblin (1958) defined a team crisis as “an urgent situation in which all group members face a common threat” (Hamblin, 1958, p. 322). In more general terms, any type of “work situation causing stress and anxiety” can be defined as a team crisis (Pillai & Meindl, 1998, p. 653). Studies in the field of event-based research have created a number of related terms, ranging from “emergencies” (Latané & Darley, 1969), to “negative events” (Lavallee & Campbell, 1995), to “shocks” (T. W. Lee & Mitchell, 1994). The notion of team event criticality reflects “the degree to which an event is important, essential, or a priority to [a] team” (Morgeson & DeRue, 2006, p. 273). Accordingly, critical team events “become the central focus of teams and team leaders until the event is resolved. Thus, because critical events are threatening to team functioning, leaders are likely to spend considerable amounts of time intervening in the team when critical events occur” (Morgeson & DeRue, 2006, p. 273). Event System Theory
(Morgeson et al., 2015) offers a more elaborate specification of team-related crises by introducing the concept of event strength, comprising the components of (a) criticality as described above, (b) novelty, i.e., the extent to which an event is different from the past, and (c) disruption, i.e., the extent to which an event represents a discontinuity in the environment (Morgeson et al., 2015). Critical team events can involve issues related to, among others, performance (e.g., operating procedures), personnel (e.g., new team members), task resources (e.g., lack of resources), safety (e.g., injuries), or disagreements (e.g., intragroup conflict) (Morgeson & DeRue, 2006). In sum, definitions of the team-based approach are centered on disruptions that impose serious constraints on the functioning of a team and its members up to the point of necessitating leadership intervention.

The *organization-based* approach complements the previous approaches with a more management-oriented perspective that positions business entities and their stakeholders at the center of analysis. Common examples of organizational crises are listed in Table 1. Hermann (1963) originally introduced the concept of crisis to the management field and defined organizational crisis as an event that “threatens high-priority values of the organization, presents a restricted amount of time in which a response can be made, and is unexpected or unanticipated by the organization” (Hermann, 1963, p. 64). Reilly (1993) offered a similar definition that clearly delineates crisis characteristics and how they can be differentiated from possible analogues: “a situation which is harmful and disruptive (versus a turning point or an opportunity); is of high magnitude (versus a threat or a problem); is sudden, acute, and demands a timely response (versus decline); and is outside the firm’s typical operating frameworks (versus routine […]” (Reilly, 1993, p. 116).

**Table 1.** Examples of Organizational Crises (Pearson & Clair, 1998)

<table>
<thead>
<tr>
<th>Extortion</th>
<th>Security breach</th>
<th>Executive kidnapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostile takeover</td>
<td>Product boycott</td>
<td>Terrorist attack</td>
</tr>
<tr>
<td>Product tampering</td>
<td>Malicious rumor</td>
<td>Material hazards</td>
</tr>
<tr>
<td>Vehicular tampering</td>
<td>Natural disaster</td>
<td>Personnel assault</td>
</tr>
<tr>
<td>Infringement</td>
<td>Bribery</td>
<td>Assault of customers</td>
</tr>
<tr>
<td>Environmental spill</td>
<td>Information sabotage</td>
<td>Product recall</td>
</tr>
<tr>
<td>Computer tampering</td>
<td>Workplace bombing</td>
<td>Counterfeiting</td>
</tr>
</tbody>
</table>
Pearson and Clair (1998) provided one of the academically most established definitions of organizational crisis, describing it as “a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly” (Pearson & Clair, 1998, p. 60). Organization-based definitions often explicitly include stakeholder aspects, for instance, by delineating that crises may damage a firm’s reputation and image in the public (James & Wooten, 2005), generally threaten important expectancies of stakeholders (Coombs, 2007), or differentially impact different groups of stakeholders, i.e., internal (e.g., executives, employees), external (e.g., suppliers, customers), and distal stakeholders (e.g., local communities, media) (Pearson & Sommer, 2011). Bundy and Pfarrer (2015) offer a comprehensive definition, describing organizational crisis as “an unexpected, publicly known, and harmful event that has high levels of initial uncertainty, interferes with the normal operations of an organization, and generates widespread, intuitive, and negative perceptions among evaluators” (Bundy & Pfarrer, 2015, p. 350). Taken together, organization-based definitions are characterized by a strong management focus which primarily entails implications for leaders’ crisis resolution activities aimed at placating stakeholders. Sayegh, Anthony, and Perrewé (2004) identified six characteristics that are commonly included in organization-based definitions of crisis (see Table 2).

The categorization of system-based, team-based, and organization-based approaches yields distinct definitions of crisis that provide a starting point for the empirical investigation of crisis leadership in this dissertation.

Table 3 summarizes these definitions and highlights the unique aspects of each of the approaches.

<table>
<thead>
<tr>
<th>Table 2. Characteristics of Organizational Crisis (Sayegh et al., 2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) high ambiguity with unknown causes and effects</td>
</tr>
<tr>
<td>(2) low probability of occurring</td>
</tr>
<tr>
<td>(3) involving an unusual and unfamiliar event</td>
</tr>
<tr>
<td>(4) requiring a rapid response</td>
</tr>
<tr>
<td>(5) posing a serious threat to the survival of the organization and its stakeholders</td>
</tr>
<tr>
<td>(6) presenting a dilemma necessitating a decision that will result in positive/negative change</td>
</tr>
<tr>
<td>Approach</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Team-based</td>
</tr>
<tr>
<td>Organization-based</td>
</tr>
</tbody>
</table>
2.2 Crisis Types

Next to the multitude of different crisis definitions evident in the literature, there are likewise numerous typologies that attempt to classify crises across different dimensions, typically by identifying general domains within which the crises occur. Lerbinger (1986, 2012) distinguishes crises of the physical environment (e.g., natural disasters), of the human climate (e.g., terrorism), and of management failure (e.g., management misconduct). Similarly, Rike (2003) differentiates natural threats, technical hazards, and human activities and threats. Rosenthal and Kouzmin (1993) distinguish the domains of corporate versus public, national versus transnational, and natural versus man-made crises. Mitroff and Alpaslan (2003) distinguish between natural accidents (e.g., fires, earthquakes) and abnormal accidents that are the result of deliberate evil actions (e.g., bombings or kidnappings).

Over the years, scholars from different disciplines have developed more elaborate classification systems that aid the understanding of the multi-faceted nature of crisis by exemplifying how crises can be viewed from a practical perspective. The most prominent typologies, their practical emphasis, basic dimensions (the majority of typologies use a two-dimensional matrix that maps crisis types along two continua) and associated examples are listed in Table 4 and reviewed in the following (please note that the existing academic typologies predominantly relate to the organization-based crisis approach, cf. Chapter 2.1).
<table>
<thead>
<tr>
<th>Authors</th>
<th>Emphasis</th>
<th>1st Dimension and Manifestation</th>
<th>2nd Dimension and Manifestation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Crisis locus: external</td>
<td>Crisis characteristics: social</td>
<td>Sabotage by insiders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crisis locus: external</td>
<td>Crisis characteristics: technical</td>
<td>Hostile takeover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Crisis characteristics: social</td>
<td>Sabotage by outsiders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deniability of event: low</td>
<td>Identifiability of victims: diffuse</td>
<td>Product Safety Incidents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deniability of event: low</td>
<td>Identifiability of victims: concrete</td>
<td>Product Safety Incidents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identifiability of victims: diffuse</td>
<td>Scandals</td>
</tr>
<tr>
<td>Egelhoff &amp; Sen (1992)</td>
<td>Information-processing</td>
<td>Source of failure: relevant environment</td>
<td>Type of failure: technical</td>
<td>Industrial accidents</td>
</tr>
<tr>
<td></td>
<td>requirements of crises</td>
<td>Source of failure: relevant environment</td>
<td>Type of failure: sociopolitical</td>
<td>Strike by workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Source of failure: remote environment</td>
<td>Type of failure: technical</td>
<td>Natural disasters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Source of failure: remote environment</td>
<td>Type of failure: sociopolitical</td>
<td>Kidnapping of executive</td>
</tr>
</tbody>
</table>
Table 4 (continued). Overview of Crisis Typologies Identified in the Literature

<table>
<thead>
<tr>
<th>Authors</th>
<th>Emphasis</th>
<th>1st Dimension and Manifestation</th>
<th>2nd Dimension and Manifestation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Crisis origin: internal</td>
<td>Intentionality: unintentional</td>
<td>Accidents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crisis origin: external</td>
<td>Intentionality: intentional</td>
<td>Terrorism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crisis origin: external</td>
<td>Intentionality: unintentional</td>
<td>Boycotts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Build-up speed: cumulative</td>
<td></td>
<td>Strategic misalignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predictability: easy</td>
<td>Influenceability: hard</td>
<td>Chernobyl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predictability: hard</td>
<td>Influenceability: easy</td>
<td>Mann Gulch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predictability: hard</td>
<td>Influenceability: hard</td>
<td>9/11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coping strategy: cognitive</td>
<td>Organizational engagement: low</td>
<td>CEO retirement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coping strategy: conative</td>
<td>Organizational engagement: high</td>
<td>Labor unrest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coping strategy: conative</td>
<td>Organizational engagement: low</td>
<td>Transport failure</td>
</tr>
</tbody>
</table>
Shrivastava and Mitroff (1987) investigated the origins of crises with the aim of helping organizations to prevent potential crises and cope better with those that have occurred. Their framework views crises as being caused by the interaction of crisis locus, i.e., failures that originate inside the organization versus in their environments, and general crisis characteristics, i.e., failures that relate to technical-economic versus human-organizational-social factors, thus yielding four clusters of causes for crises. Pearson and Mitroff (1993) extended this framework and added the third dimension of degree of crisis severity, distinguishing between normal (e.g., product recalls) and severe crises (e.g., mega damage of industrial accidents). The Shrivastava and Mitroff (1987) and Pearson and Mitroff (1993) models are very influential typologies as they represent the earliest efforts to systematically categorize crises with the aim of drawing practical implications for the professional management of crises.

Marcus and Goodman (1991) offer a different approach to conceptualizing crisis types by examining relevant dimensions for crisis policy announcements to shareholders. Building on signaling theory by Spence (1973, 1974), the function of such announcements as “signals” to outside investors and effects on their reactions during crises can be examined. The crisis typology features the dimensions deniability of the event (describing whether causes are perceived as being under the control of the organization or not) and identifiability of victims (describing whether there are immediate, concrete victims or not). “Accidents” are examples for crises that are characterized by high deniability and high victim identifiability, while “scandals” are an example for crises with low deniability and difficult victim identifiability. As a third example, “product safety and health incidents” are positioned in-between accidents and scandals, as they represent moderate levels of deniability and identifiability. Marcus’ and Goodman’s framework offers implications for crisis managers when deciding which kind of signal (e.g., defensive or accommodative) to send to shareholders as a response to a crisis, contingent on its characteristics.

Egelhoff and Sen (1992) conceptualize crises as information-processing problems for organizations. Similar to Shrivastava and Mitroff (1987), they distinguish four cluster of crisis types mapped across the two dimensions of the source of failure, encapsulating the relevant environment (i.e., parts of the environment that the organization shares significant interdependency with) versus the remote environment (i.e., everything that lies beyond the relevant environment), and the type of failure, juxtaposing technical failures (i.e., failures that occur within the product and technology processes of the organization) and sociopolitical failures (i.e., failures that occur within the sociopolitical environment). Central to Egelhoff’s
and Sen’s framework is that different crisis types entail unique implications for the information-processing of organizations. For instance, in order to prepare for technical crises that lie in the remote environment, the organization will need to establish information-exchange channels with outside parties and ensure that processing of technical-oriented information is efficient.

Coombs (1995) classifies crises in terms of appropriate crisis response strategies aimed at appeasing stakeholders. Similarly to other crisis classifications, his framework first employs the internal-external dimension of crisis origin, reflecting whether the crisis originates from within the organization or outside of it. Building on attribution theory (Weiner, 1986), the second dimension is represented by the intentionality-continuum, reflecting the controllability of crises and thus, accountability to the organization in the public’s perception. Coombs (2004) later extended his framework and grouped the various crisis types into three clusters: The (1) victim cluster comprises crisis types with very low attributions of crisis responsibility that represent a mild reputational threat where organizations are viewed as “victims” of the crisis (e.g., natural disasters, rumors, product tampering, and workplace violence); the (2) accidental cluster comprises crisis types with minimal attributions of crisis responsibility that represent a moderate reputational threat where organizations are understood as not having purposefully caused the crisis (e.g., challenges, technical-error accident, and technical-error product recall); finally, the (3) intentional cluster comprises crisis types with strong attributions of crisis responsibility that represent a severe reputational threat where management has knowingly placed stakeholders at risk (e.g., human-error product recalls, human-error accidents, and organizational misdeeds). At the core of Coombs’ typology lies a stakeholder perspective that allows the design of appropriate crisis response strategies for specific crisis situations, as outlined in his influential Situational Crisis Communication Theory (SCCT) (Coombs & Holladay, 2002; Coombs, 1998, 2004, 2007a).

Hwang and Lichtenthal (2000) formulate a developmental model of crises. Building on the theory of punctuated equilibria in biology, according to which species experience little evolutionary change over a long period of time interspersed by short and rapid events of change (Gould & Eldredge, 1977), the authors posit that crises likewise differ in their intensity with which they spur organizations away from stasis, depending on their development speed. Consequently, two types crises exist: “abrupt crises that strike suddenly and catch management off-guard versus cumulative crises that accumulate stressors and eventually erupt” (Hwang & Lichtenthal, 2000, p. 131). Abrupt crises are exemplified by
events that require a fast response from the organization (e.g., the Tylenol recall by Johnson & Johnson) whereas cumulative crises may only manifest over an extended period of time with little response evoked from the organization (e.g., overlooking foreign competition over time) (Hwang & Lichtenthal, 2000). Several other authors have proposed a dynamic, developmental notion of crisis, which is reflected in similar descriptions of crisis as ordinary versus creeping (Rosenthal & Kouzmin, 1993), sudden versus smoldering (James & Wooten, 2005), Cobra-like versus Python-like (Seymour & Moore, 2000), or episodic versus continuous (T’Hart et al., 2001). Hwang's and Lichtenthal's (2000) typology is important because of its inclusion of a temporal perspective. It offers several implications concerning the prediction of follower reactions, e.g., abrupt crises are perceived as being beyond management control and thus require a different leadership response than cumulative crises which are perceived as being the explicit fault of the organization's management. Table 5 shows further characteristics.

Table 5. Characteristics of Abrupt and Cumulative Crises (Hwang & Lichtenthal, 2000)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Type of Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abrupt</td>
</tr>
<tr>
<td>Build-up speed</td>
<td>Rapid</td>
</tr>
<tr>
<td>Predictability</td>
<td>Low</td>
</tr>
<tr>
<td>Specificity</td>
<td>Focused</td>
</tr>
<tr>
<td>Crisis recognition</td>
<td>Clear</td>
</tr>
<tr>
<td>Trigger point</td>
<td>Specific events</td>
</tr>
<tr>
<td>Probability of occurrence</td>
<td>Time-constant</td>
</tr>
<tr>
<td>Misalignment with environment</td>
<td>One/few aspects</td>
</tr>
</tbody>
</table>

Gundel (2005) presents a preventive-oriented crisis typology which differentiates the dimensions of predictability (easy versus hard) and influenceability (easy versus hard), yielding four types of crises: (1) conventional crises are predictable and influenceable (i.e., similar crises have occurred in the past, allowing for anticipation of the crisis, and management theoretically has sufficient opportunity to avert the crisis); (2) unexpected crises
are unpredictable but influenceable (i.e., they are similar to the first category as decision-makers generally are able to mitigate the crisis, however, true crisis-preparedness cannot be achieved because the origin of the crisis is an anomaly that cannot be anticipated); (3) intractable crises are predictable but leave little room for influence (i.e., due to the characteristics of the system affected, preventive countermeasures cannot be applied); and (4) fundamental crises are both unpredictable and hardly influenceable, and therefore the most critical type of crises with enormous potential for damage (i.e., they refer to inexplicable natural or technological accidents, or incidents of a social nature that could not be foreseen but have irreversible consequences). Gundel’s framework is important in that it offers implications for decisions about potential countermeasures to crises (e.g., proactive versus reactive measures).

Jin and colleagues (Jin, Pang, & Cameron, 2007, 2012) developed the Integrated Crisis Mapping (ICM) model which, for the first time, incorporates emotional aspects in a crisis classification system. The authors argue that the public is likely to show different emotional reactions to different types of crises (i.e., anger, fright, anxiety, and sadness as primary emotions; guilt and shame as secondary emotions). Emotional reactions are mapped together with categorizations of crisis types along two continua, i.e., the public’s coping strategy and the degree of engagement of the afflicted organization in the crisis. The public’s coping strategy refers to two opposite poles: Based on Lazarus' (1991) differentiation of coping styles, these poles represent “1) cognitive coping – the public try to sort out a way of thinking or interpreting the meaning of the crisis with regard to their well-being, or 2) conative coping – the public try to manage the situation so as to alter a troubled relationship or to sustain a desirable one by taking actions or at least show their tendency of action” (Jin et al., 2007, pp. 90-91). Organizational engagement reflects the “intense, consolidated, sustained, and priority in allocation of resources to deal with the crisis” (Jin et al., 2007, p. 94) and ranges from low to high. For instance, organizational engagement is considered low if an organization, due to limited responsibility for the crisis, devotes few resources and exerts little effort towards resolving the crisis. In engaging in conative coping by taking action, the public may react with the emotion of anger towards this organizational response. Overall, the contribution of the ICM model for crisis literature lies in complementing existing typologies with a classification that explicitly considers the public’s emotional reactions and links it to the organization’s crisis management efforts.
2.3 Crisis Stages

Crisis is a dynamic concept with clearly identifiable stages of development; however, as with the crisis definitions and typologies reviewed above, the existing literature offers a number of different approaches to crisis lifecycle models. Fink (1986) offers one of the earliest models and distinguishes four phases using a medical illness metaphor: (1) prodromal (clues of a potential crisis to emerge); (2) acute (triggering event with attendant damage); (3) chronic (crisis effects linger on); and (4) resolution (clear signal that crisis is no longer a concern). Pearson and Mitroff (1993) provide a detailed model with five stages aimed at supporting the professional management of crisis: The (1) signal detection phase refers to the identification of early warning signals that presage the onset of a crisis; the (2) prevention and preparation phase involves all systematic activities and preventive measures that hinder critical incidents from developing into full-scale crises; the (3) damage containment phase refers to actions aimed at preventing localized crisis effects from spreading out to other parts of the organization; the (4) recovery phase involves short-term and long-term programs designed to support the return to normal operations; finally, the (5) learning phase concerns critical reflection of lessons learned from the crisis with the goal of decreasing the likelihood of crisis occurrence in the future.

While the crisis lifecycle models above differ in terms of their emphasis and level of detail – the Fink (1986) model is descriptive and outlines basic characteristics of the crisis, whereas the Pearson and Mitroff (1993) model is prescriptive and focuses on implications for crisis managers in more clearly specified stages – some similarities are evident between the models that can usefully be subsumed in a simplified three-stage model. A three-stage approach has been proposed by several scholars (Bloch, 2014; Coombs, 2007a; Guth, 1995; Hale, Dulek, & Hale, 2005; Ulmer, 2001), distinguishing the stages of (1) pre-crisis (prevention and preparation), (2) crisis (the actual response to the crisis), and (3) post-crisis (organizational actions that follow the crisis). For the purpose of the current research, this three-stage classification will be used as it has the advantage of accommodating insights from more detailed models while still providing sufficient macro-level generality (Coombs, 2007a).

Table 6 summarizes how the previous models are subsumed in the three-stage model and identifies key questions associated with each stage that signify the evolution from crisis management to crisis leadership (cf. James & Wooten, 2005). The associated crisis leadership roles presented in the table foreshadow the constituent parts of the dissertation’s theoretical framework which will be presented later.
<table>
<thead>
<tr>
<th>Stage</th>
<th>4-Stage Model (Fink, 1986)</th>
<th>5-Stage Model (Pearson &amp; Mitroff, 1993)</th>
<th>3-Stage Model (Coombs, 2007a)</th>
<th>Key Questions for Crisis Leadership (James &amp; Wooten, 2005)</th>
<th>Role of Crisis Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>Prodromal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signal detection</td>
<td></td>
<td>Pre-crisis</td>
<td></td>
<td>Has the organization’s culture developed a readiness mentality for responding to crisis?</td>
<td>Crisis prevention</td>
</tr>
<tr>
<td>Prevention and preparation</td>
<td></td>
<td></td>
<td></td>
<td>Does the organization acknowledge things that may be uncomfortable to confront?</td>
<td></td>
</tr>
<tr>
<td>During</td>
<td>Acute</td>
<td>Damage containment</td>
<td>Crisis</td>
<td>How to implement a strategy for limiting damage during a crisis? What message should be communicated to followers and how should they be communicated?</td>
<td>Crisis intervention</td>
</tr>
<tr>
<td>Chronic</td>
<td></td>
<td>Recovery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>Resolution</td>
<td>Learning</td>
<td>Post-crisis</td>
<td>What critical activities must leadership be engaged in to recover from the crisis? How will leadership communicate the end results of recovery?</td>
<td>Crisis resolution</td>
</tr>
<tr>
<td>Resolution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.4 Crisis Leadership

Both scholarly research as well as organizational practice often confounds crisis leadership with related terms that in some way or another involve leadership functions in the context of crises. Drawing a clear demarcation line between the terms of crisis management, crisis communication, and crisis leadership with regard to their empirical analysis is not always possible; however, the following distinctions can be made which provide for unique definitions and distinguishable emphases of these concepts.

Crisis management is defined as the “systematic attempt by organizational members with external stakeholders to avert crises or to effectively manage those that do occur” (Pearson & Clair, 1998, p. 61). Spanning the broad areas of crisis types, crisis phases, organizational systems affected, and stakeholder concerns, crisis management can be regarded as overall philosophy of handling crises (Pearson & Mitroff, 1993; Pheng, Ho, & Ann, 1999). Crisis communication is defined as “the collection, processing, and dissemination of information required to address a crisis situation” (Coombs, 2010, p. 20). Crisis communication is concerned with informing and placating the public after a crisis has occurred and focuses on the description and prescription of crisis response strategies and image repair activities directed at stakeholders (Benoit, 1997; Coombs & Holladay, 2002; Coombs, 1995, 2007b).

While crisis management emphasizes developing systems to prevent and manage crises and crisis communication involves effective communication with key publics, crisis leadership can have two meanings that either emphasize (1) the traits of effective crisis leaders or (2) social influence processes (DuBrin, 2013; King, 2002). The trait perspective centers on the person of the crisis leader and is concerned with personal attributes, characteristics, and behaviors that are required for successful crisis leadership, e.g., compassion, charisma, or strategic thinking (DuBrin, 2013). The social influence perspective centers on the process of leading followers in a crisis context. A crisis leader is hereby defined as “a person who leads group members through a sudden and largely unanticipated, negative, and emotionally draining circumstance” (DuBrin, 2013, xi). This definition, however, is still narrow in that it does not capture the breadth of activities that are required from a crisis leader beyond leading followers through the acute stage of a crisis, i.e., it does not include crisis leadership activities for the time period before and after a crisis has occurred. Yet these periods are equally critical to attend to, as indicated by the previous section on crisis lifecycle models and their implications for crisis leadership.
While there exists no academically established definition of “crisis leadership” as crisis per se simply denotes a contextual factor within which leadership processes can take place (Porter & McLaughlin, 2006; Shamir & Howell, 1999), for the purpose of this dissertation, an operational definition of crisis leadership is presented. Building on the general notion of leadership which encompasses interactive processes that involve deliberate, social influence by an individual on other individuals with the purpose of achieving shared tasks in the context of a structured working situation (Wegge & von Rosenstiel, 2014), crisis leadership can be usefully conceptualized by adapting this definition to a crisis context which incorporates both the three approaches to defining crisis (cf. Chapter 2.1) as well as the crisis leadership roles derived from the three-stage model of the crisis lifecycle (cf. Chapter 2.3) outlined earlier:

Crisis leadership (definition):

“Interaction processes that involve deliberate, social influence exerted by an individual on other individuals with the purpose of preventing, intervening in, and/or resolving system-based, team-based, or organization-based crises.”
3. **Status Quo of Crisis Leadership Research**

With Chapter 2 having laid the foundation for a comprehensive understanding of the crisis concept, Chapter 3 reviews the existing empirical research on the topic of crisis leadership. The chapter starts with the *first empirical investigations* accounted for and shares insights from the political field that demonstrate some of the unique features of the leader-follower relationship in times of crisis. The scholarly examination continues from a psychological perspective by reviewing the literature on *charismatic leadership* in times of crisis. The large number of studies that exist in this area will be consolidated in a conceptual model that lays out the effects of crisis on charismatic leader emergence and its heightened influence on followers. Related to this stream of research, the findings on *charismatic crisis rhetoric* are summarized in a separate section, as this body of literature is comprehensive on its own and informs the understanding of follower effects from a different angle. The final section concerns research efforts that examine crisis leadership from a *social identity perspective*.

### 3.1 Rainfall and Politics: A First Approach to the Subject of Crisis Leadership

One of the earliest studies on the topic of crisis leadership was conducted by Marshall (1927) who surprisingly observed a relationship between rainfall levels and political change subsequent to presidential successions in the United States in a 100-year period, starting from 1824. Because low rainfall levels in the predominantly agricultural society of the time implied poor crops and thus an economic crisis, this study can be interpreted such that political leaders are likely voted out of office in times of crisis, giving way for followers’ preferences for new leadership. Using Marshall’s study as a starting point, Hamblin (1958) conducted an early laboratory study of crisis leadership in which he found that leaders indeed will be substituted by followers if they fail to successfully deal with a crisis (replacement hypothesis) and extended this with the finding that leaders are also likely to have more influence on followers in crisis than in non-crisis situations (centralization hypothesis). These findings serve as first indication that crises have unique effects on leadership phenomena.

Interestingly, besides insights gained from rainfall levels, the political realm has advanced the psychological understanding of crisis leadership from a different perspective. Mueller (1973) made the startling observation that public approval ratings of the government, particularly the head of state, tend to increase sharply in times of crisis. Denoted as the *rally
'round the flag effect, this phenomenon is likely to occur for events that (1) are international, (2) directly involve a nation and its head of state, and (3) are specific, dramatic, and sharply focused (Mueller, 1973). Mueller explains this effect in terms of a patriotic reflex, i.e., people rally behind their sovereign leader in times of crisis because he/she represents the nation’s unity and power and their rallying fulfills the desire of giving all needed support to the Commander-in-Chief who can resolve the crisis (Mueller, 1973). A significant example was provided by the September 11 terrorist attacks, immediately after which then President George W. Bush’s public approval ratings increased from a low 50 percent to an unprecedented value of almost 90 percent (Bligh et al., 2004a). Other historic examples include the public support of U.S.-Presidents observed during the Cuban Missile Crisis or Operation Desert Storm in the first Gulf War (Hetherington & Nelson, 2003) (see Figure 2). Because of the definition’s historical origin, the rally-effect has predominantly been studied with U.S.-Presidents. However, recent research has extended the analysis to other countries including Germany, France, Spain, and the United Kingdom (e.g., Chowanietz, 2010).

Figure 2. Rally-Effect Observed in U.S. Crises (Hetherington & Nelson, 2003)
While considerable empirical evidence on the rally-effect exists (Brody & Shapiro, 1991), research is still lacking important nuances in the analysis. For instance, there is a large variance in the magnitude of rally-effects that remains unexplained. Early research indicated the average strength of the rally-effect to be typically in the range of 5 to 7 percent (Kernell, 1978; J. R. Lee, 1977). However, the selection of events classified as crises in these studies has been a concern. Oneal and Bryan (1995) conducted a comprehensive review and used systematic inclusion criteria in their study of 41 foreign policy crises that the U.S. faced from 1950 to 1985, identifying a rather small mean change in presidents’ approval ratings of 1.4 percent, ranging from 0.9 percent for the opposition party to 2.2 percent for the president’s party. These findings indicate that the rally-effect is likely influenced by a multitude of factors such as economic circumstances, the political environment, or ideologically driven preferences that may affect the propensity to rally (M. A. Baum, 2002).

For the psychological study of crisis leadership, the rally-effect is important as it highlights the strong impact crises can have on followers’ experience and subsequent evaluation of their leader. Especially in crises with a high threat to personal survival, the rally-effect can be interpreted to reflect an expression of the human need to allay a deeply-rooted fear of death by submitting to a leader who can literally or symbolically deliver people from chaos and death (Landau et al., 2004). Alternatively, the rally-effect can be explained from an aggression-based perspective: Given the international scope of the crises, individual citizens may reflexively turn to their head of state as a way of deferring engagement in retribution and retaliation, which they themselves are not able to pursue (Lambert et al., 2010; Lambert, Schott, & Scherer, 2011).

The rally-effect can also be viewed through the lens of established leadership theories that will be discussed in the remainder of Chapter 3. Strong increases in public approval under crisis conditions may be a result of the enhanced susceptibility to a source of protection as represented by a charismatic leader (House, 1977; Madsen & Snow, 1991), see Chapter 3.2. The rally-effect may also be the result of the leader finding the “right words” in addressing followers’ concerns in times of crisis, highlighting the role of crisis rhetoric (Bligh et al., 2004a; Shamir, Arthur, & House, 1994), see Chapter 3.3. Lastly, the increase of public approval in times of crisis can be interpreted as a result of the leader being able to convey his/her embodiment of prototypical leader characteristics, thereby instilling trust in defending followers’ values against a common enemy, which reflects a social identity approach (Haslam, Reicher, & Platow, 2011; Hogg, 2001), see Chapter 3.4.
3.2 A Gift in Troubled Times: Charismatic Leadership in Times of Crisis

The rally-effect is indicative for the pronounced effects of crisis on followers in prompting them to seek sources of protection and implies that they likely perceive some kind of exceptional quality or ability of their leader in offering such protection. Charisma stems from Greek and means “divinely inspired gift” (Yukl, 1993). The notion of charisma in leadership studies is inextricably intertwined with Weber's (1947, 1968) original assertion that crisis is required for charisma to emerge. Specifically, Weber outlined five requirements of charisma, namely (1) a person who possesses extraordinary gifts (i.e., a charismatic leader), (2) a crisis or time of distress, (3) a set of ideas of the charismatic leader that offer a revolutionary solution to the crisis, (4) followers who are attracted to the miraculous qualities of the charismatic leader, and (5) the validation of the charismatic leader’s exceptional power through repeated successes (Weber, 1947). Leadership scholars later viewed crisis not necessarily as a strict requirement, but as a precipitating factor that facilitates the emergence of charisma (Conger & Kanungo, 1987; Shamir, House, & Arthur, 1993; Willner, 1984).

In more psychological terms, two lines of explanation can be drawn upon to explain the importance of crisis for charismatic leadership phenomena. The first line of explanation relates to the unique abilities of charismatic leaders that become evident in crisis situations. Crises offer leaders more opportunities to voice their proposals for radical change (Conger, 1999). Moreover, crises loosen organizational constraints and increase decision leeway for charismatic behavior as actions different from the status quo are likely accepted or even demanded (House, Spangler, & Woycke, 1991). Anecdotally, this is evidenced by the observable rise of populist, charismatic political leaders under conditions of crisis (Weyland, 2003; Willner, 1984). Charismatic leaders are theorized to even intentionally exaggerate environmental threats and covertly but actively precipitate incidents that create high crisis salience in order to gain a larger following (Boal & Bryson, 1988; Yukl, 1999). Beyond this, crisis can be a fertile ground for leaders who strive to create a charismatic image for themselves by advocating radical change amidst turmoil (Conger & Kanungo, 1987). Furthermore, crises create conditions that attest to the effectiveness of charismatic leadership, i.e., they favour the emergence of charismatic leaders because in highly ambiguous situations, such leaders are especially adept in identifying opportunities that benefit organizations and followers (Yukl, 1999). In sum, it follows from the aforementioned arguments that crises are a particularly important context factor because they offer leaders an increased charismatic opportunity (e.g., extended scope of action granted by others with simultaneous attempts by the leader to engage in charismatic behaviors and exploit the situation).
The second line of explanation focuses on the followers and their increased susceptibility to charismatic leaders in times of crisis, reflecting their *charisma hunger* (Bass, 1990). This assumption rests on a psycho-analytical foundation which proposes that followers attach themselves to their leaders because they offer security in times of uncertainty (Kets de Vries, 1988a, 1988b). The need for such leadership salvation can be understood as a coping mechanism that followers employ when exposed to high levels of stress (Madsen & Snow, 1991). When followers experience anxiety and need for orientation, high susceptibility to charismatic leadership is likely (Shamir et al., 1993). This assumption is also in line with the idea of proxy agency, i.e., under certain circumstances that affect one’s life but preclude direct control, individuals tend to “seek their well-being, security, and valued outcomes through the exercise of proxy agency [...] to get those who have access to resources or expertise or who wield influence and power to act at their behest to secure the outcomes they desire” (Bandura, 2001, p. 13). Shamir and Howell (1999) draw on Mischel's (1973, 1977) distinction of weak and strong psychological situations and argue that weak situations (i.e., ambiguous and unstructured situations) offer followers little direction and few cues for appropriate behavior which, however, may be supplied by charismatic leaders. Because crises are a particularly intense form of weak situations, they likely amplify *follower readiness* for charismatic leadership, increasing charismatic ascriptions (Bligh & Kohles, 2009). It can be expected that follower personality is an additional factor that facilitates this relationship, i.e., in weak situations, “weak” (insecure, anxious, low self-confidence) followers may be particularly prone to choose “strong” (charismatic) leaders to alleviate uncertainty (Conger & Kanungo, 1998; De Vries, Roe, & Taillieu, 1999; Felfe & Schyns, 2006).

The above lines of explanations can be consolidated in a conceptual model of charismatic crisis leadership in which crisis represents a contextual factor that influences the leader-follower-relationship through two pathways (see Figure 3) (Jungbauer & Wegge, 2015). From the leader perspective (pathway “A” in Figure 3), crisis facilitates the emergence of charismatic leadership and strengthens charismatic leadership influence on followers. From the follower perspective (pathway “B” in Figure 3), crisis increases follower readiness and promotes positive evaluations of charismatic leaders. The extended scope of action afforded to charismatic leaders in times of crisis and their own attempts of exploiting the situation, coupled with the increase of follower readiness due to the uncertainty experienced, lead to a *charismatic bond* where followers subordinate their sense of self to the charismatic leader who is hoped to be able to restore a sense of security in coping with the psychological stress of the situation (cf. Madsen & Snow, 1991).
Concerning empirical findings of the proposed effect paths, numerous studies exist that support the tenets of the model. With regard to pathway “A” which describes crisis effects on charismatic leader emergence, in their archival study on U.S. Presidents, House and colleagues (1991) found that the number of foreign and domestic crises that office incumbents had to contend with positively correlated with charisma and presidential performance, indicating that these crisis gave rise to their charismatic influence. Pillai (1996) showed in a small group setting that charismatic leaders are more likely to emerge in crisis conditions. Hunt, Boal, and Dodge (1999) conducted an experimental study to test the theoretical assertion of Boal and Bryson (1988) that there are two kinds of charismatic leadership that emerge under crisis – visionary and crisis-responsive charismatic leadership: While the former emphasizes the articulation of visions that represent interpretative schemas for followers and downstream actions to make them become a reality, the latter emphasizes actions of dealing with the crisis that are only later justified by the communication of a vision. The study confirmed the assertion that crisis gives rise to these charismatic behaviors.
With regard to pathway “B” which describes crisis effects on follower susceptibility, one of the earliest studies investigating these relationships was conducted by N. C. Roberts and Bradley (1988) who investigated the case study of a school principal that received high charisma attributions under crisis conditions but “lost” this charisma when she was promoted to a position in a different state without crisis. Pillai (1996), in an experimental small group setting, found that followers rate leaders as more charismatic under crisis conditions than under non-crisis situations. Halverson, Holladay, Kazama, and Quiñones (2004) corroborated and extended these findings by identifying an interaction between crisis and self-sacrificial leadership, showing that followers attribute even greater charisma to leaders in a crisis situation if they exhibit self-sacrificial behavior. Merolla, Ramos, and Zechmeister (2007), in their experimental study in the political domain, likewise found that crisis enhances perceived charisma of political leaders and furthermore increases willingness of followers to forgive their policy mistakes.

A range of further individual and situational factors likely influence the charismatic leader-follower relationship. First, certain follower characteristics may interact with crisis in promoting the susceptibility to charismatic leadership influences. For instance, studies from the political and religious realm have found that followers of charismatic leaders are likely characterized by lower self-esteem, greater indecisiveness, more feelings of helplessness, and higher subjective experience of psychological distress than others (Freemesser & Kaplan, 1976; Galanter, 1982). Second, attributes related to the person of the leader are deemed as important. In the political realm, the status of election candidates as incumbent or challenger has been found to play a significant role in shaping follower voting attitudes. In their investigation of the 2004 U.S.-Presidential election, Williams, Pillai, Lowe, Jung, and Herst (2009) found that crisis was negatively related to charisma perceptions of the incumbent George W. Bush, but positive for the challenger John Kerry. The findings indicate that crises put incumbents under high risk of losing their charismatic appeal but offer challengers, particularly political outsiders, a suitable stage for exploitation of the crisis, increasing the likelihood that they will be ascribed higher charisma (McCann, 1997; Weyland, 2003). Third, conditions of the overall environment have been found to be an important influencing factor. Landau and colleagues (2004) showed that individuals, when experimentally induced with high mortality salience, tend to increase their support for political leaders who advocate counterterrorism policies. These findings suggest that situational constraints found in the larger environment (e.g., current sentiments in society) can also largely determine how charismatic leaders will be evaluated under crisis conditions.
Recently, scholars have begun to examine charismatic crisis leadership in conjunction with contemporary leadership theories. Williams, Pillai, Deptula, and Lowe (2012), in investigating the interaction of charismatic and authentic leadership (Avolio & Gardner, 2005; Gardner, Cogliser, Davis, & Dickens, 2011), found indications for an augmentation effect such that charisma added to the positive effects of authenticity in predicting follower supportive behavior during crisis. Zhang, Jia, and Gu (2012) examined the interaction of transformational leadership with leader-member exchange (LMX) (Graen & Uhl-Bien, 1995) and showed that high quality LMX strengthens the positive effects of transformational leadership on value congruence under crisis, the rationale being that followers should become more receptive to their transformational leader’s sensemaking efforts during crisis if relationship quality is high.

It should be noted that several scholars have broadened the investigation of charismatic crisis leadership to include broader concepts of economic instability, encapsulated in such terms as environmental uncertainty (Milliken, 1987; Waldman, Ramirez, House, & Puranam, 2001), environmental dynamism (de Hoogh et al., 2004), resource munificence (Huang, Xu, Chiu, Lam, & Farh, 2015), or attributional ambiguity (Jacquart & Antonakis, 2015). Charismatic leadership is likely to have positive effects under more general conditions of economic instability because analogously to crisis conditions, the proliferation of corporate risks during these periods may lead to charisma emergence due to charismatic leaders’ ability to exploit new business opportunities (e.g., by identifying innovation potential) as well as the strengthening of the charismatic bond due to followers’ experienced uncertainty (Yukl, 1999). The existing studies on this topic largely corroborate the theoretical assumptions, e.g., economic instability has been found to strengthen the positive relationship between charisma and performance indicators (de Hoogh et al., 2004; Flynn & Staw, 2004; Jung, Wu, & Chow, 2008; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004; Waldman et al., 2001).

Latest research has identified boundary conditions that reach conflicting conclusions regarding these findings, offering novel insights into the effectiveness of charismatic crisis leadership. Huang and colleagues (2015) examined resource munificence, i.e., a region’s overall availability of critical resources, and found that in “harsh” economic environments characterized by low munificence, motivation-based advantages of transformational crisis leadership are rendered inferior to authoritarian leader behaviors, as the latter can ensure operational efficiency in such an environment by virtue of their centralized control over subordinates. Jacquart and Antonakis (2015) furthermore broadened the analysis by examining charismatic leadership under conditions of attributional ambiguity, i.e., when an
organization’s performance signals are difficult to interpret for outsiders. Though related to conditions of crisis or economic instability, the concept of attributional ambiguity implies that an organization could be in a crisis, but factually need not be so. The findings of the study suggest that under conditions of high attributional ambiguity, followers tend to look more towards the charismatic character of the leader when making leadership evaluations, while under conditions of low attributional ambiguity, the actual performance matters (Jacquart & Antonakis, 2015). This implies a counterpoint to the Weberian notion of charismatic crisis leadership: While Weber suggests that the charismatic leader, by default, is the savior in times of a crisis (Weber, 1947, 1968), Jacquart' and Antonakis' (2015) study suggests that crisis could even be detrimental to a charismatic leader if attributional ambiguity is low and the leader can be identified as causally responsible for the crisis.

3.3 Finding the Right Words: Charismatic Crisis Rhetoric

One unique aspect that may help to further explain the positive effects of charisma on followers in times of crisis is found in language. A common ground of the existing notions of charismatic leadership is the recognition of the importance of communication with followers (Bass, 1985; Burns, 1978; Conger & Kanungo, 1987; Den Hartog & Verburg, 1997; House, 1977; Sashkin, 1988; Shamir et al., 1994). Charismatic leaders not only have the striking ability to tailor their speeches to different audiences, but also to skillfully apply rhetorical devices and make use of symbolic language (Willner, 1984). Purposeful communication with followers is particularly important during crises as it allows leaders to link followers’ interpretative schema with their own, thereby engaging in frame alignment that provides meaning of the situation (Den Hartog & Verburg, 1997; T’Hart & Tindall, 2009). In the self-concept-based motivational theory of charismatic leadership (Shamir et al., 1994, 1993), rhetorical speech contents are a central in explaining how charismatic leaders cause a profound transformational change in their followers, i.e., by making more references to (1) collective history, (2) collective identity, (3) followers’ worth and efficacy, (4) leader’s similarity to followers, (5), values and moral justifications, (6) distal goals and the distant future, and (7) hope and faith.
Bligh and colleagues (2004a) empirically tested the assumptions of the Shamir model by investigating the crisis rhetoric of U.S. President George W. Bush before and after the 9/11 crisis. Using computerized content analysis of presidential rhetoric (Bligh, Kohles, & Meindl, 2004b), the authors found that the crisis lead to a charismatic shift in how Bush communicated to the American people, i.e., his public speeches reflected a significantly higher amount of charismatic rhetoric after the events of 9/11 compared to before. The operationalization of the Shamir model used in the study (which includes modifications and extensions, e.g., constructs related to adversity) and associated speech examples are shown in Table 7.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample Quote of George W. Bush during 9/11 Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective focus</td>
<td>“We will not tire, we will not falter, and we will not fail.”</td>
</tr>
<tr>
<td>Temporal orientation</td>
<td>“It is my hope that in the months and years ahead, life will return almost to normal.”</td>
</tr>
<tr>
<td>Followers’ worth</td>
<td>“America is successful because of the hard work, and creativity, and enterprise of our people.”</td>
</tr>
<tr>
<td>Similarity to followers</td>
<td>“We’ll remember the moment the news came—where we were and what we were doing.”</td>
</tr>
<tr>
<td>Values and moral justifications</td>
<td>“This is the fight of all who believe in progress and pluralism, tolerance and freedom.”</td>
</tr>
<tr>
<td>Tangibility</td>
<td>“Today, dozens of federal departments and agencies, as well as state and local governments, have responsibilities affecting homeland security.”</td>
</tr>
<tr>
<td>Action</td>
<td>“But the only way to defeat terrorism as a threat to our way of life is to stop it, eliminate it, and destroy it where it grows.”</td>
</tr>
<tr>
<td>Adversity</td>
<td>“Great harm has been done to us. We have suffered great loss… our nation—this generation—will lift a dark threat of violence from our people and our future.”</td>
</tr>
</tbody>
</table>
Comparable changes in leadership rhetoric as a consequence of the 9/11 events have also been found by Pennebaker and Lay (2002) in their linguistic investigation of then mayor of New York, Rudolph Giuliani, who exhibited more personal, more emotionally expressive, and more future oriented references in his address to the public in the aftermath of the crisis. These findings are corroborated by further studies on the rhetorical leadership of charismatic public figures in a diverse range of crises such as Alan Greenspan, Martin Luther King Jr., Mahatma Gandhi, Steve Jobs, and others (Abe, 2011; Bligh & Hess, 2007; Bligh & Kohles, 2009; Bligh, Merolla, Schroedel, & Gonzalez, 2010; Bligh & Robinson, 2010; Bligh, 2005; Heracleous & Klaering, 2014; Robinson & Topping, 2013; Seyranian & Bligh, 2008; Tan & Wee, 2002). Latest research on charismatic crisis rhetoric has taken up current technological developments and has started to examine how leaders apply charismatic crisis rhetoric in their use of social media, e.g., Twitter (de Bussy & Paterson, 2012; Gruber, Smerek, Thomas-Hunt, & James, 2015).

The importance of charismatic rhetoric notwithstanding, some scholars have noted that it is not just the content of a charismatic leader’s communication that determines its effectiveness, but also its delivery (Den Hartog & Verburg, 1997). Research is equivocal as to which component is more important for predicting charismatic leadership influence. Prior experimental studies have suggested a greater importance of delivery in contrast to the contents of the message (Awamleh & Gardner, 1999; Holladay & Coombs, 1994). However, a study by Baum and colleagues (J. R. Baum, Locke, & Kirkpatrick, 1998) suggested that content may be more important in contexts with visible performance criteria. Furthermore, Johnson and Dipboye (2008) suggest that in comparison with delivery, content is particularly important in charisma-conducive environments. Applied to a crisis context, the effects of content on followers is furthermore likely amplified if leaders have limited possibility to directly interact with their followers due to large social distance, increasing followers’ reliance on verbal cues (Shamir, 1995). Den Hartog and Verburg (1997) note that both delivery and content may be important but in a different fashion, i.e., while delivery likely increases short-term attribution to a leader’s charisma via emotionalized presentation of personal engagement, content may better invoke the long-term commitment to the leader’s mission through verbally-rich descriptions that provide a clear interpretative schema of the situation for followers.
3.4 Seeking Certainty in “Us”: Crisis Leadership from a Social Identity Perspective

A final lens through which to look at crisis leadership that is sufficiently ample represented in the existing canon of literature to warrant its mention in this dissertation, is the social identity approach of leadership (Duck & Fielding, 1999; Haslam et al., 2011; Hogg, 2001; Platow & van Knippenberg, 2001; Reicher, Haslam, & Hopkins, 2005). Social identity and self-categorization theory (Tajfel & Turner, 1986; Tajfel, 1978) assert that social identity, as a part of an individual’s self-concept, leads to categorizations of self and others into in- and outgroups and subsequently influences and governs individual attitudes, perceptions, and intra- and intergroup behaviors. Leaders’ roles in influencing followers in times of crisis from a social identity perspective lies in them acting as entrepreneurs of identity, referring to their ability to create shared meaning and form a cohesive collective out of otherwise disunited individuals (Reicher et al., 2005).

Having a shared sense of meaning is likely important in times of crisis. Past research has found that in ambiguous situations, followers tend to turn to their in-group in order to reduce their experience of uncertainty (Hogg, 2001; Pierro, Cicero, Bonaiuto, van Knippenberg, & Kruglanski, 2005). What is predictive of leadership effectiveness in crisis is the notion of leader group prototypicality, i.e., the extent to which the leader is representative of the collective identity (Hogg, 2001): Because followers in highly unstructured situations experience greater need to rely on the shared social reality provided for by their group membership, a high degree of group prototypicality of the leader and ability to act as an entrepreneur of identity likely increases his/her effectiveness (e.g., Cicero, Pierro, & van Knippenberg, 2010). Haslam and colleagues (2001) found that in the context of a crisis, identity-affirming leaders (i.e., who demonstrated that they preferred in-group members) are protected from negative follower attributions. These findings are corroborated by a study of Giessner and van Knippenberg (2008) who identified a license to fail of group prototypical leaders, demonstrating that such leaders are evaluated more favourably that non-prototypical leaders even after they have made a mistake. Latest findings have indicated that the degree of followers’ group identification influences this relationship (Rast, Hackett, Alabastro, & Hogg, 2015).

The theoretical arguments offered by the social identity approach to crisis leadership provide an alternative interpretation of the aforementioned observation of strong follower support for George W. Bush’s rhetorical leadership during the 9/11 crisis. While Bligh and colleagues (2004a) concluded that Bush’s high approval ratings in the aftermath of 9/11 was primarily a consequence of him using the “right words” in addressing the American people, as
evidenced by his increase in charismatic rhetoric, from a social identity perspective, the
overwhelmingly positive follower reactions can be seen as a consequence of him being able to
create shared meaning: By collectively addressing the various ethnic groups and different
political affiliations within the American populace and strengthening the importance of their
national membership, he was able to unite them against the common enemy of terrorism,
thereby offering a harbor of safety in times of turmoil.
4. The Current Research

The current chapter is devoted to developing a theoretical framework as the basis for a novel empirical examination of crisis leadership. It starts by identifying research gaps in the extant literature on the topic. Based on these gaps, the theoretical framework is developed by identifying three conceptualizations of crisis that achieve a comprehensive view of crisis leadership. These crisis conceptualizations are positioned in a crisis lifecycle model and linked to specific crisis leadership requirements. Subsequently, three leadership perspectives are described that provide the point of departure for the empirical investigation. In the final section, the chapter integrates these different aspects of crisis leadership and presents the research program which consists of three empirical studies.

4.1 Conclusions Drawn from the Preceding Chapters

From the conceptual clarifications in Chapter 2 and the theoretical review in Chapter 3, three fatal flaws of the existing body of literature can be identified. First, the scholarly examination of crisis leadership suffers from having limited its analysis to single crisis phenomena that use coarse conceptualizations of crisis. While a multitude of crisis definitions and typologies exists, extant research has not attempted to integrate different conceptualizations of crisis in a systematic manner. However, such an analysis could advance research by either establishing that certain effects of crisis leadership are robust across different types of crises, or reveal novel insights about boundary conditions that preclude such consistency. Second, past investigations have focused on crisis management as the solitary leadership function, disregarding the potentially insightful study of crisis leadership across stages of the crisis lifecycle. Widening the scope of analysis by recognizing that the role of crisis leadership is not just confined to the management of crisis, but that it may also fulfill important function in the prevention or resolution of a crisis, could further add to the extant literature. Third, the field is characterized by an overrepresentation of studies that approach the topic from a charismatic-transformational leadership perspective at the neglect of testing the effectiveness of other leadership styles as alternative crisis responses. What represents a fruitful avenue for further research that could substantially contribute to the current understanding of crisis leadership is the assessment of other crisis leadership styles, or the exploration of potentially negative effects of charismatic-transformational leadership. The current research aims to address these issues.
4.2 Conceptualizations of Crisis Used in the Dissertation

As outlined in Chapter 2, crisis is a broad term that is defined inconsistently by academic literature. However, three distinct approaches with distinguishable features to defining crisis have been identified, based on the broad streams that have attended to crisis research, i.e., system-based, team-based, and organization-based approaches. The present research narrows its investigation of crisis leadership to conceptualizations of crisis which directly relate to these approaches. These are critical incidents, team crises, and organizational crises (see Figure 4).

![Figure 4. Conceptualizations of Crisis Used in the Dissertation](image)

System-based, team-based, and organization-based definitions of crisis have already been presented in Chapter 2.1. While the definitions of team crisis and organizational crisis presented earlier can be used as operational definitions for the current research, the definition stemming from the system-based approach needs to be specified at this point in order to achieve a conceptualization of crisis that addresses the precursory nature of crisis in the form of “critical incidents”, preceding the manifestation of system-based crises. This conceptualization relates to the pre-crisis stage (preventive function of crisis leadership), complementing the existing conceptualizations of team crisis and organizational crisis which relate to the crisis (intervention function) and post-crisis stage (resolution function), respectively. Table 8 lists all crisis definitions (please note that the newly included definition of critical incidents is context-dependent and relates to the healthcare domain, as this is the setting of the empirical study as part of the research program that will investigate this crisis conceptualization).
Table 8. Crisis Conceptualizations and Associated Definitions

<table>
<thead>
<tr>
<th>Conceptualization</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical incident</td>
<td>“an event or circumstance that could have resulted, or did result, in unnecessary harm to a patient” (WHO, 2009, p. 15)</td>
</tr>
<tr>
<td>Team crisis</td>
<td>“an urgent situation in which all group members face a common threat” (Hamblin, 1958, p. 322)</td>
</tr>
<tr>
<td>Organizational crisis</td>
<td>“an unexpected, publicly known, and harmful event that has high levels of initial uncertainty, interferes with the normal operations of an organization, and generates widespread, intuitive, and negative perceptions among evaluators” (Bundy &amp; Pfarrer, 2015, p. 350)</td>
</tr>
</tbody>
</table>

One advantage of selecting these crisis conceptualizations is that they reflect events of increasing magnitude. Pauchant and Mitroff (1992) distinguished between incidents, conflicts, and crises in order to map a continuum of crisis severity: Incidents represent limited disruptions of self-contained parts of larger systems; conflicts are moderate disturbances of symbolic structures; crises are severe disruptions that affect a system as a whole. By using these conceptualizations, the present work aims to achieve a comprehensive understanding of crisis leadership and its effects on followers under conditions of varying magnitude.

More important for the purposes of the current work is that these conceptualizations can meaningfully be integrated in an overarching theoretical framework of crisis leadership. The basis for this framework is provided by the three-stage crisis lifecycle model presented earlier. A lifecycle approach is useful for the current research as the assumptions embedded in each crisis stage can provide insights into the specific needs of followers and associated leadership requirements (Bloch, 2014; Coombs, 2007a; González-Herrero & Pratt, 1996). For instance, literature points towards the influential role of charismatic leadership in the beginning of a crisis when stress effects are directly experienced (Sayegh et al., 2004; Sommer, Howell, & Hadley, 2015) – yet it has been suggested that other leadership behaviors may be called for when it comes to building a crisis-prepared organization (Kelloway, Mullen, & Francis, 2006; Vogus, Sutcliffe, & Weick, 2007) or to implementing crisis solutions (Bass & Riggio, 2006). As a second example, leader intervention during an acute crisis has been identified as an important function that satisfies critical needs of followers that
become salient under stressful conditions (Morgeson et al., 2010) – yet in the post-crisis stage, a different set of leadership activities may be necessary which rather support recovery efforts aimed at restoring operational processes and balancing relational systems that have been adversely affected (Kahn, Barton, & Fellows, 2013). By employing the crisis lifecycle model, the current research can examine effective leadership behaviors across the pre-crisis, crisis, and post-crisis stages that are associated with the specific crisis leadership roles of prevention, intervention, and resolution, thus allowing for the investigation of crisis leadership in a comprehensive and systematic manner. The assumptions of the integrated theoretical framework concerning the crisis leadership requirements for the three crisis conceptualizations across the different crisis stages are summarized in Table 9 and explained in more detail in the following.

In the pre-crisis stage, critical incidents represent crisis in its incubated form as a precursor to crisis escalation (Coombs, 2007a). The implications for the role of crisis leadership in this stage are that the relative state of normalcy does not necessitate active intervention but anticipatory prevention (Reason, 1990; Rochlin, 1993; Vogus & Welbourne, 2003). The main task of leadership is to create a safe culture that encourages proactive behavior of followers, for instance, by collecting information that can prevent the escalation of incidents into crises (Reason, 1997; Weick et al., 1999). The desired end result is a high level of reliability (Chassin & Loeb, 2013; K. H. Roberts, 1989). In order to achieve these aims, literature has suggested that trust plays an important role (Conchie & Donald, 2009; Cox, Jones, & Collinson, 2006; Pronovost et al., 2006). Leadership styles that have been suggested by scholars as effective in building trust when organizing for high reliability are those that feature a relational approach (Busby & Iszatt-White, 2014; Scandura & Pellegrini, 2008; Sin, Nahrngang, & Morgeson, 2009).

In the crisis stage, team crises represent the acute stage of a triggered crisis (Coombs, 2007a). The implications for crisis leadership in this stage are that due to the intensity of the situation, active leader intervention is required in order uphold basic functioning of followers who experience duress and uncertainty (Morgeson & DeRue, 2006; Morgeson, 2005). By appropriately guiding followers, leaders can achieve the end result of high effectiveness in spite of challenging circumstances (Bass, 1985; Burns, 1978). It is assumed that a leadership style that can influence the emotional experience of followers is particularly effective in this stage (Awamleh & Gardner, 1999; Bono & Ilies, 2006; Choi & Mai-Dalton, 1999). This kind of leadership style is represented by motivation-oriented leadership approaches (Conger & Kanungo, 1987; House & Shamir, 1993; Sashkin, 1988).
Table 9. Theoretical Framework of the Dissertation and Assumptions of the Crisis Stages

<table>
<thead>
<tr>
<th></th>
<th>Pre-Crisis</th>
<th>Crisis</th>
<th>Post-Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptualization</td>
<td>Critical incident</td>
<td>Team crisis</td>
<td>Organizational crisis</td>
</tr>
<tr>
<td>Magnitude</td>
<td>Limited</td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>Form</td>
<td>Incubated</td>
<td>Acute</td>
<td>Manifested</td>
</tr>
<tr>
<td>Leadership role</td>
<td>Prevention</td>
<td>Intervention</td>
<td>Resolution</td>
</tr>
<tr>
<td>Leadership task</td>
<td>Create safe culture</td>
<td>Uphold functioning</td>
<td>Restore normalcy</td>
</tr>
<tr>
<td>Desired follower response</td>
<td>Participation</td>
<td>Performance</td>
<td>Efficacy</td>
</tr>
<tr>
<td>End result</td>
<td>High reliability</td>
<td>Team effectiveness</td>
<td>Operational efficiency</td>
</tr>
<tr>
<td>Means of achievement</td>
<td>Achieve trust</td>
<td>Inspire efforts</td>
<td>Convey expertise</td>
</tr>
<tr>
<td>Potentially effective leadership</td>
<td>Relational</td>
<td>Motivational</td>
<td>Functional</td>
</tr>
</tbody>
</table>
In the post-crisis stage, organizational crises reflect the full manifestation of a crisis that has affected all constituent parts of a system (Coombs, 2007a). The main leadership task here is one of resolution, e.g., engaging in communication with stakeholders in order to restore a sense of normalcy and re-instill efficacy in followers (Benoit, 1997; Claeys & Cauberghe, 2014; Coombs, 2010; Ulmer, 2001). The end result is the return to operational efficiency (Marcus & Goodman, 1991; Sturges, 1994; Ulmer et al., 2015). Some scholars have suggested that leaders can best achieve these goals by conveying problem-solving expertise (Bedell-Avers, Hunter, & Mumford, 2008; Mumford & Doorn, 2001). Leadership styles that are deemed effective here arise from functional leadership approaches (Antonakis & House, 2002; Fleishman et al., 1991; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000).

In sum, the integration of the selected crisis conceptualizations in the theoretical framework presented leads to assumptions concerning suitable leadership behaviors that address the specific objectives and follower concerns inherent to each crisis stage. That is, the pre-crisis, crisis, and post-crisis stages are assumed to render a relational, motivational, and functional approach effective, respectively. However, it should be noted that these assumptions do not preclude the effectiveness of the selected leadership approaches for other than the specified stages. Indeed, different combinations of the crisis conceptualizations and leadership approaches are conceivable that predict effective crisis leadership and any of the three leadership approaches can potentially be mapped across any of the crisis stages. For instance, motivation-based approaches can serve a crisis preventive function that engages follower proactive safety behaviors (cf. Clarke, 2013; Flin & Yule, 2004), which suggests that this form of leadership is potentially equally suitable in the pre-crisis stage as relational approaches are. However, based on the empirical findings and assumptions presented above, the leadership approaches identified for each crisis stage form a worthwhile starting point for the research program of the current investigation. Furthermore, the classification of leadership as relational, motivational, or pragmatic mirrors established taxonomies that distinguish constructive leadership styles as relationship-oriented, change-oriented, and task-oriented leader behaviors (see meta-analytic findings by DeRue, Nahrgang, Wellman, & Humphrey, 2011; Wegge, Shemla, & Haslam, 2014).
4.3 Theoretical Perspectives for Investigating Crisis Leadership

Derived from the assumptions of the theoretical framework, the current research has identified three theoretical perspectives of crisis leadership that represent valid starting points for further research. In the following, these three leadership perspectives (see Figure 5) are described and positioned within past crisis leadership research in order to demonstrate how their empirical investigation contributes to a more comprehensive view of crisis leadership.

The first perspective is relationship-based and emphasizes the dyadic reciprocal social exchanges between leader and follower, as exemplified by leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995). LMX theory distinguishes low-quality relationships between leader and follower that are characterized by economic exchanges which merely fulfill what is demanded by contractual standards, from high-quality leader-member relationships that are characterized by social exchanges which go beyond contractual agreements (Sparrowe & Liden, 1997). The fact that leaders are limited in their time and resources implies that high-quality relationships can only be developed with a certain number of followers (Danserau, Graen, & Haga, 1975; Graen & Uhl-Bien, 1995). Consequently, followers are separated into an “in-group” and “out-group” (Van Breukelen, 2006). While in-group relationships are characterized by high interaction, loyalty, liking, support, and rewards,
out-group relationships are characterized by the use of formal authority, rules, and policies in order to maintain follower performance (Dienisch & Liden, 1986; Graen & Scandura, 1987). Followers are likely to reciprocate the special treatment in high-quality LMX relationships by exhibiting greater levels of initiative and increased commitment towards the leader (Liden, Sparrowe, & Wayne, 1997; Wilson, Sin, & Conlon, 2010). It should be noted that the scholarly understanding of LMX substantially evolved over time. The original dichotomous distinction of in- versus out-group notwithstanding, LMX currently is conceptualized rather as a continuum (Brower, Schoorman, & Tan, 2000) while the recommendation for leaders is that they should attempt to develop high-quality exchange relationships with all followers (Graen & Uhl-Bien, 1995; Schyns & Day, 2010). A wide range of empirical studies including meta-analytic research has shown the positive effects of LMX on follower outcomes as diverse as performance, job satisfaction, commitment, or citizenship behaviors (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007). LMX is the most researched leadership theory second only to the charismatic-transformational leadership framework (Yammarino, Dionne, Uk Chun, & Dansereau, 2005).

The charismatic-transformational leadership literature (Bass, 1985; Burns, 1978; Conger & Kanungo, 1987, 1998; House, 1977; Rafferty & Griffin, 2004; Shamir et al., 1993) constitutes the motivation-based perspective. Transformational leaders transform the motives of followers and engage them commit to performance efforts and outcomes that exceed expectations (Bass, 1985; Burns, 1978). In the full-range leadership model (Bass & Avolio, 1995), the profound effects transformational leaders have on followers are explained through behaviors such as (1) idealized influence, e.g., providing an exemplary role-model for followers, (2) inspirational motivation, e.g., articulating an attractive vision, (3) individualized consideration, e.g., attending to each follower’s needs as a mentor, and (4) intellectual stimulation, e.g., challenging thinking and assumptions of followers. Of particular importance for the present research is the self-concept-based motivational theory of charismatic leadership (Shamir et al., 1993) according to which charismatic leaders elevate followers’ self-concepts by achieving a high sense of collective efficacy, for instance (House & Shamir, 1993; Shamir et al., 1993). The positive effects of charismatic-transformational leadership on followers have been empirically confirmed by an exceedingly large number of studies (de Hoogh et al., 2004; Degroot, Kiker, & Cross, 2000; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996; Wang, Oh, Courtright, & Colbert, 2011). It is the most researched leadership theory to date (Dinh et al., 2014; van Knippenberg & Sitkin, 2013; Yammarino et al., 2005).
The third perspective of crisis is functionally-based and builds on recent propositions concerning outstanding leadership. This perspective is exemplified by both the pragmatic leadership approach found within the charismatic-ideological-pragmatic (CIP) leadership model by Mumford and colleagues (Mumford, Antes, Caughron, & Friedrich, 2008; Mumford, 2006) and instrumental leadership theory (ILT) by Antonakis and House (2002, 2004, 2014).

The CIP model describes three types of leadership that are firmly rooted in crisis research. Mumford (2006) argues that crises render the behavior of complex social systems unpredictable. Under such conditions, it is the role of leaders to engage in sensemaking activities that clarify goals and enhance follower motivation again (Weick, 1995). The prescriptive mental models that leaders develop to engage in sensemaking can be of charismatic, ideological, or pragmatic nature: For instance, while charismatic leaders in the wake of a crisis would stress goals whose achievement promise a better future, ideological leaders would stress goals that have proven viable in the past, and pragmatic would not stress goals at all but stress the causes that have led to the situation in the present (Mumford et al., 2008). As such, pragmatic leadership takes on a more rationalistic view, appealing to followers’ interest in the common good rather than in their identity (Mumford & Doorn, 2001). Examining Benjamin Franklin as an example of a pragmatic leader, Mumford and Doorn (2001) argue that pragmatic leaders emphasize problem solving over vision articulation. Their focus is on current issues and functional problem-solving (Hunter, Bedell-Avers, & Mumford, 2009). In influencing followers, pragmatic leaders will tend to prefer rational and logical argumentation over emotionally evocative arguments (Mumford et al., 2008). Pragmatic leaders also strongly rely on their expertise in solving problems (Bedell-Avers et al., 2008; Mumford, Partlow, & Medeiros, 2013).

Instrumental Leadership Theory (ILT) by Antonakis and House (2002, 2004, 2014) describes a theory which, similar to the CIP model by Mumford and colleagues, argues that exceptional leadership is not just a function of a leader’s ability to interpersonally influence others, but also depends on his/her expertise in (strategic) problem-solving and in the implementation of solutions to complex socio-technical problems. In other words, leadership is a form of expert-based influence that is, in this manner, “instrumental” for organizational effectiveness (Antonakis & House, 2002). Specifically, instrumental leadership is defined as “the application of leader expert knowledge on monitoring of the environment and of performance, and the implementation of strategic and tactical solutions” (Antonakis & House, 2014, p. 749). The authors group the instrumental leadership construct into the two categories
of strategic leadership with the factors (a) environmental monitoring and (b) strategy formulation and implementation, and follower work facilitation with the factors (c) path-goal facilitation and (d) outcome monitoring (Antonakis & House, 2014). The instrumental leadership theory has advanced leadership research by identifying leadership behaviors that have so far been not included in previous leadership paradigms, yet may play a critical role in predicting organizational effectiveness. For instance, while transactional leadership in the full-range leadership model is conceptualized as behaviors that focus on identifying follower roles and managing rewards (i.e., contingent rewards, management-by-exception) (Bass & Avolio, 1995), it does not explicitly consider follower work facilitation and subsequent outcome monitoring as instrumental leadership does (Antonakis & House, 2014).

Due do their relative infancy, empirical findings on both the CIP and ILT leadership models are still scarce. However, the basic validity of CIP leadership model has been tested historiometrically and experimentally in several studies (Bedell-Avers, Hunter, Angie, Eubanks, & Mumford, 2009; Bedell-Avers et al., 2008; Hunter, Bedell-Avers, & Mumford, 2007; Hunter et al., 2009; Mumford et al., 2008; Mumford & Doorn, 2001). The basic validity of the instrumental leadership construct has been confirmed by Rowold (2014) who also provided a test of its incremental validity, showing that instrumental leadership predicts important follower outcomes beyond the transactional-transformational leadership paradigm. For the remainder of this dissertation, the pragmatic and instrumental leadership models will usefully be subsumed under “pragmatic leadership”.

Table 10 summarizes key differences of the three leadership perspectives presented above.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Theory</th>
<th>Orientation</th>
<th>Leader Role</th>
<th>Means of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational</td>
<td>LMX</td>
<td>Individuals</td>
<td>“Mentor”</td>
<td>Reciprocity</td>
</tr>
<tr>
<td>Motivational</td>
<td>Charismatic</td>
<td>Collective</td>
<td>“Savior”</td>
<td>Emotional appeals</td>
</tr>
<tr>
<td>Functional</td>
<td>Pragmatic</td>
<td>Problem-focus</td>
<td>“Expert”</td>
<td>Rational arguments</td>
</tr>
</tbody>
</table>
4.4 Overview of the Research Program

Having established the three crisis conceptualizations and positioned them within a crisis lifecycle model that relates to three relevant leadership perspectives using an integrated theoretical framework, it is now possible to outline the research program of this dissertation which comprises three empirical studies (see Table 11).

Table 11. Overview of the Studies of the Dissertation

<table>
<thead>
<tr>
<th>Study</th>
<th>Study Title</th>
<th>Authors</th>
<th>Journal</th>
</tr>
</thead>
</table>

Table 12 maps the empirical studies across the research objectives of the dissertation which have been outlined at the beginning of this work, appends research questions, and categorizes the achievement of objectives more finely according to the specific foci of the empirical studies. Objective 1, the development of a theoretical framework of crisis leadership using different conceptualizations of crisis across stages of the crisis lifecycle, has already been achieved in the previous sections of this Chapter. Objectives 2 to 4 will be achieved in the empirical studies in the following Chapters 5 to 7.
Table 12. Research Objectives of the Dissertation and Associated Research Questions

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>Objective 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integration of crisis leadership across stages of the crisis lifecycle</strong></td>
<td>RQ: How do different leadership styles impact followers in the crisis stages?</td>
<td>RQ: Which conditions moderate the relationship between crisis leadership and follower outcomes?</td>
<td>RQ: Which mechanisms explain the relationships?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R</th>
<th>M</th>
<th>F</th>
<th>O</th>
<th>I</th>
<th>Cr</th>
<th>A</th>
<th>Co</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>Pre-crisis</td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Study 2</td>
<td>Crisis</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study 3</td>
<td>Post-crisis</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

RQ = Research Question; R=Relational leadership; M=Motivational leadership; F=Functional leadership; O=Organizational moderators; I=Individual difference moderators; Cr=Crisis-related moderators; A=Affective mediators; Co=Conative mediators.

Study 1, entitled “How does leadership influence incident reporting in healthcare? A dual process model of leader-member exchange”, centers on the pre-crisis stage by examining critical incidents and how relationship-oriented forms of leadership (LMX) can support the preventive function of crisis leadership. Somewhat surprisingly, even though the academic discourse of crisis leadership has been strongly shaped by multidisciplinary influences, there have been few efforts to connect distinct research streams that could inform the understanding of crisis leadership, e.g., while the prevention of crises has been explored in the system-based literature with the study of high-reliability-organizations (HROs), the importance of the quality of relationships between leader and followers that likely promotes a safe culture on a dyadic level has only been examined in the psychological literature. Study 1 connects these streams and in doing so, considers organizational moderators such as top management support and codification practices in their role of strengthening or weakening the proposed relationships and their effects on critical incident reporting. Two affective mediators, reporting-specific trust and organizational identification, are examined as well.

Study 2, entitled “When inspiration does not fit the bill: Charismatic leadership reduces performance in team crises for followers high in self-direction”, focuses on the crisis stage by examining team crises and how motivational leadership approaches (charismatic leadership) aid the intervention function of crisis leadership. While crises have been investigated in a team setting, a more in-depth look at particular forms of team crises is
missing from literature, as well as the consideration of boundary conditions found in the follower that could predict adverse crisis leadership effects. Study 2 will therefore particularly focus on the investigation of potentially negative performance effects of charismatic crisis leadership in critical team events, contingent on the individual difference moderator of follower self-direction.

Study 3, entitled “Pragmatism over vision? An experimental investigation of effective leadership styles in sudden versus gradual crises”, emphasizes the post-crisis stage by examining different types of organizational crisis and how functional leadership approaches (pragmatic leadership) versus motivational leadership approaches (charismatic leadership) aid the resolution function of crisis leadership. So far, no research has made use of an established crisis typology to directly compare leadership effects across oppositional types of crises, even though this would likely allow better predictions about the fit of different crisis leaders. Study 3 examines sudden versus gradual organizational crisis as well as different time horizons of crisis consequences as a crisis-related moderator with simultaneous inclusion of the individual difference moderator of pragmatic versus idealistic self-conception. The conative mediator examined here is collective crisis efficacy.

Taken as a whole, the three studies which form the research program examine crisis leadership across different stages of the crisis lifecycle (pre-crisis, crisis, post-crisis) that are associated with selected conceptualizations of crisis (critical incidents as a precursor to crisis, critical team events as an acute trigger of crisis, organizational crises as the full manifestation of crisis). These call for specific leadership requirements (prevention, intervention, resolution) which can be fulfilled by different leadership approaches (relational, motivational, functional) that are exemplified by established leadership theories in the field (leader-member exchange, charismatic leadership, pragmatic leadership). Methodologically, the current research considers level-of-analysis issues (supervisors at the dyadic level, team leaders at the team level, CEOs at the organizational level) and examines the effects of crisis leadership with a range of measures (behavioral, performance, attitudinal). The predictions are tested using different settings (field study, experimental study in the laboratory, online scenario study) and samples (professional healthcare staff, brainstorming teams, general population). The research program is summarized in Table 13.
<table>
<thead>
<tr>
<th>Study 1</th>
<th>Pre-crisis</th>
<th>Critical incidents</th>
<th>Prevention</th>
<th>Relationship-based</th>
<th>LMX</th>
<th>Level of Analysis</th>
<th>Outcome Measure</th>
<th>Setting</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 2</td>
<td>Crisis</td>
<td>Team crisis</td>
<td>Intervention</td>
<td>Motivation-based</td>
<td>Charismatic leadership</td>
<td>Team</td>
<td>Performance (idea generation)</td>
<td>Lab</td>
<td>Brain-storming teams</td>
</tr>
<tr>
<td>Study 3</td>
<td>Post-crisis</td>
<td>Organizational crisis</td>
<td>Resolution</td>
<td>Functional-based</td>
<td>Pragmatic leadership</td>
<td>Organization</td>
<td>Attitudinal (evaluation)</td>
<td>Online</td>
<td>General population</td>
</tr>
</tbody>
</table>
5. Study 1

How Does Leadership Influence Incident Reporting in Healthcare? A Dual Process Model of Leader-Member Exchange

Kevin-Lim Jungbauer
TU Dresden, Germany

Kai Loewenbrück
University Hospital Carl Gustav Carus Dresden, Germany

Heinz Reichmann
University Hospital Carl Gustav Carus Dresden, Germany

Jürgen Wegge
TU Dresden, Germany

Submitted to Group and Organization Management

Abstract
Building on social exchange and social identity theory, we examined how leader-member exchange (LMX) influences reporting of incidents in healthcare organizations through two different mechanisms. Using survey data of 15 hospitals in Germany (N = 436) and structural equation modelling, we found that LMX increased both reporting-specific trust and organizational identification of employees, which in turn positively affected reporting of incidents. Furthermore, top management support for patient safety moderated the link between LMX and reporting-specific trust, indicating a compensatory effect of LMX for followers who perceive management support to be low. In addition, codification of patient safety regulations moderated the link between organizational identification and reporting of incidents, indicating that the institutionalization of patient safety norms through a strong follow-through of the organization facilitates reporting for highly-identified employees. Results are discussed in terms of how safety leadership can be enacted at both the supervisory and top management level in order to promote safety behavior in healthcare organizations.
5.1 Introduction

Leadership is an important antecedent of safety behaviors at the workplace (Clarke, 2013). In recent years, the topic of leadership has received increasing scholarly attention in the medical field (Flin & Yule, 2004; Künzle, Kolbe, & Grote, 2010), as healthcare providers are seeking for ways to make healthcare more reliable and improve patient safety (Frankel, Leonard, & Denham, 2006; Leape, 1994). Compared to other high risk industries such as aviation or energy that have achieved a high level of reliability, the healthcare sector is marked by serious safety deficiencies (Leape & Berwick, 2005; Noble & Pronovost, 2010). A large number of cases where patients are harmed could be avoided, if hospitals adopted new practices that promote organizational learning, for instance, incident reporting (Kohn, Corrigan, & Donaldson, 2000). Leaders play a main role in encouraging participation in incident reporting because they, to a large extent, help create a blame-free culture which makes individuals feel safe about speaking up on critical issues (Reason, 1997, 2000; Weick, 2001).

Although there are a number of studies on the link between leadership and follower safety behaviors, most are limited to the investigation of transformational leadership theory (Barling, Loughlin, & Kelloway, 2002; Conchie & Donald, 2009; Kelloway et al., 2006; Mullen & Kelloway, 2009). There has been little theoretical development and empirical testing of supervisory influences that focus explicitly on relational aspects, even though these are likely to be particularly important for shaping follower attitudes and perceptions concerning safety (Brower et al., 2000; Dunbar, 1975).

The objective of the present research is to clarify the relationship between leader-member exchange (LMX) and reporting of incidents in healthcare. While considerable progress has been made in uncovering underlying mechanisms of the leadership-safety behavior relationship (e.g., by examining the perceptions of safety climate as the primary intervening variable; see Clarke, 2013), few have made the attempt to build and test a model that integrates different theoretical perspectives that help explain the linkage. Our study shows that LMX affects incident reporting through two mediating processes and also considers distal leadership influences as moderators, thus testing a contingency model that allows for a more fine-grained analysis of supervisory safety leadership.
5.2 Theoretical Background

Leader-member exchange (LMX) theory (Danserau et al., 1975; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Liden et al., 1997) emphasizes the relational quality between subordinates and their supervisors and has been found to positively influence a wide range of follower outcomes, for instance, organizational citizenship behavior, job satisfaction, or job performance (Gerstner & Day, 1997; Ilies et al., 2007; Schriesheim, Castro, & Cogliser, 1999). While a number of studies has examined the effects of LMX on safety outcomes in occupational fields known for their primary concern for safety, for instance, manufacturing, transportation, or railway (Hofmann, Morgeson, & Gerras, 2003; Kath, Marks, & Ranney, 2010; Yagil & Luria, 2010), little attention has so far been paid to examining this relationship in a healthcare setting. This is notable because despite its obvious similarities with the aforementioned occupations (e.g., comparable risk profile with high probability of incidents, high levels of complexity and interdependence), healthcare also differs in significant ways which can create relationship problems (e.g., collaboration of different professions, hierarchy and status differences, stigmatization of error) (Vincent, 2010). These differences render healthcare a meaningful setting for the investigation of a relationship-oriented leadership theory such as LMX.

We draw on the two different theoretical perspectives, i.e., social exchange theory (Blau, 1964) and social identity theory (Tajfel & Turner, 1986; Tajfel, 1978) to shed new light on the LMX-safety behavior relationship. From a theoretical point of view, the integration of these two perspectives is worthwhile because on the one hand, they share commonalities in that they serve as theoretical frameworks that describe antecedents of organizational behavior (Jiang & Law, 2013). On the other hand, they differ in important regards in that the social exchange perspective explains the motivation for extra-role behavior as being sourced from the principle of reciprocity (Blau, 1964), while the social identity perspective view it as being sourced from a sense of belongingness that employees experience (Ashforth & Mael, 1989). More specifically, what has been missing from research attention from the social exchange perspective is an empirical test of how LMX affects social exchanges through constructs specific to the domain being investigated. In healthcare, this concerns how followers develop trust not just towards their leader, but towards the surrounding patient safety infrastructure, i.e., reporting-specific trust. What has been missing from research attention from the social identity perspective is an examination of the extent to which organizational identification can promote medical incident reporting which extends beyond
ordinary extra-role behavior because employees are likely to feel stronger inhibitions to engage in it, given the possibility of personal negative consequences (Frankel et al., 2006).

Furthermore, for both perspectives mentioned, past research efforts have not incorporated contextual variables that may influence these relationships. This is surprising because the organizational environmental, to a large degree, shapes how employees engage in patient safety behaviors (Flin & Yule, 2004). Contextual factors can promote speaking up on critical issues because they not just act as direct stimuli of employee behavior, but also shape employee interpretations (LePine & Dyne, 1998; Whiting, Maynes, Podsakoff, & Podsakoff, 2012). To develop our model, we examine the enactment of safety leadership at higher organizational levels as context variables. Testing the interaction of supervisory and senior management leadership variables is of significance because a safe culture can only be created if appropriate leadership is enacted at all organizational levels (Flin & Yule, 2004; Reason, 1997). We posit that the *proximal* influence of LMX on followers interacts with *distal* leadership characteristics that can either attenuate (i.e., management support for patient safety) or strengthen (i.e., codification of patient safety regulations) the proposed relationships. Our hypothesized model is depicted in Figure 6.

*Figure 6. Hypothesized Model (Study 1 of the Dissertation)*
5.2.1 LMX and Incident Reporting

As mentioned earlier, LMX theory is concerned with a dyadic perspective on leader-follower relationships. By developing high vs. low quality relationships with subordinates, leaders create in- and out-groups of employees that entail differential treatment (Graen & Uhl-Bien, 1995). Low quality relationships are based primarily on a leader’s use of formal authority and contractual exchanges; here, subordinates receive little attention and few rewards from their supervisor. On the other hand, high quality relationships are based more on interpersonal liking and mutual trust, and subordinates are given greater responsibilities as well as personal mentoring (Danserou et al., 1975). LMX theory builds on the social exchange framework (Blau, 1964) to explain how high quality LMX fosters above-average follower performance. The preferential treatment received in high quality LMX relationships create perceived obligations for subordinates to reciprocate, leading to behaviors on behalf of the follower that go beyond formal job duties and are beneficial to both the leader and the organization (Ilies et al., 2007).

LMX is likely to translate into higher rates of incident reporting for several reasons. Participating in the organization’s patient safety efforts is a way for employees in high quality LMX relationships to reciprocate the attention and rewards received with behaviors that benefit their supervisor by improving quality of care and the safety record. Furthermore, because the reporting of incidents is in alignment with two ethical principles central to medical practice, i.e., avoidance of patient harm (non-maleficence) and acting for the patient’s well-being (beneficence) (Beauchamp & Childress, 2008), engaging in this behavior is an activity by which employees can reciprocate in ways that benefit the organization. Beyond this, the sense of obligation felt in high quality LMX relationships is likely to also be reciprocated towards other parties, suggesting that employees who receive special treatment will want to “pay forward” the benefits received to the clients that they interact with. If employees perceive their supervisor to show concern for their well-being, they are likely to show concern as well for patients. By actively engaging in incident reporting, employees can support organizational learning processes that ultimately improve the well-being of patients (Helmreich, 2000; Leape, 1999). Empirical findings from other occupational fields have shown that LMX promotes employee open communication and safety behaviors (Bhal & Dadhich, 2011; Credo, Armenakis, Feild, & Young, 2010; Hofmann et al., 2003; Kath et al., 2010; Michael, Guo, Wiedenbeck, & Ray, 2006; Yagil & Luria, 2010). Likewise, we posit:

*Hypothesis 1:* LMX is positively related to incident reporting.
5.2.2 The Mediating Role of Reporting-Specific Trust

LMX theory is closely aligned with theoretical frameworks of trust (Brower et al., 2000) and empirical findings have shown that LMX builds trust through the individual concern that leaders exhibit for their followers (Schriesheim et al., 1999). A common definition of trust was proposed by (R. C. Mayer, Davis, & Schoorman, 1995) who defined it as willingness to be vulnerable to the actions of another party. However, while there is extant research that has examined general concepts of trust towards the leader, more recent research suggests that trust is comprised of different dimensions that relate differently to leadership outcomes (Conchie & Donald, 2009; Conchie, Taylor, & Donald, 2012; Dirks & Ferrin, 2002; Scandura & Pellegrini, 2008). In the present study, we expect reporting-specific trust, i.e., trust in the safe use of reporting structures (Wu, Shen, Lin, Greenes, & Bates, 2008), to mediate the relationship between LMX and incident reporting. The belief that employees who report incidents will not suffer negative consequences is a main prerequisite for safety participation (Firth-Cozens, 2004).

Employees in high quality LMX relationships are likely to develop trust not just towards their supervisor, but also towards the use of communication channels that are used to offer suggestions or raise concerns with regard to patient safety. A high quality LMX relationship implies high leader solidarity: employees who report an incident with potentially negative consequences for their career will have the belief that their supervisor will shield them from potential harm. Moreover, because supervisors also provide informational cues on the consequences of follower actions, followers in high quality LMX relationships are less likely to develop a negative or cautious attitude about the use of using reporting structures. In turn, the reporting-specific trust these followers experience will translate into increased incident reporting. Trust is regarded as a prerequisite for a safe culture (Reason, 1997) and has been found to result in higher willingness to engage in incident reporting and other safety-related behaviors (Conchie et al., 2012; Wu et al., 2008). Following from the above, we posit:

_Hypothesis 2a:_ Reporting-specific trust mediates the positive relationship between LMX and incident reporting.
5.2.3 Management Support for Patient Safety as a Moderator

Leadership at different levels serves different functions and is likely to affect employee attitudes and safety participation in different ways (Andriessen, 1978; Chen & Bliese, 2002; Flin & Yule, 2004). Supervisors have more direct contact with employees and continually communicate positive or negative consequences as part of their daily routine, while also providing role-modeling and socio-emotional support (Kidd & Smewing, 2001; Komaki, 1998). In contrast, senior management has less direct contact with employees but “sets the tone at the top”, i.e., determines the supervisors’ objectives and priorities while also establishing general safety conditions with their formal and informal elements (Keller & Huwaish, 1993; Thompson, Hilton, & Witt, 1998; Yule, Flin, & Murdy, 2007) and should therefore be particularly influential in shaping follower perceptions.

One important implication of the aforementioned is that even though supervisory and managerial leadership can both achieve changes in employee safety behaviors, the routes of getting there may be very different. More importantly, employees may receive conflicting messages from different leadership sources that shape their perceptions of trust when engaging in these behaviors (Dirks & Ferrin, 2002). As perceived organizational support (POS) theory suggests, employees develop distinct perceptions about and unique exchange relationships with entities from different organizational levels (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002). It is likely that these exchange relationships can either complement or counteract each other. For instance, employees may experience a high level of support when raising safety concerns with one organizational entity, e.g., the supervisor, but a low level of support with another one, e.g., senior management.

We hypothesize that a high management support for patient safety attenuates the positive relationship between LMX and reporting-specific trust. Employees perceiving a high management support for patient safety are expected to have a sense that management places a high priority on creating a no-blame culture. They have a strong belief that reporting incidents will be positively acknowledged. Since the support received from top management renders them less likely to be fearful about potential negative consequences of their reporting, the relationship they share with their supervisor will not have such a pronounced effect on developing reporting-specific trust. In contrast, employees who perceive low management support for patient safety are likely to be more doubtful when deciding whether to report an incident. The lack of support for patient safety from above is likely to exacerbate fears employees might harbour and they more strongly may anticipate consequences that could
negatively affect their career. To these individuals, a high quality LMX-relationship with their supervisor provides them with feelings of safety not received from the top of the organization. In other words, if the informational cues provided by senior management are not sufficient to create reporting-specific trust in followers, the relationship with the supervisor is likely to gain in importance and can serve as the otherwise missing impetus that instills a sense of trust in employees. However, because of the far-reaching influence that senior management has on organizational processes (cf. above), we also expect a strong main effect of management support on reporting-specific trust. We therefore propose the following hypothesis:

*Hypothesis 2b:* Management support for patient safety moderates the relationship between LMX and reporting-specific trust such that the relationship is stronger for employees perceiving low rather than high management support while reporting-specific trust is generally higher under high management support for patient safety.

### 5.2.4 The Mediating Role of Organizational Identification

A complementary process that can explain the linkage between LMX and incident reporting is organizational identification, defined as a perception of oneness with a group of persons (Ashforth & Mael, 1989). Supervisors, by representing the prototypical characteristics of an organization, offer employees important identity cues regarding their organizational membership that can promote organizational identification (Loi, Chan, & Lam, 2014; Reicher et al., 2005). Furthermore, leaders in high quality LMX-relationships are likely to fulfil the motivational needs of followers that promote identification, i.e., enhancement of the self (Hogg & Terry, 2000). Self-enhancement is achieved because the interpersonal treatment received in a high quality LMX relationship conveys to followers that they are valued: by empowering followers with more responsibilities, leaders show followers that they regard them as trusted employees, while by mentoring them, they convey their personal interest in their career development.

Organizational identification, in turn, leads to increased incident reporting. Because it provides individuals with a sense of identity and governs an individual’s attitudes and behavior, highly-identified individuals are likely to expend more effort on behalf of the organization and engage in activities that benefit the organization rather than self-interest (Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; van Knippenberg & van Schie, 2000). Organizational identification has often been associated with extra-role behavior.
(Riketta, 2005). Beyond this, identification has also been linked to employee voice and communication of suggestions intended to improve organizational functioning (Morrison, Wheeler-Smith, & Kamdar, 2011; Tangirala & Ramanujam, 2008). Likewise, we hypothesize that the sense of belonging highly-identified employees experience increases pro-organizational behavior in terms of participating in patient safety efforts. These employees are likely to act in a manner that serves the benefits of the organization by engaging more in incident reporting. In sum, we posit:

*Hypothesis 3a*: Organizational identification mediates the positive relationship between LMX and incident reporting.

### 5.2.5 Codification of Patient Safety Regulations as a Moderator

As outlined above, highly-identified employees engage in pro-organizational extra-role behaviors. Therefore, organizations that want to encourage reporting of incidents need to ensure that organizational objectives related to patient safety are salient in employees’ minds. One way of how management can promote these objectives throughout the organization is through codification of patient safety regulations. Extant research on how codification shapes organizational behavior exists in the domain of corporate codes, particularly ethical codes (Kaptein, 2004). Codes are defined as written documents that articulate the fundamental principles embraced by the organization and inform organizational members about acceptable or unacceptable behavior (Stevens, 1991, 2007).

Research has shown that the implementation depth of codification practices can vary widely (Weaver, Trevino, & Cochran, 1999a, 1999b). A strong implementation depth is associated with a committed “follow-through” of the organization, referring to the extent to which an organization takes action on concerns raised by its members and how the violation of patient safety codes is sanctioned (Trevino & Weaver, 2001). Follow-through is particularly important in shaping employee attitudes toward appropriate conduct, because corporate codes that convey the existence of regulations but not the consequences if individuals fail to comply with them are likely to be perceived as a mere “window dressing” (Weaver et al., 1999b).

We hypothesize that such a strong form of codification of patient safety regulations will strengthen the positive relationship between organizational identification and incident reporting. Healthcare organizations can use codification of patient safety practices to signal follow-through and convey to employees that adhering to patient safety principles is not just
endorsed by the organization, but that their violation will be sanctioned. Because highly-identified individuals will act and behave in ways that serve the organization, salient knowledge about the content of organizational goals related to patient safety facilitates the translation of identification into incident reporting. By codifying patient safety regulations, a healthcare organization unequivocally signals to its members that acting in accordance with these regulations is an espoused value and that acting in accordance with these regulations is a core component of the role identity of the organization (cf. Trevino & Weaver, 2001). Related studies have shown the importance of contextual factors for identification processes by showing that rule-based ethical climates or favourable voice climates positively influence effects of identification processes (Chen, Chen, & Liu, 2013; Morrison et al., 2011). In contrast, for less-identified individuals, the existence of such codification will yield a less pronounced effect of identification on incident reporting. We posit:

Hypothesis 3b: Patient safety codification moderates the relationship between organizational identification and incident reporting such that the relationship is stronger for employees perceiving high rather than low patient safety codification.

5.3 Method

5.3.1 Research Setting, Data Preparation, and Sample

We conducted this study as part of a larger research project on patient safety in 15 German neurological university hospitals. We distributed two pen-and-paper surveys on-location to all employees of the organization who had direct contact with patients (e.g., office secretaries and clerks were excluded). In each hospital, one member of the research team presented the study aims and procedure to physicians in a dedicated presentation meeting and to nurses and other occupational groups (e.g., medical technical assistants) in the handover meetings of the shifts. Hospital members also received an e-mail from the chief physician encouraging participation. In total, we distributed 2064 survey and received 951 usable responses, yielding a return rate of 46 percent.

Some of the measures used in the present study were only assessed in half of the surveys, therefore the usable sample size for this research was comprised of 481 participants. We deleted 45 further cases due to missing demographic data on the variables of age and gender. We performed Little’s Missing Completely at Random (MCAR) test (Little, 1988) which revealed that data were missing randomly, \( \chi^2[2] = 1.80, p > .05 \). We used the
expectation-maximization (EM) algorithm (Dempster, Laird, & Rubin, 1977; Little & Rubin, 1989) to impute missing data of the variables used in the model (LMX: 4 missing values, .08%; incident reporting: 4 missing values, .08%; reporting-specific trust: 7 missing values, 1.5%; organizational identification: 2 missing values, 0.4%; management support for patient safety: 5 missing values, 1.0%; codification of patient safety regulations: 26 missing values, 5.4%)

The size of the final sample was 436 participants. 312 (71.6%) were women and 124 (28.4%) were men. Due to the privacy protection policies of the participating hospitals, the age variable was only available at ordinal level. 1 participant (0.2%) was under the age of 20 years, 155 (35.6%) participants were between 21 and 30 years old, 133 (30.5%) between 31 and 40 years old, 106 (24.3%) between 41 and 50 years old, 34 (7.8%) between 51 and 60 years old, and 7 (1.6%) were above the age of 60 years. 116 (26.6%) participants were physicians, 251 (57.6%) nurses, and 36 (8.3%) belonged to the other occupational groups with direct patient contact.

5.3.2 Measures

Leader–member exchange. We measured leader-member exchange with the LMX-7 by Graen and Uhl-Bien (1995). Respondents answered on a five-point scale with different response options depending on the item wording. A sample item was “How would you characterize your working relationship with your direct supervisor?” with response options ranging from 1 (= extremely ineffective) to 7 (= extremely effective). The coefficient alpha for this scale was .92.

Organizational identification. We measured organizational identification with the four-item identification measure of Doosje, Ellemers, and Spears (1995). Respondents answered on a five-point scale from 1 (= do not agree at all) to 5 (= agree completely). A sample item was “I am glad to be a member of this hospital.” The coefficient alpha for this scale was .87.

Management support for patient safety. We measured management support for patient safety with a three-item scale taken from the Hospital Survey on Patient Safety Culture (HSOPSC; Sorra & Nieva, 2004). Respondents answered on a five-point scale from 1 (= do not agree at all) to 5 (= agree completely). A sample item was “Hospital management provides a work climate that promotes patient safety.” The coefficient alpha for this scale was .82.
**Reporting-specific trust.** We measured trust in the reporting processes with a modified three-item scale taken from Wu and colleagues (2008) which assesses trust in using incident reporting systems in healthcare. We adapted the scale to reflect the trust not just in using reporting systems but in the reporting process in general. Respondents answered on a seven-point scale from 1 (= do not agree at all) to 7 (= agree completely). A sample item was “Reporting incidents is safe for me.” The coefficient alpha for this scale was .91.

**Codification of patient safety regulations.** We measured codification of patient safety regulations with two modified items from a short scale by (Trevino & Weaver, 2001) which assesses an organization’s follow-through on ethical regulations. We adapted the items to reflect the follow-through of a healthcare organization on patient safety regulations. Respondents answered on a five-point scale from 1 (= do not agree at all) to 5 (= agree completely). A sample item was “Employees who are caught violating the hospital’s regulations for patient safety are disciplined.” The coefficient alpha for this scale was .91.

**Incident reporting.** We measured incident reporting with a modified three-item scale taken from (Wu et al., 2008) which assesses the intention to use incident reporting systems in healthcare. We adapted the scale to reflect the reporting of incidents not just by use of reporting systems as proposed in the original measure but by general means. Intention to report is an appropriate measure to reflect incident reporting behavior according to theory of reasoned action (Fishbein & Ajzen, 1975). Respondents answered on a seven-point scale from 1 (= do not agree at all) to 7 (= agree completely). A sample item was “When I encounter an incident due to a mistake by others, I would report it.” The coefficient alpha for this scale was .82.

**Control variables.** As a control variable, we included gender (coded as 1 = “male,” 2 = “female”).

### 5.3.3 Analytical Procedure

In order to test the hypotheses, we used structural equation modelling (SEM) with AMOS 22. SEM allows for the analysis of complex mediational models (Hoyle & Smith, 1994) and is appropriate in this case as the two mediational paths and their moderating variables can be examined simultaneously. As recommended by (Anderson & Gerbing, 1988), we adopted a two-stage approach to the analysis. First, we assessed the adequacy of the
equality of the

---

1 We collected data on the control variable age, however, this data was only available at ordinal level (see sample description). Because it did not significantly correlate with the dependent variable ($\beta = .06, p > .05$), we did not include this variable in the analysis.
measurement model using confirmatory factor analysis (CFA). Second, we tested the hypothesized structural model and estimated the fit of the model to the data. We used established goodness-of-fit indices for assessing model fit: chi-square ($\chi^2$) and degrees of freedom ($df$), comparative fix index (CFI), goodness-of-fit index (GFI), the standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA). To test mediation, we applied the non-parametric bootstrapping method (with 1000 bootstrap samples) and estimated the total indirect effect of the independent variable on the dependent variable as well as single indirect effects for each mediated sequence. To examine the proposed interaction effects, we included interaction terms based on $z$-standardized variable scores in the model and furthermore examined these relationships in a moderated mediation framework using conditional indirect effects analysis with the PROCESS macro (Hayes, 2013; Muller, Judd, & Yzerbyt, 2005; Preacher, Rucker, & Hayes, 2007).

5.4 Results

5.4.1 Descriptive Statistics and Preliminary Analysis

Table 14 presents the means, standard deviations, and correlation coefficients for the study variables. We performed CFA and first examined whether each of the measurement items would load significantly on the associated constructs. Results showed that this measurement model exhibited an adequate fit to the data ($\chi^2[194] = 472.01$, CFI = .95, GFI = .92, SRMR = .06, RMSEA = .06). Because some of the constructs examined in our model are conceptually related, we conducted additional tests to determine their discriminant validity. We tested an alternative model in which the items for management support for patient safety and codification of patient safety regulations were set to load on a single factor. Results showed that this model exhibited a poor fit ($\chi^2[199] = 970.75$, CFI = .86, GFI = .84, SRMR = .08, RMSEA = .09), indicating the distinctiveness of the constructs as proposed by the measurement model.
Table 14. Means, Standard Deviations, and Correlations among Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LMX</td>
<td>3.22</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Reporting-specific trust</td>
<td>4.53</td>
<td>1.46</td>
<td>.40*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Organizational identification</td>
<td>3.44</td>
<td>0.84</td>
<td>.44*</td>
<td>.30*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Management support</td>
<td>2.74</td>
<td>0.82</td>
<td>.30*</td>
<td>.41*</td>
<td>.29*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Codification of regulations</td>
<td>2.49</td>
<td>0.84</td>
<td>.07</td>
<td>-.02</td>
<td>.02</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Incident reporting</td>
<td>5.31</td>
<td>1.13</td>
<td>.26*</td>
<td>.38*</td>
<td>.21*</td>
<td>.13*</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>7. Gender&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.72</td>
<td>0.45</td>
<td>-.11</td>
<td>-.11</td>
<td>-.10</td>
<td>-.05</td>
<td>-.07</td>
<td>.11*</td>
</tr>
</tbody>
</table>

<sup>a</sup> n = 436.

<sup>b</sup> Coding was as follows: gender: 1 = “male,” 2 = “female”.

* p < .05

** p < .01
5.4.2 Hypothesis Tests

Our test of the hypothesized structural model revealed a good fit to the data ($\chi^2[16] = 42.10$, CFI = .94, GFI = .98, SRMR = .05, RMSEA = .06). We tested alternative models that were theoretically plausible, but exhibited poorer fit. Table 15 summarizes the model fit indices. Figure 7 presents the results of the SEM analysis as standardized path coefficients.

Table 15. Comparison of Model Fit Indices

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>GFI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Measurement model</td>
<td>472.01</td>
<td>194</td>
<td>.95</td>
<td>.92</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>2. Hypothesized model</td>
<td>42.10</td>
<td>16</td>
<td>.94</td>
<td>.98</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>3. Alternative model 1$^b$</td>
<td>97.60</td>
<td>18</td>
<td>.80</td>
<td>.95</td>
<td>.06</td>
<td>.10</td>
</tr>
<tr>
<td>4. Alternative model 2$^c$</td>
<td>45.87</td>
<td>17</td>
<td>.93</td>
<td>.98</td>
<td>.05</td>
<td>.06</td>
</tr>
</tbody>
</table>

$^a n = 436.$  
$^b$ Paths from reporting-specific trust and organizational identification to incident reporting removed (direct effects model).  
$^c$ Path from LMX to incident reporting removed (full mediation model).

Figure 7. Results of Structural Equation Modeling
Hypothesis 1 predicted that LMX is positively related to incident reporting. We tested this hypothesis with a direct effects model with relatively poor fit (alternative model 1; see Table 15) with the paths from reporting-specific trust and organizational identification to incident reporting removed, in order to test direct effects without influence of mediating variables. Our results showed a significant effect of LMX on incident reporting ($\beta = .27, p < .001$), thus supporting Hypothesis 1. However, when adding the paths from reporting-specific trust and organizational identification to incident reporting back to the model again (hypothesized model), the prior significant path from LMX to incident reporting became non-significant ($\beta = .10, p > .05$). Analysis of indirect effects with 1000 bootstrap samples showed a significant total indirect effect of LMX on incident reporting in the overall model ($\beta = .14, p < .001$) while the full mediation model (alternative model 2; see Table 15) with the path from LMX to incident reporting removed showed acceptable fit. Having established a total indirect effect of LMX via the two mediating pathways, we proceeded with testing the specific mediational pathways.

Hypothesis 2a predicted that reporting-specific trust mediates the positive relationship between LMX and incident reporting. SEM analysis revealed that LMX is positively related to reporting-specific trust ($\beta = .29, p < .001$) which in turn is positively related to incident reporting ($\beta = .33, p < .001$). More specifically, estimation of single indirect effects showed a significant indirect effect of LMX via reporting-specific trust ($\beta = .13, p < .001$). Thus, Hypotheses 2a was supported.

Hypothesis 2b predicted that management support for patient safety moderates the relationship between LMX and reporting-specific trust and that there is a main effect of management support on reporting-specific trust. Our results showed a significant negative effect of the interaction term (LMX $\times$ management support for patient safety) on reporting-specific trust ($\beta = -.11, p < .05$) when controlling for both main effects. More detailed analysis of conditional indirect effects showed that the indirect effect of LMX on incident reporting via reporting-specific trust was $\.18$, $\.13$, and $\.09$ at values of low, average, and high management support for patient safety, respectively; the 95 percent bias-corrected confidence interval around the bootstrapped indirect effect did not contain zero for low (CI $[.11, .28]$), average (CI $[.08, .21]$) and high management support for patient safety (CI $[.03, .17]$). These results indicate that the positive effect of LMX on incident reporting via reporting-specific trust is stronger when management support for patient is low, rather than high. Following the procedures of Aiken and West (1991), we plotted the significant interaction effect. As shown in Figure 8, for employees who perceive low management support for patient safety, the
positive relationship between LMX and incident reporting is relatively stronger. Additional simple slope tests showed that, at low levels of management support for patient safety, LMX had a stronger positive effect on incident reporting ($\beta = .54, t = 7.57, p < .001$) than at high levels ($\beta = .25, t = .27, p < .01$). In addition, as expected, we also found a strong main effect of management support on reporting-specific trust ($\beta = .33, p < .001$). As can be seen from the plot in Figure 8, the slope indicating high management support is on average higher than the one indicating low management support. In sum, Hypothesis 2b was supported.

Hypothesis 3a predicted that organizational identification mediates the positive relationship between LMX and incident reporting. SEM analysis revealed that LMX is positively related to organizational identification ($\beta = .44, p < .001$) which in turn is positively related to incident reporting ($\beta = .10, p < .05$). Estimation of single indirect effects showed a significant indirect effect of LMX via organizational identification ($\beta = .06, p < .05$). Thus, Hypotheses 3a was supported.

Hypothesis 3b predicted that codification of patient safety regulations moderates the relationship between organizational identification and incident reporting. Our results showed a significant positive effect of the interaction term (organizational identification $\times$ codification of patient safety regulations) on incident reporting ($\beta = .11, p < .05$) when controlling for both main effects. More detailed analysis of conditional indirect effects showed that the indirect effect of LMX on incident reporting via organizational identification trust was .03, .08, and .14 at levels of low, average, and high codification of patient safety regulations, respectively; the 95 percent bias-corrected confidence interval around the bootstrapped indirect effect contained zero in the condition of low codification (CI [-.06, .14]) but did not contain zero in the average (CI [.02, .18]) and high codification (CI [.05, .25]). These results indicate that the positive effect of LMX on incident reporting via organizational identification is stronger when codification of patient safety regulations is high, rather than low. The interaction effects are plotted in Figure 9. As can be seen, for employees who perceive high codification of patient safety regulations, the positive relationship between LMX and incident reporting is relatively stronger. Additional simple slope tests showed that, at high levels of codification of patient safety regulations, LMX had a stronger positive effect on incident reporting ($\beta = .39, t = 5.57, p < .001$) than at low levels ($\beta = .14, t = 1.95, p < .05$). In sum, Hypothesis 3b was supported.
Figure 8. Interaction of LMX and Management Support for Patient Safety

Figure 9. Interaction of Identification and Codification of Patient Safety Regulations
5.5 Discussion

The objective of this study was to further the theoretical understanding of how LMX impacts incident reporting in a healthcare setting. Extending past research on antecedents of safety participation, our findings add to the existing body of literature by focusing on supervisory leadership and delineating underlying mechanisms and contingencies that predict incident reporting. Specifically, we developed and tested an integrated model that explains how positive effects of LMX on incident reporting can unfold when seen from the theoretical perspectives of social exchange theory and social identity theory, i.e., by affecting reporting-specific trust and organizational identification, respectively. Beyond this, we showed that higher management, though more distant from followers in comparison to the supervisor, plays an influential role for these relationships by showing support for patient safety and codifying patient safety regulations. Regarding the former, we showed that the positive effects of LMX on reporting-specific trust are stronger if employees perceive low management support for patient safety, indicating an interaction of proximal (LMX) and distal (management support for patient safety) leadership variables. Regarding the latter, we found that organizational identification leads to improved incident reporting particularly if patient safety values are enforced in the organization by means of codification of patient safety regulations. Taken together, our findings indicate that supervisors play an influential role for the participation in patient safety efforts, but also that how this role takes effect depends on influences of higher management levels.

5.5.1 Theoretical Implications

We make three distinct contributions with the present study. Our first contribution is that we have developed a more fine-grained theoretical understanding of leadership as an antecedent of reporting behavior in a healthcare setting. Although there has been extant research on the concept of safety leadership and safety behavioral outcomes (Clarke, 2013; Künzle et al., 2010), a thorough analysis of a relational perspective focusing on the importance of leader-follower relationships for safety behavior has been a missing. Moreover, we examined reporting-specific trust and organizational identification as two distinct underlying mechanisms that explain how LMX positively affects reporting behavior. Our study not only illustrates why followers with a high-quality LMX relationship are likely to increase their safety behavior, but also that this increase can be motivated from different sources. These findings complement previous research that have taken a multiple process-view of LMX (Jiang & Law, 2013; Loi et al., 2014).
Second, our study contributes to the social exchange literature. Even though LMX theory has often been tested in terms of mutual trust that develops between leader and follower, considerably less attention has been paid to whether LMX can also positively affect specific forms of trust (Conchie & Donald, 2009; Conchie et al., 2012). Our findings show that a high quality social exchange relationship with the leader can translate into trust towards the existing infrastructure used to collect information on incidents. We also examined management support for patient safety as a contingency factor that influences this relationship. Our results indicate that LMX is likely to have a stronger influence on perceptions of reporting-specific trust when employees perceive a low level of management support for patient safety, implying that leadership at both the supervisory and the top management level can instill trust in followers and work in a compensatory fashion. These results can be interpreted in light of substitutes of leadership theory (Kerr & Jermier, 1978) according to which certain contingencies can modify leadership influences on followers. One such contingency is leadership distance, which has been found to moderate the relationship between leadership and follower outcomes such as commitment or performance (Avolio, Zhu, Koh, & Bhatia, 2004; J. M. Howell & Hall-Merenda, 1999). Similarly, our study showed that a lack of support from distal leadership influences concerning reporting-specific trust can, to a certain extent, be substituted by proximal leadership at the supervisory level. However, this effect can be expected to be limited: as our specific hypothesis on the main effects of management support for patient safety has shown, overall, senior management seems to play a highly influential role in shaping perceptions of trust.

Third, our study also contributes to the development of social identity theory. By testing organizational identification as a second intervening mechanism of the LMX-incident reporting relationship, we showed that the motivation for incident reporting can also be sourced from an employee’s sense of belongingness to the organization. Even though numerous studies have shown a positive link between organizational identification and pro-organizational attitudes and behaviors (Riketta, 2005), our study adds to this literature by testing this relationship in relation to medical incident reporting. Also, our findings suggest that in order to act in ways beneficial to the organization, highly-identified organizational members need to know that the formal, disciplinary structures upper management has put into place to promote patient safety will indeed lead to sanctions if not adhered to. Our study demonstrates that beyond the social exchanges followers share with their supervisor, the institutionalization of patient safety regulations plays an important role in encouraging employees to engage in patient safety-supportive behaviors.
5.5.2 Practical Implications

The findings of our study have important implications for healthcare organizations that want to encourage reporting of incidents. They show the importance of building high quality relationships between supervisors and their subordinates for developing trust towards reporting structures. However, the realities of organizational life prohibit supervisors from building these relationships with every follower. Our findings suggest complementary interventions that take place in upper echelons are important as well. Organizations should focus intervention efforts on both supervisory training aimed at employee relationship building and managerial training on the importance of communicating a clear commitment to patient safety throughout the organization. At the same time, healthcare officials can facilitate the reporting of incidents through promoting a high sense of identification of employees with the organization while simultaneously ensuring that formal elements are in place that inform employees about expectations and consequences concerning patient safety behavior. It is important that such written documents signify not just a window dressing but a commitment of the organization to “follow-through”. Past research has emphasized the importance of closing the “safety-feedback-loop” (Benn et al., 2009), suggesting that after reporting an incident, employees need to be informed about follow-up actions of the organization (e.g., dissemination of information on organizational changes as a consequence of the report) in order to maintain motivation to report in the future. Likewise, by codifying patient safety regulations, healthcare organizations can signal the earnestness of their patient safety efforts to employees.

5.5.3 Study Limitations and Future Research Directions

Our study is limited in several aspects. First, our analysis was conducted with cross-sectional data which prohibits drawing clear conclusions about the causality of the proposed relationships. Although we calculated alternative models using SEM that exhibited a significantly worse fit than our final model, future longitudinal research should be conducted to corroborate our findings and also investigate how reporting-specific trust or organizational identification develops over time. Furthermore, our data was collected from the same source and potentially suffers from common method bias. However, we provided evidence in our SEM (via discriminant validity) that decreases the concern for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).
Secondly, our study examined a broad range of leadership variables. While LMX is a general leadership theory at the supervisory level, management support for patient safety and codification of patient safety regulations emphasize patient safety-specific leadership aspects at the upper management level. Future research could shed more light on the issue of how different forms of safety leadership enacted at different levels of the organization affect follower perceptions of trust, e.g., by comparing relationship- and patient safety-related forms of leadership across supervisory (e.g., LMX vs. supervisor expectations and actions promoting patient safety; Sorra & Nieva, 2004) and higher management levels (perceived organizational support vs. management support for patient safety; Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Also, the examination of cascading leadership effects that explain how patient safety norms are relayed across organizational levels (“trickle-down-models” of leadership) constitute a promising avenue for future research (see McFadden, Henagan, & Gowen, 2009).

Thirdly, even though we have assessed reporting of incidents that include medical errors as well as adverse events that can potentially harm patients, our study did not consider a more differentiated view of incidents that differ in their harm level or specific type. With regards to the development of reporting-specific trust investigated, the relative importance of supervisory and top management leadership might shift in favour from one to the other, depending on the degree of patient harm or the specific type of incident. Future research should therefore focus on a more fine-grained analysis of the content of incidents employees report in different contexts.

Finally, future studies could explore how leadership interacts with other factors that influence employee attitudes towards incident reporting. Human factors theory views hospitals as complex socio-technical systems, in which human behavior, the organizational environment, and available technologies interact to produce safety outcomes (Braithwaite, Runciman, & Merry, 2009; Gurses, Ozok, & Pronovost, 2012). In recent years, many healthcare providers have introduced reporting systems that have been successfully used in other high risk industries (e.g., aviation) to achieve high safety standards (Helmreich, 2000; Sexton, 2000). This can be seen as an attempt of healthcare to take on the underlying philosophy of organizations with a strong safety culture and thus become a high reliability organization (Dixon & Shofer, 2006; Reason, 1997; Weick et al., 1999). The role of leadership relative to the implementation of safety infrastructure for shaping this kind of culture is insufficiently explored and offers room for further investigation.
5.6 Conclusion

Hospitals are complex organizations with a high risk for incidents. However, in contrast to other high-risk professions that have achieved a high level of reliability by successfully implementing systems and processes of organizational learning, the healthcare sector still suffers from inherent safety deficiencies that preclude the prevention of patient harm. The present research highlights the role of supervisory leadership in promoting the reporting patient safety-related incidents by hospital staff members. By identifying different mechanisms that explain how leader-member exchange influences follower safety attitudes, the findings of this study provide a starting point for the development of interventions aimed at improving follower proactive safety behavior and thus, increasing patient safety. Future research efforts should be geared towards gaining further insights into how the leader-follower relationship can be improved and how this could contribute to providing for high quality care.
6. Study 2

When Inspiration Does Not Fit the Bill: Charismatic Leadership Reduces Performance in Team Crises for Followers High in Self-Direction

Kevin-Lim Jungbauer  
TU Dresden, Germany

Meir Shemla  
Rotterdam School of Management, Netherlands

Jürgen Wegge  
TU Dresden, Germany

Submitted to Organizational Behavior and Human Decision Processes

Abstract
We extend charismatic leadership research by identifying conditions under which charismatic leadership in teams does not improve but can even hurt follower performance. Specifically, we hypothesize that while charismatic leadership generally leads to higher performance in team-based settings, team crises decrease performance. In addition, the follower attribute of self-direction is hypothesized to interact with charismatic leadership and team crises such that charismatic leadership adversely impacts performance in team crises if followers’ self-direction is high rather than low. In a laboratory experiment disguised as a brainstorming competition, 88 participants were randomly assigned to a team crisis or a control condition. Half of the participants were exposed to a charismatic leadership intervention while the other half served as a control group (receiving a laissez-faire leadership treatment). The findings support our propositions. In sum, this study provides first experimental evidence of how charismatic leadership may also reduce performance of specific team members.
6.1 Introduction

Charismatic leadership is one of the most-researched and established leadership theories (Dinh et al., 2014; Yammarino et al., 2005). A large body of literature has established the positive effects of charismatic leadership on followers across a wide range of outcomes (de Hoogh et al., 2004; Degroot et al., 2000; Judge & Piccolo, 2004; Lowe et al., 1996; Wang et al., 2011). One important environmental factor that should be conducive to charismatic leadership effects is crisis, based on Weber’s (1947) original assertion that crisis is prerequisite of charismatic leadership emergence. A number of empirical studies exists that can attest to this basic proposition, highlighting its beneficial influence on followers even duress (e.g., Bligh, Kohles, & Meindl, 2004a; Davis & Gardner, 2012; Halverson, Holladay, Kazama, & Quiñones, 2004; Hunt, Boal, & Dodge, 1999; Landau et al., 2004; Pillai, 1996; Seyranian & Bligh, 2008; Waldman, Ramirez, House, & Puranam, 2001; Williams, Pillai, Lowe, Jung, & Herst, 2009).

However, the existing body of research still misses important details of the charismatic leader-follower relationship in times of crisis. Generally, crisis is defined as a condition where “a system is expected to handle a situation for which existing resources, procedures, policies, structures, or mechanisms are inadequate” (Boal & Bryson, 1988, p. 16). While this definition captures the stressors followers are likely to experience as a consequence of the crisis, it leaves open to which level-of-analysis “system” refers to. Indeed, it is conceivable that the situational demands of a crisis exceed the coping capabilities of a whole organization, but likewise that of a smaller entity such as a team, which may demand specific crisis leadership responses (Kaplan, Laport, & Waller, 2013; Sommer et al., 2015; Stachowski, Kaplan, & Waller, 2009). Furthermore, the role of followers themselves has been a widely understudied area. Follower characteristics have been found to predict stronger suggestibility by charismatic leaders as well as evaluations of those leaders (Conger, 1999; De Vries, Roe, & Taillieu, 1999; Ehrhart & Klein, 2001; Felfe & Schyns, 2006).

Scholars have described charismatic leadership as a phenomenon resulting from three prerequisites: a leader with charismatic qualities, an environment conducive to charisma, and followers susceptible to charisma (Klein & House, 1995). Although previous research has investigated each of the three elements of charismatic leadership, so far no attempts have been made to study their combined effects. This is problematic because interactions between the three components are theoretically expected. In particular, and as outlined in more detail below, we will propose and test a new model in which even a negative effect of charismatic leadership for the performance of certain followers is expected (a three-way interaction
between leadership, team crises, and follower characteristics). Our study is designed to extend existing literature by extending the investigation of charismatic crisis leadership to a specific type of team crisis, i.e., critical team events in the form of value-based disagreements. In doing so, our study focuses on a follower characteristic that so far has been neglected by research but offers interesting findings when examined in conjunction with contextual factors. While critical team events on their own are likely to increase follower susceptibility to charismatic leadership, we posit that follower performance is negatively afflicted by charismatic leadership if high self-direction is added to the model. Our overall model is depicted in Figure 10 and explained in detail in the following.

**Figure 10. Hypothesized Model (Study 2 of the Dissertation)**

### 6.2 Theoretical Background

#### 6.2.1 Charismatic Leadership in Times of Crisis

A large body of literature has shown that charismatic leadership is effective in times of crisis (e.g., Halverson, 2004; Hamblin, 1958; Pillai, 1996). In a crisis, followers may tolerate or even demand leadership actions that are different from the status quo and can therefore resolve the crisis (Yukl, 1999). Research from the political field has also shown that followers tend to collectively rally behind their leader in times of crisis (Bligh et al., 2004a; Mueller, 1973; Oneal & Bryan, 1995). An explanation for this effect is that the uncertainty experienced during a crisis leads to an increased follower readiness for charismatic leadership (Kets de Vries, 1988a, 1988b; Madsen & Snow, 1991). More precisely, crises create environmental contingencies under which the need for charismatic leadership becomes salient: followers
who have felt safe before may now feel fearful and wish for support from a charismatic leader (De Vries et al., 1999; J. M. Howell & Shamir, 2005). While different conceptualizations of charismatic leadership exist today (Bass, 1985; Burns, 1978; Conger & Kanungo, 1987; House, 1977), we build on the self-concept based motivational theory of charismatic leadership to develop our research model and apply it to a team-setting. According to this approach, charismatic leaders cause a profound transformational change in their followers by elevating their self-concepts (Shamir et al., 1993). They achieve this by communicating an attractive vision, and more specifically, by making use of certain rhetorical elements, e.g., more references to the collective identity, follower’s worth, important values, and distal goals (Shamir et al., 1994). We chose this theoretical framework because the rhetorical elements outlined lend themselves well for the experimental manipulation of a crisis intervention speech (cf. below) and because rhetorical aspects of charismatic leadership have been found to play a significant role across different crisis contexts (Bligh et al., 2004a, 2010; Bligh & Robinson, 2010; Davis & Gardner, 2012; de Bussy & Paterson, 2012; Heracleous & Klaering, 2014; Pennebaker & Lay, 2002; Robinson & Topping, 2013).

6.2.2 Critical Team Events

While charismatic leadership has often been examined in the context of large-scale crises such as natural disasters, terrorist attacks, or economic downturns (e.g., Bligh & Hess, 2007; Bligh et al., 2004; Davis & Gardner, 2012; Pennebaker & Lay, 2002; Williams, Pillai, Deptula, & Lowe, 2012), we study the construct in the context of critical events that organizational teams are facing on a recurring basis. With increasing frequency, employees in today’s workforce have to grapple with unforeseen events that threaten team functioning and often reach a level of criticality that necessitates leadership intervention (Mumford et al., 2000; Zaccaro, Rittman, & Marks, 2001). Critical team events are defined as “events in teams [that] become the central focus of teams and team leaders until the event is resolved” (Morgeson & DeRue, 2006, p. 273). Critical team events extend beyond ordinary disruptions of workflow. They require from individuals to devote attentional and information processing resources to coping with the situation (Morgeson & DeRue, 2006), force afflicted teams to undergo adaptation processes (LePine, 2003; Levine & Moreland, 1994), and lead to affective reactions that reduce performance (Kaplan et al., 2013).

Critical team events create a need for assistance from a leader (Morgeson & DeRue, 2006). In familiar environments where routines are in place, followers may be self-managing
and have few leadership needs. In critical events, however, followers are exposed to circumstances that they may not be able to effectively handle themselves (Marks et al., 2000). This calls for leader interventions that help followers adapt to the new situation and maintain performance standards (Morgeson, 2005; Zaccaro et al., 2001). Because critical events, just like crises, can be regarded as a specific case of the more general condition of unstructured situations (Shamir & Howell, 1999), it is likely that they are particularly amenable to charismatic leadership influences.

Critical team events can involve a variety of issues including, but not limited to, performance (e.g., operating procedures), personnel (e.g., new team members), task resources (e.g., lack of resources), or safety (e.g., injuries) (Morgeson & DeRue, 2006). Past studies indicate that the effectiveness of a leadership intervention depends on the nature of problems that followers encounter (Morgeson, 2005). For the purpose of the current research, we focus on a specific type of critical team event that relates to value-based disagreements, i.e., intragroup conflict resulting from disagreements within or between individual team members (Morgeson & DeRue, 2006). This type of critical team event constitutes a strong, relationship-oriented type of crisis for which the potential negative impact on both performance and well-being should be particularly pronounced, compared to task conflicts (Amason, 1996; De Dreu & Van Vianen, 2001; Jehn, 1995; Meier, Gross, Spector, & Semmer, 2013). The empirical investigation of this type of crisis in connection to charismatic leadership therefore seems warranted. In examining this relationship, we predict an interaction effect with follower self-direction, which will be elaborated on in the following.

### 6.2.3 The Role of Follower Self-Direction

Past studies have shown that under ambiguous conditions, followers strive to reduce their experienced uncertainty (Cicero et al., 2010). Moreover, research on charismatic leadership from a follower-centered perspective has shown that the need for security is predictive of a preference for charismatic leadership (Ehrhart & Klein, 2001). While these findings are important because they show that follower susceptibility to charismatic leadership may not just be driven by situational but also by personal factors, they do not inform us about how followers are affected if charisma-favourable circumstances co-occur with opposite leadership preferences, for instance, the need for work without a leader (De Vries et al., 1999; Kerr & Jermier, 1978; Podsakoff, MacKenzie, & Bommer, 1996).
The present study is concerned with addressing this research gap by investigating followers who are high in self-direction. Self-direction is a component in Schwartz’s work values framework (Schwartz, 1992). While work values in general regulate how individuals deal with the social and physical world, self-direction in particular reflects individuals’ need for control, their sense of autonomy, and reliance upon their own judgment when coping with challenges (Schwartz, 1999, 2012). We propose that followers who are high in self-direction prefer to adapt to critical team events on their own and, therefore, might even reject external support from a charismatic leader. In fact, for such followers, charismatic leadership may have negative consequences because needs become salient that cannot be fulfilled by a leader.

Our rationale builds on situational strength theory by Mischel (1973, 1977), which distinguishes between strong (here: non-critical) and weak (here: critical) psychological situations. In contrast to strong situations, weak situations are characterized by less structure, fewer situational cues, and higher ambiguity of expectations. Shamir and Howell (1999) propose that charismatic leadership is more likely to be effective in weak situations, because followers then tend to look for behavioral cues that guide their behavior. This should particularly apply to followers low in self-direction who are susceptible to social cues from powerful others and seek a sense of direction through identification with a charismatic leader (Conger & Kanungo, 1998; De Vries, Roe, & Taillieu, 1999; Felfe & Schyns, 2006). On the other hand, followers high in self-direction will prefer to act autonomously and self-reliant when it comes to dealing with a weak situation. Such followers may show little responsiveness to charismatic leaders that, by intervening, fail to link follower values to superordinate goals (cf. Howell & Shamir, 2005).

Our proposition also reflects research on the contextual need for leadership which asserts that individuals have different needs in different settings (Hoogervorst, De Cremer, & van Dijke, 2013; Kets de Vries, 1988a; D. M. Mayer, Bardes, & Piccolo, 2008). If the context does not give rise to leadership needs of followers, they are likely to discount leader contributions or even perceive leadership to be an impediment to their goal achievement (De Vries et al., 1999). Following from the above, we argue that critical team events are likely to make the need for charismatic leadership salient for individuals low in self-direction, but not for individuals high in self-direction. Thus, we argue that in response to a critical situation, charismatic leadership can be misdirected because the very act of offering charismatic leadership assistance to highly self-directed followers is in conflict with their preference to deal with the crisis on their own. Our study thus challenges the commonly held assumption that followers perform well under guidance of a charismatic leader.
Following from the sections above which have reviewed the empirical findings on the positive effects of charismatic leadership, established the potentially disruptive effects of critical team events on followers, and specified the role of follower values in the charismatic-leader-follower relationship, we posit the following:

**Hypothesis 1:** Charismatic leadership increases follower performance in teams.

**Hypothesis 2:** The occurrence of a critical team event decreases follower performance.

**Hypothesis 3:** There will be a three-way interaction between leadership, critical team event, and follower self-direction on performance: Charismatic leadership will decrease performance in critical team events, but only for followers high in self-direction.

### 6.3 Method

#### 6.3.1 Participants

88 undergraduate students at a large German university participated in the laboratory study in exchange for course credits or a remuneration of 5 EUR. The study was advertised as a brainstorming competition (cf. below). Participation was voluntary and the mean age of participants in the sample was 23.99 (SD = 3.72); 60 were female and 28 were male.

#### 6.3.2 Design and Procedure

We used a 2 (team crisis: crisis, control) × 2 (leadership: charismatic leadership, control) × 2 (self-direction: low, high) factorial design. Participants were randomly assigned to the crisis and leadership conditions. The final two conditions of low versus high self-direction were established by a retrospective median split, therefore yielding unequal cell distributions (see Table 16). We advertised the study as a brainstorming competition in student magazines and on the webpage of the university, stating that a technological spin-off company of one of the university’s research faculties was looking for creative student ideas on how to advertise novel consumer products. We included the information that members of the three teams with the best ideas would receive an award of 50 EUR, 25 EUR, and 15 EUR, respectively. With this information, we intended to motivate participants to take the brainstorming tasks seriously.
Table 16. Distribution of Participants to Experimental Conditions

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Leadership</th>
<th>Preliminary N</th>
<th>Self-Direction</th>
<th>Final N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charismatic</td>
<td>Low</td>
<td>22</td>
<td>Low</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Control</td>
<td>Low</td>
<td>22</td>
<td>Low</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Charismatic</td>
<td>Low</td>
<td>22</td>
<td>Low</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Control</td>
<td>Low</td>
<td>22</td>
<td>Low</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Participants were randomly assigned to 44 teams of two members. Each team was invited to a seminar room at the university where the experimenter (played by a student confederate; male) told participants a cover story that the company that had advertised the brainstorming competition was preparing the commercial launch of two new (unbeknownst to participants, fictitious) consumer products. The experimenter gave participants background information on the products – a cleaning spray and a functional food product – and informed them that both products were based on state-of-the-art nanotechnology that can modify matter on a molecular level in order to provide added benefits to the consumer.

After filling out a questionnaire assessing the work value of self-direction, participants executed the brainstorming task for the first product (Task 1). The experimenter gave participants a joint goal instruction with the directive to generate as many ideas as possible and with the highest quality possible in terms of ideas that would promote the product’s successful marketing. Three categories for idea generation were given, i.e., (a) product names, (b) advertising slogans, and (c) spokespeople that could be used for the commercial launch of the products. Participants were told that they had a time limit of six minutes in total to generate ideas in these categories. They were given individual response sheets to write down their ideas and were informed that their individual ideas would be summed to determine the
team score. They were also informed that they could discuss their individual ideas with the other team members, if desired. Brainstorming for the first product (Task 1) was followed by the experimental manipulations and the brainstorming task for the second product (Task 2), which had the same instructions as Task 1. Upon completion, participants filled out a questionnaire with manipulation checks and demographic data. To maintain the cover story, we debriefed participants about the experimental manipulations only after we had collected all data of the sample. Finally, even though the consumer products had been fictitious, members of the three teams with the highest brainstorming performance were disbursed the promised team award.

6.3.3 Manipulation of Critical Team Event

A trained student confederate (female) with a background in psychology was assigned to each two-person team to enact the role of a fellow student as the “third” member of each team. In order to ensure consistency across experimental conditions, behavior and speech contents by the confederate followed prescribed and rehearsed scripts. The confederate’s input of ideas was also held constant in all conditions.

For manipulation of the critical team event, the student confederate joined two participants at the outset of each experimental session as the third team member. After the team completed the brainstorming activity for the first product, the cleaning spray (Task 1), the experimenter gave further information on the second product, a functional food product. Specifically, the experimenter emphasized that the ideas generated by the participants would be used towards the advertisement of the product for its soon-to-come commercial launch with the aim of boosting sales. However, the experimenter also mentioned that there were some health concerns known about this product, i.e., the nanotechnology used to enhance the food product with added consumer benefits was cited by food regulators to have some inherent risks (e.g., once the food product was ingested, there was a probability of nano-particles crossing the blood barrier and causing physical damage to internal organs). The experimenter further included the statement that results of scientific studies on the safe use of nanotechnology in food products was equivocal and that the product was still undergoing testing and had as of yet not been approved by federal food authorities. This explanation can be considered realistic and verifiable based on scientific reports on the potential health risks of using nano-particles in food products (e.g., BfR, 2009). Based on an elaborate script, the student confederate then raised concerns about her participation in the brainstorming competition, citing the potential health hazards of the product in question and objecting to support a cause with potential damage to innocent consumers. The script ended with the
student confederate openly and explicitly voicing her disagreement with the purpose of the competition and leaving the group altogether, thus achieving a critical team event in the form of a value-based disagreement as described earlier (cf. Morgeson & DeRue, 2006).

In the control condition, the student confederate joined two participants at the outset of each experimental session and fulfilled the role of the third team member throughout both brainstorming tasks without any interference.

6.3.4 Manipulation of Leadership Style

Immediately after the manipulation of team crisis, we manipulated leadership style. The experimenter communicated a rehearsed leadership speech that was either charismatic or (in the control condition) laissez-faire in nature. In the experimental condition, this occurred directly after the manipulation of the team crisis when the criticality of the situation was most salient, i.e., after the confederate left the team. In the control condition, this occurred before the brainstorming activity for the second product (Task 2). We developed the charismatic leadership speech based on the work of Shamir and colleagues on charismatic rhetoric (Shamir et al., 1994). The leadership speech in the control condition was composed of passive instructions based on laissez-faire leadership (Bass, 1985) (see Appendix A.1).

As before, in order to ensure consistency across experimental conditions, behavior and speech contents by the confederate in the remainder of the experimental session followed prescribed and rehearsed scripts.

6.3.5 Measures

Manipulation Checks. We used three manipulation checks to test the successful manipulation of conditions. One item was used to assess if the situation represented a team crisis, based on past definitions than conceptualize team crises as events that disrupt teams and pose a common threats for its members (Hamblin, 1958; Morgeson & DeRue, 2006). The item was, “The team’s success was threatened by disruptions”. Participants could respond on a 6-point Likert scale from 1 (= strongly disagree) to 6 (= strongly agree). One item was used to assess whether participants perceived a value-based disagreement by the confederate (who left the team during the manipulation), operationalized as the reverse-coded variable of task endorsement. The item was, „In my opinion, my team mates endorsed the purpose of the task”). Participants could respond on a 6-point Likert scale from 1 (= strongly disagree) to 6 (= strongly agree). One item taken from Bass and Avolio’s (1995) Multifactor Leadership Questionnaire (MLQ) was used to measure charismatic leadership. The items referred to the
experimenter as the leader, i.e., “This leader talks optimistically about the future”. Participants could respond on a 5-point Likert scale from 1 (= strongly disagree) to 5 (= strongly agree).

**Follower performance.** To calculate an individual performance measure, we counted the number of ideas written on the response sheet of each participant, subtracted by the number of ideas that were also written on the response sheet of the other participant (these ideas had been discussed between the team members can could not be counted towards the number of ideas generated by individual team members) and the number of ideas that the confederate had contributed (this number was held constant across all conditions).

**Self-direction.** Self-direction was assessed with two items taken from the Portrait Values Questionnaire (PVQ; Schwartz et al., 2001) adapted to the work setting (work values). Participants were asked to read two statements about an employee exhibiting different work values and indicate to what extent they perceived the employee to be similar to them. An example item is “It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself”. Participants could respond on a 6-point Likert scale from 1 (= not similar to me at all) to 6 (= very similar to me). Cronbacht’s alpha of the two-item scale was .65. In order to compare participants that are low versus high on self-direction, we split the sample at the median of 2.00.

### 6.4 Results

#### 6.4.1 Descriptives and Manipulation Checks

Table 17 shows the means, standard deviations and intercorrelations of all variables. We administered a post-experimental questionnaire to verify the successful manipulation of experimental conditions. T-test analysis revealed significant differences of crisis threat perceptions between the control condition, $M = 2.30$, $SD = 1.42$, and the value-based critical team event, $M = 4.47$, $SD = 1.61$, $t(85) = 6.66, p < .001$. For value-based disagreements, t-test analysis indicated significant differences between the control condition, $M = 3.16$, $SD = 1.28$, and the value-based critical team event, $M = 4.30$, $SD = 1.15$, $t(86) = 4.39, p < .001$. For perceptions of charismatic leadership of the experimenter confederate, t-test analysis revealed significant differences as well, i.e., participants in the charismatic leadership conditions perceived the experimenter as more charismatic, $M = 3.84$, $SD = .89$, than in the control conditions, $M = 3.47$, $SD = .74$, $t(85) = 2.15, p < .05$. 

6.4.2 Hypothesis Tests

In order to investigate the impact of the experimental conditions and leadership on follower performance, an ANCOVA was conducted with brainstorming performance (Task 2) as the dependent variable and age, gender, study duration, confederate, and the baseline performance measure (Task 1) as covariates. ANCOVA results are summarized in Table 18. Results indicated a significant main effect of leadership, $F(1, 69) = 15.03, p < .001, \eta^2_p = .18$, on follower performance. Subsequent analysis of simple effects revealed a significant positive effect of leadership style with a mean difference of 3.06 between charismatic leadership and the laissez-faire control condition, $F(1, 69) = 15.03, p < .001, \eta^2 = .18$. Thus, Hypothesis 1 was supported. Results furthermore indicated a significant main effect of team crisis, $F(1, 69) = 4.43, p < .05, \eta^2_p = .06$. Subsequent analysis of simple effects revealed a significant negative effect of team crisis with a mean difference of -1.59 between team crisis and the control condition, $F(1, 69) = 10.73, p < .05, \eta^2 = .06$. Thus, Hypothesis 2 was supported. As predicted, there was furthermore a significant three-way interaction between team crisis, leadership, and follower self-direction, $F(1, 69) = 7.90, p < .01, \eta^2_p = .10$. The three-way interaction plots are presented in Figure 11, demonstrating that charismatic leadership reduces performance in team crisis for followers high in self-direction. Hence, Hypothesis 3 was supported.

In sum, the results show that (a) charismatic leadership increases performance, (b) the occurrence of a team crisis reduces performance, and (c) charismatic leadership decreases performance of followers high in self-direction in a team crisis.
Table 17. Means, Standard Deviations, and Correlations among Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>23.99</td>
<td>3.715</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>1.68</td>
<td>.47</td>
<td>-.22*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Study duration</td>
<td>5.38</td>
<td>3.47</td>
<td>.42**</td>
<td>-.16</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Confederate</td>
<td>3.20</td>
<td>.82</td>
<td>-.05</td>
<td>.05</td>
<td>-.18</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Baseline performance</td>
<td>4.88</td>
<td>3.82</td>
<td>.07</td>
<td>-.10</td>
<td>.23*</td>
<td>-.07</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Crisis</td>
<td>.50</td>
<td>1.01</td>
<td>.05</td>
<td>.00</td>
<td>-.02</td>
<td>-.08</td>
<td>-.10</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Leadership</td>
<td>.50</td>
<td>.50</td>
<td>-.23*</td>
<td>.00</td>
<td>-.13</td>
<td>-.03</td>
<td>.21</td>
<td>.00</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Self-direction</td>
<td>.40</td>
<td>.49</td>
<td>-.07</td>
<td>.21</td>
<td>.12</td>
<td>.17</td>
<td>-.09</td>
<td>-.07</td>
<td>-.07</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>9. Performance</td>
<td>6.38</td>
<td>4.49</td>
<td>-.08</td>
<td>-.26*</td>
<td>.12</td>
<td>-.02</td>
<td>.59*</td>
<td>.02</td>
<td>-.08</td>
<td>-.10</td>
<td>–</td>
</tr>
</tbody>
</table>

*a n = 82 due to missing data. b Coding was as follows: age: number of years; gender: 1 = “male,” 2 = “female; study duration: number of semesters; confederate: 1 = “confederate 1,” 2 = “confederate 2,” 3 = “confederate 3,” 4 = “confederate 4”; baseline performance: number of ideas in task 1; crisis: 0 = “control,” 1 = “crisis”; leadership: 0 = control,” 1 = “charismatic; self-direction: 0 = “low”, 1 = “high”; performance: number of ideas in task 2.

* p < .05
** p < .01
Table 18. Results of ANCOVA when Predicting Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>F-statistic</th>
<th>p-value</th>
<th>$\eta_p^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall model</td>
<td>7.19</td>
<td>.00</td>
<td>.56</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.50</td>
<td>.48</td>
<td>.01</td>
</tr>
<tr>
<td>Gender</td>
<td>2.83</td>
<td>.10</td>
<td>.04</td>
</tr>
<tr>
<td>Study duration</td>
<td>5.68</td>
<td>.02</td>
<td>.08</td>
</tr>
<tr>
<td>Confederate</td>
<td>.82</td>
<td>.37</td>
<td>.01</td>
</tr>
<tr>
<td>Baseline performance</td>
<td>59.28</td>
<td>.00</td>
<td>.46</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crisis</td>
<td>4.43</td>
<td>.04</td>
<td>.06</td>
</tr>
<tr>
<td>Leadership</td>
<td>15.03</td>
<td>.00</td>
<td>.18</td>
</tr>
<tr>
<td>Self-direction</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Interaction terms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crisis × Leadership</td>
<td>1.91</td>
<td>.17</td>
<td>.03</td>
</tr>
<tr>
<td>Leadership × Self-direction</td>
<td>1.33</td>
<td>.25</td>
<td>.02</td>
</tr>
<tr>
<td>Crisis × Self-direction</td>
<td>.15</td>
<td>.70</td>
<td>.00</td>
</tr>
<tr>
<td>Crisis × Leadership × Self-direction</td>
<td>7.90</td>
<td>.01</td>
<td>.10</td>
</tr>
</tbody>
</table>

\(^a\) n = 82 due to missing data.
Figure 11. Three-Way Interaction of Crisis, Leadership Style, and Self-Direction
6.5 Discussion

This study examined whether charismatic leadership reduces performance of followers high in self-direction in the context of value-based critical team events. We found that followers high in self-direction perform worse after being exposed to a charismatic leadership crisis intervention.

Our findings contribute to existing literature in a three-fold way. First, we widen the notion of crisis in order to advance crisis leadership literature by examining the charismatic leader-follower relationship in the context of critical events that teams experience on a recurring basis. Critical events create novel environments for which followers may not be prepared for (Marks et al., 2000). We investigated a specific type of critical team events that lends itself well for testing the proposed interaction. Second, we increase the current understanding about the role of follower characteristics by including self-direction (Schwartz, 2012) in the analysis. High self-direction was found to be predictive of followers’ predisposition of wanting to deal with critical events on their own, thereby reducing their susceptibility to charismatic leadership. By taking into account follower preferences regarding the resolution of a critical situation, we answer scholarly calls for a follower-centered perspective on charismatic leadership (Hollander, 1978; Meindl, 1995; Uhl-Bien, Riggio, Lowe, & Carsten, 2014). Third, our study extends recent research on negative effects of charismatic leadership (e.g., Eisenbeiß & Boerner, 2013; Kark, Shamir, & Chen, 2003). We found that while charismatic leadership generally is likely to have positive effects on followers in certain critical events because it motivates them to extend effort in challenging circumstances, it can be counterproductive if followers are high in self-direction and therefore not in need of such leadership. In sum, our study offers novel insight into the charismatic leader-follower relationship. Its findings are in accordance with arguments put forth by leadership scholars who propose that charismatic leadership in crisis results not solely from the interaction of a crisis context and a charismatic leader, but also from the interaction with followers who are open to charisma (Klein & House, 1995).

The results of this study have important managerial implications. First, the negative effect found for charismatic leadership points towards important limitations of this approach. Whereas charismatic leadership commonly has implied a “good fit” for followers in routine situations, such a leadership intervention may be a “bad fit” for certain types of followers in critical team events. This begs the more general questions whether leaders can intervene too much and what the right amount of leadership intervention is, depending on characteristics of both the environment and followers. Second, our findings suggest that charismatic leaders
need to learn to distinguish between followers with different preferences and consequently, use different motivational strategies to engage them in critical team events. Our results suggest that there are circumstances when charismatic leaders should just step back and let followers manage challenging situations on their own. On the other hand, other types of followers might need to be facilitated when experiencing difficulties in critical situations. However, research indicates that with continuous intervention, a charismatic leader runs the risk of developing excessive follower dependence, which can lead to adverse organizational outcomes (Eisenbeiß & Boerner, 2013; Kark et al., 2003). Adding to that, follower’s dependency on their leader is likely to increase in times of crisis (Kets de Vries, 1988b; Madsen & Snow, 1991; Shamir, 1991). On the other hand, the continued use of charismatic rhetoric may also lead to decreases in effectiveness over time, if salience of the crisis declines or if followers experience numbing due to unnecessary repetitions (Davis & Gardner, 2012). Weber (1947) similarly proposed that charisma requires repeated validation of the leader’s exceptional qualities through continued successes. This shows that leaders need to take great care and strike a fine balance in deciding how to intervene for different followers who are faced with challenges.

6.5.1 Study Limitations

This study has several limitations. First, our chosen design implies a validity issue. Because we examined students in a laboratory setting, it cannot be concluded definitely that the patterns observed would also extend to employees in a real organizational setting. However, literature suggests that findings from the laboratory can generalize to more realistic conditions (Locke, 1986) and we invested extra effort in developing naturalistic task-condition (e.g., information about the new company was given, a structured brainstorming task was used). Thus, it seems reasonable to conclude that the findings of our study could also apply to real teams. Nevertheless, compared to a naturalistic setting, the laboratory setting is decontextualized. Therefore, the relationships examined should be replicated in a study with non-student samples and in an organizational setting across different fields. It should be noted, however, that our experimental approach has the advantage of determining causality in assessing the effectiveness of different leadership behaviors in crisis situations (cf. Mook, 1983).

Second, another limitation is linked to the experimental manipulations used in this study. While past studies have used many different approaches to operationalize crisis in a small-group setting (Halverson, Holladay, et al., 2004; Halverson, Murphy, et al., 2004; Hamblin, 1958; Hunt et al., 1999; Pillai, 1996), we exerted much effort to create a specific
type of critical team event that would represent a significant threat to participants. However, while the manipulation of the value-based critical team event was successful as indicated by significant differences of the manipulation check, stronger inductions of event criticality are conceivable that could be analysed in order to gain additional insight into the effects of charismatic leadership contingent on crisis conditions. For instance, besides value-based disagreement as examined in this study, other types of events that can be expected to trigger a critical situation are sudden task problems such as mistakes, breakdowns in equipment, or safety issues (Morgeson & DeRue, 2006). While the types of critical team events mentioned here are all likely to generate a need for leadership interventions, they represent distinct issues that imply different directions influence of charismatic leadership due to the varying nature of emotional experience and demands posed by actual stressors that followers experience (Sayegh et al., 2004; Sommer et al., 2015).

Third, it can be questioned whether charismatic leadership can be created in a laboratory setting in the first place. However, numerous studies have successfully manipulated charismatic leadership experimentally in a compressed space of time (e.g., Awamleh & Gardner, 1999; Holladay & Coombs, 1994; Hunt et al., 1999; Johnson & Dipboye, 2008; Kirkpatrick & Locke, 1996; Stam et al., 2010). Charismatic leadership may be studied under laboratory conditions if there is a strong induction of the charismatic leadership effect (J. M. Howell & Frost, 1989). We tried to achieve this by basing our charismatic leadership manipulation on sound theory, i.e., the self-concept based motivational theory of charismatic leadership (Shamir et al., 1994, 1993). This might pose a limitation insofar as prior experimental studies have suggested a greater importance of delivery of charismatic speeches relative to content (Awamleh & Gardner, 1999; Holladay & Coombs, 1994). Charismatic content has been found to be particularly important for contexts with visible performance criteria and charisma-conducive environments (J. R. Baum et al., 1998; S. K. Johnson & Dipboye, 2008), as it was the case in our study. Nonetheless, future studies should uncover the effects of charismatic leadership on followers by also contrasting charismatic content with charismatic delivery.

Finally, there are some further limitations related to the specific design of our study. Self-direction was only assessed with two items. However, time constraints in survey-based research often necessitate the use of short measures and the use of two-item scales is not uncommon for self-assessments (Eisinga, Grotenhuis, & Pelzer, 2013). Further, we used a median split for testing individual difference effects in the proposed relationships. While this approach is not uncommon in studies on values (Gouveia & Ros, 2000; Jetten, Postmes, &
McAuliffe, 2002), this yields a rather low statistical power for detecting the influence of personality factors. On the other hand, the findings are even more impressive as we did find a three-way interaction. Another issue is the validity of the dependent variables. While the use of brainstorming tasks provides the opportunity to objectively measure individual follower performance, the generalizability to organizational team tasks with differing degrees of complexity or interdependence is not known. Nevertheless, as brainstorming is an activity that is comparable to common tasks of many teams in organizations, we expect the fundamental processes observed in our study to apply to real settings as well. Still, future research should seek to replicate our findings with more sophisticated measures, larger samples, and different work tasks in order to draw stronger conclusions about their generalizability.

6.5.2 Future Research Directions

There are further general research directions we propose. The first is concerned with how charismatic leadership can be abused in critical team events, as proposed by the notion of the dark side of charisma (Conger, 1990; J. M. Howell & Avolio, 1992; Judge, Piccolo, & Kosalka, 2009). Charismatic leaders may not always be interested in benefitting their organizations and followers, but rather pursue their personal agenda (Connor, Mumford, Clifton, Gessner, & Connelly, 1995; Sankowsky, 1995). As mentioned earlier, a crisis provides a fertile ground for the emergence of charismatic leadership. Uncertainties and fears may prompt followers to engage in unethical behavior if leaders direct them towards such conduct through their charismatic behavior (Barling, Christie, & Turner, 2007; Effelsberg, Solga, & Gurt, 2013). Thus, further research on boundary conditions of how crises offer the unethical charismatic leader the opportunity to influence followers seems worthwhile.

In addition, future research could benefit from a more fine-grained analysis of the examined relationships from both the leader and follower perspective. The leader perspective is concerned with the role of different leadership sources. While we looked at leadership interventions by an external leader in this study, there are other sources of leadership that could play a significant role for followers when dealing with critical team events, for instance, shared leadership (Pearce, Manz, & Sims, 2008; Jürgen Wegge et al., 2010). Against this background, it would be worthwhile to examine whether this or other forms of leadership can serve as substitutes for leadership that reduce the need for charismatic leadership in critical situations (J. P. Howell & Dorfman, 1981; Kerr & Jermier, 1978). The follower perspective is concerned with a more detailed look at team composition variables that influence how teams respond to critical team events. The need configuration of followers that determine their susceptibility to leadership interventions likely interacts with the need configuration of the
team they are members of. Future research could particularly examine the personality composition of workgroups to shed more light on these issues (see Bradley, Klotz, Postlethwaite, & Brown, 2013; Fisher, Bell, Dierdorff, & Belohlav, 2012). Also, because crises represent situations with a strong impact on affective states of followers (Landau et al., 2004; Madera & Smith, 2009), research would benefit from examining emotional contagion processes (see Hatfield, Cacioppo, & Rapson, 1994; Kelly & Barsade, 2001). Charismatic leadership has often been linked to the emotional experience of followers (Bono & Ilies, 2006; Cherulnik, Donley, Wievel, & Miller, 2001; S. K. Johnson, 2008), but little is still known about how charismatic leadership affects the dispersion of emotions in teams during times of crisis.

Finally, it should be noted that our study is in line with recent criticism on charismatic-transformational leadership theory, particularly the limitation of its conceptualization and operationalization which confounds leadership with its effects (van Knippenberg & Sitkin, 2013). We circumvented this problem in our study by experimentally manipulating charismatic leadership as an independent variable and assessing objective performance data in teams, thus mitigating biases that are a potential problem in studies that examine the relationship between charismatic leadership evaluations and performance assessments that are both subjective in nature. Notwithstanding this strength of our study, we did not test mediators of the three-way interaction, even though the self-concept based motivational theory of charismatic leadership by Shamir and colleagues (1993) has specified a set of theoretically meaningful effects that likely explain the relationship, for instance, social identification, self and collective efficacy, and value internalization. Future research should examine these issues in more detail.

6.6 Conclusion

The results of our study highlight that charismatic leadership can have negative effects in specific types of team crises, if such leadership is enacted on highly self-directed followers. These findings are novel and can form the basis for developing new leadership interventions aimed at resolving the specific challenges associated with critical situations that employees experience on a recurring basis. Understanding how charismatic leadership can fail to address the specific needs of followers in different types of critical team events is an important area for future study.
7. Study 3

Pragmatism over Vision? An Experimental Investigation of Effective Leadership Styles in Sudden versus Gradual Crises

Kevin-Lim Jungbauer
TU Dresden, Germany

Submitted to Leadership Quarterly

Abstract
Research on crisis leadership has predominantly focused on the role of charismatic leadership. However, there is a wide range of crisis situations that can necessitate alternative leadership styles, which may additionally depend on follower characteristics. This article examines the interplay of (a) crisis types (sudden vs. gradual) with (b) leadership styles (pragmatic vs. charismatic), and (c) follower characteristics (pragmatism vs. idealism) and hypothesizes favourable leader evaluations based on a principle of fit. The proposed relationships were tested in three experimental studies (Ns = 62, 49, 204). Study 1 showed that pragmatic leadership is evaluated more favourably than charismatic leadership in gradual (vs. sudden) crises. Study 2 identified the time horizon of crisis consequences as a further boundary condition and highlighted that charismatic leadership can, conversely, be evaluated more favourably than pragmatic leadership if crisis consequences are perceived to manifest in the distant (vs. in the near) future. Study 3 replicated and extended the findings of Study 1 by providing evidence that the positive effects of pragmatic leadership are mediated by collective crisis efficacy of followers and that this effect is enhanced for individuals high in pragmatism. Findings and implications for future research on leadership in times of crisis are discussed.
7.1 Introduction

Organizations today operate in an increasingly uncertain and volatile environment. Crises of all shapes and forms pose considerable challenges to leaders as they try to mitigate their damaging impact on organizations and its members (Bundy & Pfarrer, 2015; Kahn et al., 2013). A main role of leaders during crisis is to provide guidance and direction to followers (Osborn et al., 2002; Porter & McLaughlin, 2006). By engaging in sensemaking efforts that provide followers with a mental model of how to understand and effectively respond to the crisis, leaders can reduce their followers’ stress and motivate them to move towards problem-solving actions (Mumford et al., 2007). Crises can thus be seen as a litmus-test for leadership, as a leader’s actions are never under such close public scrutiny as when the situation is dire and swift decisions to be made (Hermann, 1963; Pearson & Clair, 1998).

From a scholarly perspective, a wide body of literature on crisis leadership exists today that has offered insights on what makes leadership effective in times of crises. Propelled by Weber’s (1947) assertion that crisis is required for charisma to emerge, the study of charismatic leadership has often been put to the forefront when investigating crisis conditions (Choi & Mai-Dalton, 1998; House, 1977; Klein & House, 1995; Shamir & Howell, 1999; Willner, 1984; Yukl, 1999). Empirical findings have largely supported the proposition that crisis is a sufficient (though not necessary) precondition for charismatic leadership, and that charismatic leadership is effective in motivating followers in times of crisis (Bligh, 2005; Choi & Mai-Dalton, 1999; Davis & Gardner, 2012; Halverson, Murphy, et al., 2004; House et al., 1991; J. M. Howell & Frost, 1989; Pillai & Meindl, 1991; Seyranian & Bligh, 2008; E. A. Williams et al., 2012).

However, several important issues concerning the understanding of effective crisis leadership remain unexplored. First, a more nuanced look at how leadership styles operate in different types of crisis is not available in the literature. Even though numerous typologies exist that classify crises along theoretically meaningful dimensions such as locus of origin, degree of responsibility, or predictability (e.g., Coombs, 1995, 2004; Egelhoff & Sen, 1992; Gundel, 2005; Marcus & Goodman, 1991; Rosenthal & Kouzmin, 1993; Shrivastava & Mitroff, 1987), past research has only examined leadership for single crisis types in a non-systematic way, for instance, terrorist attacks (Bligh et al., 2004a; Landau et al., 2004), natural disasters (Davis & Gardner, 2012; Zhang et al., 2012), financial crises (Bligh & Kohles, 2009; E. A. Williams et al., 2012), or product recalls (Avnet & Laufer, 2015; Madera & Smith, 2009). A systematic study of crisis leadership that compares and contrasts effects on followers across crisis types that are based on a shared classification system, yet are sufficiently
distinguishable in that they can be expected to entail different leadership expectations, would deepen the current understanding of crisis leadership. As will be shown, a particularly fruitful starting point for such a systematic investigation is provided for by taking on a temporal perspective of crisis development which distinguishes crises that strike suddenly versus that develop gradually over time (Hwang & Lichtenthal, 2000; James & Wooten, 2005; Seymour & Moore, 2000).

Second, the examination of effective crisis leadership behaviors other than charismatic leadership is missing from research. However, because the effectiveness of leadership interventions depends on the specific nature of problems that are encountered (Bass & Riggio, 2006; Morgeson, 2005; Mumford, 2006), it can be expected that contingent on the specific circumstances of a crisis, certain forms of leadership may prove to be better fit than others. Anecdotally, German chancellor Angela Merkel showcases the relevance of fit between crisis type and leadership style. Merkel is commonly described as a decidedly uncharismatic leader, but praised for her pragmatism to which her leadership success during the European financial crisis has often been attributed (Kettle, 2011; McGroarty, 2011). This stands in stark contrast to charismatic leaders who likewise face challenging, albeit different crisis circumstances that necessitate rather the emotional engagement of followers, for instance, John F. Kennedy (Bedell-Avers et al., 2009). These examples relate to different, arguably oppositional leadership styles that are academically grounded in the well-established charismatic-transformational leadership framework (Bass, 1985; Burns, 1978; Conger & Kanungo, 1987; House & Shamir, 1993; House, 1977) and in newer research streams that can be subsumed under functional, pragmatic, and instrumental leadership approaches (Antonakis & House, 2004, 2014; Fleishman et al., 1991; Mumford & Doorn, 2001; Mumford, 2006).

The purpose of the present research is to advance the study of crisis leadership by examining two crisis types of distinctly different nature, i.e., crises that strike suddenly and crises that develop gradually over time, and the effectiveness of two foundational leadership styles in the context of these crises, i.e., charismatic and pragmatic leadership. Further investigation of the interaction between different crisis types and leadership styles could advance theory and practice and is required for three reasons. First, it needs to be examined whether certain crisis conditions render other leadership styles than charismatic as appropriate and if pragmatic leadership represents such a valid alternative. Using an experimental approach, the present research proposes that pragmatic leadership will be evaluated more favourably than charismatic leadership by followers in gradual crises. Second, boundary conditions need to be identified which reconcile the large body of empirical evidence that
shows that charismatic leadership is an effective way of addressing followers in times of crisis. The current research posits that charismatic leadership will still be regarded a suitable leadership response if the consequences of the crisis lie far ahead in the future. Third, individual differences and psychological processes need to be uncovered to demonstrate how these effects manifest. The current study proposes that pragmatic individuals will evaluate pragmatic leadership more favourably than idealistic individuals and that this leadership behavior instills them with a heightened sense of collective crisis efficacy as a mechanism underlying these evaluations. The present research empirically tests the hypothesized model which is depicted in Figure 12 across a series of experimental studies.

![Figure 12. Hypothesized Model (Study 3 of the Dissertation)](image-url)
7.2 Theoretical Background

7.2.1 Crisis Types: Sudden and Gradual Crises

Organizational crisis is defined as “a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly (Pearson & Clair, 1998, p. 60). Despite this broad definition, organizational crises come in various shapes and sizes and can manifest, for instance, as plant accidents, naturally-caused disasters, product recalls, hostile takeovers, employee boycotts, or reputational threats (Pearson & Clair, 1998). Numerous scholars have attempted to classify the multitude of crises into consolidated taxonomies that range from simple categorizations of crises to more elaborate classification systems that feature a unique emphasis and map different crises on one or more dimensions (Coombs, 1995, 2004; Egelhoff & Sen, 1992; Gundel, 2005; Jin et al., 2007; Lerbinger, 1986, 2012). For example, Shrivastava's and Mitroff's (1987) framework emphasizes implications for the management of crisis and classifies crises along the dimension of locus of origin (i.e., viewing crises as being caused either from within or outside of the organization) and nature of crisis (i.e., viewing crises as being associated either with technical or social factors). Marcus' and Goodman's (1991) model focuses on stakeholder reactions and distinguishes crises in accordance with their degree of deniability (i.e., high or low) and the identifiability of victims (i.e., high or low).

The current research argues that one particularly important crisis aspect to consider is a temporal one, i.e., the timeframe over which a crisis develops. As Pearson and Sommer (2011) note, “crises can seem to strike and disappear instantaneously, like a bolt of lightning, or they can build momentum and effect slowly, like a glacier” (Pearson & Sommer, 2011, p. 27). The distinction between crises that strike suddenly and crises that develop gradually over time has been proposed by several authors, using slightly different terminology, e.g., abrupt and cumulative crises (Hwang & Lichtenthal, 2000), ordinary and creeping crises (Rosenthal & Kouzmin, 1993), sudden and smoldering crises (James & Wooten, 2005), Cobra-like crises and Python-like crises (Seymour & Moore, 2000), or episodic and continuous crises (T’Hart et al., 2001). Sudden and gradual crises can usefully be understood as two extreme ends of the same continuum that exhibit specific characteristics. While sudden crises catch management off-guard, could not have been foreseen, and require a fast response from the organization, gradual crises accumulate stressors gradually, manifest over an extended period of time, and represent a foreseeable consequence of management negligence (Hwang & Lichtenthal, 2000; James & Wooten, 2005; Seymour & Moore, 2000).
An important implication for the current research is that the discrimination of these two crisis types renders it possible to make predictions concerning the effectiveness of different leadership styles that are likely effective as crisis responses. It has long been suggested that leadership requirements are contingent on developmental conditions related to ab organization’s evolution over time. Eggleston and Bhagat (1993) proposed that in periods that are characterized by rapid discontinuous changes in short time spans, leaders may primarily fulfill a symbolic leadership role which relates to the maintenance of organizational values, while during periods of incremental change over long time spans, a substantive leadership role is required which involves taking concrete action. Likewise, Pawar and Eastman (1997) suggested that depending on whether an organization is currently oriented towards adaptation or efficiency, leaders are expected to either build new frames of reference through vision formation or facilitate the attainment of existing goals. While not explicitly referring to crisis situations, these propositions evidently relate to the developmental concept of sudden and gradual crisis and the likely differing fulfillment of their associated leadership requirements by charismatic versus pragmatic leaders. The present research builds on these arguments to develop a contingency model of crisis leadership, testing the extent to which charismatic or pragmatic leadership is effective in addressing specific follower needs that arise from the unique features of crises that strike suddenly or develop gradually.

7.2.2 Crisis Leadership: Charismatic and Pragmatic Leadership

As outlined earlier, past scholarly investigation of leadership in times of crisis is characterized by a strong focus on charismatic leadership theory (Bass, 1985; Burns, 1978; Conger & Kanungo, 1987; House & Shamir, 1993; House, 1977). Charismatic leaders are effective crisis leaders because they are exceptional in increasing awareness about higher-order values that engage followers even under duress (Bass, 1985; Burns, 1978). They are able to move followers from the status quo toward a more desirable future state by conveying means of achieving future goals (Conger & Kanungo, 1998; Conger, 1999). Charismatic leaders instigate a range of motivational processes that are conducive to effective coping of followers with crises, e.g., they increase the salience of collective identity, heighten self-esteem, and enhance efficacy beliefs (House & Shamir, 1993). Empirical research has found that charismatic leaders positively impact followers in crisis through the means such as rhetoric (Bligh et al., 2004a; Bligh & Robinson, 2010; Seyranian & Bligh, 2008; E. A. Williams et al., 2012), interpretation of events through vision formulation (Combe &
Carrington, 2015; Den Hartog & Verburg, 1997; Strange & Mumford, 2005), or self-sacrificial behavior (Choi & Mai-Dalton, 1999; Halverson, Holladay, et al., 2004).

Notwithstanding the importance of charismatic leadership in a crisis context, recent advancements in the leadership field suggest that there are alternative forms of leadership behaviors that could serve equally well as response to crisis. Grounded in functional leadership approaches (Fleishman et al., 1991), such forms of leadership stem from a growing body of literature that, for the purposes of the current investigation, can be subsumed under pragmatic leadership approaches. Pragmatic forms of leadership are explicitly addressed in the Charismatic-Ideological-Pragmatic (CIP) leadership model by Mumford and colleagues (Mumford et al., 2008; Mumford, 2006) and in the Instrumental Leadership Theory (ILT) by Antonakis and House (2002, 2004).

In the CIP leadership model, Mumford (2006) differentiates pragmatic from charismatic leaders. While charismatic leaders typically emphasize the articulation of a future vision and provide followers with a sense of identity tied to this vision (Mumford et al., 2008; Shamir et al., 1994, 1993), pragmatic leaders take on a more rationalistic and functional view (Mumford & Doorn, 2001). A hallmark of pragmatic leaders is that they emphasize problem solving over vision articulation, focusing on current issues (Hunter et al., 2009; Mumford & Doorn, 2001). In influencing followers, pragmatic leaders prefer rational and logical argumentation that makes use of factual evidence, compared to charismatic leaders who engage in emotional persuasion aimed at arousing enthusiasm by appealing to values and ideals (Hunter, Cushingbery, Thoroughgood, Johnson, & Ligon, 2011; Mumford et al., 2008; Yukl, Falbe, & Youn, 1993; Yukl & Falbe, 1990). Pragmatic leaders also rely strongly on their expertise in solving problems, rather than attempting to rally followers by creating personal meaning (Bedell-Avers et al., 2008; Mumford et al., 2013). The core tenets of the CIP leadership model have been empirically supported in experimental and historiometric studies (Bedell-Avers et al., 2009, 2008; Hunter et al., 2007, 2009; Mumford et al., 2008; Mumford & Doorn, 2001).

Antonakis' and House's (2002, 2004, 2014) ILT model likewise takes on a functional approach and proposes that instrumental leadership is based on a leader’s expertise in (strategic) problem-solving and in the formulation and implementation of solutions to complex socio-technical problems. Specifically, instrumental leadership is defined as “the application of leader expert knowledge on monitoring of the environment and of performance, and the implementation of strategic and tactical solutions” (Antonakis & House, 2014, p. 749). The construct comprises the two components of strategic leadership with the subfacets
of environmental monitoring and strategy formulation and implementation, and follower work facilitation with the subfacets path-goal facilitation and outcome monitoring (Antonakis & House, 2014). So far, the few empirical studies that exist on the model have confirmed the basic validity of the construct and showed that instrumental leadership predicts important follower outcomes beyond the transactional/transformational leadership paradigm (Rowold, 2014). In the following, for the purposes of the present research, both the pragmatic and instrumental leadership model will be subsumed under “pragmatic leadership”.

7.2.3 Interaction of Crisis Type and Crisis Leadership

In connecting the empirical knowledge on crisis types and leadership styles deemed as effective for crises, the present study suggests that charismatic and pragmatic leadership differ in important dimensions that allow predictions concerning their effectiveness in sudden and gradual crises. As Mumford and Doorn (2001) note, “pragmatic leaders must appeal to functional need rather than promise of a better life in some distant future” (Mumford & Doorn, 2001, p. 282). The present study argues that functional needs become particularly salient in gradual crises and hypothesizes that accordingly, pragmatic leadership will be favoured by followers over charismatic leadership in gradual rather than sudden crises (and vice versa), for the following reasons.

First, sudden and gradual crises entail different implications concerning follower ascriptions of leadership responsibility for the crisis. While a crisis that has struck suddenly is perceived as being beyond the control of the organization’s leaders due to its abruptness and unexpectedness, leaders will likely be held at fault for a crisis that has developed gradually with intrinsically ample time to engage in countermeasures (James & Wooten, 2005; Rosenthal & Kouzmin, 1993). Given that followers perceive the causes of gradual crises to be the general inattention of management and specific errors related to its long-term strategy (Hwang & Lichtenthal, 2000), what is expected of crisis leaders here is likely less the communication of a future vision but more the communication of strategic expertise and abilities to solve the problems at hand, which is provided for by pragmatic leadership (Antonakis & House, 2004; Mumford, 2006). Furthermore, the perceived leadership accountability in gradual crises likely calls for transparent leadership solutions (Coldwell, Joosub, & Papageorgiou, 2012; Gruber et al., 2015). Whether a leader’s messages influence follower attitudes may depend on the credible framing of these messages (Grewal, Gotlieb, & Marmorstein, 1994; Jones, Sinclair, & Courneya, 2003). Given that the emotionally-evocative messages communicated by the charismatic leader – relative to rationally-framed messages of
the pragmatic leader—tend to obscure objective information (Grant & Hofmann, 2011; Hermalin, 1998, 2014; Sarachek, 1964), such a crisis leadership response may come at the cost of insufficiently addressing follower needs for transparent crisis communication, leading to unfavourable leader evaluations.

Second, sudden and gradual crises differ in their complexity and degree of emotional involvement of followers, which likely necessitates different crisis responses. Sudden crises are often of a social nature which can readily be addressed by charismatic leaders (Mumford, Partlow, & Medeiros, 2013). They are well-versed in fulfilling followers’ (under a sudden crisis highly salient) personal needs (Bedell-Avers et al., 2008; Strange & Mumford, 2002). For instance, a labor strike may occur suddenly, but a charismatic intervention may achieve to move followers towards subordinating their personal needs to the collective cause (Galvin, Balkundi, & Waldman, 2010; House & Shamir, 1993). Furthermore, the unexpectedness of a sudden crisis likely prompts followers to turn to powerful others for protection and support (Kahn et al., 2013). These powerful others are well represented by charismatic leaders who are able provide a safe harbor for followers by creating a shared sense of meaning and fulfilling identity-based functions (Cohen, Solomon, Maxfield, Pyszczynski, & Greenberg, 2004; Landau et al., 2004; Smircich & Morgan, 1982). Identity-affirming leaders have been found to be evaluated particularly favourably in a crisis context (Giessner, van Knippenberg, & Sleebos, 2009; Haslam et al., 2001; Meyer, Shemla, Li, & Wegge, 2015). On the other hand, gradual crises which are caused by strategic errors primarily require leadership which is based in a strategic rather than an identity-affirming role (Antonakis & House, 2014; Hwang & Lichtenthal, 2000). Solving long-term problems may require a more down-to-earth approach, which is fulfilled by the rationalistic approach of pragmatic leadership. Pragmatic leaders strongly rely on their expertise in problem-solving rather than in formulating a vision (Mumford, Partlow, & Medeiros, 2013). Due to their ability to implement tangible solutions, and consistency in solving complex tasks, pragmatic leaders are likely perceived as highly capable in addressing the underlying problems of this type of crisis, whereas the formulation of idealized future states by charismatic leaders may be problematic under conditions of high complexity (Hunter et al., 2009; Khurana, 2002b).

In sum, the present research predicts that crisis type and leadership style interact to predict leadership effectiveness, based on a principle of fit.
Hypothesis 1: There will be a two-way interaction between crisis type and leadership style such that pragmatic (charismatic) leadership will be evaluated more favourably in gradual (sudden) crisis.

7.2.4 Crisis Consequences: Near and Distant Future

While the temporal perspective of crisis above traces the development of crises from its origin in the past to its manifestation in the present, a fuller picture of effective crisis leadership could be drawn if the time frame that followers have from the present to the future is considered as well. This can be achieved by considering the temporal horizon of the consequences a crisis entails. The present study proposes that crisis consequences represent an additional contingency factor that moderates the relationship between crisis leadership style and leader evaluations. Specifically, it is hypothesized that followers prefer pragmatic over charismatic leadership if crisis consequences are perceived as occurring in the near future; however, this preference should tilt towards charismatic leadership if crisis consequences are perceived as occurring in the distant future.

The above argument draws on insights from research on psychological distance (Popper, 2013; Trope & Liberman, 2010). According to construal-level-theory (CLT), individuals use increasingly higher levels of construal (i.e., abstraction as opposed to concreteness) to represent an object as the psychological distance from the object increases (Trope & Liberman, 2010). Positive effects of construal fit – i.e., psychologically near (vs. distant) objects are presented in a more concrete (vs. abstract) manner – have been found in numerous studies, e.g., better information processing or increased message fluency (Fujita, Henderson, Eng, Trope, & Liberman, 2006; Kim, Rao, & Lee, 2009; A. Y. Lee, Keller, & Sternthal, 2010). In a leadership context, construal fit between situational conditions and leadership messages has been suggested to enhance the degree of social influence the leader can exert on followers through enhanced message processing (Berson, Halevy, Shamir, & Erez, 2015). For instance, voters have been found to support political leaders more if they achieve construal fit in their election messages with regard to temporally proximate or distant election time (Kim et al., 2009) Likewise, the current research proposes that by achieving construal fit during a crisis, leaders enhance follower perceptions of situationally appropriate leadership cues that support crisis sensemaking activities (Berson & Halevy, 2014; Weick, 1995).
For the purpose of the current research, construal fit is conceptualized as the fit between the psychological distance of crisis consequences and the degree of abstraction in the crisis leader’s communication. Since the communication of pragmatic leaders is characterized by a presence-focus while that of charismatic leaders is characterized by a future-focus (Hunter et al., 2011), it is proposed that pragmatic leaders are more likely to achieve construal fit when crisis consequences are near while charismatic leaders are more likely to achieve construal fit when crisis consequences are distant. While pragmatic leaders tend to emphasize temporally-proximal desirable end states, which are experienced as more concrete, charismatic leaders tend to emphasize temporally-distant desirable end states, which are experienced as more abstract (Berson et al., 2015). Accordingly, when consequences of the crisis are in the near future (e.g., downsizing will occur very soon), exhibiting pragmatic leadership behaviors by offering suggestions for action and tangible solutions on how the current problems will be solved enhances credibility, thus leading to more positive evaluations of the leader’s competence as a crisis manager. On the other hand, when consequences of the crisis are in the distant future (e.g., downsizing may occur at a later stage), a charismatic leadership style that draws attention to a future-based phenomenological ideal state in which the adverse effects of the crisis have been mitigated, likely enhances motivational leverage of the situation and leads to construal fit that likewise improves leader evaluations.

**Hypothesis 2:** There will be a two-way interaction between crisis type and leadership style such that pragmatic (charismatic) leadership will be evaluated more favourably if crisis consequences are in the near (distant) future.

### 7.2.5 A Moderated Mediation Framework of Crisis Leadership

Building on findings of the contextual need for leadership which asserts that followers have different needs in different settings (Hoogervorst et al., 2013; Kets de Vries, 1988b; D. M. Mayer et al., 2008), the present study furthermore predicts an interaction effect of the aforementioned relationships with follower attributes. One individual difference variable that is expected to play an important role for predicting preferences for pragmatic versus charismatic leadership in times of crisis can be identified by assessing whether followers generally share the underlying philosophy of these leadership approaches: Followers can be characterized by either a pragmatic self-conception, i.e., they are guided by practical concerns and emphasize action over values, or as idealistic, or by an idealistic self-conception, i.e., they
place principles and values above practical considerations (Kivetz & Tyler, 2007). It is proposed that pragmatic leadership will be evaluated more favourably by followers with a pragmatic self while charismatic leadership will be evaluated more favourable by followers with an idealistic self.

Pragmatic individuals are concerned with present issues and means of resolving them. For these followers, pragmatic leadership is expected to be preferred as a leadership response to crisis because it is action-focused and problem-solving oriented (Mumford, 2006). Pragmatic leaders also satisfy pragmatic followers’ preference for the achievement of instrumental goals, i.e., achieving the resolution of the crisis instead of fulfilling identity-based motives (Bedell-Avers et al., 2009; Hunter et al., 2011). In contrast, idealistic individuals prefer symbolic rewards and are likely more receptive for identity-based appeals (Reed, Forehand, Puntoni, & Warlop, 2012). Charismatic leaders can have a profound influence on these followers by creating a moral (as opposed to calculative) commitment to superordinate goals (House & Shamir, 1993; Shamir et al., 1993). Charismatic leaders are also able to fulfil the desire of moving towards desirable distal end states by emphasizing goals in terms of ideal conditions (Sashkin, 1988).

In sum, the self-conception as pragmatic (idealistic) should either enhance or diminish the evaluations of pragmatic (charismatic) leadership in gradual (sudden) crises, based on a principle of fit. However, and with the aim of advancing the understanding of the psychological processes underlying this relationship, it is proposed that the interactive effect indirectly impacts leader evaluations through collective crisis efficacy.

In general, the efficacy of a collective governs what individuals choose to do as a group, how much effort they put into it, and their perseverance when group efforts fail to produce results (Bandura, 1986). Though related, collective efficacy is different from the concept of group potency which is defined as the “collective belief within a group that it can be effective” (Sosik, 2010, p. 368). While this definition implies the shared belief that a group is effective across a variety of contexts (Sosik, 2010), collective efficacy is tied to the shared confidence that a collective can carry out tasks within a particular domain (Bandura, 1997; Collins & Parker, 2010). For instance, research in the military setting has conceptualized collective efficacy as individuals’ perceptions about their unit’s readiness for war (Bass, Avolio, Jung, & Berson, 2003; Shamir, Zakay, Breinin, & Popper, 1998). For the purpose of the present research, collective crisis efficacy denotes the perceptions individuals share about their organization’s readiness for dealing with a crisis.
In their self-concept-based motivational theory of charismatic leadership, Shamir and colleagues (Shamir et al., 1993) outlined how charismatic leadership can increase collective efficacy beliefs by tying individuals’ self-concepts to higher values. The present study tests this relationship in the context of crisis. However, as outlined earlier, because the perceived effectiveness of a given leadership behavior is contingent on the fit to the situation and to the follower, it is hypothesized that charismatic leadership enhances collective crisis efficacy when both crisis context and follower attributes are favourable for such a leadership style, that is, in sudden crises and for idealistic followers. Under these conditions, charismatic leadership is likely an adequate crisis response that succeeds in addressing follower needs and reducing experienced uncertainty, thus increasing follower beliefs that the organization can readily deal with the crisis. Conversely, pragmatic leadership likely enhances collective crisis efficacy particularly in gradual crises and for pragmatic followers. The perceived expertise that these leaders bring to the table in this context (Bedell-Avers et al., 2008; Mumford & Doorn, 2001; Mumford, 2006) likely instills confidence in followers that the organization is in good hands and the crisis can be resolved.

In sum, it is proposed that the aforementioned three-way interaction is mediated through collective crisis efficacy. A fit between crisis type, leadership style, and follower self-conception is expected to increase collective crisis efficacy (first-stage moderated mediation model). In turn, this increase of collective crisis efficacy leads to higher crisis leader effectiveness ratings (second-stage moderated mediation model).

**Hypothesis 3:** There will be a three-way interaction between crisis type, leadership style, and follower self-conception that is mediated by collective crisis efficacy such that the indirect effect of pragmatic (charismatic) leadership in gradual (sudden) crises on leader effectiveness ratings through collective crisis efficacy is stronger for pragmatic (idealistic) followers.

### 7.3 Overview of Studies

Three studies were conducted to examine the proposed relationships. Study 1 investigates the interaction of different crisis types with different leadership styles on leader evaluations and proposes that pragmatic leadership will receive better leadership evaluations than charismatic leadership in gradual rather than sudden crises. Study 2 manipulates the time horizon of crisis consequences in a sudden crisis and proposes that due to the different leadership foci (charismatic: visionary focus; pragmatic: action-oriented focus), charismatic
(pragmatic) leadership will be evaluated favourably if crisis consequences are perceived as occurring in the distant (in the near) future. Finally, Study 3 again compares sudden and gradual crises types but extends the findings of Study 1 by incorporating follower characteristics (follower self-conception: pragmatic versus idealistic) and testing a mediator (collective crisis efficacy) in a moderated-mediation model.

7.4 Preparatory work: Experimental Manipulation of Sudden and Gradual Crises

7.4.1 Development of Materials

Crisis scenarios were developed based on theoretical grounds and previous experimental studies that employed similar manipulations. To develop a realistic crisis setting, the description of the fictitious company “OfficeStock” in the (gender-neutral) office supplies industry that experiences a corporate crisis was used as a starting point, building on past research in the field of leader selection and evaluation during crisis (cf. Choi & Mai-Dalton, 1999; Haslam & Ryan, 2008). Hwang and Lichtenthal (2000)’s typology of crises that strike abruptly or develop cumulatively served as the basis for distinguishing sudden and gradual crises. Two different scenarios based on the characteristics of these crises as laid out by Hwang and Lichtenthal (2000) were developed by the author, e.g., the sudden crisis was described as a crisis that “has struck suddenly”; “has rapidly escalated”; “could not have been foreseen by management” whereas the gradual crisis was described as a crisis that “has built up slowly”; “has developed over a long period of time”; “could have been foreseen by management” (see Appendix A.2 for full descriptions of the manipulations).

7.4.2 Pilot Study

The crisis scenarios were pilot-tested in a sample of 28 workers (11 females) from Amazon’s MTurk portal who participated in the study for a small remuneration. Participants in the sample had an average age of 37.68 years (SD=11.74). 82.1% of the participants were from the US, 14.3% were from India, and 3.6% were from Lithuania. 60.7% were employed, 25.0% were self-employed, and 14.3% were students, looking for work, or retired.

Participants were asked to a) rate the realism of the scenarios in order to ensure that they represent valid instances of companies experiencing crises that could generalize to the real world and b) evaluate the characteristics of the presented crisis in order to test the distinctiveness of the descriptions as either “sudden” or “gradual”.

A three-item scale from Wirtz, Orsingher, Chew, and Tambyah (2012) with response options ranging from 1 (= strongly disagree) to 7 (= strongly agree) was used to assess
scenario realism (“The scenario is realistic”; “It is easy to imagine being in the situation described in this study”; “Something like the situation described can happen”). The coefficient alpha for this scale was .70. Subsequent t-test analysis revealed that participants indicated high scenario realism for both the sudden ($M = 5.55$, $SD = .92$) and gradual ($M = 5.71$, $SD = .85$, $t = .50$, $p = .62$) crisis conditions.

A self-developed four-item bi-polar scale with 9 response options was used to assess the crisis scenarios on characteristics that distinguish sudden from gradual crises (cf. Hwang & Lichtenthal, 2000). The anchors of the four items were (1) sudden – gradual, (2) rapid – slow, (3) unforeseeable – foreseeable, (4) low probability of occurring - high probability of occurring. The coefficient alpha for this scale was .93. Subsequent t-test analysis revealed that participants indicated higher suddenness vs. gradualness of the crisis in the sudden crisis condition ($M = 6.77$, $SD = 1.73$) compared to the gradual crisis condition ($M = 2.86$, $SD = 2.03$, $t = 5.49$, $p < .001$). In sum, the pilot study supported both the realism and the validity of the crisis manipulation. Consequently, the empirical studies were conducted using this material.

7.5 Study 1

Study 1 was designed as an initial test of the proposed interactive effect of crisis type and leadership style. The theoretical assertion to confirm before conducting further tests was whether pragmatic leadership is evaluated more favourably than charismatic leadership in gradual compared to sudden crises.

7.5.1 Method

Participants and design

62 workers (28 females) from Amazon’s MTurk portal participated in the study for a small remuneration. Participants in the sample had an average age of 34.15 years ($SD = 11.22$). All participants were from the US. 56.5% were employed, 22.6% were self-employed, and 20.9% were students, unemployed or looking for work, or retired.

Participants received information about a company that was described as experiencing either a (a) sudden crisis or a (b) gradual crisis and subsequently were presented two candidates described as either (a) charismatic or (b) pragmatic for the position of the new CEO. The assignment of participants to the two crisis conditions was randomized as was the order of presentation of the two candidates. Participants were instructed to read the presented information carefully and imagine as vividly as possible that they were an employee of the
company and asked to evaluate each of the candidates in terms of their ability to lead the company out of crisis. The study thus had a 2 (crisis type: sudden vs. gradual) × 2 (leadership style: charismatic vs. pragmatic) within-participants design with repeated measures on the second factor. Participants were randomly assigned to each of the two experimental conditions with approximately equal cell distributions \( N_{\text{sudden crisis}} = 33, N_{\text{gradual crisis}} = 29 \).

Crisis type was manipulated using the materials from the pilot study. Leadership style was manipulated by describing the two candidates as either charismatic (e.g., emphasizes vision communication; uses emotional appeals to motivate and engage followers) following established conceptualizations in the charismatic leadership literature (Bass & Avolio, 1995; Conger & Kanungo, 1998; House & Shamir, 1993; Sashkin, 1988) or pragmatic (e.g., emphasizes pragmatic problem solving; uses rational persuasion to motivate and engage followers) following theoretical considerations of pragmatic leadership according to the CIP model of leadership (Hunter et al., 2011; Mumford et al., 2008; Mumford & Doorn, 2001; Mumford, 2006) (see Appendix A.2 for full descriptions of the manipulations).

Measures

Leadership evaluation. Leadership evaluation was measured with a self-developed item that assessed the crisis leadership abilities of the described CEO, i.e., “how likely is it that this person will solve the crisis of OfficeStocks?” with response options ranging from 1 (= not at all) to 7 (= extremely).

Control variables. Age, gender, and occupation were included as demographic control variables.

7.5.2 Results

To check whether the experimental manipulation of crisis type was successful, participants were asked to rate the crisis scenario on a 9-point bipolar scale with response options ranging from 1 (= sudden) to 9 (= gradual). T-test analysis showed that participants perceived the crisis type in the gradual crisis condition as more gradual \( (M = 7.97, SD = 2.21) \) than in the sudden crisis condition \( (M = 2.21, SD = 1.80, t = 11.82, p < .001) \). These results show that the manipulation of the crisis types was successful.

Table 19 presents the means, standard deviations, and correlation coefficients for the study variables.
Table 19. Means, Standard Deviations, and Correlations among Study Variables (Study 1)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>34.15</td>
<td>11.22</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Gender</td>
<td>1.55</td>
<td>.50</td>
<td>-.15</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Occupation</td>
<td>5.60</td>
<td>2.40</td>
<td>.50**</td>
<td>-.06</td>
<td>–</td>
</tr>
<tr>
<td>4. Crisis type</td>
<td>1.47</td>
<td>.50</td>
<td>.21</td>
<td>-.12</td>
<td>.04</td>
</tr>
</tbody>
</table>

*a n = 62  
b Coding was as follows: age: number of years; gender: 1 = “male,” 2 = “female”; occupation: 1 = “student,” 5 = “employed,” 6 = “self-employed,” 7 = “looking for work,” 8 = “out of work,” 12 = “retired,” 13 = “unable to work,” 14 = “other”; crisis type: 1 = “sudden,” 2 = “gradual”.

Leadership style was manipulated within-participants and is not included in the table.

** p < .01

To test Hypothesis 1, ANCOVA with leadership evaluation as the dependent variable was conducted (see Table 20). The analysis showed a significant interaction between crisis type and leadership style, $F(1, 57) = 4.11$, $p < .05$, $\eta^2 = .07$. As shown in Figure 13, participants in the sudden crisis condition evaluated pragmatic leadership ($M = 5.06$, $SD = 1.22$) more favourably than charismatic leadership, ($M = 4.46$, $SD = 1.48$), while in the gradual crisis condition, they evaluated a pragmatic leadership style ($M = 5.62$, $SD = 1.02$) more favourably than the charismatic leadership style ($M = 3.96$, $SD = 1.73$). Subsequent analysis of simple effects revealed a significant main effect of pragmatic leadership with a mean difference of 1.13 between pragmatic leadership and charismatic leadership, $F(1, 57) = 19.85$, $p < .001$, $\eta^2 = .26$. However, this significant interaction between crisis type and leadership style was qualified by a non-significant difference of simple effects for leadership style in the sudden crisis condition $F(1, 29) = 2.74$, $p = .11$, $\eta^2 = .09$ and a significant difference of simple effects for leadership style in the gradual crisis condition $F(1, 25) = 23.17$, $p < .001$, $\eta^2 = .48$. In sum, Hypothesis 1 was partially supported.

Table 20. Results of ANCOVA when Predicting Leader Evaluation (Study 1)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F-statistic</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership style × Gender</td>
<td>.54</td>
<td>.47</td>
<td>.01</td>
</tr>
<tr>
<td>Leadership style × Age</td>
<td>.24</td>
<td>.63</td>
<td>.00</td>
</tr>
<tr>
<td>Leadership style × Occupation</td>
<td>2.32</td>
<td>.13</td>
<td>.04</td>
</tr>
<tr>
<td>Leadership style × Crisis type</td>
<td>4.11</td>
<td>.04</td>
<td>.07</td>
</tr>
</tbody>
</table>

*a n = 62.
7.6 Study 2

The results of Study 1 showed that pragmatic leadership is evaluated more favourably in times of crisis. However, the statistical test of this difference reached significance only in the gradual crisis condition, leaving open the question which leadership style is considered appropriate in sudden crises. Accordingly, Study 2 was conducted in order to explore whether the time horizon in which the consequences of a sudden crisis manifest represent an additional contingency factor that predicts the effectiveness of charismatic versus pragmatic leadership. Specifically, Study 2 tested whether crises with consequences in the distant (near) future render a future-oriented charismatic (action-oriented pragmatic) leadership style effective.

7.6.1 Method

Participants and design

49 individuals (23 females) from a convenience sample participated in the study for the possibility of winning one of 5 Amazon vouchers. Participants in the sample had an average age of 25.49 years ($SD = 12.09$) and an average work experience of 8.82 years.
Participants received information about a company that was described as experiencing a sudden crisis with negative consequences manifesting either (a) in the near or (b) in the distant future and subsequently were presented the (a) charismatic or (b) pragmatic crisis response speech of the newly appointed CEO. Participants were instructed to read the presented information carefully and imagine as vividly as possible that they were an employee of the company and asked to evaluate the newly appointed CEO. The study thus had a 2 (crisis consequences: in near future vs. in distant future) × 2 (leadership style: charismatic vs. pragmatic) between-participants design. Participants were randomly assigned to each of the four experimental conditions, yielding moderately differing cell distributions ($N_{\text{near future / charismatic}} = 16$, $N_{\text{near future / pragmatic}} = 12$, $N_{\text{distant future / charismatic}} = 7$, $N_{\text{distant future / pragmatic}} = 12$). Time horizon of crisis consequences was manipulated by describing the consequences of the crisis as occurring either in the near (e.g., crisis consequences are “likely to be felt very soon”; layoffs will be announced “already by the coming week”) or distant (crisis consequences are “likely to be felt with a delay”; layoffs will be announced “by the coming year”) future, following previous experimental manipulations of temporal distance (cf. Kim et al., 2009). Leadership style was manipulated by presenting a crisis response speech that was delivered in either a charismatic (e.g., emphasis of values, idealization of principles, and “why”-appeals) or pragmatic (e.g., emphasis of action, implementation of concrete measures, and “how”-appeals) manner (cf. Kim et al., 2009) (see Appendix A.3 for full descriptions of the manipulations).

Measures

Leadership evaluation. Leadership evaluation was assessed by asking participants to rate the overall competence of the described CEO as a leader with response options ranging from 1 (= very poor) to 7 (= very good) (cf. Haslam et al., 2001).

Control variables. Age, gender, nationality, and education were included as demographic control variables.
7.6.2 Results

To check whether the experimental manipulation of crisis type was successful, participants were asked to rate the occurrence of crisis consequences on a 9-point bipolar scale with response options ranging from 1 (= in the near future) to 9 (= in the distant future). T-test analysis showed that participants perceived higher temporal distance vs. low of the crisis in the high distance crisis condition (\(M = 6.15, SD = 2.52\)) compared to the low distance condition (\(M = 1.48, SD = .57, t = 8.14, p < .001\)). These results show that the manipulation of the crisis types was successful.

Table 21. Means, Standard Deviations, and Correlations among Study Variables (Study 2)

<table>
<thead>
<tr>
<th>Variables¹,²</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>25.49</td>
<td>12.09</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Gender</td>
<td>1.53</td>
<td>.50</td>
<td>.03</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Nationality</td>
<td>1.12</td>
<td>.44</td>
<td>.19</td>
<td>-.30*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4. Education</td>
<td>6.83</td>
<td>3.16</td>
<td>.10</td>
<td>-.35*</td>
<td>.23</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Crisis consequences</td>
<td>1.59</td>
<td>.50</td>
<td>.11</td>
<td>.05</td>
<td>-.15</td>
<td>-.09</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. Leadership style</td>
<td>1.51</td>
<td>.50</td>
<td>-.21</td>
<td>-.02</td>
<td>-.01</td>
<td>.23</td>
<td>-.15</td>
<td>–</td>
</tr>
</tbody>
</table>

¹ \(n = 49\)

² Coding was as follows: age: number of years; gender: 1 = “male,” 2 = “female”; nationality: 1 = “US,” 2 = “Europe,” 3 = “UK”; education: 4 = “high school graduate,” 6 = “completed vocational training,” 8 = bachelor’s degree,” 9 = “master’s degree or equivalent,” 11 = “doctorate degree or higher,” 12 = “other”; crisis consequences: 1 = “distant future,” 2 = “near future”; leadership style: 1 = “charismatic,” 2 = “pragmatic.”

* \(p < .05\)

To check whether the experimental manipulation of leadership style was successful, participants were asked to rate to what extent the described leader emphasized action vs. values in his speech on a 9-point bipolar scale with response options ranging from 1 (= action) to 9 (= values). T-test analysis showed that participants perceived higher values vs. action in the charismatic leadership condition (\(M = 7.88, SD = 1.70\)) compared to the pragmatic leadership condition (\(M = 1.32, SD = .56, t = 17.97, p < .001\)). These results show that the manipulation of the leadership style was successful as well.

Table 21 presents the means, standard deviations, and correlation coefficients for the study variables.
Table 22. Results of ANCOVA when Predicting Leader Evaluation (Study 2)

<table>
<thead>
<tr>
<th>Variables</th>
<th>F-statistic</th>
<th>p-value</th>
<th>$\eta_{p}^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.23</td>
<td>.63</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>1.03</td>
<td>.32</td>
<td>.03</td>
</tr>
<tr>
<td>Education</td>
<td>1.05</td>
<td>.31</td>
<td>.03</td>
</tr>
<tr>
<td>Crisis consequences</td>
<td>.08</td>
<td>.79</td>
<td>.00</td>
</tr>
<tr>
<td>Leadership style</td>
<td>.08</td>
<td>.77</td>
<td>.00</td>
</tr>
<tr>
<td>Crisis consequences $\times$ Leadership style</td>
<td>4.75</td>
<td>.04</td>
<td>.11</td>
</tr>
</tbody>
</table>

* $n = 47$ due to missing data.

To test Hypothesis 2, ANCOVA with leadership evaluation as the dependent variable was conducted (see Table 22). The analysis showed a significant interaction between crisis type and leadership style, $F (1, 39) = 4.75, p < .05, \eta^2 = .11$. As shown in Figure 14, participants in the near future condition evaluated a pragmatic leadership style ($M = 5.53, SD = 1.00$) more favourably than charismatic leadership ($M = 4.48, SD = 1.67$), while in the distant future condition, they evaluated a pragmatic leadership style ($M = 4.49, SD = 1.08$) less favourably than the charismatic leadership style ($M = 5.29, SD = 1.62$). Hence, Hypothesis 2 was supported.

![Figure 14. Interaction of Crisis Consequences and Leadership Style on Leader Evaluation](image-url)
7.7 Study 3

Having established that pragmatic leadership can lead to favourable leader evaluations over charismatic leadership in different types of crisis in Study 1 and having delineated further conditions for which charismatic leadership is evaluated favourably in Study 2, Study 3 was conducted with the goal of replicating the effects and extending the analysis of Study 1 by investigating additional variables that may further influence leader evaluations. Moreover, while Study 1 offered a confirmation of the basic assumptions concerning the interaction between crisis type and leadership style, its within-participants design implied certain limitations, i.e., it (a) increases the possibility to deduce the study purpose and therefore may influence participants’ responses and (b) precludes a precise evaluation of an individual leader as participants are forced to assess two candidates simultaneously. Study 3 was intended to overcome this limitation by the use of a between-participants design. Furthermore, in order to provide for the robustness of finding, it used a more elaborate operationalization of pragmatic and charismatic leadership. Finally, Study 3 sought to include follower characteristics in the model as well as to examine mediating variables that would explain the relationship between the interactive effect of crisis type and leadership on leader evaluations. Thus, Study 3 tested a moderated mediation model with follower self-conception (pragmatic or idealistic) as an individual difference variable and collective crisis efficacy as the underlying mechanism explaining the proposed relationships.

7.7.1 Method

Participants and design

204 workers (91 females) from Amazon’s MTurk portal participated in the study for a small remuneration. Participants in the sample had an average age of 36.54 years ($SD = 11.95$). Average work experience of 15.79 years ($SD = 11.30$). 88.7% of the participants were from the US, 9.3% were from Asia, and 2.0% from Europe. 69.6% were employed, 11.3% were self-employed, and 19.1% were students, unemployed or looking for work, or retired.

Participants received information about a company that was described as experiencing either a (a) sudden crisis or a (b) gradual crisis and subsequently were presented the description and crisis response speech of the newly appointed CEO as either (a) charismatic or (b) pragmatic. Participants were asked to evaluate the newly appointed CEO. The study thus had a 2 (crisis type: sudden vs. gradual) $\times$ 2 (leadership style: charismatic vs. pragmatic) between-participants design. Participants were randomly assigned to each of the four experimental conditions with approximately equal cell distributions ($N_{sudden crisis / charismatic} = 58$, ...
N_{sudden crisis / pragmatic} = 42, N_{gradual crisis / charismatic} = 52, N_{gradual crisis / pragmatic} = 52). Crisis type was manipulated using the same materials used in Study 1. Transformational leadership was manipulated by using a modified version of the manipulation by Baum and colleagues (1998) that has successfully been used in previous scenario-based leadership research, emphasizing particularly the dimensions in the transformational leadership model that relate to charisma, i.e., idealized influence and inspirational motivation (see Felfe & Schyns, 2006). Instrumental leadership was manipulated by a self-developed script based on the basic tenets of instrumental leadership theory (ILT) focusing on the component of strategic leadership with its subcomponents of environmental monitoring and strategy formulation and implementation (Antonakis & House, 2014) (see Appendix A.4 for full descriptions of the manipulations).

**Measures**

**Leadership evaluation.** Leadership evaluation was measured with a single-item graphic scale used to measure leader prototypes (van Quaquebeke, Kerschreiter, Buxton, & van Dick, 2010; van Quaquebeke, van Knippenberg, & Brodbeck, 2011; van Quaquebeke, van Knippenberg, & Eckloff, 2011). The scale employs a Venn-diagram format that depicts different pairs of circles representing various degrees of overlap which signify respondents’ perceived (mis)match for a described category. We adapted the template originally used by van Quaquebeke and colleagues (2011) to measure the degree to which a respondent’s current leader represents participant's picture of an ideal leader, by including the word “crisis leader” in order to assess prototypical crisis leader evaluations. The response options were visually depicted by the overlaps of circles and included numerical anchors that ranged from 1 (= the CEO does not, at all, match your picture of the ideal leader during crisis) to 7 (= the CEO completely matches your picture of the ideal leader during crisis) (see Appendix A.5).

**Collective crisis efficacy.** Three items from the Shamir et al. (1998) collective efficacy scale which assesses war readiness of military units were modified by adapting the setting to a business context and replacing the word “war” with the word “crisis” (e.g., "Under the leadership of this CEO, the employees of the company will deal well with the crisis."). Response options ranged from 1 (= strongly disagree) to 7 (= strongly agree). The coefficient alpha for this scale was .93.

**Follower self-conception.** Building on prior measurements of individual self-conceptions (cf. Kivetz & Tyler, 2007), a single-item self-developed bipolar scale was used to assess stable follower self-conception as either idealistic or pragmatic (“To what extent would
you describe yourself as an idealistic or a pragmatic person?”) with response options ranging from 1 (= idealistic) to 9 (= pragmatic). Because this measure only consisted of one item, the scale anchors included additional descriptions (e.g., idealistic: prefers principles and values; pragmatic: prefers action and practical considerations) in order to increase reliability.

*Control variables.* Age, gender, nationality, and work experience were included as demographic control variables. Two further individual difference variables were controlled for. First, romance of leadership was controlled for because in influences leader charisma attributions and performance evaluations (Meindl, Ehrlich, & Dukerich, 1985; Meindl & Ehrlich, 1987; Schyns, Felfe, & Blank, 2007; Schyns & Hansbrough, 2012). The construct was measured using four items from the “*influence of the leader*”-subscale by Schyns, Meindl, and Croon (2007) (e.g., “When it comes right down to it, the quality of leadership is the single most important influence on the functioning of an organization”). The coefficient alpha for this scale was .79. Second, need for structure was controlled for because it shapes attitudes towards ambiguity and uncertain settings such as represented by crisis conditions (Neuberg & Newsom, 1993) and has been found to predict individuals’ preference for prototypical leaders (Leicht, Crisp, & Randsley de Moura, 2013). This variable was assessed using three items from Neuberg’s and Newsom’s (1993) instrument (e.g., “I don't like situations that are uncertain”). The coefficient alpha for this scale was .95. Both individual difference scales were measured with response options ranging from 1 (= strongly disagree) to 7 (= strongly agree).

### 7.7.2 Results

To check whether the experimental manipulation of crisis type was successful, participants were asked to rate the crisis scenario on a 9-point bipolar scale from (1 = sudden, 9 = gradual). T-test analysis showed that participants perceived the crisis type in the gradual crisis condition as more gradual ($M = 8.03, SD = 1.54$) than in the sudden crisis condition ($M = 1.73, SD = 1.68, t = 27.97, p < .001$). These results show that the manipulation of the crisis types was successful. To check whether the experimental manipulation of leadership style was successful, participants were asked to rate the leadership style on a 9-point bipolar scale with response options ranging from 1 (= charismatic) to 9 (= pragmatic). T-test analysis showed that participants perceived the leadership style in the charismatic leadership condition as more charismatic ($M = 6.93, SD = 2.63$) than in the pragmatic leadership condition ($M = 3.40, SD = 2.67, t = 9.48, p < .001$). These results show that the manipulation of the leadership styles was successful as well.
Table 23 presents the means, standard deviations, and correlation coefficients for the study variables. To test Hypothesis 3, the non-parametric bootstrapping method (with 20000 bootstrap samples) was applied by examining the proposed relationships in a moderated-mediation framework using conditional indirect effects analysis with the PROCESS macro (Hayes, 2013; Muller et al., 2005; Preacher et al., 2007). The direct and total indirect effect of the independent variable and associated interactions on the dependent variable as well as single indirect effects were assessed for each mediated sequence. Table 24 shows the results from the moderated mediation analyses, indicating that the three-way interaction between crisis type, leadership style, and follower self-conception was significant in predicting collective crisis efficacy \( (b = .34, t = 2.06, p < .05) \) and collective crisis efficacy, in turn, was significant in predicting leadership evaluation \( (b = .67, t = 11.48, p < .001) \). In order to examine the exact pattern of this interaction effect and its associated conditional indirect effect, the three-way interaction was then decomposed by conducting separate bootstrapped regression models for the charismatic and pragmatic leadership conditions.

The upper part of Table 25 shows the results for the charismatic leadership condition. When followers are low, moderate, or high on pragmatic (versus idealistic) self-conception, crisis type has a high \( (b = .46, 95\% \text{ bias-corrected CI } [-.19, 1.11]) \), moderate \( (b = .26, 95\% \text{ bias-corrected CI } [-.16, .74]) \) or low \( (b = .06, 95\% \text{ bias-corrected CI } [-.50, .69]) \) indirect effect, respectively, on leadership evaluation through collective crisis efficacy. These results show a non-significant inference test of the conditional indirect effect for different values of the moderator. However, as Hayes (2015) argues, probing moderated mediation by quantifying an indirect effect conditioned on different values of the moderator is not a sufficient for testing conditional indirect effects. Rather, a formal test of moderated mediation is required which fulfils the requirement of an inferential test of the difference between any two conditional indirect effects that can be constructed from the model coefficients and different values of the moderator (Hayes, 2015). Results show that this formal test, the index of moderated mediation, was non-significant as well, with an effect of -.08, 95\% bias-corrected CI [-.25, .09], showing that the conditional indirect effect of crisis type on leadership evaluation through collective crisis efficacy is not a decreasing function of follower pragmatism. However, while non-significant, the direction of the effects is in the expected direction.

The lower part of Table 25 shows the results for the pragmatic leadership condition. When followers are low, moderate, or high on pragmatic (versus idealistic) self-conception, crisis type has a low \( (b = -.19, 95\% \text{ bias-corrected CI } [-.76, .20]) \), moderate \( (b = .45, 95\% \text{ bias-corrected CI } [.09, .74]) \)
bias-corrected CI [-.14, .45]) or high \((b = .14, 95\% \text{ bias-corrected CI [.09, .99]})\) indirect effect, respectively, on leadership evaluation through collective crisis efficacy. These results show a significant inference test of the conditional indirect effect only for followers high on pragmatism. In addition, the \textit{index of moderated mediation} was significant as well with an effect of \(.14, 95\% \text{ bias-corrected CI [.01, .32]}\), showing that the conditional indirect effect of crisis type on leadership evaluation through collective crisis efficacy is an increasing function of follower pragmatism. The conditional indirect effects of crisis type on leadership evaluation through collective crisis efficacy for the moderator of follower self-conception is plotted with an accompanying 95\% confidence band in Panel A (charismatic leadership) and Panel B (pragmatic leadership) of Figure 15.

In order to ensure that these results were not driven by portions of the sample that exhibit indiscriminate (i.e., neutral) self-conceptions on the bipolar idealism-pragmatism scale, additional analyses were conducted with a subsample of the dataset consisting of participants who had indicated either high values of idealism (1, 2, or 3 on the scale) or high values of pragmatism (7, 8, or 9 on the scale). The analysis revealed a similar pattern for this subsample, i.e., when followers are low, moderate, or high on pragmatic (versus idealistic) self-conception, crisis type has a low \((b = -.04, 95\% \text{ bias-corrected CI [-.49, .47]})\), moderate \((b = .33, 95\% \text{ bias-corrected CI [.07, .81]})\) or high \((b = .62, 95\% \text{ bias-corrected CI [.17, 1.40]})\) indirect effect, respectively, on leadership evaluation through collective crisis efficacy. The \textit{index of moderated mediation} for this subsample was significant as well with an effect of \(.11, 95\% \text{ bias-corrected CI [.01, .31]}\).

To further facilitate the interpretation of these results, additional simple slope tests were conducted by regressing collective crisis efficacy as the dependent variable on \(z\)-standardized scores of the independent variables, their interactions, and all control variables. The results of this analysis are plotted in Figure 16. As the figure shows, at high levels of pragmatism, pragmatic leadership has a significantly stronger positive effect on collective crisis efficacy than at high levels of idealism \((t = 2.34, p < .05)\). Conversely, at high levels of idealism, charismatic leadership has a stronger positive effect on collective crisis efficacy than at high levels of pragmatism, though this effect did not reach significance \((t = -1.75, p = .08)\). However, in sum and based particularly on the results on the conditional indirect effects analysis, Hypothesis 3 was supported.
Table 23. Means, Standard Deviations, and Correlations among Study Variables (Study 3)

<table>
<thead>
<tr>
<th>Variables(^a)</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age(^b)</td>
<td>36.54</td>
<td>1.95</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Gender(^b)</td>
<td>1.55</td>
<td>.50</td>
<td>-.13</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Nationality(^b)</td>
<td>1.21</td>
<td>.59</td>
<td>-.19**</td>
<td>.15*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4. Work experience(^b)</td>
<td>15.79</td>
<td>11.30</td>
<td>.93**</td>
<td>-.08</td>
<td>-.29**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Romance of leadership</td>
<td>5.32</td>
<td>.97</td>
<td>-.12</td>
<td>.02</td>
<td>.22**</td>
<td>.10</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. Need for structure</td>
<td>4.83</td>
<td>1.65</td>
<td>-.02</td>
<td>-.11</td>
<td>-.06</td>
<td>-.06</td>
<td>.21**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7. Crisis type(^b)</td>
<td>1.51</td>
<td>.50</td>
<td>-.25**</td>
<td>.13</td>
<td>-.02</td>
<td>-.24**</td>
<td>-.04</td>
<td>.05</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8. Leadership style(^b)</td>
<td>1.46</td>
<td>.50</td>
<td>-.12</td>
<td>-.06</td>
<td>.08</td>
<td>-.14</td>
<td>.05</td>
<td>.04</td>
<td>.08</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9. Self-conception</td>
<td>5.65</td>
<td>2.43</td>
<td>.06</td>
<td>-.07</td>
<td>.00</td>
<td>.03</td>
<td>.08</td>
<td>.06</td>
<td>-.01</td>
<td>.02</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>10. Crisis efficacy</td>
<td>4.83</td>
<td>1.49</td>
<td>-.12</td>
<td>.00</td>
<td>.18*</td>
<td>-.12</td>
<td>.29**</td>
<td>.14*</td>
<td>.13</td>
<td>.24**</td>
<td>.07</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>11. Leadership evaluation</td>
<td>4.26</td>
<td>1.50</td>
<td>-.07</td>
<td>-.06</td>
<td>.15*</td>
<td>-.07</td>
<td>.15*</td>
<td>.12</td>
<td>.01</td>
<td>.14*</td>
<td>.13</td>
<td>.64**</td>
<td>–</td>
</tr>
</tbody>
</table>

\(^a\) n = 204

\(^b\) Coding was as follows: age: number of years; gender: 1 = “male,” 2 = “female”; nationality: 1 = “US”, 2 = “Europe”, 3 = “Asia”; work experience: number of years; crisis type: 1 = “sudden,” 2 = “gradual”; leadership style: 1 = “charismatic,” 2 = “pragmatic”.

* \(p < .05\)

** \(p < .01\)
Table 24. Moderated Mediation Analyses Predicting Leader Evaluation (Study 3)

<table>
<thead>
<tr>
<th>Variable a</th>
<th>First Stage Dependent Variable</th>
<th>Second Stage Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Collective Crisis Efficacy)</td>
<td>(Leadership Evaluation)</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.02</td>
</tr>
<tr>
<td>Gender</td>
<td>-.08</td>
<td>.20</td>
</tr>
<tr>
<td>Nationality</td>
<td>.32</td>
<td>.19</td>
</tr>
<tr>
<td>Work experience</td>
<td>.02</td>
<td>.03</td>
</tr>
<tr>
<td>Romance of leadership</td>
<td>.35</td>
<td>.11</td>
</tr>
<tr>
<td>Need for structure</td>
<td>.08</td>
<td>.06</td>
</tr>
<tr>
<td>Crisis type</td>
<td>2.78</td>
<td>1.51</td>
</tr>
<tr>
<td>Leadership style</td>
<td>3.65</td>
<td>1.65</td>
</tr>
<tr>
<td>Pragmatism</td>
<td>.76</td>
<td>.39</td>
</tr>
<tr>
<td>Crisis type × leadership style</td>
<td>-.187</td>
<td>1.02</td>
</tr>
<tr>
<td>Crisis type × self-conception</td>
<td>-.45</td>
<td>.25</td>
</tr>
<tr>
<td>Leadership style × self-conception</td>
<td>-.55</td>
<td>.27</td>
</tr>
<tr>
<td>Crisis type × leadership style × self-conception</td>
<td>.34</td>
<td>.16</td>
</tr>
<tr>
<td>Crisis efficacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.42***</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.19</td>
<td></td>
</tr>
</tbody>
</table>

a $n = 202$ due to missing data. Entries are unstandardized coefficient estimates. SE = standard error; CI = confidence interval; LL = lower limit; UL = upper limit.

$^+$ p < .10
$^*$ p < .05
$^{**}$ p < .01
$^{***}$ p < .001
Table 25. Conditional Direct and Indirect Effects of Moderated Mediation (Study 3)

<table>
<thead>
<tr>
<th>Path</th>
<th>Leadership</th>
<th>Self-Conception</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effect</td>
<td>Charismatic</td>
<td></td>
<td>-.13</td>
<td>.23</td>
<td>-.56</td>
<td>.58</td>
<td>-.59</td>
<td>.33</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Charismatic</td>
<td>Idealistic</td>
<td>.46</td>
<td>.33</td>
<td></td>
<td></td>
<td>-.19</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Charismatic</td>
<td>Neutral</td>
<td>.26</td>
<td>.23</td>
<td></td>
<td></td>
<td>-.16</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Charismatic</td>
<td>Pragmatic</td>
<td>.06</td>
<td>.30</td>
<td></td>
<td></td>
<td>-.50</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Index of moderated mediation</td>
<td>Charismatic</td>
<td></td>
<td>-.08</td>
<td>.08</td>
<td></td>
<td></td>
<td>-.25</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>Direct effect</td>
<td>Pragmatic</td>
<td></td>
<td>-.35</td>
<td>.26</td>
<td>-1.37</td>
<td>.17</td>
<td>-.86</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Pragmatic</td>
<td>Idealistic</td>
<td>-.19</td>
<td>.24</td>
<td></td>
<td></td>
<td>-.76</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Pragmatic</td>
<td>Neutral</td>
<td>.13</td>
<td>.15</td>
<td></td>
<td></td>
<td>-.14</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Pragmatic</td>
<td>Pragmatic</td>
<td>.45</td>
<td>.22</td>
<td></td>
<td></td>
<td>.09</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>Index of moderated mediation</td>
<td>Pragmatic</td>
<td></td>
<td>.14</td>
<td>.08</td>
<td></td>
<td></td>
<td>.01</td>
<td>.32</td>
<td></td>
</tr>
</tbody>
</table>

*a* \(n\) (charismatic leadership) = 108; \(n\) (pragmatic leadership) = 94.

*b* “Idealistic” = 1 standard deviation below the mean of the idealism-pragmatism scale; “neutral” = the mean of the idealism-pragmatism scale; “pragmatic” = 1 standard deviation above the mean of the idealism-pragmatism scale.

Entries are unstandardized coefficient estimates. SE = standard error; CI = confidence interval; LL = lower limit; UL = upper limit.
Dashed lines represent 95% confidence band.

Figure 15. Conditional Indirect Effects of Crisis Type on Leader Evaluation
7.8 Discussion

Even though organizational crises often have vastly different attributes, research has paid little attention to leadership requirements that arise from the specific nature of the crisis. Sudden and gradual crises feature unique aspects (e.g., different degree of management accountability or complexity) that render them suitable for further study in order to advance leadership literature. The present research examined charismatic and pragmatic leadership as opposing approaches to crisis leadership and investigated which of the two better predicts leadership effectiveness ratings in the context of the two crisis types. On the one hand, the charismatic leadership perspective predicts that by formulating a vivid vision, followers are provided with a mental image that inspires them to a better future, reduces their uncertainty, and motivates them to confidently take on the challenges of the current situation (Bass, 1995; Burns, 1978; House & Shamir, 1993; Shamir et al., 1994). On the other hand, the theory of pragmatic leadership holds that it is rather by emphasizing problem solving over vision articulation, employing rational over emotional persuasion, and drawing on expertise rather than motivational appeals, that followers’ sense of efficacy in dealing with crises can be increased (Antonakis & House, 2004, 2014; Mumford et al., 2008; Mumford & Doorn, 2001).
The findings of the present research indicate that, compared to charismatic leadership, pragmatic leadership is a particularly effective form of leadership when the crisis is of gradual nature, the reason being that pragmatic leaders more explicitly address follower concerns that become salient in this type of crisis, e.g., expertise-based problem-solving (Study 1). The present research also highlights the importance of construal fit and shows that charismatic leadership is evaluated favourably if consequences of the crisis are expected in the distant future, indicating that the articulation of a mental image is an appropriate intervention for such instances, but that pragmatic leadership is required when crisis consequences are near, indicating that an action-focus with concrete measures is sought for by followers under these circumstances (Study 2). Lastly, the current research supports the hypothesis of a three-way interaction of crisis type, leadership style, and follower attributes which indirectly affects leader evaluations through perceptions concerning organizational crisis readiness. Specifically, followers who are high in pragmatism (idealism) tend to evaluate pragmatic (charismatic) leadership in gradual (sudden) crises as particularly effective because the fit of this leadership style enhances collective crisis efficacy (Study 3).

7.8.1 Theoretical Implications

The overarching aim of the present research was to extend the crisis leadership literature. It contributes to past findings in the following ways. First, it offers a more thorough investigation of crisis leadership by having a theoretically grounded and well-established crisis typology as its foundation. By examining crisis phenomena in the context of different types of crises that organizations commonly experience, this study answers scholarly calls to integrate context into research more prominently (Hunter et al., 2007; Liden & Antonakis, 2009). Even though crises have been the object of analysis in a wide range of leadership studies, so far, no research has directly compared crises that differ on an important dimension such as their development over time (Hwang & Lichtenthal, 2000). Sudden and gradual crises represent opposite ends of the same continuum and have unique characteristics that imply different follower expectations concerning effective leadership responses. The crises investigated in the present research were related to two leadership styles that have not been investigated in these settings, i.e., charismatic and pragmatic leadership. Thus, the study adds to leadership literature by taking on contingency perspective and comparing and contrasting these forms of leadership, allowing for conclusions concerning the fit of these leadership styles to these crisis situations.
Second, the present research contributes to the charismatic leadership literature. While there is a large base of evidence for the positive effects of charismatic leadership in general (e.g., Degroot, Kiker, & Cross, 2000; Judge & Piccolo, 2004; Lowe et al., 1996; Wang et al., 2011) and particularly in a crisis context (e.g., Bligh et al., 2004; Flynn & Staw, 2004; Halverson, Holladay, et al., 2004; Pillai, 1996; Waldman, Ramirez, House, & Puranam, 2001; Williams, Pillai, Lowe, Jung, & Herst, 2009), past research has not examined its potential mis-fit to specific crisis conditions. The combined findings of the studies identifies crisis situations in which charismatic leadership is not an effective behavior (crises that have developed gradually) and outlines boundary conditions under which it yet proves valuable (crisis consequences lie in the distant future). The present research thus complements recent findings on the potential misfit of charismatic leadership under varying environmental circumstances. Huang, Xu, Chiu, Lam, and Farh (2015) showed that in harsh economic circumstances, authoritarian rather than transformational leaders improve company performance, the reason being that through their assertion of discipline and obedience, they are able to maintain operational efficiency required to survive in such an environment. Also, in contrast to Weber’s assertion that the charismatic leader is perceived by followers as the savior in times of crisis (Weber, 1947, 1968), the findings of a recent study conducted by Jacquart and Antonakis (2015) suggest that charismatic leaders lose in crisis effectiveness if performance signals of the organization are unclear and causes of the crisis are attributed to the leader. While these studies demonstrate that contextual conditions can render other forms than charismatic leadership as suitable leadership responses, they did not explicitly look at crisis. The present research fills this gap and points towards limitations of charismatic leadership in different crises while highlighting boundary conditions under which it can retain its effectiveness.

Third, concerning the investigation of pragmatic leadership, the present study represents the first experimental investigation of core tenets related to the CIP model of leadership (Mumford, 2006; Mumford et al., 2008) and instrumental leadership theory ILT (Antonakis & House, 2014) in a crisis context. The CIP model has so far only been examined using past examples of prototypical pragmatic leaders (Mumford & Doorn, 2001), historiometric methods (Hunter et al., 2011), or leadership problem-solving with student samples (Bedell-Avers et al., 2008). The present study examines pragmatic leadership using a leader evaluation paradigm that allows predictions about its suitability as a crisis response, compared to charismatic leadership. It also adds to the scarce empirical findings on instrumental leadership theory that exist so far that – Rowold (2014) has shown that
instrumental leadership explains additional variance beyond the transformational/transactional leadership paradigm – by extending its analysis to a crisis setting.

Fourth, the present research untangles the complex relationships that unfold under varying crisis conditions and explored underlying mechanisms in a moderated-mediation framework with variables unique to the domain: While previous crisis leadership research tends to focus on global outcomes such as general leader competence evaluations (e.g., Haslam et al., 2001), the present study attempted to achieve a domain-specific investigation by examining crisis-specific variables such as collective crisis efficacy (i.e., the perceptions individuals share about their organization’s readiness for dealing with a crisis) as a mediator and prototypical crisis leader evaluations (i.e., the extent to which a person matches one’s picture of the ideal leader during crisis) as the outcome variable. The analytical model revealed that collective crisis efficacy mediates the effect of the three-way interaction between crisis type, leadership style, and follower attributes has on ideal crisis leader evaluations, thus shedding light on the processes underlying effective crisis leadership. Also, by including follower attributes in the three-way interaction, the study considered relevant follower characteristics, thereby answering scholarly calls for a follower-centered perspective of leadership (Hollander, 1978; Meindl, 1995; Uhl-Bien et al., 2014). The role of followers themselves has been a widely understudied area, even though follower characteristics have been found to exert a strong influence on charismatic leader evaluations (De Vries et al., 1999; Ehrhart & Klein, 2001; Felfe & Schyns, 2009). Examining these follower preferences in a crisis setting advances the existing understanding of crisis leadership.

7.8.2 Practical Implications

The current findings have important practical implications for organizations that seek ways to educate and train leaders who are able to mobilize collective action and maintain operational efficiency once a crisis has struck. Firstly, the findings indicate that leaders, depending on the circumstances of the crisis, need to apply different strategies to engage followers. Particularly if the circumstances are such that employees are convinced the crisis could had been averted if management had only shown more strategic foresight (i.e., gradual crises), leaders need to focus on practical solutions instead of offering mere consolation in the distant future with colorful rhetoric. Organizational consultants and crisis management experts could train CEOs how to gain a deeper understanding of the nature of the different crises their organization has experienced in the past and could experience in the future by
identifying meaningful crisis attributes and categorize them accordingly. This could serve as
the basis of the development of a crisis leadership portfolio which delineates follower needs
and leadership expectations unique to each situation. Once a crisis has struck, executives can
use this portfolio to formulate crisis response messages that are tailored to the situation and
include appropriate amounts of pragmatic or charismatic appeals so that follower concerns
can be reduced.

The findings also have implications for leader selection. Charisma has strong positive
connotations among followers, as seen in the example of the late Steve Jobs (Heracleous &
Klaering, 2014). Especially in times of uncertainty, the choice about who should lead the
company out of crisis can often be a result of the impression about the candidate’s ability to
fulfill the function of a charismatic super-hero who is then touted the “organizational saviour”
(Khurstana, 2002a, 2002b). However, even though the public and investors frequently seem to
welcome such successions as evidenced by positive reactions at the stock market (Agle,
Nagarajan, Sonnenfeld, & Srinivasan, 2006; Fanelli & Grasselli, 2006; Fanelli, Misangyi, &
Tosi, 2009; Tosi et al., 2004), charismatic leaders are not always effective crisis leaders
(Huang et al., 2015). The findings of the present research show that pragmatic leaders who
might make a rather bland first impression and who are not able to strongly arouse followers
emotions could be potentially a better choice for certain crisis conditions. Thus, organizations
should modify their HR selection practices towards explicitly accounting for leadership
requirements that different crisis situations bring, while also considering that pragmatic
leaders could a represent particularly good fit to the position of crisis leader.

These selection processes would also need to take into account the existing
organizational culture. The selection of a pragmatic crisis leader for a company in which
ideals are held in higher esteem than pragmatic considerations might prove troublesome
because the pragmatic leader represents a bad match with the majority of followers, as an
idealist organization has likely attracted followers with a similar attitude in the past
(Schneider, 1983, 1987). Literature on the routinization of charisma (Weber, 1968) also
suggests that CEO successions which constitute a strong break with the past company culture
that has mainly been shaped by its charismatic leader could lead to problems (Beyer &
Browning, 1999; Hatch & Schultz, 2013). On the other hand, for organizations that have a
long company history of overemphasizing pragmatic concerns (e.g., cost cutting, instrumental
rewards, established procedures), a crisis might serve as the needed jolt to redirect the
strategic course and reinvigorate employee motivation under the guidance of a charismatic
figure. Though the current study’s focus was on crisis leadership as displayed by top
management leadership, HR practices aimed at selecting suitable crisis leaders could, of course, also extend to lower management ranks as crisis situations are also common here, as leadership is inherently a multi-level phenomenon (Dionne et al., 2014; Yammarino et al., 2005; Yammarino, 1990). A recommendation for charismatic leadership can be made for the case where crises strike suddenly and/or have consequences far in the future. If it is foreseeable that a crisis will hold the organization in its stranglehold for a prolonged period of time and restructuring efforts will likewise need ample time until they take hold, the crisis leader should include both pragmatic and charismatic elements in his/her crisis communication that balance action-orientation while at the same time upholding a positive frame of future reference for followers to pursue. On a whole, both charismatic and pragmatic leadership behaviors have proved to be effective leadership behaviors in times of crisis.

The current research also offers implications concerning the leadership of different followers through crisis. The moderated mediation analyses show that leaders who communicate charismatically during a crisis – a strategy that has often been suggested in the past – may incur the high cost of of reducing collective crisis efficacy particularly if followers do not share an idealistic, value-oriented worldview. Pragmatically-oriented followers are not likely to support leaders who paint an idealized picture of a better situation that is only to be realized “some time in the future”, but rather prefer or even demand someone who has designated expertise to solve problems and who talks about the concrete implementation of crisis countermeasures. In such cases, charismatic leader communication may come at the cost of losing credibility with followers. Consequently, leaders need to learn to distinguish between followers with different preferences and become more flexible in adapting to needs in the context of differing crisis circumstances.

### 7.8.3 Study Limitations and Future Research Directions

The present study is limited in several aspects. First, generalizability is potentially restricted due to the experimental approach. Even though this methodology supports the aim of achieving high internal validity and inferring causality, the generalizability of findings to a real life setting can be questioned. However, findings from laboratory research can potentially be well-replicated and generalize to the field (Mitchell, 2012; Mook, 1983). Also, as past scholars have argued, leadership research can be advanced by employing experimental approaches that are particularly well suited to examine novel relationships (Brown & Lord, 1999; Locke, 1986; Wofford, 1999). Another advantage of the chosen methodology is that
interactions such as the ones investigated in this research can potentially be better detected in the laboratory compared to the field setting (McClelland & Judd, 1993). Beyond this, the present study answers scholarly calls for a methodologically more balanced field that is otherwise characterized by an over-representation of field research (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009; Dinh et al., 2014; Mumford, 2011). Notwithstanding the above, concerns remain about the explanatory power of findings due to the decontextualized setting as a result of using scenario-based vignettes. However, a sizeable number of studies has successfully applied similar vignette-based studies to investigate processes of leader selection and evaluation during crisis (e.g., Choi & Mai-Dalton, 1999; Felfe & Schyns, 2006; Haslam & Ryan, 2008; Ryan, Haslam, Hersby, & Bongiorno, 2011). Also, the experimental manipulations of leadership styles in the form of CEO speeches can be considered not far removed from reality as the large social distance between CEO and subordinates makes crisis leadership in the form of crisis response speeches likely (Cole, Bruch, & Shamir, 2009; Shamir, 1995). Still, future research should conduct additional experiments and complement these with field research on actual crisis responses of real leaders that confirm the robustness of the findings. These efforts should include the study of samples of the working population. This is ever more so important as there is a potentially high number of leader-follower-related aspects that could not be assessed using the present approach but would influence crisis leader evaluations, e.g., actual interaction or working history.

Another limitation is that single-item measures were used for both the individual difference moderator and the outcome variables, which renders these instruments susceptible to low reliability. The decision for the use of these measures was guided by deliberations of economy with the aim to keep the survey as short as possible in order to achieve a high return in the online sample (cf. Eisinga, Grotenhuis, & Pelzer, 2013). Single-item measures have been used effectively in psychological research to assess a wide range of constructs such as the big five personality domains (Gosling, Rentfrow, & Swann, 2003; Spörrle & Bekk, 2013), personal beliefs (Cook & Perri, 2004; Hettler & Cohen, 1998), assessments of well-being (Robins, Hendin, & Trzesniewski, 2001; Youngblut & Casper, 1993), or social identification (Postmes, Haslam, & Jans, 2012; Shamir & Kark, 2004). If the study objective is to assess global evaluations, as it was the case in the present study, the use of a holistic single-item measure can be considered appropriate (Youngblut & Casper, 1993). However, it should be mentioned that the measures used were more sophisticated than a single-item measure. The measure of follower self-conception included a short description of characteristics that describe idealistic and pragmatic individuals. This approach has been used in research where
the use of a measure is required that is economic yet sufficiently captures the breadth of the construct under investigation, e.g., dominance and affiliation assessments (Hess, Adams, & Kleck, 2005). Also, the single-item outcome measure of prototypical crisis leader evaluation used an intuitive graphical response format (Aron, Aron, & Smollan, 1992; Shamir & Kark, 2004) that has been successfully used in past leadership studies (Shamir & Kark, 2004; van Quaquebeke et al., 2010; van Quaquebeke, van Knippenberg, & Brodbeck, 2011; van Quaquebeke, van Knippenberg, & Eckloff, 2011). Still, future research should replicate the findings of the present research with more elaborate measures.

A related limitation concerns the high intercorrelation (.64) found between the mediator (i.e., collective crisis efficacy) and the outcome variable (i.e., prototypical crisis leader evaluation) in Study 3, raising the issue of discriminant validity of the constructs (Schwab, 1980). However, high correlations need not be problematic if the constructs investigated are conceptually distinct and theoretically well-explained (cf. van Knippenberg & Sitkin, 2013) which likely is the case here. While collective crisis efficacy is concerned with followers’ beliefs concerning their membership to a group and subjective evaluations related to the successful achievement of shared tasks (Bandura, 1997; Shamir et al., 1993, 1998), the prototypical crisis leader evaluation is firmly rooted in the literature on Implicit Leadership Theories (Eden, 1992; Foti & Lord, 1987; Lord, Foti, & De Vader, 1984; Lord & Maher, 1991; Offermann, Kennedy, & Wirtz, 1994; Schyns & Meindl, 2005) which concerns followers’ mental representation of what constitutes an ideal leader (i.e., prototype), and thus is centered on subjective evaluations of the person of the leader. Also, further inspection of the separate data analyses that had been conducted for the charismatic and pragmatic leadership conditions revealed that in the latter, the correlation of the two constructs was only at .52. This instills more confidence in the validity of the results as despite this lower correlation, significant results in the moderated-mediation model were found for this condition.

A final limitation concerns the fact that this study conceptualized and measured charismatic and pragmatic leadership as two mutually exclusive leadership styles. Though this supported the study purpose of comparing and contrasting the effects of both leadership styles on different groups of followers, this does mean that they represent opposite ends of a single continuum. Indeed, leaders who are typically perceived as charismatic figures could instill pragmatic behaviors in their dealings with followers, while pragmatic leaders could be trained to display charismatic behaviors (e.g., Antonakis, Fenley, & Liechti, 2011). Future research should therefore investigate the effects of combining both leadership behaviors when dealing
with crises. As the present research has alluded to by examining both crisis development and crisis consequences as important moderators, the optimum balance between charismatic and pragmatic leadership possibly also depends on further dynamic contingency factors. One such factor might be the duration during which a single leadership behavior is shown over time. Early crisis leadership research has examined a particular form of action-oriented, crisis responsive charismatic leadership and revealed that positive effects of the leadership style diminish faster than those of charismatic leadership, and thus have to be reinforced over time (Boal & Bryson, 1988; Hunt et al., 1999). On the other hand, research on charismatic rhetoric has indicated a ceiling effect of crisis rhetoric, suggesting that while it is effective in motivating followers, it does not do so indefinitely (Davis & Gardner, 2012). These findings open up interesting avenues for the extension of the current study. For instance, future research could investigate the interactive long-term effects of charismatic and pragmatic crisis leadership by examining whether pragmatic leaders are well advised to carefully balance pragmatic and charismatic leadership in order to engage followers over time – or whether they receive a penalty in terms of follower support when they consistently resist articulating a future vision versus engaging in concrete actions and implementation of this vision.

7.9 Conclusion

Taken as a whole, the results of this study indicate that both charismatic and pragmatic leadership represent a potentially effective approach to crisis leadership. However, their effectiveness, to a large extent, depends on the specific crisis circumstances and the expectations that different types of followers have towards the ideal crisis leader. The findings delineate the crisis conditions under which one or the other leadership behavior likely proves useful in reducing follower duress and helping them to rebuild or strengthen crisis efficacy, which is critical resource when organizations wish to surmount critical circumstances and challenges. Future research should identify further contingency variables to be found in factors that surround organizational crisis and in the followers affected by it.
8. General Discussion

The current work was dedicated to providing a thorough examination of leadership in times of crisis and had four objectives. The first was the development of a theoretical framework of crisis leadership using different conceptualizations of crisis across stages of the crisis lifecycle. The second was the empirical examination of different leadership styles and their effects on follower outcomes in these crisis stages. The third was the identification of organizational, individual, and crisis-related moderators that act as boundary conditions of these relationships. Finally, the fourth was the identification of associated underlying mechanisms. To achieve these objectives, three empirical studies were conducted. The final section of this doctoral dissertation will be comprised of the following parts. First, the findings of the three studies will be summarized and integrated in an overarching model of crisis leadership. Next, theoretical implications of the findings and their contribution to extant theory will be discussed and implications for the managerial practice of crisis leadership will be derived. Finally, a discussion of the limitations and strengths of the dissertation along with suggestions for research opportunities that extend beyond the scope of this dissertation and an overall conclusion will close this work.

8.1 Summary and Integration of Findings

Drawing on a variety of theoretical perspectives in the crisis leadership literature, the current work systematically investigated the effectiveness of different leadership styles across stages of the crisis lifecycle. Crisis leadership has been the object of analysis in a wide range of disciplines, yet scholars have rarely attempted to integrate insights from these different perspectives. This, however, seems worthwhile as the heterogeneity of the field likely benefits from the mutual stimulation of disparate research strands, e.g., the application of leadership theory from the psychological domain in specific industry settings that have up to this point mainly been shaped by assumptions of the safety literature could substantially advance the current theoretical and practical understanding of how to promote organizational changes (Dixon & Shofer, 2006; Flin & Yule, 2004; Pronovost et al., 2006). Thus, the theoretical investigation of this dissertation began with a comprehensive review and classification of existing crisis definitions identified in the multidisciplinary streams of research, grouping them into system-based, team-based, and organization-based approaches. Going beyond previous research which has not considered examining crisis leadership across different stages
of the crisis lifecycle, the present work identified three distinct conceptualizations of crisis, i.e., critical incidents, team crisis, and organizational crisis, and related them to specific leadership requirements of each stage as seen from a relational-based (LMX), motivation-based (charismatic leadership), and functional-based (pragmatic leadership) perspective. Three empirical studies were positioned in-between the crisis conceptualizations and leadership perspectives to systematically examine crisis leadership.

Study 1 examined how the relational theory of leader-member exchange (LMX) can inform the understanding of crisis leadership in the pre-crisis stage. Leaders are often cited as playing an eminent role in establishing relations with followers that help create a safe culture and the prevention of crises (Brower et al., 2000; Flin & Yule, 2004; Reason, 1997). The present study advanced research by examining LMX as a precursor of crisis preventive follower behaviors (i.e., incident reporting). Also, in departure from previous research that has examined crisis leadership in industries that are considered high risk but that have already achieved a high level of reliability (e.g., aviation), it extended the analysis to the healthcare sector which is still marked by serious safety deficiencies (Leape & Berwick, 2005; Noble & Pronovost, 2010). The study generated fresh insights into how LMX can prevent incidents from escalating to situations that cause tangible damage (i.e., patient harm) by identifying safety-specific trust and organizational identification as dual processes of the LMX–reporting behavior relationship and revealing how higher-level leadership influences such as top management support and codification practices can diminish or facilitate these influences.

Study 2, focusing on the crisis stage, examined how the motivational-based theory of charismatic leadership can be applied as a crisis intervention. A large number of studies has shown the conducive effect of charismatic leadership on followers. Combining particularly the research findings on crisis leadership in a team setting (e.g., Hamblin, 1958; Pillai & Meindl, 1991) with findings on charismatic crisis rhetoric (e.g., Bligh et al., 2004a, 2004b; Shamir et al., 1994), this study provided novel insights into the charismatic bond in times of crisis by testing how a rhetoric-based charismatic leadership intervention affects followers in a team setting. Based on a crisis conceptualization that builds on Critical Event Theory (Morgeson & DeRue, 2006; Morgeson et al., 2015) and adopting a contingency approach that considers crisis-relevant individual difference variables, it examined value-based disagreements and revealed negative effects of a charismatic intervention on performance of followers if they are high on self-direction (Ros, Schwartz, & Surkiss, 1999; Schwartz, 1999, 2012), thus delineating conditions where charismatic leadership can lead to adverse organizational outcomes (cf. Eisenbeiß & Boerner, 2013; Kark, Shamir, & Chen, 2003).
Study 3 was concerned with the post-crisis stage and focused on the analysis of the functional-based leadership perspective. Pragmatic leadership (Mumford & Doorn, 2001; Mumford, 2006) and the related theory of instrumental leadership theory (ILT) (Antonakis & House, 2002, 2004, 2014) are rather new forms of leadership whose effectiveness has not been sufficiently explored, particularly in a crisis setting. This study represents the first experimental investigation of pragmatic leadership in times of crisis and investigated how this leadership style contrasts with charismatic leadership, building on an established crisis typology that classifies crises as sudden or gradual in nature (Hwang & Lichtenthal, 2000; James & Wooten, 2005; Moore & Seymour, 2000; Rosenthal & Kouzmin, 1993; Seymour & Moore, 2000; T’Hart et al., 2001). The findings revealed that pragmatic leadership does represent an effective leadership style in crisis as it enhances collective crisis efficacy, particularly if the crisis is of gradual nature and followers themselves exhibit a pragmatic disposition. However, certain boundary conditions (i.e., crisis consequences lie in the distant future) tip the scale towards charismatic leadership again, highlighting that the benefits of charismatic leadership still prove worthwhile under certain crisis conditions.

The key findings of the three studies with regard to their examined relationships are summarized in Table 26.
Table 26. Key Findings of the Studies of the Dissertation

<table>
<thead>
<tr>
<th>Crisis Leadership Variables</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership (L)</td>
<td>Crisis (C)</td>
</tr>
<tr>
<td>LMX</td>
<td>Incidents</td>
</tr>
<tr>
<td>Study 1</td>
<td>LMX</td>
</tr>
<tr>
<td></td>
<td>LMX</td>
</tr>
<tr>
<td>Charismatic</td>
<td>Team crisis</td>
</tr>
<tr>
<td>Study 2</td>
<td>Charismatic</td>
</tr>
<tr>
<td></td>
<td>Charismatic</td>
</tr>
<tr>
<td>Pragmatic</td>
<td>Gradual crisis</td>
</tr>
<tr>
<td>Study 3</td>
<td>Pragmatic</td>
</tr>
<tr>
<td></td>
<td>Pragmatic</td>
</tr>
</tbody>
</table>
The inspection of all three studies allows the drawing of aggregated conclusions in an integrated model of crisis leadership (see Figure 17). This model advances four propositions concerning leadership in times of crisis. First, the basis for attempts of social influence on followers by the crisis leader is formed by the leader-follower-relationship that has been developed. This dissertation focused on the three approaches of relational, motivational, and functional leadership. Across the three empirical studies, it was shown that the motivation of followers to engage in crisis activities can be sourced from different grounds, i.e., from a relationship that has, at its core, social exchanges, a charismatic bond, or followers’ perceptions of a functional fit between the leader and the crisis situation. Following from this, the means of influence leaders employ and the responses in followers they evoke are of distinguishable nature, i.e., the relational leader acts as a mentor such that the follower engages in reciprocal support; the motivational leader inspires such that followers exert extra effort to achieve performance; the pragmatic leaders proves his/her expertise to followers such that they evaluate him favourably in terms of resolving the crisis.

Figure 17. Integrated Crisis Leadership Model
The second proposition the model puts forth is that the effects of these leader-follower relationships on follower crisis engagement are not isolated from context factors. Context factors deemed as influential based on the findings of the current research are grouped in the model in (a) crisis attributes (top of Figure 17) and (b) general contingency factors (bottom of Figure 17). Crisis attributes firstly relate to the crisis stages within the crisis lifecycle model. As shown in the course of this work, the preventive function of crisis leadership during the pre-crisis stage has different implications for follower expectations concerning adequate leadership than the intervention or resolution functions in the crisis and post-crisis stage, respectively (see Studies 1-3). Secondly, crisis attributes concern crisis variations, i.e., specific manifestations of crisis within any of the crisis stages (e.g., critical incidents versus adverse events; relationship- versus task-problems in teams; sudden versus gradual crises in organizations). These variations likewise can strengthen or diminish the effect of crisis leadership, as evidenced for instance, by the interaction effect found between crisis type (sudden versus gradual) and leadership style (pragmatic versus charismatic) in Study 3. Furthermore subsumed under crisis variations are specific characteristics of the crisis, e.g., the time horizon of crisis consequences (see Substudy 2 of Study 3). Besides crisis attributes, general contingency factors found in the follower and/or the larger organizational environment can influence crisis leadership attempts. As demonstrated in the current research, an environmental factor that is likely unfavourable to relational crisis leadership effects is high top management support (Study 1); an environmental factor that is likely favourable to relational crisis leadership effects is codification of regulations (Study 1); a follower attribute that is likely unfavourable to charismatic crisis leadership effects is self-direction (Study 2); and a follower attribute that is likely favourable to pragmatic crisis leadership effects is a pragmatic (as opposed to idealistic) predisposition (Study 3).

The third proposition of the model is that specific mechanisms underlie the crisis leadership process. The findings of the current work suggest that the breadth of mechanisms that can potentially be activated as a consequence of the different leader-follower relationships can usefully be categorized into affective/cognitive, identity-based, and conative mechanisms. Affective/cognitive mechanisms relate to a group of variables that relate to individuals’ affective experience and cognitive evaluations (e.g., M. D. Johnson, Morgeson, & Hekman, 2012; Yang, Mossholder, & Peng, 2009) which are amenable to leadership influences in times of crisis (Antes & Mumford, 2012; Combe & Carrington, 2015; Kaplan et al., 2013; Sommer et al., 2015), for instance, reporting-specific trust as identified in Study 1. Identity-based mechanisms relate to processes that are instigated by the leader’s creation of a
shared sense of meaning even under high levels of duress (Cohen et al., 2004; Landau et al., 2004; Smircich & Morgan, 1982). Fulfilling identity-based functions is relevant in ambiguous situations when followers are likely to turn to identity-affirming influences in order to reduce their uncertainty (Hogg, 2001; Pierro et al., 2005). Conative mechanisms concern the action tendencies of followers in engaging crisis situations and includes constructs related to the perceived confidence as readiness in dealing with crises (Bass et al., 2003; Shamir et al., 1998), e.g., collective crisis efficacy denotes the perceptions individuals share about their organization’s readiness for dealing with a crisis (see Study 3). Certain crisis conditions may require leadership which is based in a strategic rather than an identity-affirming role in order to instill such efficacy (Antonakis & House, 2014; Hwang & Lichtenthal, 2000). However, based on the findings of the current research, the model does not substantiate that these specific processes can only triggered by specific leader-follower relationships, i.e., the relational, motivational, or functional leadership categories can potentially influence all three mechanism categories identified (signified by the grey background in Figure 17). However, it is likely that certain leadership categories are more effective than others in producing particular mechanisms. For instance, charismatic leaders may be particularly adept at fulfilling identity-based functions (Seyranian & Bligh, 2008; Shamir et al., 1994). As such, the model proposition can be tied to insights offered by Implicit Leadership Theory (Foti & Lord, 1987; Lord et al., 1984; Lord & Maher, 1991; Offermann et al., 1994) which suggests that, depending on changes of follower or situational factors, definitions of ideal leadership may also change (Lord et al., 2001). This emphasizes again the interactive nature of the model and that when predicting these mechanisms, the interaction of different leader-follower relationships with the contingency factors need to be considered.

Finally, the fourth proposition holds that the outcomes of crisis leadership can target different domains of organizational life that relate broadly to system-oriented, team-related, and organization-oriented outcomes of crisis leadership, in accordance with the conceptualization of crisis as critical incidents, team crisis, and organizational crisis used in this dissertation. Followers, as a consequence of effective crisis leadership, can engage in activities that benefit the systems and processes aimed at enhancing the overall crisis-readiness of organizations (Kahn et al., 2013; Pearson & Mitroff, 1993; Vogus & Welbourne, 2003; Weick et al., 1999). The literature on proactive follower behaviors such as employee voice, upward safety communication, or critical incident reporting (Benn et al., 2009; Conchie et al., 2012; LePine & Dyne, 1998; Liu, Zhu, & Yang, 2010; Mahajan, 2010; Morrison, 2014; Mowbray, Wilkinson, & Tse, 2014; Zohar, 2010) is positioned here. Team-oriented outcomes
reflect the multitude of issues related to engaging high performance under event-based team critical situations, e.g., increased team member efforts, flexibly organizing interaction, and improving adaptation after change events (Collins & Parker, 2010; Kaplan et al., 2013; LePine, 2003; Marks et al., 2000; Roussin, 2008; Salas, Florida, Cooke, & Rosen, 2008; Sommer et al., 2015; Stachowski et al., 2009; Summers, Humphrey, & Ferris, 2012; H. M. Williams, Parker, & Turner, 2010) that could favourably be influenced by crisis leadership. Organization-oriented outcomes concern activities that support broad aspects of crisis leadership such as evaluating leader crisis communication, improving relational systems, or supporting processes of education and training for crisis leaders (Antes & Mumford, 2012; Bundy & Pfarrer, 2015; Claeys & Cauberghe, 2014; Coldwell et al., 2012; Coombs, 2007b; Guth, 1995; Hadley, Pittinsky, Sommer, & Zhu, 2011; Hale et al., 2005; James, Wooten, & Dushek, 2011; James & Wooten, 2005; Kahn et al., 2013; Probst & Raisch, 2005; Sayegh et al., 2004; Tieying, Sengul, & Lester, 2008). While the current work demonstrated the ability of crisis leadership to influence outcomes pertaining to each of the three categories across the three empirical studies (i.e., incident reporting to improve systems of patient safety, maintaining performance in team crises, and support of leader communication in terms of ideal crisis leader evaluations), it is evident that a much larger number of variables within each of the three categories would warrant further investigation in a crisis context.

The above model does not claim completeness; it is conceivable that further variables are added in future extensions of the model. For instance, another potential category of crisis leadership outcomes could be related to the person of the follower. Considering the growing interest of leadership scholars in examining the connection between leadership and health outcomes (e.g., Franke, Felfe, & Pundt, 2014; Gregersen, Vincent-Höper, & Nienhaus, 2014; Wegge et al., 2014; Zwingmann et al., 2014), this category could comprise different health-related variables. At this point in time, empirical insights on such issues is scarce; however, there have been recent indications that in the pre-crisis stage, crisis leadership positively influences follower well-being as crisis preparation activities may reduce role ambiguity and signal organizational concern for employees’ safety (Selart, Johansen, & Nesse, 2013); in the crisis stage, studies have shown that crisis leadership reduces stress and positively influences affective outcomes and resilience (Franke & Felfe, 2011; Sommer et al., 2015); in the post-crisis stage, it has been suggested that leaders can improve followers’ experience by working through distressing events and renewing a sense of optimism and hope (James et al., 2011; Kahn et al., 2013).
8.2 Theoretical Implications

The current research offers a number of contributions to the extant literature canon of crisis leadership. The individual studies on their own make unique contributions. Study 1 took on the relational perspective and examined leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995) and how it pertains to the prevention of crises. In departure from research on organizations that have already achieved the goal of being “crisis-prepared” (e.g., high-reliability-organizations), the present study extended the analysis to the healthcare sector and provided insights on how supervisory leadership as represented by LMX interacts with higher level leadership functions in preventing crisis escalation via two distinct processes. Study 2 represented the motivational perspective and examined charismatic leadership (Shamir et al., 1994, 1993). However, in contrast to previous research on charismatic crisis leadership which has found positive effects in large-scale crises (e.g., Bligh et al., 2004a; Williams et al., 2012), Study 2 examined charismatic crisis leadership in a team setting and tested a potentially negative effect at the team level, contingent on follower attributes. Study 3 marked the functional view and takes up a latest development in the leadership field by examining pragmatic-instrumental leadership (Antonakis & House, 2014; Mumford & Doorn, 2001). With a few exceptions (Hunter et al., 2011; Rowold, 2014), pragmatic-instrumental leadership still awaits thorough empirical investigation. To the best of the author’s knowledge, this leadership style has not been investigated at all in an explicit crisis context. Study 3 filled this gap and identified contextual variations of crisis that predict the effectiveness of such leadership.

Taken as a whole, the dissertation advances current research in the following ways. First, it develops and tests a theoretical framework that uniquely integrates multiple crisis conceptualizations situated at different stages of the crisis lifecycle with important leadership approaches. Historically, the leadership literature has often adopted a contingency perspective in an attempt to explain how the leader-follower relationship is affected by contextual variables (Osborn et al., 2002; Pawar & Eastman, 1997; Shamir & Howell, 1999). Crisis has been identified as an influential context variable in a large number of studies (James et al., 2011; Pillai & Meindl, 1995). However, somewhat problematic, the field of crisis research has been marked by a multitude of different definitions and typologies (Gundel, 2005; Reilly, 1993). Past studies in this field have mainly been conducted in an isolated manner, applying non-specific conceptualizations of crisis that have been measured by some form of general performance downturn (e.g., Choi & Mai-Dalton, 1999; Haslam & Ryan, 2008; Haslam et al., 2001). Such coarse operationalizations, however, disregard important specifics and nuances
that could impact the expectations follower harbor towards crisis leadership responses. As Conger (1999) noted with regard to research on charismatic crisis leadership, “the severity, duration, and possibility of a recovery vary widely across different crisis situations. More fine-grained [definitions] are needed to permit us to see that under the heading of ‘crisis’ there are certain forms or sub-contexts that are more conducive to charismatic and transformational leadership while others may not be at all” (Conger, 1999, p. 166). Thus, even though the aforementioned issue of construct ambiguity of crisis poses a challenge to the focused examination of crisis leadership processes, it also offers an opportunity that this dissertation capitalized on, namely to systematically develop a theoretical framework that facilitates the empirical investigation of crisis leadership in clearly specified crisis conditions.

Second, the field has been limited in its focus on individual leadership behaviors. Building on Weber’s emphasis of the connection between crisis and charisma (Weber, 1947), an overwhelming number of crisis leadership studies focuses on motivation-based approaches of leadership, e.g., the charismatic/transformational framework (Bass, 1995; Burns, 1978; Conger & Kanungo, 1998; Shamir et al., 1993). However, as has been argued in this dissertation, crises can be approached from a perspective that emphasizes a precursory nature, an acute trigger stage, or the full manifestation of crisis, all of which may render different leadership styles as effective in influencing followers. Surprisingly, there have been little to no attempts to adopt a more fine-grained analysis of crisis and link it with different leadership behaviors that should prove effective under the constraints of the particular crisis. The theoretical framework that has been developed in the course of the present work moved beyond past investigations of crisis leadership by proposing and testing a comprehensive definition of crisis leadership that reflects crisis prevention, intervention, and resolution functions, incorporating a broader view of crisis leadership styles by investigating relational, motivational, and functional leadership approaches.

Third, the current research explicated how further contingency variables at both the organizational level and individual level as well as variables related to the crisis as such impact crisis leadership activities. Study 1 considered contextual factors in the larger organizational environment that can influence followers by shaping attitudes towards participation aimed at crisis prevention (cf. LePine & Dyne, 1998; Whiting, Maynes, Podsakoff, & Podsakoff, 2012). This study made the startling finding that higher-level leadership functions can both strengthen or weaken the positive effects of high quality LMX relationships: While codification of patient safety practices enhances incident reporting via organizational identification, top management support for patient safety diminishes the
influence of LMX as employees’ resulting trust in the reporting infrastructure does not necessitate further relationship building with the supervisor. These results can be interpreted in light of substitutes of leadership theory (Kerr & Jermier, 1978) in that they show which higher-level contingencies modify proximal leadership influences on followers. Study 2 looked at individual difference variables found in the follower that may act as moderators in the charismatic leader-follower relationship. Even though Weber’s (1947) assumptions regarding the emergence of charisma includes not only the existence of a crisis but also of followers who are susceptible to such influence, follower characteristics have rarely been empirically investigated in a crisis context. By including follower characteristics such as follower work values (i.e., self-direction) in its investigation, the current study took on a follower-centric view that has often been proposed by leadership scholars (Ehrhart & Klein, 2001; Klein & House, 1995; Kohles, Bligh, & Carsten, 2012; Oc & Bashshur, 2013; Shamir, Pillai, Bligh, & Uhl-Bien, 2006; Uhl-Bien, Riggio, Lowe, & Carsten, 2014). Study 3 investigated individual and crisis-related moderators by examining follower self-conception as pragmatic or idealistic, the nature of the crisis as sudden or gradual, and crisis consequences as near and distant in the future. While past research has been limited to single crisis types that have been selected with no a priori selection criterion, e.g., product recalls, terrorist attacks, natural disasters (Davis & Gardner, 2012; Madera & Smith, 2009), this study offered compelling arguments that call for a more specific analysis of crises of different nature, based on established theoretical frameworks. Because different crises most likely imply different degrees of susceptibility to leadership influences (e.g., emotional involvement of followers), followers may deem different leadership styles as more or less effective (e.g., prototypical expectations). Study 3 confirmed this assertion by highlighting that one important crisis aspect to consider is a temporal one, i.e., the timeframe over which a crisis develops, and by showing that pragmatic leadership is evaluated favourably over charismatic leadership in gradual crises, particularly by followers who are high on pragmatism, thus supporting a contingency view of crisis leadership that includes both environmental and individual factors. The study also adds to temporal distance research (Berson et al., 2015; Popper, 2013) by using a novel way of conceptualizing meaningful crisis characteristics (i.e., crisis consequences occurring in the near versus in the distant future) and establishing the importance of fit between crisis leadership messages in terms of abstract (values) versus concrete (action) attributes to these circumstances.
Fourth, the present research sheds light on mechanisms underlying the relationships. For the pre-crisis stage, Study 1 identified distinct processes that explain how LMX can positively affect reporting of critical incidents. The findings show that different motivational sources can be tapped in order to promote followers’ crisis preventive behavior. By identifying reporting-specific trust as a mediator, the study contributes to the social exchange literature by demonstrating that LMX can positively affect specific forms of trust (Conchie & Donald, 2009; Conchie et al., 2012), i.e., trust towards the existing crisis preventive infrastructure used to collect information on critical incidents. By testing organizational identification as a second underlying mechanism of the LMX-incident reporting relationship, the study highlights that the motivation to engage in proactive crisis prevention via incident reporting can also be sourced from an employee’s sense of belongingness to the organization, thus aiding to theoretical development of social identity theory. Concerning the post-crisis stage, Study 3 explored underlying mechanisms with variables unique to the domain by examining a novel mediator, i.e., collective crisis efficacy, defined as the perceptions individuals share about their organization’s readiness for dealing with a crisis. Even though efficacy has been suggested to potentially play an explanatory role for charismatic leadership outcomes (Shamir et al., 1993; van Knippenberg & Sitkin, 2013), there have been no studies that investigated it (a) in a crisis context, (b) with regard to both charismatic and pragmatic leadership, or (c) by conceptualizing it specifically as a crisis-related construct. The findings of Study 3 show that collective crisis efficacy is particularly enhanced if there is a fit between the nature of the crisis, follower pragmatic predispositions, and a pragmatic leadership style.

Table 27 summarizes the theoretical contributions of the individual studies and the combined dissertation research program by collating them according to their contributions to the advancement of the general body of literature, crisis research and leadership research.
<table>
<thead>
<tr>
<th>Contribution Domain</th>
<th>General Advancement</th>
<th>Advancement of Crisis Research</th>
<th>Advancement of Leadership Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>Link ideas and insights from the safety sciences (high-reliability-organization theory) with organizational psychology (examining the role of leader-follower relationships)</td>
<td>Widen scope of analysis to include crisis in the incubation stage</td>
<td>Develop and test a dual-process model of LMX to advance social exchange and social identity literature</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Test interactive effects between proximal and distal leadership variables</td>
</tr>
<tr>
<td>Study 2</td>
<td>Examine unacknowledged aspects of crisis leadership effects in a team setting</td>
<td>Gain insights on the performance effects of particular forms of critical team events</td>
<td>Uncover negative effects of charismatic leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Include follower perspective in analysis</td>
</tr>
<tr>
<td>Study 3</td>
<td>Experimentally investigate pragmatic crisis leadership approaches for the first time</td>
<td>Examine crisis using a theoretically established typology (sudden versus gradual crises)</td>
<td>Identify boundary conditions that predict the effectiveness of alternative leadership behaviors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Include follower perspective in the analysis and uncover crisis-specific mechanisms</td>
</tr>
<tr>
<td>Dissertation</td>
<td>Develop and test a theoretical framework of crisis leadership using a crisis lifecycle approach</td>
<td>Investigate crisis in terms of three different conceptualizations</td>
<td>Investigate crisis leadership using three different leadership perspectives</td>
</tr>
</tbody>
</table>
8.3 Practical Implications

The findings of the three individual studies of this dissertation offer some compelling implications for crisis leadership in organizations. First, they outline the importance of considering contingency factors on both the organizational and individual level when dealing with crises. The results from Study 1 suggest that leaders who wish to stimulate followers’ proactive behaviors aimed at preventing crises can do so by establishing high-quality relationships. By ensuring that followers experience both a sense of trust and affiliation, leaders can lay the groundwork for a communication culture that followers experience as safe and personally relevant, which in turn, leads to an increased willingness to play their part in creating a crisis-prepared organization. Besides educating supervisors about the importance of improving social exchanges with their subordinates, organizational consultants can also inform decision-makers and policy makers about the importance of implementing both formal and informal elements in the organization that aid the prevention of crisis, e.g., by signaling the prioritization of safety concerns to followers, establishing appropriate codes of conduct, and ensuring appropriate dissemination of relevant information across all hierarchical levels.

The results from Study 2 show that the magnitude of potentially adverse effects of crises on a team level should not be underestimated. Indeed, such an occurrence can have a substantial negative impact on team functioning. Leaders who want to build and maintain high-performing teams should work on preventing such events from happening in the first place by raising team members’ awareness of the possibility of value-based disagreements and proactively reducing their probability by engaging in cohesion-increasing activities or defining shared goals. If such critical team events do occur, leaders should recognize that depending on the personalities of the team members, a different leadership intervention may be appropriate. By selecting highly self-directed team members, leaders could compose teams that are relatively resilient to the type of critical team event investigated in this study in the sense that these individuals can, or indeed wish to continue their work tasks without motivational leadership assistance. On the other hand, for less self-directed team members, leaders will do well in making motivational appeals in order to restore task effectiveness after a disruption.

The results from Study 3 emphasize the importance of displaying leadership behaviors that potentially diverge from past recommendations which typically focus on motivational interventions. The current findings suggest that pragmatic, expertise-based leadership is not experienced as “uninspired” by followers during organizational duress, but indeed can be called for when critical problems need to be solved. One implication from this study is that
crisis communication experts could coach CEOs to formulate crisis response messages that explicitly focus on pragmatic aspects of crisis resolution. Particularly due to the high social distance between a CEO and lower-level subordinates where the latter cannot infer from close contact whether the CEO’s words can be trusted, visionary appeals harbor the danger that followers doubt the realization of the future-oriented model the leader proclaims. In this case, it may be critical for the crisis response message to convey rather a “down-to-earth” solution-focus that deals with the matters at hand so that followers are instilled with confidence in the successful and swift resolution of the crisis.

Taken as a whole, the findings from the combined studies in the dissertation point towards the importance of leader adaptability in times of crisis. Though all crises share common elements such as an elevated sense of uncertainty, they differ along important dimensions that can imply vastly different leadership requirements. One way to ensure appropriate leadership in times of crisis is through leader selection. Indeed, the times when a company is in crisis are often the times when a new person is appointed the position at the helms (Ryan & Haslam, 2005; Schnatterly & Johnson, 2007). Typically, leaders are selected on basis of their general leadership ability, industry knowledge, or track record, however, selection of crisis leaders may also be a result of wanting to find someone who can induce strategic change, as evidenced by research on the appointment of company outsiders (Kesner & Sebora, 1994; Schnatterly & Johnson, 2007) or female leaders (Haslam, Ryan, Kulich, Trojanowski, & Atkins, 2010; Haslam & Ryan, 2008; Kulich, Lorenzi-Cioldi, Iacoviello, Faniko, & Ryan, 2015; Ryan et al., 2011; Ryan & Haslam, 2005). However, the findings of the current research suggest that decision-makers in the supervisory boards of crisis-afflicted organizations can employ a more deliberate selection process in order to find a person that fits the specific requirements crisis. The selection of crisis leaders should be conducted by carefully taking into account the nature of the crisis and its classification within the crisis lifecycle model and assessing which individuals fit the bill in terms of not just their overall expertise, but their capability to instill a sense of crisis efficacy in followers. The current work indicates that this efficacy can be sourced from charismatic leaders in certain types of crises and from pragmatic leaders in other ones.

While selection of new leaders is a viable way to support organizations in rebounding from crises, training of existing leaders to become more crisis-prepared is another one. History has shown many examples of leaders who prototypically represent a certain leadership style, e.g., John F. Kennedy as charismatic, Ronald Reagan as ideological, Dwight D. Eisenhower as pragmatic (Mumford et al., 2008). However, leaders could also be trained to
a certain extent to adapt flexibly to different crisis situations and exhibit different leadership facets to followers in distress (Antonakis et al., 2011; DeRue, 2011). These trainings could take the form of crisis leadership courses that first inform prospective crisis leaders about different crisis stages and contingencies and their effects on followers. Then, the importance of fit between these crisis contingencies within each crisis stage and different leadership styles need to be communicated in order to display the importance of the choice of leadership style in these situations. A further building block of such a crisis leadership course would be to highlight the necessity of adaptability in terms of the type of appeals (e.g., relational versus motivational versus pragmatic) that leaders can employ to direct followers in order to alleviate their concerns. Leader adaptability for crisis times not only implies a flexible change of leadership behaviors according to the needs of situation, but according to the needs of followers as well (DeRue, 2011). As the current work has shown, follower characteristics shape, to a large extent, how well-intentioned crisis leadership attempts will ultimately be received. It follows that the type of leader who will successfully motivate followers will be the one who can sufficiently recognize and address their individual differences. Followers experiencing duress in team crises may do well by charismatic appeals which, however, is not the case if they are highly self-directed. Likewise, idealistic followers may be receptive to charismatic appeals more than to pragmatic ones, to which pragmatic followers will respond more favourably to.

8.4 Limitations

Individually, the three empirical studies of the present research have the following limitations. First, while Studies 1 and 3 provided insights into important mediators in the relationship between crisis leadership and follower outcomes, Study 2 did not provide data on explanations that would help predict the negative outcomes found for highly self-directed followers. Future research could therefore replicate the study with further experimental manipulations of team crises while assessing, for instance, affective reaction which have been suggested to play an influential role during crisis (Brockner & James, 2008; Sayegh et al., 2004; Sommer et al., 2015).

Second, while objective performance data was used in Study 2, this is not the case for Studies 1 and 3. To corroborate the findings made with subjective assessments, extensions of these studies could be conducted by measuring key outcome variables as objective measures, i.e., in extending Study 1, a retrospective measure of incident reporting (e.g., number of actual incident reports received by hospital management) or patient safety performance indicators
(e.g., mortality rates) could be assessed in order correlate followers’ crisis preventive behavior with the actual safety performance in hospitals. In extending Study 3, financial performance data (e.g., cumulative abnormal stock market return) or generalized public perceptions (e.g., corporate reputation indices) could be measured in order to estimate the real effects of different crisis leader competencies. Third, out of the three studies, Study 3 was the only one to examine different leadership styles (pragmatic versus charismatic) in different types of crisis (sudden versus gradual) which allowed for a direct comparison of the suitability of these leadership styles, contingent on the nature of the crisis (here: in the post-crisis stage). Future studies pertaining to the pre-crisis and crisis-stage should likewise examine different operationalizations of crisis within these stages. For instance, in extending Study 1, it could be assessed how different leadership styles impact the reporting of different types of incidents, e.g., incidents with low, medium, or high degree of patient harm; in extending Study 2, it could be evaluated how different leadership styles impact followers experiencing different types of team crises, e.g., task-based or personnel-based conflicts (Morgeson & DeRue, 2006; Morgeson, 2005).

A fourth limitation is that the methodological paradigms used in the studies, on their own, preclude clear conclusions regarding causality and generalizability of findings. The main drawbacks of the field methodology used in Study 1 are its cross-sectional nature and low internal validity. Future studies should employ studies that investigate the phenomena observed in a longitudinal fashion or extend the research methodology with experimental approaches in order to draw stronger conclusions regarding their causality. Also, further professional healthcare samples should be examined that are not limited to a single medical discipline (here: neurology) in order to establish generalizability of findings. Study 2, though its experimental approach offers the advantage of providing for causality, potentially suffers from low generalizability, particularly because a student sample was used. The investigation of team crises could therefore benefit by similarly experimentally investigating members of the working population, and from developing new measures for field surveys that query subordinates on their experience of different types of team crises and evaluation of their team leaders’ response to these events. Study 3 used a vignette-based experimental approach. From all three studies, it is the most decontextualized one and therefore impedes generalizability to a natural setting. Even though studies show that laboratory research can effectively be replicated in the field and achieve high levels of external validity (Brown & Lord, 1999; Locke, 1986; Mitchell, 2012; Mook, 1983; Wofford, 1999), concerns about the validity of the findings remain. Consequently, future research should conduct studies using a wider range of
methodological approaches that achieve generalizability of findings and establish robustness of effects in different settings and using different samples.

Taken as a whole, the overall research program of this dissertation comprising all three empirical studies has inherent limitations as well. In order to offer a comprehensive examination, different theoretical approaches in the empirical studies were used that operationalized crisis in terms of different crisis stages (pre-crisis, crisis, post-crisis) and leadership in terms of different perspectives (relational, motivational, pragmatic). The theoretical framework of this dissertation made compelling arguments that each of the crisis stages comes with certain leadership requirements. Such requirements render certain leadership styles particularly suitable for influencing followers and therefore, warrant an examination which limits the investigation of crisis leadership to the individual settings of the three studies. However, even though the findings made from these different vantage points inform our understanding of the breadth of what crisis leadership can entail, the limitation inherent to this approach lies in not having a systematic test of a single leadership approach across the different crisis conceptualizations. Consequently, the current research can be regarded less as a robust test and more of a first investigation of the phenomena observed that illuminates the path for future research. For instance, it would be promising to conduct further investigations that compare pragmatic and charismatic leadership not just in large-scale organizational crises with top management at the center of attention as conducted in Study 3, but extend this to the team setting as well and show how these leadership styles compare when teams experience different types of crisis.

Furthermore, even though the theoretical framework of this dissertation empirically tested leadership of crises at different levels of analysis, it did not consider potential additive effects of elements in the framework that are nested within each other. This opens up interesting questions for future research, for instance: Does the duress experienced from organization-wide downsizing rumors add to the prevalence or influence the experience of team crises that occur in individual departments? To what extent can the crisis leadership response from the socially near supervisor counteract a derailed crisis response made by the socially distant CEO? What role does organizational culture play for leader selection if the afflicted organization has a longstanding idealistic and values-driven instead of a pragmatic and action-oriented “personality”, but faces a crisis of gradual nature that requires a pragmatic leader? These are questions that could be addressed in the future by employing more sophisticated methods, e.g., using hierarchical linear modeling or longitudinal designs.
8.5 Strengths

The current work has the following strengths. First, the hypotheses of the empirical part of this dissertation were tested using different samples and methodological paradigms. Study 1 was conducted in a field setting using a large sample of professional hospital employees. Accordingly, the study provides for high generalizability. The survey-based instruments consisted of established measures that were adapted to the specific nature of the healthcare setting in order to gain novel insights into subtleties of the investigation (e.g., examining specific notions of trust towards the reporting infrastructure). Study 2 employed a laboratory approach with a student sample. Experimental factors were manipulated with the help of trained confederates, allowing the establishment of causality. The main methodological strengths of this study are the high internal validity and the assessment of objective performance outcomes through an idea generation task. Study 3 was vignette-based with members of the general population as participants. This study also offers high internal validity. Furthermore, it consisted of several sub-studies that established the hypothesized general effects in a first study, explored boundary conditions in a second study, and replicated and extended findings with the examination of a mediator and a follower personality moderator in a third study. Beyond this, the sub-studies use different but not distinct operationalizations to experimentally manipulate both the crisis and leadership factors, thus strengthening confidence in the robustness of findings.

Second, the current research spans multiple disciplines using unique and novel approaches. Study 1 integrated insights about preventing crises from high-reliability-organization (HRO) theory (Reason, 1997; K. H. Roberts, 1990; Weick et al., 1999) with a relationship-based leadership approach, demonstrating how LMX relates to crisis prevention behaviors in the healthcare setting. Furthermore, the study included constructs from healthcare research in the analysis, i.e., top management support for patient safety (Sorra & Nieva, 2004), thus bridging the gap between disciplines. Study 2 is the first to experimentally manipulate charismatic leadership according to the rhetoric-based charismatic leadership model by Shamir and colleagues (Shamir et al., 1994, 1993). Even though the Shamir-model has been employed to examine effects of crisis leadership speeches on followers using linguistic speech content analysis (e.g., Bligh et al., 2004b), to the best of the author’s knowledge, it has never been used to enact a crisis leadership speech in a small group setting. In doing so, the study connects charismatic leadership theory to Event Systems Theory (Morgeson & DeRue, 2006; Morgeson et al., 2015) and tests the role of crisis leadership in a specific type of critical team event, i.e., value-based disagreements. Study 3 examined the fit
of pragmatic leadership approaches (Antonakis & House, 2004; Mumford, 2006) to different crisis types based on a theory-based classification system (Hwang & Lichtenthal, 2000; James & Wooten, 2005; Seymour & Moore, 2000). The sparse extant empirical work on pragmatic leadership has so far employed methodological approaches that limit the investigation of the leader-follower relationship under crisis conditions (e.g., historiometric and cognitive-experimental) (Bedell-Avers et al., 2009, 2008; Hunter et al., 2011). Study 3 used a true between-participants experimental setup that manipulated crisis and leadership factors and thus was able to test, to the best of the author’s knowledge for the first time, follower evaluations of pragmatic versus charismatic leadership across different crisis situations.

Third, the current research examined different but specifically crisis-related outcomes and associated underlying processes. Study 1 examined the effects of LMX on critical incident reporting in the healthcare setting. From past research it is known that LMX positively affects proactive behaviors, e.g., organizational citizenship behavior, upward communication, or employee voice (Ilies et al., 2007; Schriesheim et al., 1999). However, these constructs are rather broad (Morrison, 2014; Mowbray et al., 2014; Vadera, Pratt, & Mishra, 2013), making it difficult to draw conclusions from past studies related to the specific crisis preventive function of leadership. The outcome measure used in the present research extends beyond these notions and is directly tied to processes that aid the prevention of crises, i.e., by engaging in critical incident reporting, followers can promote organizational learning (Cooke, Dunscombe, & Lee, 2007; Dixon & Shofer, 2006). Study 2 examined the direct effects of an acute team crisis on followers through the objective performance measure in an idea generation task, controlling for a baseline performance measure. Study 3 assessed several measures of crisis leader evaluations (i.e., likelihood that leader will solve the crisis, competence of crisis leader, prototypical association of ideal crisis leader) while furthermore exploring the crisis-specific measure of collective crisis efficacy as a mediator. Taken as a whole, the three studies have in common as a strength that they investigate crisis leadership phenomena using crisis-specific variables comprised of behavioral, objective performance, and attitudinal constructs.

Fourth, the three empirical studies also address levels-of-analysis issues. Leadership is inherently a multilevel phenomenon (Dionne et al., 2014; Yammarino et al., 2005; Yammarino, 1990). While past studies have individually examined crisis leadership as it pertains to supervisory influences (e.g., Andrews, Richard, Robinson, Celano, & Hallaron, 2012; Roussin, 2008), team leader interventions (e.g., Morgeson & DeRue, 2006; Morgeson, 2005), or CEO behaviors (e.g., Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006; Jacquat &
Antonakis, 2015), no work has provided integrated findings on how crisis leadership relates to followers on a dyadic, team, and organizational level. While the current work is not able to compare and contrast different leadership styles directly within these levels, the findings inform the current knowledge of crisis leadership by highlighting how leadership attempts at preventing, intervening in, or resolving crises are received by followers at these different levels. To this effect, the three empirical studies examined dyadic relationship building of supervisory leaders in high risk industries (Flin & Yule, 2004), interventions of team leaders on basis of Event Systems Theory (Morgeson et al., 2015), and CEO crisis speeches which reflect upper echelons theory (Hambrick & Mason, 1984).

8.6 General Future Research Directions

Beyond the future research suggestions deduced from the study limitations outlined above, the findings of this dissertation provide further promising avenues to pursue in the field of crisis leadership. These can usefully be grouped into research directions related to the crisis, the leader, and the follower.

Concerning research directions related to the crisis, an obvious first avenue for future research is to examine further contextual variations of crisis. Extending the analysis of the crisis leadership model of this dissertation, one access point would be to investigate further types of crises based on established typologies (e.g., crises of social versus technical nature; see Pearson & Mitroff, 1993) or potential overlapping effects when multiple crises occur at the same time or in close proximity (e.g., Davis & Gardner, 2012). Another access point would be to widen the scope of environmental circumstances that relate to crisis situations (e.g., Huang et al., 2015; Waldman et al., 2001). In accordance with the crisis leadership model developed in this dissertation, when examining such contextual variations, studies should consider the inclusion of further leadership styles in the analysis aimed at detecting interactive effects, contingent on specific crisis variations. This could be achieved, for instance, by assessing followers’ perceptions of reputational crises and the associated loss of confidence in public figures, and examining these individuals’ receptivity to contemporary leadership styles that feature a humble leadership response, as displayed by servant leaders (van Dierendonck & Nuijten, 2011; van Dierendonck, Stam, Boersma, de Windt, & Alkema, 2014; van Dierendonck, 2011). Furthermore, the analysis could be extended to the investigation of crisis leadership under varying economic conditions of different countries and regions, thereby including intercultural aspects in the analysis (cf. Zwingmann et al., 2014).
Another potential avenue is the examination of leadership in crises over time. The current work investigated the effects of crisis leadership as a one-time stimulus, however, the positive effects of crisis leadership activities may diminish after an extended period of use. Weber (1947) proposed that charisma requires validation of the leader’s exceptional qualities through repeated successes. Experimental research has found that charismatic attributions to crisis-responsive leader are short-lived and weaken once the crisis has abated, if the leader fails to formulate a vision after having taken action (Boal & Bryson, 1988). Furthermore, Davis and Gardner (2012) identified a ceiling effect of charismatic leadership and explained this finding with the decline of crisis salience that occurs over time and a potential numbing effect generated by continued use of charismatic crisis rhetoric. These findings may be indicative of dynamic changes in followers’ expectations concerning crisis leadership across the stages of the crisis lifecycle model. Future research should follow up on these issues by investigating leadership during crises that are stretched out over longer periods of time.

Concerning follower-related research directions, future research could extend the crisis leadership model of this dissertation by exploring the role of additional individual difference variables that potentially act as moderators. A first approach concerns the influence of stable traits that can color followers’ reactions to crises leadership responses, for instance, self-esteem. Given that contextual cues are more salient for followers with low self-esteem (Brockner, 1988; Saks & Ashforth, 2000), it can be assumed that crises make it especially difficult for such individuals to deal with the stress experienced under environmental difficulties. Empirical research has shown that different leadership behaviors such as transformational or ethical leadership impact follower behaviors and performance more strongly if followers are low on self-esteem (Avey, Palanski, & Walumbwa, 2011; Rank, Nelson, Allen, & Xian, 2009). Similarly, it can be expected that such followers will respond differently to different leadership styles, as the results of Study 2 of this dissertation attest to which showed that charismatic leadership may have adverse effects for highly self-directed followers. Thus, future research could examine in more detail how further follower attributes, depending on the specific nature of the crisis, increase preference for one over another leadership style (cf. Ehrhart & Klein, 2001).

A second follower-related approach concerns transient follower state variables. This could relate to the dynamic experience of affective reactions to crisis (e.g., Kaplan, Laport, & Waller, 2013; Sommer et al., 2015), fluctuating receptiveness to team members’ inputs in stress situations (e.g., Stachowski, Kaplan, & Waller, 2009), or the malleability of the followers’ self: Depending on antecedent conditions, individuals can construe themselves in
different ways, for instance, as personal or social selves (Brewer & Gardner, 1996; Otten & Epstude, 2006). It has been suggested that these mental representations can be activated or modified by environmental contingencies (Barth, 1990). Similarly, the pragmatic versus idealistic self-conceptualization investigated in Study 3 of this dissertation can also be understood in terms of a state variable (Kivetz & Tyler, 2007) that is activated by certain crisis characteristics that render one or the other self-representation more salient. Future research should examine how these factors influence leadership expectations in times of crisis, for instance, by addressing the question whether there is a threshold at which the perception of appropriate crisis leadership switches from a charismatic to a pragmatic preference, depending on activation of different selves as a result of crisis conditions.

From a leader perspective, future research could investigate crisis leadership as it pertains to the crisis leader’s emotional and cognitive experience during crisis as well as decision-making. As Staw, Sandelands, and Dutton (1981) have proposed in their influential threat-rigidity-framework, stress likely leads to a narrowing of perception and the interpretation of strategic issues as threats. Consequently, crises may render organizational leaders as less open to useful information, confining themselves to traditional ways of thinking while simultaneously reverting to routine behaviors. However, as argued by Brockner and James (2008), crises offer considerable potential for learning and improvement and should therefore be seen by leaders as sources of opportunity rather than as a threat. Future research could explore how crises impact leaders’ emotional experience (e.g., stress, anxiety, well-being) and their subsequent responses (e.g., decision-making, self-regulation, self-leadership) affect the leadership of followers as conceptualized in this study.

Finally, while the present research has examined different leadership styles in times of crisis in direct opposition to each other (e.g., charismatic versus pragmatic leadership), future research may benefit from investigating further leadership styles such as servant leadership (van Dierendonck et al., 2014) or authoritarian leadership (Huang et al., 2015) as well as the interaction of different leadership styles (e.g., Williams et al., 2012; Zhang et al., 2012) or their specific facets (cf. van Knippenberg & Sitkin, 2013) in crisis conditions. Pursuing research in this area would complement findings of the current dissertation with insights gained from other leadership theories. This would aid the development of specific interventions aimed at educating leaders about a more flexible behavioral repertoire that encompasses utilization of diverse leadership styles beyond the ones examined in the current research.
8.7 Conclusion

Crises exert severe pressures on individuals, teams, and organizations that can severely limit their functioning, thus posing a formidable challenge for leaders. This dissertation applied theories from diverse fields in the crisis literature with the aim of gaining new insights into crisis leadership. It emphasized the importance of taking a comprehensive perspective by positioning crisis leadership in a crisis lifecycle model, delineating more precisely than in the past how crisis can be conceptualized, as well as specifying leadership requirements that arise in dependence of varying crisis stages and conditions. Three empirical studies were conducted to empirically shed light on these issues. Testing the effectiveness of different crisis leadership styles under varying conditions, the findings of these studies encourage a more integrated view on crisis leadership that comprises characteristics of the crisis, the leader, and the follower. In this way, the current work paves the way for future investigation of this topic, but also poses a challenge for organizational researchers to continue to entangle the complex and dynamic interrelationships of these different aspects in more detail.

Depending on the depth of understanding of how crises exert their effects on followers, leverage points can be identified for leaders to influence followers and prevent escalation. The current work speaks on behalf of crisis leadership’s potent ability in engaging the “shocks” that crises can engender in daily organizational life: Crisis leadership may, at the least, contain the damage caused by a crisis that has occurred; at most, onset or circumvent the onset of a crisis; or at best, convert the inherent threats and consequences of a crisis into opportunities. To ascertain which role will be fulfilled, future research should further examine the effects of different leadership styles across stages of the crisis lifecycle, accounting for different crisis types, environmental conditions, and follower attributes, thereby contributing to finding new ways of building organizational crisis-readiness.
Reference List


Organizational Behavior and Human Performance, 78, 46–78.


Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and


Williams, H. M., Parker, S. K., & Turner, N. (2010). Proactively performing teams: The role of work design, transformational leadership, and team composition. Journal of


Appendix

A.1 Scripts for the Leadership Manipulations of Study 2

For the charismatic leadership manipulation, we prepared a short script that included references to elements of charismatic rhetoric developed and used in prior research (Bligh et al., 2004; Shamir et al., 1993). In particular, these included references to adversity, collective focus, follower’s worth, and high performance expectations. Statements made by the experimenter explicitly addressed the critical situation and included: “This is an unfortunate situation, but you can still win the team award with joint effort. View this as a challenge, you can do this. You are intelligent students. It is important for this university that you perform well.” For the laissez-faire leadership intervention, the statements made by the experimenter did not address the critical situation and were comprised simply of “There is nothing I can about this” and “Please just continue”.
A.2 Vignettes Used in Substudy 1 of Study 3

Crisis type manipulation

Sudden crisis at OfficeStocks caused by labor strike [sudden crisis manipulation]

A crisis “long time in the making” caused by strategic shortsightedness [gradual crisis manipulation]

OfficeStocks is a medium-sized company that manufactures and distributes office supplies. In the past twenty years, the company enjoyed steady growth due to the continuing expansion of the market. Recently, however, the company has been facing difficult times. The company experiences an unprecedented financial hardship which could lead to bankruptcy if left unmanaged.

The crisis has struck suddenly and is the consequence of a labor strike that has abruptly and rapidly escalated to a threatening situation that now severely affects the company’s daily operations. [sudden crisis manipulation]

The crisis has built up slowly and gradually over a long period of time and is the consequence of misinterpretation of strategic opportunities by management which now severely affect the company’s daily operations. [gradual crisis manipulation]

Industry experts call the crisis an “unexpected shock” and agree that the crisis could not have been foreseen by management. Essentially, senior management was caught “off-guard”. [sudden crisis manipulation]

Industry experts say the crisis is a result of the “organizational stagnation and mental rigidity” that OfficeStocks has displayed in the past decade and agree that it could have been foreseen by management. Essentially, senior management “had it coming”. [gradual crisis manipulation]

To resolve the crisis, it will be critical to motivate and unite disgruntled employees in returning to their workplaces and to foster positive employee collaborations for the future. [sudden crisis manipulation]

To resolve the crisis, it will be critical to obtain a clear understanding of where past management has developed a wrong strategy and which new avenues can now be pursued in the current market environment. [gradual crisis manipulation]
Leadership style manipulation

The candidate for the position of the new OfficeStocks CEO can be described as someone who…

…emphasizes pragmatic problem solving; focuses on the present situation of the company; uses rational persuasion to motivate and engage followers; often refers to action and practical considerations [pragmatic leadership manipulation]

…emphasizes vision communication; focuses on the future of the company; uses emotional appeals to motivate and engage followers; often refers to values and ideals [charismatic leadership manipulation]
A.3 Vignettes Used in Substudy 2 of Study 3

Crisis type manipulation
Company in crisis! Consequences likely to be felt very soon [crisis consequences in near future manipulation]
Company in crisis! Consequences likely to be felt with a delay [crisis consequences in distant future manipulation]
OfficeStocks is a medium-sized company that manufactures and distributes office supplies. In the past twenty years, the company enjoyed steady growth due to the continuing expansion of the market. Recently, however, the company has been facing difficult times. The company experiences an unprecedented financial hardship which could lead to bankruptcy if left unmanaged.

Industry experts say that in the coming weeks, the crisis will have a sharp and immediate impact on the company’s operations. Negative consequences that will be directly felt by OfficeStocks’ employees include plant closings, consolidation of departments, wage reductions, and ultimately downsizing. It is expected that these effects will manifest very soon. [crisis consequences in near future manipulation]
Industry experts say that in the coming years, the crisis will have a diffuse and delayed impact on the company’s operations. Negative consequences that will be directly felt by OfficeStocks’ employees include plant closings, consolidation of departments, wage reductions, and ultimately downsizing. However, it is expected that these effects may only manifest after some time. [crisis consequences in distant future manipulation]

To resolve the crisis, the company will need to undergo an immediate restructuring program. [crisis consequences in near future manipulation]
To resolve the crisis, the company, at some point in time, will need to undergo a restructuring program. [crisis consequences in distant future manipulation]

However, it is evident that negative effects of the crisis can be expected already in the very near future. The first batch of employees to be laid off will be notified already by the coming week. [crisis consequences in near future manipulation]
It is evident that negative effects of the crisis can be expected in the distant future. The first batch of employees to be laid off may be notified by the coming year. [crisis consequences in distant future manipulation]

**Leadership style manipulation**

OfficeStocks CEO: "Action will save this company" [pragmatic leadership manipulation]

OfficeStocks CEO: "Values will save this company" [charismatic leadership manipulation]

Bill Stuart has been appointed the new CEO of OfficeStocks to lead the company out of the crisis. He has already worked in this industry for 25 years, the last 10 years at OfficeStocks.

To explain his plans for the crisis turnaround, Bill holds a speech entitled “How we will handle this crisis” in front of all the OfficeStocks staff. Here is what he says: [pragmatic leadership manipulation]

*To explain his plans for the crisis turnaround, Bill holds a speech entitled “Why we will handle this crisis” in front of all the OfficeStocks staff. Here is what he says: [charismatic leadership manipulation]*

“This crisis is a major task for our company and a test of our crisis management capabilities. How will we survive this crisis? By taking action. We have a detailed crisis-response plan, with concrete steps and specific milestones. We will identify the causes of the crisis and get to work immediately to resolve all issues. We need all of you to implement all protocols in order to handle this situation. Above all, what will help this company to turn this crisis around is taking immediate and proper action.” [pragmatic leadership manipulation]

“This crisis is a challenge for our company and a test of our resolve. Why will we survive this crisis? Because this company is built on solid principles. We have important values, things that we believe in, principles that make us who we are. We will keep the values on which our company is built and which have survived the test of time in our minds. We need all of you to follow the company’s long-term vision in emerge from this challenge. Above all, what will help this company to turn this crisis around is remembering our values and what we stand for.” [charismatic leadership manipulation]
A.4 Vignettes Used in Substudy 3 of Study 3

**Crisis type manipulation**

*(Same as in Substudy 1 of Study 3)*

**Leadership style manipulation**

CEO crisis response: Taking advantage of markets will turn crisis around [pragmatic leadership manipulation]

*CEO crisis response: OfficeStocks employees can achieve the company’s vision if they work together [charismatic leadership manipulation]*

Bill Stuart has been appointed the new CEO of OfficeStocks to lead the company out of the crisis. He has already worked in this industry for 25 years.

Bill is a pragmatic leader who is known not so much for his visionary leadership style, but for his strategic expertise. He has an expert knowledge of the company’s environment and is highly adept in identifying strategic opportunities. Moreover, he is able to implement strategy and translate the company mission into specific goals that followers can achieve. [pragmatic leadership manipulation]

*Bill is a charismatic leader who is known not so much for his strategic expertise, but for his visionary leadership style. He is highly competent in rallying people together by communicating a vivid future vision. Moreover, he has an excellent ability to instill confidence in his followers to achieve the company’s vision. [charismatic leadership manipulation]*

To explain his plans for the crisis turnaround, Bill holds a speech in front of all the OfficeStocks staff. Here is what he says:

“We need to change our company strategy. Our management team has been working hard on gaining a better understanding of our markets. There are many growth opportunities in the current environment and I intend to take full advantage of it. We also need to make sure that our new strategy is implemented swiftly. We therefore will develop clear policies and a roadmap for our company with realistic and attainable goals. Our new strategic course will not simply remain a distant future scenario, but will be achieved by pursuing specific targets
and objectives. I will make sure that you understand what this means for your day-to-day goals and their implementation.” [pragmatic leadership manipulation]

“The crisis we are facing is a real challenge for our company, and will require your complete dedication and effort. I am convinced that you will give your best. I expect you to take the initiative and to act independently, to rise to the challenge and to solve problems whenever they arise. If each of you gives his or her best efforts, we will all be proud of what we have achieved. I know that this task is pretty difficult, but I really think that we can do well if we work together. It has been my experience that employees such as you are able to turn around this kind of challenging situation and build a better future for our company. We’re counting on you and I think you’ll do a super job.” [charismatic leadership manipulation]
### A.5 Graphic Leader Evaluations Measure Used in Substudy 3 of Study 3

<table>
<thead>
<tr>
<th></th>
<th>CEO of OfficeStocks</th>
<th>My picture of an ideal leader during crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><img src="image1" alt="Circle" /></td>
<td><img src="image2" alt="Circle" /></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><img src="image3" alt="Circle" /></td>
<td><img src="image4" alt="Circle" /></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><img src="image5" alt="Circle" /></td>
<td><img src="image6" alt="Circle" /></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><img src="image7" alt="Circle" /></td>
<td><img src="image8" alt="Circle" /></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><img src="image9" alt="Circle" /></td>
<td><img src="image10" alt="Circle" /></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><img src="image11" alt="Circle" /></td>
<td><img src="image12" alt="Circle" /></td>
</tr>
<tr>
<td><strong>7</strong></td>
<td><img src="image13" alt="Circle" /></td>
<td><img src="image14" alt="Circle" /></td>
</tr>
</tbody>
</table>
Declaration

Hiermit versichere ich, dass ich die vorliegende Arbeit ohne unzulässige Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe; die aus fremden Quellen direkt oder indirekt übernommenen Gedanken sind als solche kenntlich gemacht. Die Arbeit wurde bisher weder im Inland noch im Ausland in gleicher oder ähnlicher Form einer anderen Prüfungsbehörde vorgelegt.

Die Dissertation wurde vom 01.04.2010 bis 10.12.2015 am Institut für Arbeits-, Organisations- und Sozialpsychologie unter wissenschaftlicher Betreuung von Prof. Dr. Jürgen Wegge angefertigt.

Dresden, 10. Dezember 2015

Kevin-Lim Jungbauer